



## ABSTRACT

This report discusses the results of the total ionizing dose (TID) testing for TPS7H2211-SP, Texas Instruments 4.5V to 14V operating input voltage range, 3.5A continuous current, single channel load switch. The study was done to determine TID effects under high dose rate (HDR) up to 100krad(Si). The results show that all samples passed within the specified limits up to 100krad(Si).

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## 1 Device Information

### 1.1 Product Description

The TPS7H2211-SP is a single channel load switch that provides reverse current protection, overvoltage protection, and a configurable rise time to minimize inrush current (soft start). The device contains P-channel MOSFETs that operate over an input voltage range of 4.5V to 14V and supports a maximum continuous current of 3.5A.

The switch is controlled by an on and off input (EN), which is capable of interfacing directly with low-voltage control signals. Overvoltage protection and soft start are programmable with few external components through the OVP and SS pins. The TPS7H2211-SP is available in a ceramic package with an exposed thermal pad allowing for improved thermal performance.

### 1.2 Device Details

[Table 1-1](#) lists the device information used in the initial TID HDR characterization.

**Table 1-1. Device and Exposure Details**

| TID Exposure Details    |                                                        |
|-------------------------|--------------------------------------------------------|
| TI Device               | TPS7H2211-SP                                           |
| TI Part Name            | XTPS7H2211HKR/EM                                       |
| Package                 | 16-pin CFP (HKR)                                       |
| Technology              | LBC7                                                   |
| Quantity Tested         | HDR - 20                                               |
| Lot Accept/Reject       | All levels tested and passed up to 100krad(Si) for HDR |
| HDR Radiation Facility  | Texas Instruments Santa Clara - Santa Clara, CA        |
| HDR Dose Level          | 50krad(Si) and 100krad(Si)                             |
| HDR Dose Rate           | 59.48rads(Si)/s [53.53 to 65.42rad(Si)/s]              |
| HDR Radiation Source    | Gammacell 220 Excel (GC-220E) Co-60                    |
| Irradiation Temperature | Ambient, room temperature                              |



**Figure 1-1. TPS7H2211-SP Device Photo**

## 2 Total Dose Test Setup

### 2.1 Test Overview

The TPS7H2211-SP was tested according to MIL-STD-883, Test Method 1019.9. For this testing, Conditions A and D were used. The product was irradiated up to the target radiation level, and then put through full electrical parametric testing on the production Automated Test Equipment (ATE). All devices remained functional passing all parametric test limits.

### 2.2 Test Description and Facilities

The TPS7H2211-SP HDR exposure was performed on biased and unbiased devices in a Co-60 gammacell at TI facility in Santa Clara, California. The un-attenuated dose rate of this cell is 59.48 rad(Si)/s. After exposure, the devices were packed in dry ice (per MIL-STD-883 Method 1019.9 section 3.10) and returned to TI Dallas for a full post-radiation electrical evaluation using Texas Instruments ATE. ATE test limits are set per SMD electrical limits based on qualification and characterization data. Post-radiation measurements were taken within 30 minutes of removing the devices from the dry ice container. The devices were allowed to reach room temperature prior to electrical post-radiation measurements.

### 2.3 Test Setup Details

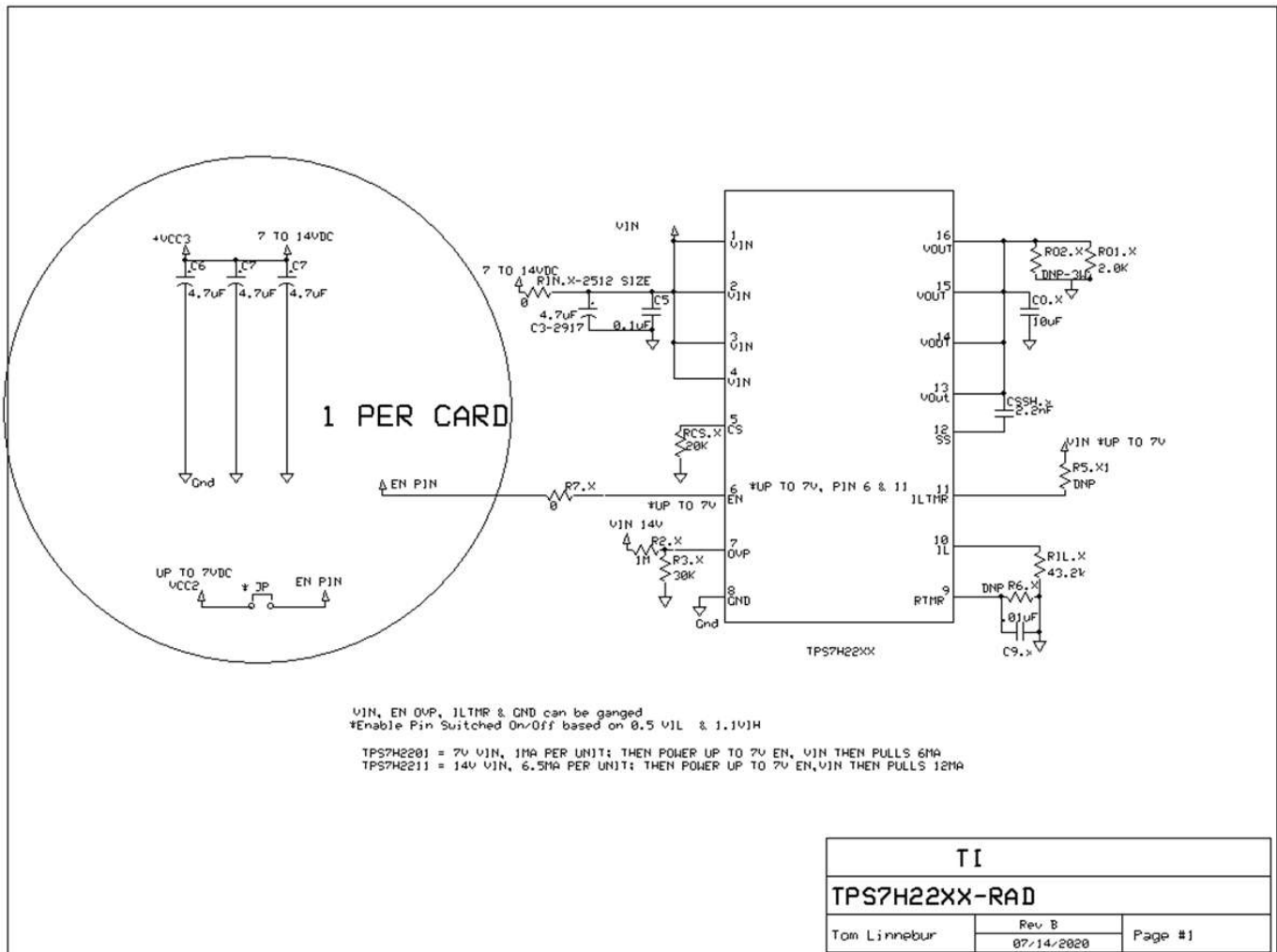
The devices under HDR exposure were tested in two conditions, biased and unbiased, as described in the following sections.

### 2.3.1 Unbiased

For the unbiased HDR conditions, the exposure was performed with all pins grounded.

### 2.3.2 Biased

Figure 2-1 shows the diagram for HDR with biased condition.



### Figure 2-1. Bias Diagram Used in TID Exposure

## 2.4 Test Configuration and Conditions

HDR devices were stressed at 50krad(Si) and 100krad(Si) for biased and unbiased conditions.

**Table 2-1. HDR ≥ 50–100-krad(Si)/s Biased and Unbiased Device Information**

| Total Samples: 20 |                     |                    |                      |
|-------------------|---------------------|--------------------|----------------------|
| Exposure Levels   |                     |                    |                      |
| 50krad(Si) Biased | 50krad(Si) Unbiased | 100krad(Si) Biased | 100krad(Si) Unbiased |
| 1, 2, 3, 4, 5     | 6, 7, 8, 11, 12     | 13, 14, 15, 16, 17 | 18, 19, 20, 21, 22   |

### 3 TI Characterization Test Results

#### 3.1 TID Characterization Summary Results

The parametric data for the TPS7H2211-SP passed up to 100krad(Si) HDR TID.

The drifts of SMD electrical parameters through HDR were within the SMD limits.

Overall, the TPS7H2211-SP showed a strong degree of hardness to HDR TID irradiation up to 100krad(Si) for both biased and unbiased exposure conditions. The measurements taken post-irradiation for each sample set showed a marginal shift for most parameters at each dose level for both biased and unbiased devices. The parameters that showed a greater degree of change between pre- and post-irradiation were still within the SMD electrical specification. See [Table 3-1](#) for Specification Compliance Matrix.

See [Appendix A](#) for Specifications Requiring Clarification.

See [Appendix B](#) for HDR report up to 100krad(Si).

#### 3.2 Specification Compliance Matrix

**Table 3-1. TPS7H2211-SP Specification Compliance Matrix**

| PARAMETER                                                   | TEST CONDITION                                           | TPS7H2211-SP DATA SHEET (SLVSEW6) |      |      |      | TEST#                                                       |
|-------------------------------------------------------------|----------------------------------------------------------|-----------------------------------|------|------|------|-------------------------------------------------------------|
|                                                             |                                                          | MIN                               | TYP  | MAX  | UNIT |                                                             |
| V <sub>INUVLOR</sub> Internal VIN UVLO rising               |                                                          | 3.2                               | 3.4  | 3.8  | V    | 5.0 __VIN_UVLO_RISING                                       |
| V <sub>INUVLOF</sub> Internal VIN UVLO falling              |                                                          | 2.6                               | 2.9  | 3.2  | V    | 5.1 __VIN_UVLO_FALLING                                      |
| HYST <sub>VIN-UVLO</sub> Internal VIN UVLO hysteresis       |                                                          |                                   | 0.55 | 0.75 | V    | 5.2 __VIN_UVLO_HYSTERESIS                                   |
| I <sub>Q</sub> Quiescent current                            | I <sub>OUT</sub> = 0 mA, EN = 7 V                        |                                   | 5    | 10   | mA   | 3.0 __IQ_Vin_4p5V, 3.2 __IQ_Vin_14p0V                       |
| I <sub>F</sub> VIN to VOUT forward leakage current          | EN = 0 V, VOUT = 0 V, measured VOUT current, VIN = 14 V  |                                   | 1    | 1.3  | mA   | 4.9 __Forward_Leakage_14p0V                                 |
|                                                             | EN = 0 V, VOUT = 0 V, measured VOUT current, VIN = 12 V  |                                   | 0.65 | 0.94 | mA   | 4.7 __Forward_Leakage_12p0V                                 |
|                                                             | EN = 0 V, VOUT = 0 V, measured VOUT current, VIN = 9 V   |                                   | 0.15 | 0.49 | mA   | 4.5 __Forward_Leakage_9p0V                                  |
|                                                             | EN = 0 V, VOUT = 0 V, measured VOUT current, VIN = 4.5 V |                                   | 0.04 | 0.23 | mA   | 4.1 __Forward_Leakage_4p5V                                  |
| I <sub>SD</sub> VIN off-state supply current                | EN = 0 V, VOUT = 0 V, measured VIN current, VIN = 14 V   |                                   | 6.9  | 10   | mA   | 4.8 __ISD_Vin_14p0V                                         |
|                                                             | EN = 0 V, VOUT = 0 V, measured VIN current, VIN = 12 V   |                                   | 5.9  | 9.5  | mA   | 4.6 __ISD_Vin_12p0V                                         |
|                                                             | EN = 0 V, VOUT = 0 V, measured VIN current, VIN = 9 V    |                                   | 4.4  | 8    | mA   | 4.4 __ISD_Vin_9p0V                                          |
|                                                             | EN = 0 V, VOUT = 0 V, measured VIN current, VIN = 4.5 V  |                                   | 3.7  | 7    | mA   | 4.0 __ISD_Vin_4p5V                                          |
| I <sub>RCP</sub> Reverse current protection leakage current | EN = 0 V, VOUT = 0 to 14 V and VOUT > VIN                |                                   | 44   | 250  | μA   | 3.1 __IRCP_EN0p0V_4p5V, 3.3 __IRCP_EN0p0V_14p0V             |
|                                                             | EN = 7 V, VIN = 0 V, VOUT = 0 to 14 V                    |                                   | 37   | 240  | μA   | 3.4 __IRCP_EN7p0V_4p5V, 3.5 __IRCP_EN7p0V_14p0V             |
| I <sub>SS</sub> Soft start charge current                   |                                                          |                                   | 65   | 83   | μA   | 6.3 __SS_Icharge_4p5V, 6.7 __SS_Icharge_14V                 |
| V <sub>IHEN</sub> EN threshold voltage, rising              |                                                          | 0.60                              | 0.63 | 0.68 | V    | 6.0 __EN_UVLO_RISING_4p5V, 6.4 __EN_UVLO_RISING_14V         |
| V <sub>ILEN</sub> EN threshold voltage, falling             |                                                          | 0.50                              | 0.52 | 0.57 | V    | 6.1 __EN_UVLO_FALLING_4p5V, 6.5 __EN_UVLO_FALLING_14V       |
| HYST <sub>EN</sub> EN hysteresis voltage                    |                                                          | 94                                | 109  | 139  | mV   | 6.2 __EN_UVLO_HYSTERESIS_4p5V, 6.6 __EN_UVLO_HYSTERESIS_14V |

**Table 3-1. TPS7H2211-SP Specification Compliance Matrix (continued)**

| PARAMETER                                                 | TEST CONDITION                  | TPS7H2211-SP DATA SHEET (SLVSEW6) |      |      |      | TEST#                                                                                                |
|-----------------------------------------------------------|---------------------------------|-----------------------------------|------|------|------|------------------------------------------------------------------------------------------------------|
|                                                           |                                 | MIN                               | TYP  | MAX  | UNIT |                                                                                                      |
| I <sub>EN</sub> EN pin input leakage current              | EN = 7 V, VIN = 14 V            |                                   | 2    | 12   | nA   | 6.8 __EN7p0V_I_Vin14V                                                                                |
| V <sub>OVP</sub> OVP threshold voltage, rising            |                                 | 1.11                              | 1.15 | 1.18 | V    | 7.0 __OVP_UVLO_RISING_4p5V, 7.3 __OVP_UVLO_RISING_14p0V                                              |
| V <sub>OVP</sub> OVP threshold voltage, falling           |                                 | 1.09                              | 1.14 | 1.17 | V    | 7.1 __OVP_UVLO_FALLING_4p5V, 7.4 __OVP_UVLO_FALLING_14p0V                                            |
| HYST <sub>OVP</sub> OVP hysteresis voltage                | 4.6 V < VIN < 14 V              | 5                                 | 14   | 40   | mV   | 7.2 __OVP_UVLO_HYSTERESIS_4p5V, 7.5 __OVP_UVLO_HYSTERESIS_14p0V                                      |
| I <sub>OVP</sub> OVP pin input leakage current            | OVP = 7 V                       |                                   | 1.5  | 12   | nA   | 7.6 __OVP_I_Vin7V, 7.7 __OVP_I_Vin5V, 7.8 __OVP_I_Vin3p3V, 7.9 __OVP_I_Vin1p8V, 7.10 __OVP_I_Vin1p5V |
| R <sub>ON</sub> On-state resistance, lead length ≈ 2.5 mm | VIN = 14 V, IOUT = 3.5 A, 25°C  |                                   | 54   | 60   | mΩ   | 8.4 __RdsOn_3p50A_14p0V                                                                              |
|                                                           | VIN = 12 V, IOUT = 3.5 A, 25°C  |                                   | 54   | 60   | mΩ   | 8.3 __RdsOn_3p50A_12p0V                                                                              |
|                                                           | VIN = 9 V, IOUT = 3.5 A, 25°C   |                                   | 54   | 61   | mΩ   | 8.2 __RdsOn_3p50A_9p0V                                                                               |
|                                                           | VIN = 6 V, IOUT = 3.5 A, 25°C   |                                   | 54   | 61   | mΩ   | 8.1 __RdsOn_3p50A_6p0V                                                                               |
|                                                           | VIN = 4.5 V, IOUT = 3.5 A, 25°C |                                   | 59   | 65   | mΩ   | 8.0 __RdsOn_3p50A_4p5V                                                                               |

## 4 Applicable and Reference Documents

### 4.1 Applicable Documents

- Texas Instruments, [TPS7H2211-SP Radiation-Hardness-Assured \(RHA\) 14-V, 3.5-A Load Switch data sheet](#)
- Texas Instruments, [TPS7H2211EVM-CVAL Evaluation Module user's guide](#)
- Texas Instruments, [Single-Event-Effects Test Report of the TPS7H2211-SP Load Switch radiation report](#)

### 4.2 Reference Documents

Texas Instruments total ionizing dose radiation (total dose) test procedure follows the standards put forth in MIL-STD-883 TM 1019. The document can be found at the DLA website.

## A Appendix: Specifications Requiring Clarification

Data sheet specifications for which there is no parametric data and, therefore, not in the TID report. Functionality is assured by ATE testing.

**Table A-1. Specifications Requiring Clarification - Set #1**

| PARAMETER                                                  | TEST CONDITION                  | TPS7H2211-SP DATA SHEET (SLVSEW6) |     |     |      |
|------------------------------------------------------------|---------------------------------|-----------------------------------|-----|-----|------|
|                                                            |                                 | MIN                               | TYP | MAX | UNIT |
| t <sub>LOW_OFF</sub> EN signal low time during cycling     | V <sub>OUT</sub> falls to < 90% | 20                                |     |     | μs   |
| V <sub>INEN</sub> VIN percentage for enable <sup>(1)</sup> |                                 | 75%                               |     |     |      |

(1) VIN must be ≥ 75% of its final value before EN is asserted only if V<sub>INSR</sub> > V<sub>OUTSR</sub>.

Data sheet specifications for which no data is available in TID report as specification was verified through bench testing. TID testing is by ATE.

**Table A-2. Specifications Requiring Clarification - Set #2**

| PARAMETER                                                                      | TEST CONDITION                                                 | TPS7H2211-SP DATA SHEET (SLVSEW6) |     |     |      |
|--------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------|-----|-----|------|
|                                                                                |                                                                | MIN                               | TYP | MAX | UNIT |
| V <sub>RCP_ENTER</sub> Reverse current protection enter voltage <sup>(1)</sup> | EN = 7V, VIN = 4.5V                                            |                                   | 390 |     | mV   |
|                                                                                | EN = 7V, VIN = 14V                                             |                                   | 363 |     | mV   |
| V <sub>RCP_EXIT</sub> Reverse current protection exit voltage <sup>(1)</sup>   | EN = 7V, VIN = 4.5V                                            |                                   | 264 |     | mV   |
|                                                                                | EN = 7V, VIN = 14V                                             |                                   | 249 |     | mV   |
| t <sub>RCP</sub> Reverse current protection response time                      | EN = 7V, VIN = 4.5V                                            |                                   | 208 |     | μs   |
|                                                                                | EN = 7V, VIN = 14V                                             |                                   | 247 |     | μs   |
| I <sub>L_trip</sub> Internal current limit trip point                          | VIN = 12V, C <sub>SS</sub> = 2nF                               |                                   | 8   |     | A    |
| I <sub>L_peak</sub> Fast trip off current limit peak                           | VIN = 12V, 10Ω to 10mΩ short in 1μs, switch inductance = 270nH |                                   | 25  |     | A    |
| t <sub>ft</sub> Fast trip off response time                                    |                                                                |                                   | 2.3 |     | μs   |
| t <sub>fto</sub> Fast trip off off-time                                        | VIN = 12V, C <sub>SS</sub> = 2nF                               |                                   | 51  |     | μs   |
| Thermal shutdown                                                               |                                                                |                                   | 155 |     | °C   |
| Thermal shutdown hysteresis                                                    |                                                                |                                   | 20  |     | °C   |
| t <sub>ON</sub> Turn-on time                                                   | VIN = 5V                                                       |                                   | 107 |     | μs   |
| t <sub>OFF</sub> Turn-off time                                                 | VIN = 5V                                                       |                                   | 56  |     | μs   |
| t <sub>F</sub> V <sub>OUT</sub> fall time                                      | VIN = 5V                                                       |                                   | 167 |     | μs   |
| t <sub>ASSERT</sub> OVP Assert time                                            | VIN = 5V                                                       |                                   | 8   |     | μs   |
| t <sub>DEASSERT</sub> OVP deassert time                                        | VIN = 5V                                                       |                                   | 41  |     | μs   |
| t <sub>ON</sub> Turn-on time                                                   | VIN = 12V                                                      |                                   | 220 |     | μs   |
| t <sub>OFF</sub> Turn-off time                                                 | VIN = 12V                                                      |                                   | 41  |     | μs   |

**Table A-2. Specifications Requiring Clarification - Set #2 (continued)**

| PARAMETER                           | TEST CONDITION | TPS7H2211-SP DATA SHEET (SLVSEW6) |     |     |         |
|-------------------------------------|----------------|-----------------------------------|-----|-----|---------|
|                                     |                | MIN                               | TYP | MAX | UNIT    |
| $t_F$ VOUT fall time                | VIN = 12V      |                                   | 139 |     | $\mu s$ |
| $t_{ASSERT}$<br>OVP Assert time     | VIN = 12V      |                                   | 6   |     | $\mu s$ |
| $t_{DEASSERT}$<br>OVP deassert time | VIN = 12V      |                                   | 63  |     | $\mu s$ |

(1) This parameter is not referenced to GND; it is referenced from VOUT to VIN.

Data sheet specifications that are not covered in TID report because specification condition is at temperature other than 25°C. TID testing is at 25°C only.

**Table A-3. Specifications Requiring Clarification - Set #3**

| PARAMETER                                                    | TEST CONDITION                 | TPS7H2211-SP DATA SHEET (SLVSEW6) |     |     |            |
|--------------------------------------------------------------|--------------------------------|-----------------------------------|-----|-----|------------|
|                                                              |                                | MIN                               | TYP | MAX | UNIT       |
| $R_{ON}$<br>On-state resistance, lead length $\approx$ 2.5mm | VIN = 14V, IOUT = 3.5A, -55°C  |                                   | 41  | 45  | m $\Omega$ |
|                                                              | VIN = 14V, IOUT = 3.5A, -40°C  |                                   | 43  | 46  | m $\Omega$ |
|                                                              | VIN = 14V, IOUT = 3.5A, 85°C   |                                   | 65  | 71  | m $\Omega$ |
|                                                              | VIN = 14V, IOUT = 3.5A, 125°C  |                                   | 72  | 79  | m $\Omega$ |
|                                                              | VIN = 12V, IOUT = 3.5A, -55°C  |                                   | 41  | 45  | m $\Omega$ |
|                                                              | VIN = 12V, IOUT = 3.5A, -40°C  |                                   | 43  | 46  | m $\Omega$ |
|                                                              | VIN = 12V, IOUT = 3.5A, 85°C   |                                   | 65  | 71  | m $\Omega$ |
|                                                              | VIN = 12V, IOUT = 3.5A, 125°C  |                                   | 72  | 79  | m $\Omega$ |
|                                                              | VIN = 9V, IOUT = 3.5A, -55°C   |                                   | 41  | 45  | m $\Omega$ |
|                                                              | VIN = 9V, IOUT = 3.5A, -40°C   |                                   | 43  | 46  | m $\Omega$ |
|                                                              | VIN = 9V, IOUT = 3.5A, 85°C    |                                   | 65  | 71  | m $\Omega$ |
|                                                              | VIN = 9V, IOUT = 3.5A, 125°C   |                                   | 72  | 79  | m $\Omega$ |
|                                                              | VIN = 6V, IOUT = 3.5A, -55°C   |                                   | 41  | 45  | m $\Omega$ |
|                                                              | VIN = 6V, IOUT = 3.5A, -40°C   |                                   | 43  | 47  | m $\Omega$ |
|                                                              | VIN = 6V, IOUT = 3.5A, 85°C    |                                   | 65  | 71  | m $\Omega$ |
|                                                              | VIN = 6V, IOUT = 3.5A, 125°C   |                                   | 72  | 79  | m $\Omega$ |
|                                                              | VIN = 4.5V, IOUT = 3.5A, -55°C |                                   | 44  | 48  | m $\Omega$ |
|                                                              | VIN = 4.5V, IOUT = 3.5A, -40°C |                                   | 47  | 50  | m $\Omega$ |
|                                                              | VIN = 4.5V, IOUT = 3.5A, 85°C  |                                   | 71  | 76  | m $\Omega$ |
|                                                              | VIN = 4.5V, IOUT = 3.5A, 125°C |                                   | 79  | 84  | m $\Omega$ |

## **B Appendix: HDR TID Report Data**

This appendix contains the HDR TID report data.

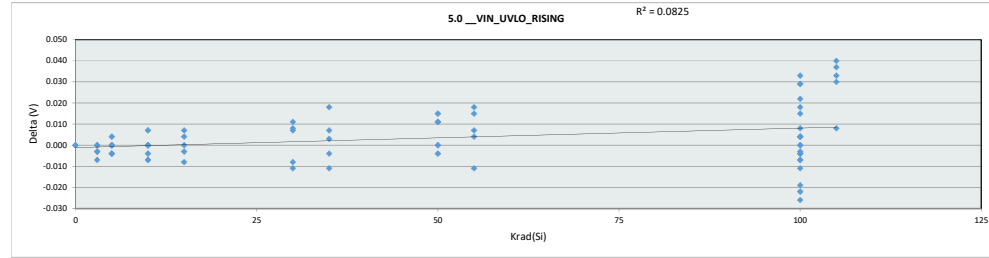
# HDR TID REPORT

## TPS7H2211-SP

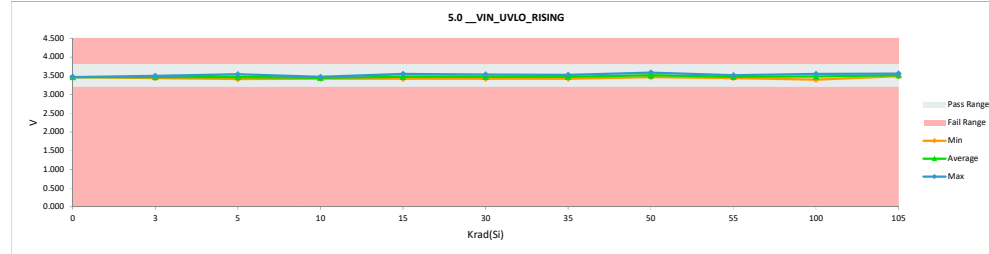
| IDENTIFIER | DESCRIPTION           |
|------------|-----------------------|
| 0          | Control Unit          |
| 3          | 3 krad(Si) biased     |
| 5          | 3 krad(Si) unbiased   |
| 10         | 10 krad(Si) biased    |
| 15         | 10 krad(Si) unbiased  |
| 30         | 30 krad(Si) biased    |
| 35         | 30 krad(Si) unbiased  |
| 50         | 50 krad(Si) biased    |
| 55         | 50 krad(Si) unbiased  |
| 100        | 100 krad(Si) biased   |
| 105        | 100 krad(Si) unbiased |

# HDR TID Report TPS7H2211-SP

| 5.0 __VIN_UVLO_RISING |          |       |       |        |
|-----------------------|----------|-------|-------|--------|
| Test Site             |          |       |       |        |
| Tester                |          |       |       |        |
| Test Number           |          |       |       |        |
| Unit                  | V        | V     |       |        |
| Max Limit             | 3.8      | 3.8   |       |        |
| Min Limit             | 3.2      | 3.2   |       |        |
| Krad(Si)              | Serial # | PRE   | POST  | Delta  |
| 0                     | 227      | 3.461 | 3.461 | 0.000  |
| 0                     | 229      | 3.468 | 3.468 | 0.000  |
| 3                     | 107      | 3.442 | 3.439 | -0.003 |
| 3                     | 108      | 3.479 | 3.476 | -0.003 |
| 3                     | 109      | 3.501 | 3.494 | -0.007 |
| 3                     | 110      | 3.468 | 3.468 | 0.000  |
| 3                     | 111      | 3.450 | 3.450 | 0.000  |
| 5                     | 112      | 3.501 | 3.505 | 0.004  |
| 5                     | 113      | 3.409 | 3.409 | 0.000  |
| 5                     | 114      | 3.428 | 3.428 | 0.000  |
| 5                     | 115      | 3.472 | 3.468 | -0.004 |
| 5                     | 116      | 3.542 | 3.538 | -0.004 |
| 10                    | 96       | 3.424 | 3.424 | 0.000  |
| 10                    | 97       | 3.446 | 3.442 | -0.004 |
| 10                    | 98       | 3.468 | 3.461 | -0.007 |
| 10                    | 99       | 3.465 | 3.472 | 0.007  |
| 10                    | 100      | 3.446 | 3.446 | 0.000  |
| 15                    | 101      | 3.428 | 3.428 | 0.000  |
| 15                    | 102      | 3.428 | 3.420 | -0.008 |
| 15                    | 104      | 3.538 | 3.545 | 0.007  |
| 15                    | 105      | 3.468 | 3.465 | -0.003 |
| 15                    | 106      | 3.494 | 3.498 | 0.004  |
| 30                    | 83       | 3.428 | 3.435 | 0.007  |
| 30                    | 84       | 3.501 | 3.509 | 0.008  |
| 30                    | 85       | 3.435 | 3.424 | -0.011 |
| 30                    | 86       | 3.523 | 3.534 | 0.011  |
| 30                    | 87       | 3.476 | 3.468 | -0.008 |
| 35                    | 88       | 3.490 | 3.479 | -0.011 |
| 35                    | 92       | 3.509 | 3.512 | 0.003  |
| 35                    | 93       | 3.505 | 3.523 | 0.018  |
| 35                    | 94       | 3.428 | 3.424 | -0.004 |
| 35                    | 95       | 3.428 | 3.435 | 0.007  |
| 50                    | 1        | 3.490 | 3.501 | 0.011  |
| 50                    | 2        | 3.454 | 3.465 | 0.011  |
| 50                    | 3        | 3.538 | 3.534 | -0.004 |
| 50                    | 5        | 3.571 | 3.586 | 0.015  |
| 50                    | 6        | 3.476 | 3.476 | 0.000  |
| 55                    | 7        | 3.505 | 3.512 | 0.007  |
| 55                    | 8        | 3.494 | 3.498 | 0.004  |
| 55                    | 9        | 3.424 | 3.439 | 0.015  |
| 55                    | 10       | 3.468 | 3.457 | -0.011 |
| 55                    | 11       | 3.439 | 3.457 | 0.018  |
| 100                   | 29       | 3.450 | 3.431 | -0.019 |
| 100                   | 30       | 3.523 | 3.527 | 0.004  |
| 100                   | 31       | 3.402 | 3.398 | -0.004 |
| 100                   | 32       | 3.476 | 3.476 | 0.000  |
| 100                   | 34       | 3.454 | 3.476 | 0.022  |
| 100                   | 35       | 3.472 | 3.501 | 0.029  |
| 100                   | 36       | 3.509 | 3.498 | -0.011 |
| 100                   | 38       | 3.483 | 3.457 | -0.026 |
| 100                   | 39       | 3.494 | 3.523 | 0.029  |
| 100                   | 41       | 3.424 | 3.442 | 0.018  |
| 100                   | 42       | 3.431 | 3.428 | -0.003 |
| 100                   | 43       | 3.516 | 3.549 | 0.033  |
| 100                   | 45       | 3.490 | 3.483 | -0.007 |
| 100                   | 46       | 3.483 | 3.483 | 0.000  |
| 100                   | 47       | 3.509 | 3.487 | -0.022 |
| 100                   | 48       | 3.468 | 3.472 | 0.004  |
| 100                   | 49       | 3.494 | 3.490 | -0.004 |
| 100                   | 51       | 3.457 | 3.472 | 0.015  |
| 100                   | 54       | 3.483 | 3.479 | -0.004 |
| 100                   | 56       | 3.446 | 3.450 | 0.004  |
| 100                   | 57       | 3.523 | 3.527 | 0.004  |
| 100                   | 58       | 3.549 | 3.542 | -0.007 |
| 100                   | 59       | 3.523 | 3.531 | 0.008  |
| 105                   | 61       | 3.520 | 3.560 | 0.040  |
| 105                   | 62       | 3.483 | 3.520 | 0.037  |
| 105                   | 64       | 3.476 | 3.509 | 0.033  |
| 105                   | 65       | 3.479 | 3.487 | 0.008  |
| 105                   | 66       | 3.490 | 3.520 | 0.030  |
| Max                   |          | 3.571 | 3.586 | 0.040  |
| Average               |          | 3.476 | 3.480 | 0.004  |
| Min                   |          | 3.402 | 3.398 | -0.026 |
| Std Dev               |          | 0.037 | 0.040 | 0.013  |

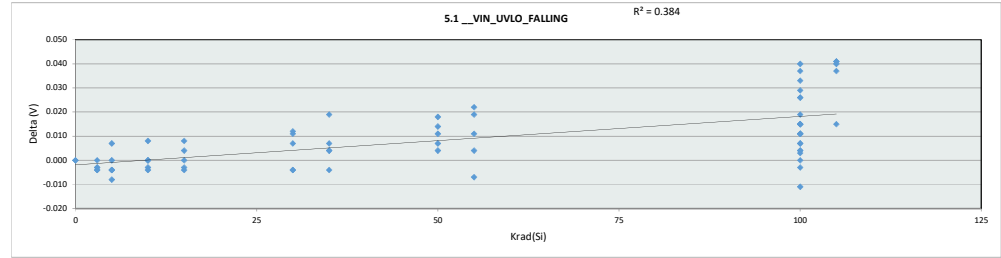


|             |     | 5.0_VIN_UVLO_RISING |  |  |  |  |  |  |  |  |  |
|-------------|-----|---------------------|--|--|--|--|--|--|--|--|--|
| Test Site   |     |                     |  |  |  |  |  |  |  |  |  |
| Tester      |     |                     |  |  |  |  |  |  |  |  |  |
| Test Number |     |                     |  |  |  |  |  |  |  |  |  |
| Max Limit   | 3.8 | V                   |  |  |  |  |  |  |  |  |  |
| Min Limit   | 3.2 | V                   |  |  |  |  |  |  |  |  |  |
|             |     |                     |  |  |  |  |  |  |  |  |  |
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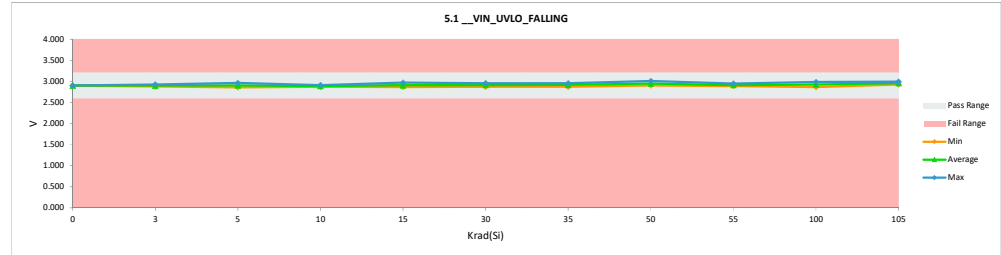


# HDR TID Report TPS7H2211-SP

| 5.1 __VIN_UVLO_FALLING |          |       |       |        |
|------------------------|----------|-------|-------|--------|
| Test Site              |          |       |       |        |
| Tester                 |          |       |       |        |
| Test Number            |          |       |       |        |
| Unit                   |          | V     | V     |        |
| Max Limit              |          | 3.2   | 3.2   |        |
| Min Limit              |          | 2.6   | 2.6   |        |
| Krad(Si)               | Serial # | PRE   | POST  | Delta  |
| 0                      | 227      | 2.902 | 2.902 | 0.000  |
| 0                      | 229      | 2.905 | 2.905 | 0.000  |
| 3                      | 107      | 2.883 | 2.883 | 0.000  |
| 3                      | 108      | 2.916 | 2.913 | -0.003 |
| 3                      | 109      | 2.935 | 2.931 | -0.004 |
| 3                      | 110      | 2.909 | 2.905 | -0.004 |
| 3                      | 111      | 2.894 | 2.891 | -0.003 |
| 5                      | 112      | 2.931 | 2.938 | 0.007  |
| 5                      | 113      | 2.861 | 2.861 | 0.000  |
| 5                      | 114      | 2.876 | 2.872 | -0.004 |
| 5                      | 115      | 2.913 | 2.905 | -0.008 |
| 5                      | 116      | 2.968 | 2.964 | -0.004 |
| 10                     | 96       | 2.872 | 2.872 | 0.000  |
| 10                     | 97       | 2.891 | 2.887 | -0.004 |
| 10                     | 98       | 2.905 | 2.902 | -0.003 |
| 10                     | 99       | 2.905 | 2.913 | 0.008  |
| 10                     | 100      | 2.891 | 2.891 | 0.000  |
| 15                     | 101      | 2.876 | 2.876 | 0.000  |
| 15                     | 102      | 2.872 | 2.869 | -0.003 |
| 15                     | 104      | 2.964 | 2.972 | 0.008  |
| 15                     | 105      | 2.909 | 2.905 | -0.004 |
| 15                     | 106      | 2.927 | 2.931 | 0.004  |
| 30                     | 83       | 2.872 | 2.883 | 0.011  |
| 30                     | 84       | 2.935 | 2.942 | 0.007  |
| 30                     | 85       | 2.880 | 2.876 | -0.004 |
| 30                     | 86       | 2.949 | 2.961 | 0.012  |
| 30                     | 87       | 2.913 | 2.909 | -0.004 |
| 35                     | 88       | 2.924 | 2.920 | -0.004 |
| 35                     | 92       | 2.942 | 2.946 | 0.004  |
| 35                     | 93       | 2.938 | 2.957 | 0.019  |
| 35                     | 94       | 2.872 | 2.876 | 0.004  |
| 35                     | 95       | 2.876 | 2.883 | 0.007  |
| 50                     | 1        | 2.924 | 2.938 | 0.014  |
| 50                     | 2        | 2.898 | 2.909 | 0.011  |
| 50                     | 3        | 2.964 | 2.968 | 0.004  |
| 50                     | 5        | 2.990 | 3.008 | 0.018  |
| 50                     | 6        | 2.913 | 2.920 | 0.007  |
| 55                     | 7        | 2.938 | 2.949 | 0.011  |
| 55                     | 8        | 2.931 | 2.935 | 0.004  |
| 55                     | 9        | 2.869 | 2.891 | 0.022  |
| 55                     | 10       | 2.909 | 2.902 | -0.007 |
| 55                     | 11       | 2.883 | 2.902 | 0.019  |
| 100                    | 29       | 2.891 | 2.891 | 0.000  |
| 100                    | 30       | 2.953 | 2.968 | 0.015  |
| 100                    | 31       | 2.854 | 2.865 | 0.011  |
| 100                    | 32       | 2.913 | 2.924 | 0.011  |
| 100                    | 34       | 2.891 | 2.920 | 0.029  |
| 100                    | 35       | 2.809 | 2.946 | 0.037  |
| 100                    | 36       | 2.942 | 2.946 | 0.004  |
| 100                    | 38       | 2.916 | 2.905 | -0.011 |
| 100                    | 39       | 2.931 | 2.964 | 0.033  |
| 100                    | 41       | 2.872 | 2.898 | 0.026  |
| 100                    | 42       | 2.880 | 2.887 | 0.007  |
| 100                    | 43       | 2.946 | 2.986 | 0.040  |
| 100                    | 45       | 2.924 | 2.927 | 0.003  |
| 100                    | 46       | 2.920 | 2.931 | 0.011  |
| 100                    | 47       | 2.938 | 2.935 | -0.003 |
| 100                    | 48       | 2.905 | 2.920 | 0.015  |
| 100                    | 49       | 2.927 | 2.938 | 0.011  |
| 100                    | 51       | 2.894 | 2.920 | 0.026  |
| 100                    | 54       | 2.920 | 2.927 | 0.007  |
| 100                    | 56       | 2.887 | 2.902 | 0.015  |
| 100                    | 57       | 2.953 | 2.968 | 0.015  |
| 100                    | 58       | 2.975 | 2.979 | 0.004  |
| 100                    | 59       | 2.953 | 2.972 | 0.019  |
| 105                    | 61       | 2.953 | 2.994 | 0.041  |
| 105                    | 62       | 2.920 | 2.961 | 0.041  |
| 105                    | 64       | 2.913 | 2.953 | 0.040  |
| 105                    | 65       | 2.916 | 2.931 | 0.015  |
| 105                    | 66       | 2.924 | 2.961 | 0.037  |
| Max                    |          | 2.990 | 3.008 | 0.041  |
| Average                |          | 2.913 | 2.923 | 0.009  |
| Min                    |          | 2.854 | 2.861 | -0.011 |
| Std Dev                |          | 0.030 | 0.035 | 0.013  |



|             |       | 5.1 __VIN_UVLO_FALLING |       |       |       |       |       |       |       |       |       |
|-------------|-------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site   |       |                        |       |       |       |       |       |       |       |       |       |
| Tester      |       |                        |       |       |       |       |       |       |       |       |       |
| Test Number |       |                        |       |       |       |       |       |       |       |       |       |
| Max Limit   | 3.2   | V                      |       |       |       |       |       |       |       |       |       |
| Min Limit   | 2.6   | V                      |       |       |       |       |       |       |       |       |       |
| Krad(Si)    | 0     | 3                      | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL          | 2.600 | 2.600                  | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| Min         | 2.902 | 2.863                  | 2.861 | 2.872 | 2.869 | 2.876 | 2.876 | 2.909 | 2.891 | 2.865 | 2.931 |
| Average     | 2.904 | 2.905                  | 2.908 | 2.893 | 2.911 | 2.914 | 2.916 | 2.949 | 2.916 | 2.931 | 2.960 |
| Max         | 2.905 | 2.931                  | 2.964 | 2.913 | 2.972 | 2.961 | 2.957 | 3.008 | 2.949 | 2.986 | 2.994 |
| UL          | 3.200 | 3.200                  | 3.200 | 3.200 | 3.200 | 3.200 | 3.200 | 3.200 | 3.200 | 3.200 | 3.200 |

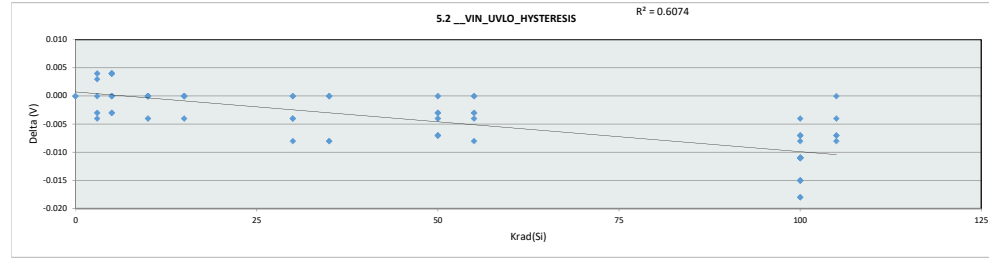


# HDR TID Report TPS7H2211-SP

## 5.2 \_\_VIN\_UVLO\_HYSTERESIS

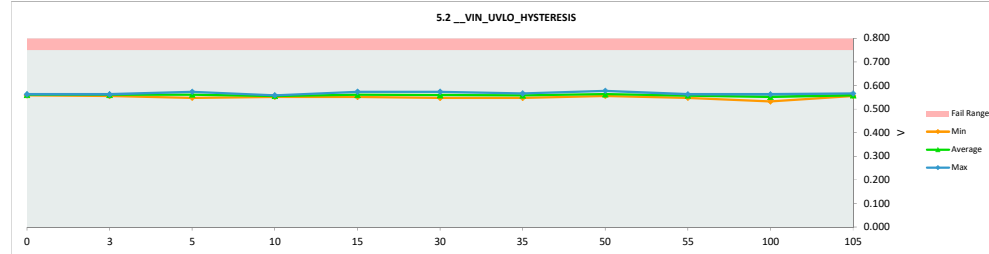
|             |      |   |
|-------------|------|---|
| Test Site   |      |   |
| Tester      |      |   |
| Test Number |      |   |
| Unit        | V    | V |
| Max Limit   | 0.75 |   |
| Min Limit   |      |   |

| Krad(Si) | Serial # | PRE   | POST  | Delta  |
|----------|----------|-------|-------|--------|
| 0        | 227      | 0.559 | 0.559 | 0.000  |
| 0        | 229      | 0.563 | 0.563 | 0.000  |
| 3        | 107      | 0.559 | 0.556 | -0.003 |
| 3        | 108      | 0.563 | 0.563 | 0.000  |
| 3        | 109      | 0.567 | 0.563 | -0.004 |
| 3        | 110      | 0.559 | 0.563 | 0.004  |
| 3        | 111      | 0.556 | 0.559 | 0.003  |
| 5        | 112      | 0.570 | 0.567 | -0.003 |
| 5        | 113      | 0.548 | 0.548 | 0.000  |
| 5        | 114      | 0.552 | 0.556 | 0.004  |
| 5        | 115      | 0.559 | 0.563 | 0.004  |
| 5        | 116      | 0.574 | 0.574 | 0.000  |
| 10       | 96       | 0.552 | 0.552 | 0.000  |
| 10       | 97       | 0.556 | 0.556 | 0.000  |
| 10       | 98       | 0.563 | 0.559 | -0.004 |
| 10       | 99       | 0.559 | 0.559 | 0.000  |
| 10       | 100      | 0.556 | 0.556 | 0.000  |
| 15       | 101      | 0.552 | 0.552 | 0.000  |
| 15       | 102      | 0.556 | 0.552 | -0.004 |
| 15       | 104      | 0.574 | 0.574 | 0.000  |
| 15       | 105      | 0.559 | 0.559 | 0.000  |
| 15       | 106      | 0.567 | 0.567 | 0.000  |
| 30       | 83       | 0.556 | 0.552 | -0.004 |
| 30       | 84       | 0.567 | 0.567 | 0.000  |
| 30       | 85       | 0.556 | 0.548 | -0.008 |
| 30       | 86       | 0.574 | 0.574 | 0.000  |
| 30       | 87       | 0.563 | 0.559 | -0.004 |
| 35       | 88       | 0.567 | 0.559 | -0.008 |
| 35       | 92       | 0.567 | 0.567 | 0.000  |
| 35       | 93       | 0.567 | 0.567 | 0.000  |
| 35       | 94       | 0.556 | 0.548 | -0.008 |
| 35       | 95       | 0.552 | 0.552 | 0.000  |
| 50       | 1        | 0.567 | 0.563 | -0.004 |
| 50       | 2        | 0.556 | 0.556 | 0.000  |
| 50       | 3        | 0.574 | 0.567 | -0.007 |
| 50       | 5        | 0.581 | 0.578 | -0.003 |
| 50       | 6        | 0.563 | 0.556 | -0.007 |
| 55       | 7        | 0.567 | 0.563 | -0.004 |
| 55       | 8        | 0.563 | 0.563 | 0.000  |
| 55       | 9        | 0.556 | 0.548 | -0.008 |
| 55       | 10       | 0.559 | 0.556 | -0.003 |
| 55       | 11       | 0.556 | 0.556 | 0.000  |
| 100      | 29       | 0.559 | 0.541 | -0.018 |
| 100      | 30       | 0.570 | 0.559 | -0.011 |
| 100      | 31       | 0.548 | 0.533 | -0.015 |
| 100      | 32       | 0.563 | 0.552 | -0.011 |
| 100      | 34       | 0.563 | 0.556 | -0.007 |
| 100      | 35       | 0.563 | 0.556 | -0.007 |
| 100      | 36       | 0.567 | 0.552 | -0.015 |
| 100      | 38       | 0.567 | 0.552 | -0.015 |
| 100      | 39       | 0.563 | 0.559 | -0.004 |
| 100      | 41       | 0.552 | 0.544 | -0.008 |
| 100      | 42       | 0.552 | 0.541 | -0.011 |
| 100      | 43       | 0.570 | 0.563 | -0.007 |
| 100      | 45       | 0.567 | 0.556 | -0.011 |
| 100      | 46       | 0.563 | 0.552 | -0.011 |
| 100      | 47       | 0.570 | 0.552 | -0.018 |
| 100      | 48       | 0.563 | 0.552 | -0.011 |
| 100      | 49       | 0.567 | 0.552 | -0.015 |
| 100      | 51       | 0.563 | 0.552 | -0.011 |
| 100      | 54       | 0.563 | 0.552 | -0.011 |
| 100      | 56       | 0.559 | 0.548 | -0.011 |
| 100      | 57       | 0.570 | 0.559 | -0.011 |
| 100      | 58       | 0.574 | 0.563 | -0.011 |
| 100      | 59       | 0.570 | 0.559 | -0.011 |
| 105      | 61       | 0.567 | 0.567 | 0.000  |
| 105      | 62       | 0.563 | 0.559 | -0.004 |
| 105      | 64       | 0.563 | 0.556 | -0.007 |
| 105      | 65       | 0.563 | 0.556 | -0.007 |
| 105      | 66       | 0.567 | 0.559 | -0.008 |
| Max      |          | 0.581 | 0.578 | 0.004  |
| Average  |          | 0.563 | 0.557 | -0.005 |
| Min      |          | 0.548 | 0.533 | -0.018 |
| Std Dev  |          | 0.007 | 0.008 | 0.006  |



|             |      |   |
|-------------|------|---|
| Test Site   |      |   |
| Tester      |      |   |
| Test Number |      |   |
| Max Limit   | 0.75 | V |
| Min Limit   |      | V |

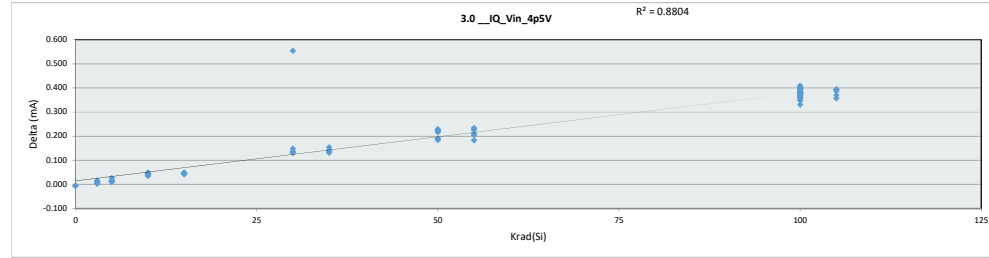
| Krad(Si) | 0     | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| LL       |       |       |       |       |       |       |       |       |       |       |       |
| Min      | 0.559 | 0.556 | 0.548 | 0.552 | 0.552 | 0.548 | 0.548 | 0.556 | 0.548 | 0.533 | 0.556 |
| Average  | 0.561 | 0.561 | 0.562 | 0.556 | 0.561 | 0.560 | 0.559 | 0.564 | 0.557 | 0.552 | 0.559 |
| Max      | 0.563 | 0.563 | 0.574 | 0.559 | 0.574 | 0.574 | 0.567 | 0.578 | 0.563 | 0.563 | 0.567 |
| UL       | 0.750 | 0.750 | 0.750 | 0.750 | 0.750 | 0.750 | 0.750 | 0.750 | 0.750 | 0.750 | 0.750 |



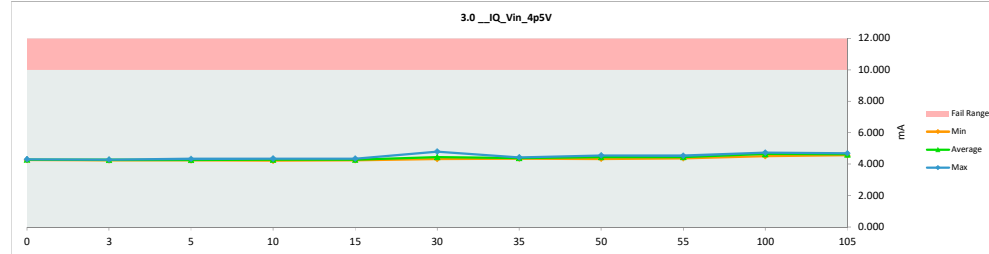
# HDR TID Report TPS7H2211-SP

| 3.0_IQ_Vin_4p5V |    |    |  |
|-----------------|----|----|--|
| Test Site       |    |    |  |
| Tester          |    |    |  |
| Test Number     |    |    |  |
| Unit            | mA | mA |  |
| Max Limit       | 10 |    |  |
| Min Limit       |    |    |  |

| Krad(Si) | Serial # | PRE   | POST  | Delta  |
|----------|----------|-------|-------|--------|
| 0        | 227      | 4.258 | 4.252 | -0.006 |
| 0        | 229      | 4.318 | 4.312 | -0.006 |
| 3        | 107      | 4.261 | 4.277 | 0.016  |
| 3        | 108      | 4.259 | 4.271 | 0.012  |
| 3        | 109      | 4.229 | 4.233 | 0.005  |
| 3        | 110      | 4.279 | 4.289 | 0.010  |
| 3        | 111      | 4.279 | 4.281 | 0.003  |
| 5        | 112      | 4.254 | 4.268 | 0.014  |
| 5        | 113      | 4.305 | 4.330 | 0.025  |
| 5        | 114      | 4.222 | 4.236 | 0.013  |
| 5        | 115      | 4.247 | 4.260 | 0.013  |
| 5        | 116      | 4.238 | 4.249 | 0.011  |
| 10       | 96       | 4.304 | 4.348 | 0.045  |
| 10       | 97       | 4.254 | 4.302 | 0.048  |
| 10       | 98       | 4.169 | 4.214 | 0.045  |
| 10       | 99       | 4.255 | 4.294 | 0.039  |
| 10       | 100      | 4.261 | 4.296 | 0.035  |
| 15       | 101      | 4.297 | 4.345 | 0.048  |
| 15       | 102      | 4.211 | 4.260 | 0.048  |
| 15       | 104      | 4.223 | 4.265 | 0.042  |
| 15       | 105      | 4.306 | 4.350 | 0.044  |
| 15       | 106      | 4.200 | 4.244 | 0.044  |
| 30       | 83       | 4.229 | 4.366 | 0.136  |
| 30       | 84       | 4.259 | 4.407 | 0.148  |
| 30       | 85       | 4.243 | 4.797 | 0.554  |
| 30       | 86       | 4.182 | 4.314 | 0.131  |
| 30       | 87       | 4.211 | 4.344 | 0.133  |
| 35       | 88       | 4.275 | 4.428 | 0.154  |
| 35       | 92       | 4.216 | 4.346 | 0.131  |
| 35       | 93       | 4.235 | 4.378 | 0.142  |
| 35       | 94       | 4.246 | 4.385 | 0.139  |
| 35       | 95       | 4.265 | 4.403 | 0.138  |
| 50       | 1        | 4.243 | 4.460 | 0.217  |
| 50       | 2        | 4.314 | 4.536 | 0.222  |
| 50       | 3        | 4.146 | 4.336 | 0.190  |
| 50       | 5        | 4.188 | 4.373 | 0.185  |
| 50       | 6        | 4.325 | 4.554 | 0.228  |
| 55       | 7        | 4.282 | 4.515 | 0.234  |
| 55       | 8        | 4.308 | 4.535 | 0.227  |
| 55       | 9        | 4.204 | 4.409 | 0.205  |
| 55       | 10       | 4.233 | 4.443 | 0.211  |
| 55       | 11       | 4.188 | 4.372 | 0.183  |
| 100      | 29       | 4.328 | 4.732 | 0.404  |
| 100      | 30       | 4.293 | 4.654 | 0.360  |
| 100      | 31       | 4.266 | 4.644 | 0.378  |
| 100      | 32       | 4.209 | 4.566 | 0.357  |
| 100      | 34       | 4.206 | 4.574 | 0.368  |
| 100      | 35       | 4.166 | 4.552 | 0.386  |
| 100      | 36       | 4.292 | 4.666 | 0.374  |
| 100      | 38       | 4.184 | 4.550 | 0.366  |
| 100      | 39       | 4.249 | 4.652 | 0.403  |
| 100      | 41       | 4.240 | 4.638 | 0.398  |
| 100      | 42       | 4.268 | 4.634 | 0.366  |
| 100      | 43       | 4.276 | 4.666 | 0.390  |
| 100      | 45       | 4.258 | 4.643 | 0.385  |
| 100      | 46       | 4.311 | 4.693 | 0.381  |
| 100      | 47       | 4.276 | 4.685 | 0.409  |
| 100      | 48       | 4.177 | 4.508 | 0.331  |
| 100      | 49       | 4.287 | 4.635 | 0.348  |
| 100      | 51       | 4.294 | 4.691 | 0.397  |
| 100      | 54       | 4.289 | 4.685 | 0.396  |
| 100      | 56       | 4.283 | 4.659 | 0.376  |
| 100      | 57       | 4.267 | 4.649 | 0.382  |
| 100      | 58       | 4.300 | 4.699 | 0.398  |
| 100      | 59       | 4.295 | 4.667 | 0.372  |
| 105      | 61       | 4.295 | 4.688 | 0.393  |
| 105      | 62       | 4.240 | 4.610 | 0.370  |
| 105      | 64       | 4.260 | 4.647 | 0.387  |
| 105      | 65       | 4.208 | 4.601 | 0.394  |
| 105      | 66       | 4.206 | 4.563 | 0.357  |
| Max      |          | 4.328 | 4.797 | 0.554  |
| Average  |          | 4.252 | 4.468 | 0.215  |
| Min      |          | 4.146 | 4.214 | -0.006 |
| Std Dev  |          | 0.043 | 0.168 | 0.159  |



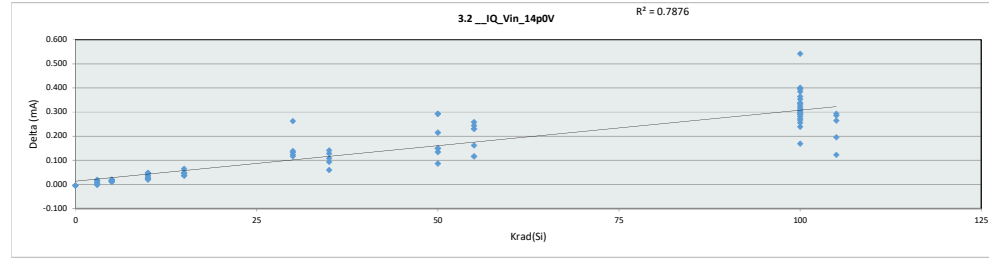
|             |        | 3.0_IQ_Vin_4p5V |        |        |        |        |        |        |        |        |        |
|-------------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site   |        |                 |        |        |        |        |        |        |        |        |        |
| Tester      |        |                 |        |        |        |        |        |        |        |        |        |
| Test Number |        |                 |        |        |        |        |        |        |        |        |        |
| Max Limit   | 10     | mA              |        |        |        |        |        |        |        |        |        |
| Min Limit   |        | mA              |        |        |        |        |        |        |        |        |        |
| Krad(Si)    | 0      | 3               | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL          |        |                 |        |        |        |        |        |        |        |        |        |
| Min         | 4.252  | 4.233           | 4.236  | 4.214  | 4.244  | 4.314  | 4.346  | 4.336  | 4.372  | 4.508  | 4.563  |
| Average     | 4.282  | 4.270           | 4.268  | 4.291  | 4.293  | 4.445  | 4.388  | 4.452  | 4.455  | 4.641  | 4.622  |
| Max         | 4.312  | 4.289           | 4.330  | 4.349  | 4.350  | 4.797  | 4.428  | 4.554  | 4.535  | 4.732  | 4.689  |
| UL          | 10.000 | 10.000          | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 |



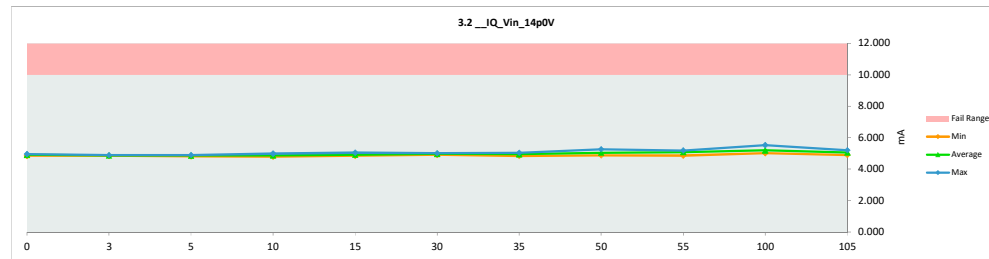
# HDR TID Report TPS7H2211-SP

| 3.2 __IQ_Vin_14p0V |    |    |
|--------------------|----|----|
| Test Site          |    |    |
| Tester             |    |    |
| Test Number        |    |    |
| Unit               | mA | mA |
| Max Limit          | 10 | 10 |
| Min Limit          |    |    |

| Krad(Si) | Serial # | PRE   | POST  | Delta  |
|----------|----------|-------|-------|--------|
| 0        | 227      | 4.852 | 4.847 | -0.005 |
| 0        | 229      | 4.965 | 4.959 | -0.005 |
| 3        | 107      | 4.872 | 4.891 | 0.018  |
| 3        | 108      | 4.864 | 4.880 | 0.016  |
| 3        | 109      | 4.844 | 4.842 | -0.002 |
| 3        | 110      | 4.878 | 4.887 | 0.010  |
| 3        | 111      | 4.865 | 4.869 | 0.004  |
| 5        | 112      | 4.881 | 4.895 | 0.014  |
| 5        | 113      | 4.853 | 4.869 | 0.016  |
| 5        | 114      | 4.853 | 4.864 | 0.011  |
| 5        | 115      | 4.794 | 4.806 | 0.012  |
| 5        | 116      | 4.874 | 4.894 | 0.019  |
| 10       | 96       | 4.933 | 4.980 | 0.047  |
| 10       | 97       | 4.803 | 4.827 | 0.024  |
| 10       | 98       | 4.764 | 4.801 | 0.037  |
| 10       | 99       | 4.820 | 4.841 | 0.020  |
| 10       | 100      | 4.879 | 4.909 | 0.029  |
| 15       | 101      | 4.979 | 5.044 | 0.065  |
| 15       | 102      | 4.795 | 4.841 | 0.047  |
| 15       | 104      | 4.816 | 4.853 | 0.036  |
| 15       | 105      | 4.945 | 4.982 | 0.037  |
| 15       | 106      | 4.849 | 4.897 | 0.048  |
| 30       | 83       | 4.871 | 5.009 | 0.138  |
| 30       | 84       | 4.883 | 5.007 | 0.124  |
| 30       | 85       | 4.746 | 5.008 | 0.262  |
| 30       | 86       | 4.786 | 4.903 | 0.117  |
| 30       | 87       | 4.795 | 4.928 | 0.133  |
| 35       | 88       | 4.874 | 5.001 | 0.128  |
| 35       | 92       | 4.778 | 4.838 | 0.060  |
| 35       | 93       | 4.784 | 4.877 | 0.093  |
| 35       | 94       | 4.874 | 4.982 | 0.108  |
| 35       | 95       | 4.892 | 5.033 | 0.141  |
| 50       | 1        | 4.853 | 5.002 | 0.149  |
| 50       | 2        | 4.936 | 5.151 | 0.215  |
| 50       | 3        | 4.746 | 4.881 | 0.134  |
| 50       | 5        | 4.821 | 4.907 | 0.087  |
| 50       | 6        | 4.972 | 5.264 | 0.293  |
| 55       | 7        | 4.938 | 5.168 | 0.230  |
| 55       | 8        | 4.938 | 5.100 | 0.162  |
| 55       | 9        | 4.839 | 5.083 | 0.244  |
| 55       | 10       | 4.926 | 5.185 | 0.258  |
| 55       | 11       | 4.744 | 4.860 | 0.116  |
| 100      | 29       | 4.985 | 5.527 | 0.542  |
| 100      | 30       | 4.941 | 5.213 | 0.272  |
| 100      | 31       | 4.863 | 5.217 | 0.353  |
| 100      | 32       | 4.812 | 5.102 | 0.290  |
| 100      | 34       | 4.831 | 5.128 | 0.298  |
| 100      | 35       | 4.721 | 5.012 | 0.291  |
| 100      | 36       | 4.931 | 5.197 | 0.266  |
| 100      | 38       | 4.822 | 5.217 | 0.395  |
| 100      | 39       | 4.847 | 5.185 | 0.338  |
| 100      | 41       | 4.855 | 5.151 | 0.296  |
| 100      | 42       | 4.912 | 5.277 | 0.364  |
| 100      | 43       | 4.786 | 5.067 | 0.281  |
| 100      | 45       | 4.905 | 5.301 | 0.396  |
| 100      | 46       | 4.900 | 5.285 | 0.384  |
| 100      | 47       | 4.888 | 5.192 | 0.304  |
| 100      | 48       | 4.803 | 5.111 | 0.309  |
| 100      | 49       | 4.906 | 5.239 | 0.333  |
| 100      | 51       | 4.926 | 5.327 | 0.401  |
| 100      | 54       | 4.888 | 5.144 | 0.256  |
| 100      | 56       | 4.866 | 5.035 | 0.169  |
| 100      | 57       | 4.893 | 5.210 | 0.317  |
| 100      | 58       | 4.913 | 5.238 | 0.325  |
| 100      | 59       | 4.914 | 5.153 | 0.239  |
| 105      | 61       | 4.913 | 5.199 | 0.286  |
| 105      | 62       | 4.847 | 5.140 | 0.293  |
| 105      | 64       | 4.849 | 5.045 | 0.196  |
| 105      | 65       | 4.776 | 4.898 | 0.122  |
| 105      | 66       | 4.775 | 5.040 | 0.265  |
| Max      |          | 4.985 | 5.527 | 0.542  |
| Average  |          | 4.861 | 5.036 | 0.175  |
| Min      |          | 4.721 | 4.801 | -0.005 |
| Std Dev  |          | 0.062 | 0.160 | 0.135  |



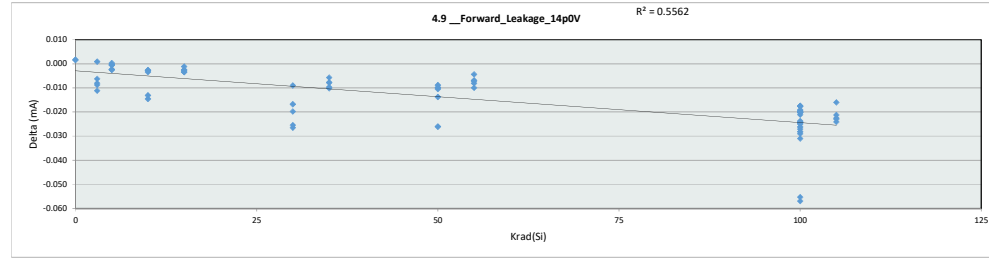
|             |                  |        |        |        |        |        |        |        |        |        |        |
|-------------|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|             | 3.2_IQ_Vin_14p0V |        |        |        |        |        |        |        |        |        |        |
| Test Site   |                  |        |        |        |        |        |        |        |        |        |        |
| Tester      |                  |        |        |        |        |        |        |        |        |        |        |
| Test Number |                  |        |        |        |        |        |        |        |        |        |        |
| Max Limit   | 10               | mA     |        |        |        |        |        |        |        |        |        |
| Min Limit   |                  | mA     |        |        |        |        |        |        |        |        |        |
| Krad(Si)    | 0                | 3      | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL          | 4.848            | 4.842  | 4.806  | 4.801  | 4.842  | 4.903  | 4.838  | 4.881  | 4.860  | 5.012  | 4.898  |
| Min         | 4.903            | 4.874  | 4.866  | 4.872  | 4.923  | 4.971  | 4.946  | 5.041  | 5.079  | 5.197  | 5.064  |
| Average     | 4.959            | 4.891  | 4.895  | 4.980  | 5.044  | 5.009  | 5.033  | 5.264  | 5.185  | 5.527  | 5.199  |
| Max         | 10.000           | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 |
| UL          | 10.000           | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 |



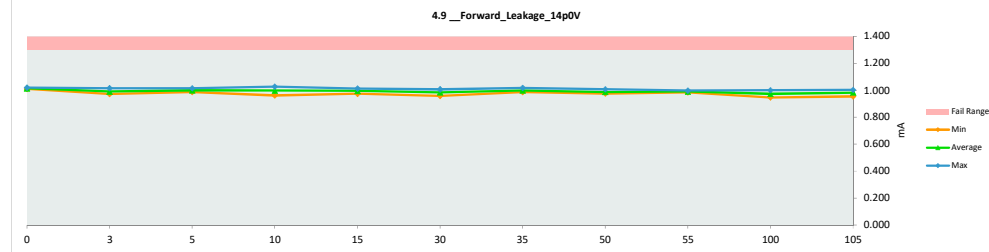
# HDR TID Report TPS7H2211-SP

| 4.9 _Forward_Leakage_14p0V |     |     |  |
|----------------------------|-----|-----|--|
| Test Site                  |     |     |  |
| Tester                     |     |     |  |
| Test Number                |     |     |  |
| Unit                       | mA  | mA  |  |
| Max Limit                  | 1.3 | 1.3 |  |
| Min Limit                  |     |     |  |

| Krad(Si) | Serial # | PRE   | POST  | Delta  |
|----------|----------|-------|-------|--------|
| 0        | 227      | 1.008 | 1.010 | 0.002  |
| 0        | 229      | 1.019 | 1.021 | 0.002  |
| 3        | 107      | 0.981 | 0.972 | -0.009 |
| 3        | 108      | 0.998 | 0.987 | -0.011 |
| 3        | 109      | 1.015 | 1.016 | 0.001  |
| 3        | 110      | 0.985 | 0.979 | -0.006 |
| 3        | 111      | 1.005 | 0.997 | -0.008 |
| 5        | 112      | 1.016 | 1.015 | 0.000  |
| 5        | 113      | 1.006 | 1.004 | -0.002 |
| 5        | 114      | 0.989 | 0.987 | -0.002 |
| 5        | 115      | 0.988 | 0.988 | 0.000  |
| 5        | 116      | 1.005 | 1.006 | 0.000  |
| 10       | 96       | 1.014 | 1.001 | -0.013 |
| 10       | 97       | 1.004 | 1.001 | -0.003 |
| 10       | 98       | 1.030 | 1.027 | -0.003 |
| 10       | 99       | 0.976 | 0.962 | -0.015 |
| 10       | 100      | 1.000 | 0.997 | -0.003 |
| 15       | 101      | 0.978 | 0.974 | -0.003 |
| 15       | 102      | 1.001 | 0.998 | -0.002 |
| 15       | 104      | 0.989 | 0.987 | -0.003 |
| 15       | 105      | 1.015 | 1.013 | -0.001 |
| 15       | 106      | 1.011 | 1.007 | -0.003 |
| 30       | 83       | 1.009 | 0.990 | -0.020 |
| 30       | 84       | 0.991 | 0.974 | -0.017 |
| 30       | 85       | 1.016 | 1.007 | -0.009 |
| 30       | 86       | 0.983 | 0.958 | -0.025 |
| 30       | 87       | 1.019 | 0.992 | -0.026 |
| 35       | 88       | 1.002 | 0.992 | -0.010 |
| 35       | 92       | 1.011 | 1.003 | -0.008 |
| 35       | 93       | 1.006 | 0.996 | -0.010 |
| 35       | 94       | 1.023 | 1.017 | -0.006 |
| 35       | 95       | 0.995 | 0.987 | -0.008 |
| 50       | 1        | 0.996 | 0.982 | -0.014 |
| 50       | 2        | 1.003 | 0.995 | -0.009 |
| 50       | 3        | 0.988 | 0.978 | -0.010 |
| 50       | 5        | 1.001 | 0.975 | -0.026 |
| 50       | 6        | 1.018 | 1.008 | -0.010 |
| 55       | 7        | 1.008 | 0.998 | -0.010 |
| 55       | 8        | 0.999 | 0.995 | -0.004 |
| 55       | 9        | 0.993 | 0.985 | -0.008 |
| 55       | 10       | 0.998 | 0.991 | -0.007 |
| 55       | 11       | 0.993 | 0.986 | -0.007 |
| 100      | 29       | 1.010 | 0.986 | -0.025 |
| 100      | 30       | 0.997 | 0.969 | -0.028 |
| 100      | 31       | 0.982 | 0.957 | -0.024 |
| 100      | 32       | 1.017 | 0.986 | -0.031 |
| 100      | 34       | 0.982 | 0.962 | -0.020 |
| 100      | 35       | 1.004 | 0.949 | -0.055 |
| 100      | 36       | 1.008 | 0.988 | -0.020 |
| 100      | 38       | 1.002 | 0.983 | -0.019 |
| 100      | 39       | 0.995 | 0.969 | -0.026 |
| 100      | 41       | 1.010 | 0.986 | -0.024 |
| 100      | 42       | 0.991 | 0.970 | -0.021 |
| 100      | 43       | 1.003 | 0.946 | -0.057 |
| 100      | 45       | 1.007 | 0.988 | -0.020 |
| 100      | 46       | 1.006 | 0.977 | -0.029 |
| 100      | 47       | 0.992 | 0.972 | -0.020 |
| 100      | 48       | 0.994 | 0.976 | -0.018 |
| 100      | 49       | 0.995 | 0.971 | -0.024 |
| 100      | 51       | 0.990 | 0.973 | -0.017 |
| 100      | 54       | 0.975 | 0.948 | -0.027 |
| 100      | 56       | 1.025 | 1.001 | -0.024 |
| 100      | 57       | 0.989 | 0.964 | -0.025 |
| 100      | 58       | 1.000 | 0.982 | -0.018 |
| 100      | 59       | 1.017 | 0.997 | -0.020 |
| 105      | 61       | 1.003 | 0.981 | -0.023 |
| 105      | 62       | 1.023 | 1.002 | -0.021 |
| 105      | 64       | 0.979 | 0.955 | -0.024 |
| 105      | 65       | 1.019 | 1.003 | -0.016 |
| 105      | 66       | 0.996 | 0.973 | -0.023 |
| Max      |          | 1.030 | 1.027 | 0.002  |
| Average  |          | 1.001 | 0.987 | -0.015 |
| Min      |          | 0.975 | 0.946 | -0.057 |
| Std Dev  |          | 0.013 | 0.018 | 0.012  |



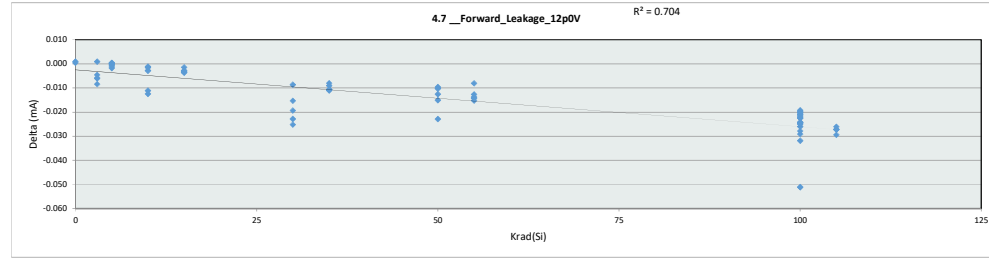
| 4.9 Forward Leakage 14p0 |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                |       |       |       |       |       |       |       |       |       |       |       |
| Tester                   |       |       |       |       |       |       |       |       |       |       |       |
| Test Number              |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                | 1.3   | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit                |       | mA    |       |       |       |       |       |       |       |       |       |
| Krad(Si)                 | 0     | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                       |       |       |       |       |       |       |       |       |       |       |       |
| Min                      | 1.010 | 0.972 | 0.987 | 0.962 | 0.974 | 0.958 | 0.987 | 0.975 | 0.985 | 0.946 | 0.955 |
| Average                  | 1.015 | 0.990 | 1.000 | 0.998 | 0.996 | 0.984 | 0.999 | 0.988 | 0.991 | 0.974 | 0.983 |
| Max                      | 1.021 | 1.016 | 1.015 | 1.027 | 1.013 | 1.007 | 1.017 | 1.008 | 0.998 | 1.001 | 1.003 |
| UL                       | 1.300 | 1.300 | 1.300 | 1.300 | 1.300 | 1.300 | 1.300 | 1.300 | 1.300 | 1.300 | 1.300 |



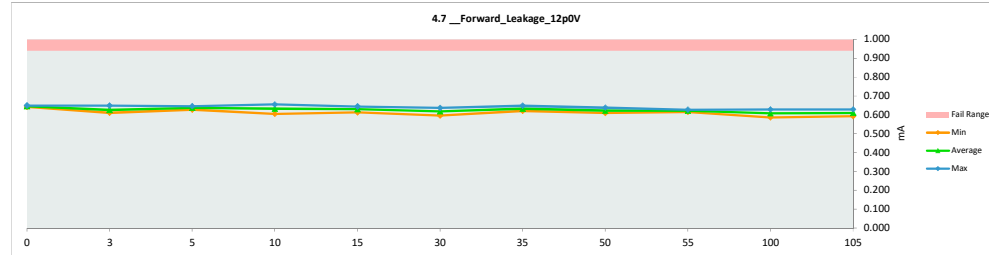
# HDR TID Report TPS7H2211-SP

| 4.7 __Forward_Leakage_12p0V |      |      |  |  |
|-----------------------------|------|------|--|--|
| Test Site                   |      |      |  |  |
| Tester                      |      |      |  |  |
| Test Number                 |      |      |  |  |
| Unit                        | mA   | mA   |  |  |
| Max Limit                   | 0.94 | 0.94 |  |  |
| Min Limit                   |      |      |  |  |

| Krad(Si) | Serial # | PRE   | POST  | Delta  |
|----------|----------|-------|-------|--------|
| 0        | 227      | 0.641 | 0.642 | 0.001  |
| 0        | 229      | 0.649 | 0.650 | 0.000  |
| 3        | 107      | 0.617 | 0.611 | -0.006 |
| 3        | 108      | 0.630 | 0.622 | -0.008 |
| 3        | 109      | 0.648 | 0.649 | 0.001  |
| 3        | 110      | 0.622 | 0.618 | -0.005 |
| 3        | 111      | 0.638 | 0.632 | -0.006 |
| 5        | 112      | 0.646 | 0.646 | 0.000  |
| 5        | 113      | 0.640 | 0.639 | -0.001 |
| 5        | 114      | 0.630 | 0.629 | -0.002 |
| 5        | 115      | 0.627 | 0.627 | 0.000  |
| 5        | 116      | 0.643 | 0.643 | 0.000  |
| 10       | 96       | 0.644 | 0.633 | -0.011 |
| 10       | 97       | 0.636 | 0.635 | -0.001 |
| 10       | 98       | 0.657 | 0.655 | -0.002 |
| 10       | 99       | 0.617 | 0.605 | -0.013 |
| 10       | 100      | 0.639 | 0.636 | -0.003 |
| 15       | 101      | 0.616 | 0.613 | -0.003 |
| 15       | 102      | 0.636 | 0.633 | -0.003 |
| 15       | 104      | 0.626 | 0.622 | -0.004 |
| 15       | 105      | 0.646 | 0.645 | -0.001 |
| 15       | 106      | 0.641 | 0.637 | -0.004 |
| 30       | 83       | 0.645 | 0.625 | -0.019 |
| 30       | 84       | 0.625 | 0.610 | -0.015 |
| 30       | 85       | 0.645 | 0.636 | -0.009 |
| 30       | 86       | 0.620 | 0.597 | -0.023 |
| 30       | 87       | 0.649 | 0.624 | -0.025 |
| 35       | 88       | 0.640 | 0.629 | -0.011 |
| 35       | 92       | 0.645 | 0.635 | -0.011 |
| 35       | 93       | 0.641 | 0.630 | -0.011 |
| 35       | 94       | 0.656 | 0.648 | -0.008 |
| 35       | 95       | 0.630 | 0.621 | -0.009 |
| 50       | 1        | 0.634 | 0.619 | -0.015 |
| 50       | 2        | 0.638 | 0.629 | -0.010 |
| 50       | 3        | 0.630 | 0.618 | -0.013 |
| 50       | 5        | 0.632 | 0.609 | -0.023 |
| 50       | 6        | 0.648 | 0.638 | -0.010 |
| 55       | 7        | 0.639 | 0.625 | -0.014 |
| 55       | 8        | 0.632 | 0.624 | -0.008 |
| 55       | 9        | 0.630 | 0.615 | -0.015 |
| 55       | 10       | 0.640 | 0.627 | -0.013 |
| 55       | 11       | 0.632 | 0.618 | -0.014 |
| 100      | 29       | 0.641 | 0.616 | -0.024 |
| 100      | 30       | 0.634 | 0.604 | -0.029 |
| 100      | 31       | 0.621 | 0.596 | -0.025 |
| 100      | 32       | 0.649 | 0.617 | -0.032 |
| 100      | 34       | 0.621 | 0.600 | -0.021 |
| 100      | 35       | 0.638 | 0.587 | -0.051 |
| 100      | 36       | 0.640 | 0.620 | -0.020 |
| 100      | 38       | 0.633 | 0.614 | -0.020 |
| 100      | 39       | 0.630 | 0.605 | -0.025 |
| 100      | 41       | 0.641 | 0.616 | -0.024 |
| 100      | 42       | 0.628 | 0.605 | -0.023 |
| 100      | 43       | 0.640 | 0.589 | -0.051 |
| 100      | 45       | 0.642 | 0.619 | -0.022 |
| 100      | 46       | 0.641 | 0.613 | -0.028 |
| 100      | 47       | 0.629 | 0.608 | -0.021 |
| 100      | 48       | 0.634 | 0.611 | -0.023 |
| 100      | 49       | 0.626 | 0.605 | -0.021 |
| 100      | 51       | 0.628 | 0.608 | -0.019 |
| 100      | 54       | 0.610 | 0.586 | -0.025 |
| 100      | 56       | 0.654 | 0.628 | -0.026 |
| 100      | 57       | 0.625 | 0.601 | -0.024 |
| 100      | 58       | 0.637 | 0.617 | -0.020 |
| 100      | 59       | 0.650 | 0.628 | -0.022 |
| 105      | 61       | 0.634 | 0.607 | -0.027 |
| 105      | 62       | 0.655 | 0.628 | -0.027 |
| 105      | 64       | 0.622 | 0.592 | -0.030 |
| 105      | 65       | 0.648 | 0.622 | -0.026 |
| 105      | 66       | 0.629 | 0.601 | -0.027 |
| Max      |          | 0.657 | 0.655 | 0.001  |
| Average  |          | 0.636 | 0.621 | -0.015 |
| Min      |          | 0.610 | 0.586 | -0.051 |
| Std Dev  |          | 0.010 | 0.016 | 0.011  |

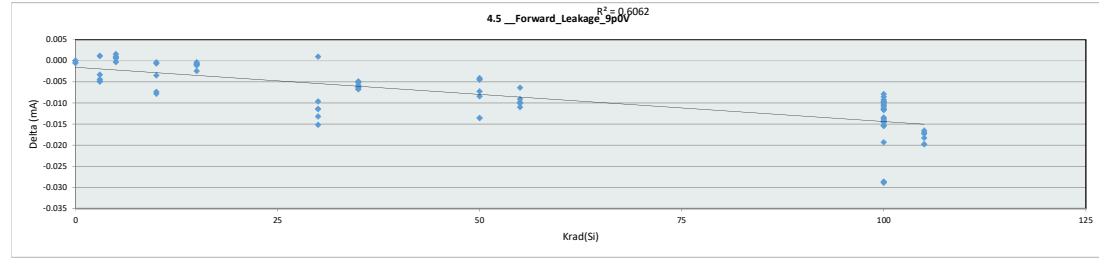


| 4.7 __Forward_Leakage_12p0 |       |       |       |       |       |       |       |       |       |       |       |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                  |       |       |       |       |       |       |       |       |       |       |       |
| Tester                     |       |       |       |       |       |       |       |       |       |       |       |
| Test Number                |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                  | 0.94  | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit                  |       | mA    |       |       |       |       |       |       |       |       |       |
| Krad(Si)                   | 0     | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                         |       |       |       |       |       |       |       |       |       |       |       |
| Min                        | 0.642 | 0.611 | 0.627 | 0.605 | 0.613 | 0.597 | 0.621 | 0.609 | 0.615 | 0.586 | 0.592 |
| Average                    | 0.646 | 0.626 | 0.637 | 0.633 | 0.630 | 0.618 | 0.632 | 0.622 | 0.622 | 0.608 | 0.610 |
| Max                        | 0.650 | 0.649 | 0.646 | 0.655 | 0.645 | 0.636 | 0.648 | 0.638 | 0.627 | 0.628 | 0.628 |
| UL                         | 0.940 | 0.940 | 0.940 | 0.940 | 0.940 | 0.940 | 0.940 | 0.940 | 0.940 | 0.940 | 0.940 |

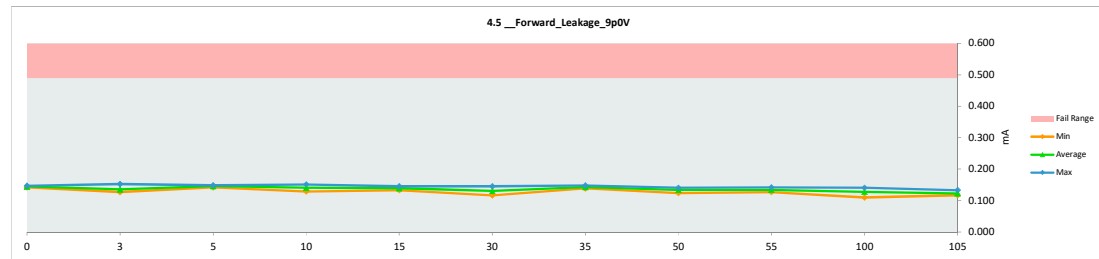


# HDR TID Report TPS7H2211-SP

| 4.5 _Forward_Leakage_9p0V |          |       |       |        |
|---------------------------|----------|-------|-------|--------|
| Test Site                 |          |       |       |        |
| Tester                    |          |       |       |        |
| Test Number               |          |       |       |        |
| Unit                      |          | mA    | mA    |        |
| Max Limit                 |          | 0.49  | 0.49  |        |
| Min Limit                 |          |       |       |        |
| Krad(Si)                  | Serial # | PRE   | POST  | Delta  |
| 0                         | 227      | 0.142 | 0.142 | 0.000  |
| 0                         | 229      | 0.148 | 0.147 | -0.001 |
| 3                         | 107      | 0.131 | 0.127 | -0.004 |
| 3                         | 108      | 0.136 | 0.131 | -0.005 |
| 3                         | 109      | 0.151 | 0.152 | 0.001  |
| 3                         | 110      | 0.134 | 0.131 | -0.003 |
| 3                         | 111      | 0.140 | 0.136 | -0.005 |
| 5                         | 112      | 0.148 | 0.148 | 0.001  |
| 5                         | 113      | 0.143 | 0.144 | 0.001  |
| 5                         | 114      | 0.148 | 0.148 | 0.000  |
| 5                         | 115      | 0.140 | 0.141 | 0.002  |
| 5                         | 116      | 0.146 | 0.147 | 0.001  |
| 10                        | 96       | 0.145 | 0.137 | -0.008 |
| 10                        | 97       | 0.141 | 0.140 | -0.001 |
| 10                        | 98       | 0.151 | 0.151 | 0.000  |
| 10                        | 99       | 0.136 | 0.129 | -0.007 |
| 10                        | 100      | 0.149 | 0.146 | -0.003 |
| 15                        | 101      | 0.133 | 0.132 | -0.001 |
| 15                        | 102      | 0.142 | 0.141 | -0.001 |
| 15                        | 104      | 0.135 | 0.133 | -0.002 |
| 15                        | 105      | 0.146 | 0.145 | 0.000  |
| 15                        | 106      | 0.145 | 0.144 | -0.001 |
| 30                        | 83       | 0.147 | 0.135 | -0.011 |
| 30                        | 84       | 0.134 | 0.124 | -0.010 |
| 30                        | 85       | 0.144 | 0.145 | 0.001  |
| 30                        | 86       | 0.129 | 0.116 | -0.013 |
| 30                        | 87       | 0.146 | 0.131 | -0.015 |
| 35                        | 88       | 0.149 | 0.142 | -0.006 |
| 35                        | 92       | 0.149 | 0.143 | -0.007 |
| 35                        | 93       | 0.147 | 0.142 | -0.006 |
| 35                        | 94       | 0.152 | 0.147 | -0.005 |
| 35                        | 95       | 0.143 | 0.138 | -0.005 |
| 50                        | 1        | 0.140 | 0.132 | -0.008 |
| 50                        | 2        | 0.145 | 0.140 | -0.004 |
| 50                        | 3        | 0.141 | 0.133 | -0.007 |
| 50                        | 5        | 0.137 | 0.123 | -0.014 |
| 50                        | 6        | 0.144 | 0.140 | -0.004 |
| 55                        | 7        | 0.141 | 0.132 | -0.010 |
| 55                        | 8        | 0.142 | 0.136 | -0.006 |
| 55                        | 9        | 0.137 | 0.126 | -0.011 |
| 55                        | 10       | 0.151 | 0.142 | -0.009 |
| 55                        | 11       | 0.145 | 0.135 | -0.010 |
| 100                       | 29       | 0.143 | 0.130 | -0.014 |
| 100                       | 30       | 0.140 | 0.125 | -0.015 |
| 100                       | 31       | 0.136 | 0.122 | -0.014 |
| 100                       | 32       | 0.148 | 0.129 | -0.019 |
| 100                       | 34       | 0.134 | 0.123 | -0.010 |
| 100                       | 35       | 0.138 | 0.110 | -0.029 |
| 100                       | 36       | 0.148 | 0.139 | -0.010 |
| 100                       | 38       | 0.138 | 0.129 | -0.009 |
| 100                       | 39       | 0.140 | 0.129 | -0.011 |
| 100                       | 41       | 0.143 | 0.130 | -0.013 |
| 100                       | 42       | 0.141 | 0.129 | -0.012 |
| 100                       | 43       | 0.144 | 0.116 | -0.029 |
| 100                       | 45       | 0.144 | 0.133 | -0.012 |
| 100                       | 46       | 0.150 | 0.135 | -0.015 |
| 100                       | 47       | 0.140 | 0.131 | -0.010 |
| 100                       | 48       | 0.142 | 0.126 | -0.015 |
| 100                       | 49       | 0.132 | 0.124 | -0.008 |
| 100                       | 51       | 0.140 | 0.132 | -0.009 |
| 100                       | 54       | 0.127 | 0.115 | -0.012 |
| 100                       | 56       | 0.146 | 0.132 | -0.014 |
| 100                       | 57       | 0.139 | 0.128 | -0.011 |
| 100                       | 58       | 0.146 | 0.136 | -0.010 |
| 100                       | 59       | 0.151 | 0.140 | -0.011 |
| 105                       | 61       | 0.139 | 0.122 | -0.017 |
| 105                       | 62       | 0.150 | 0.133 | -0.017 |
| 105                       | 64       | 0.137 | 0.117 | -0.020 |
| 105                       | 65       | 0.143 | 0.125 | -0.018 |
| 105                       | 66       | 0.134 | 0.117 | -0.017 |
| Max                       |          | 0.152 | 0.152 | 0.002  |
| Average                   |          | 0.142 | 0.134 | -0.009 |
| Min                       |          | 0.127 | 0.110 | -0.029 |
| Std Dev                   |          | 0.006 | 0.010 | 0.007  |



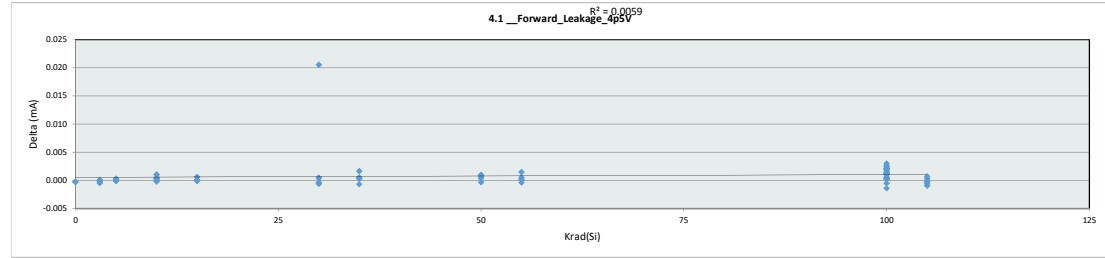
| 4.5 _Forward_Leakage_9p0V |       |       |       |       |       |       |       |       |       |       |       |  |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Test Site                 |       |       |       |       |       |       |       |       |       |       |       |  |
| Tester                    |       |       |       |       |       |       |       |       |       |       |       |  |
| Test Number               |       |       |       |       |       |       |       |       |       |       |       |  |
| Max Limit                 |       | 0.49  | mA    |       |       |       |       |       |       |       |       |  |
| Min Limit                 |       |       | mA    |       |       |       |       |       |       |       |       |  |
| Krad(Si)                  | 0     | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |  |
| LL                        |       |       |       |       |       |       |       |       |       |       |       |  |
| Min                       | 0.142 | 0.127 | 0.141 | 0.129 | 0.132 | 0.116 | 0.138 | 0.123 | 0.126 | 0.110 | 0.117 |  |
| Average                   | 0.145 | 0.135 | 0.146 | 0.140 | 0.139 | 0.130 | 0.142 | 0.134 | 0.134 | 0.128 | 0.123 |  |
| Max                       | 0.147 | 0.152 | 0.148 | 0.151 | 0.145 | 0.145 | 0.147 | 0.140 | 0.142 | 0.140 | 0.133 |  |
| UL                        | 0.490 | 0.490 | 0.490 | 0.490 | 0.490 | 0.490 | 0.490 | 0.490 | 0.490 | 0.490 | 0.490 |  |



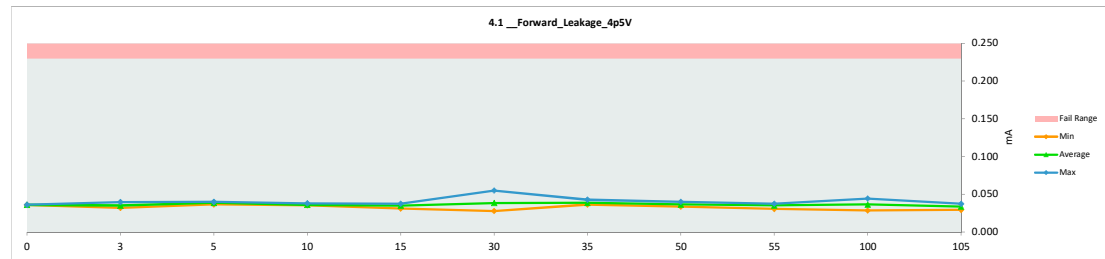
# HDR TID Report TPS7H2211-SP

| 4.1 _Forward_Leakage_4p5V |      |      |  |
|---------------------------|------|------|--|
| Test Site                 |      |      |  |
| Tester                    |      |      |  |
| Test Number               |      |      |  |
| Unit                      | mA   | mA   |  |
| Max Limit                 | 0.23 | 0.23 |  |
| Min Limit                 |      |      |  |

| Krad(Si) | Serial # | PRE   | POST  | Delta  |
|----------|----------|-------|-------|--------|
| 0        | 227      | 0.036 | 0.036 | 0.000  |
| 0        | 229      | 0.037 | 0.036 | 0.000  |
| 3        | 107      | 0.032 | 0.032 | 0.000  |
| 3        | 108      | 0.033 | 0.033 | 0.000  |
| 3        | 109      | 0.040 | 0.040 | 0.000  |
| 3        | 110      | 0.034 | 0.034 | 0.000  |
| 3        | 111      | 0.037 | 0.037 | 0.000  |
| 5        | 112      | 0.036 | 0.037 | 0.000  |
| 5        | 113      | 0.039 | 0.039 | 0.000  |
| 5        | 114      | 0.039 | 0.039 | 0.000  |
| 5        | 115      | 0.039 | 0.040 | 0.000  |
| 5        | 116      | 0.039 | 0.039 | 0.000  |
| 10       | 96       | 0.035 | 0.036 | 0.000  |
| 10       | 97       | 0.036 | 0.035 | 0.000  |
| 10       | 98       | 0.037 | 0.038 | 0.001  |
| 10       | 99       | 0.035 | 0.035 | 0.000  |
| 10       | 100      | 0.035 | 0.035 | 0.000  |
| 15       | 101      | 0.032 | 0.032 | 0.000  |
| 15       | 102      | 0.036 | 0.037 | 0.001  |
| 15       | 104      | 0.031 | 0.031 | 0.000  |
| 15       | 105      | 0.036 | 0.037 | 0.001  |
| 15       | 106      | 0.037 | 0.037 | 0.000  |
| 30       | 83       | 0.039 | 0.039 | 0.000  |
| 30       | 84       | 0.034 | 0.033 | -0.001 |
| 30       | 85       | 0.034 | 0.055 | 0.021  |
| 30       | 86       | 0.028 | 0.028 | 0.000  |
| 30       | 87       | 0.036 | 0.037 | 0.000  |
| 35       | 88       | 0.043 | 0.043 | -0.001 |
| 35       | 92       | 0.036 | 0.036 | 0.000  |
| 35       | 93       | 0.037 | 0.037 | 0.001  |
| 35       | 94       | 0.038 | 0.039 | 0.002  |
| 35       | 95       | 0.037 | 0.037 | 0.000  |
| 50       | 1        | 0.034 | 0.034 | 0.000  |
| 50       | 2        | 0.039 | 0.040 | 0.001  |
| 50       | 3        | 0.034 | 0.034 | 0.001  |
| 50       | 5        | 0.034 | 0.035 | 0.001  |
| 50       | 6        | 0.039 | 0.039 | 0.000  |
| 55       | 7        | 0.035 | 0.035 | 0.000  |
| 55       | 8        | 0.035 | 0.037 | 0.001  |
| 55       | 9        | 0.030 | 0.031 | 0.000  |
| 55       | 10       | 0.038 | 0.037 | 0.000  |
| 55       | 11       | 0.036 | 0.037 | 0.001  |
| 100      | 29       | 0.034 | 0.036 | 0.002  |
| 100      | 30       | 0.037 | 0.039 | 0.002  |
| 100      | 31       | 0.035 | 0.036 | 0.001  |
| 100      | 32       | 0.036 | 0.036 | 0.000  |
| 100      | 34       | 0.029 | 0.030 | 0.002  |
| 100      | 35       | 0.031 | 0.031 | 0.001  |
| 100      | 36       | 0.040 | 0.043 | 0.003  |
| 100      | 38       | 0.031 | 0.034 | 0.003  |
| 100      | 39       | 0.033 | 0.035 | 0.002  |
| 100      | 41       | 0.034 | 0.035 | 0.001  |
| 100      | 42       | 0.038 | 0.037 | -0.001 |
| 100      | 43       | 0.035 | 0.037 | 0.001  |
| 100      | 45       | 0.037 | 0.036 | -0.001 |
| 100      | 46       | 0.043 | 0.044 | 0.001  |
| 100      | 47       | 0.038 | 0.039 | 0.001  |
| 100      | 48       | 0.032 | 0.032 | 0.001  |
| 100      | 49       | 0.031 | 0.033 | 0.002  |
| 100      | 51       | 0.036 | 0.038 | 0.002  |
| 100      | 54       | 0.027 | 0.029 | 0.001  |
| 100      | 56       | 0.035 | 0.036 | 0.000  |
| 100      | 57       | 0.038 | 0.038 | 0.000  |
| 100      | 58       | 0.041 | 0.041 | 0.000  |
| 100      | 59       | 0.042 | 0.044 | 0.002  |
| 105      | 61       | 0.035 | 0.036 | 0.000  |
| 105      | 62       | 0.037 | 0.037 | 0.001  |
| 105      | 64       | 0.033 | 0.033 | 0.000  |
| 105      | 65       | 0.033 | 0.033 | 0.000  |
| 105      | 66       | 0.030 | 0.029 | -0.001 |
| Max      |          | 0.043 | 0.055 | 0.021  |
| Average  |          | 0.036 | 0.036 | 0.001  |
| Min      |          | 0.027 | 0.028 | -0.001 |
| Std Dev  |          | 0.003 | 0.004 | 0.003  |

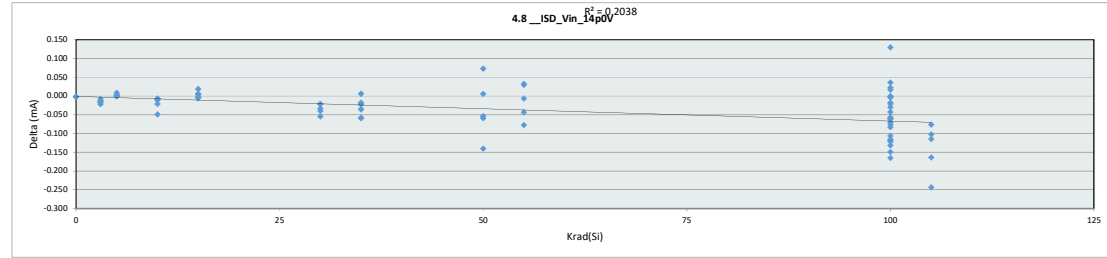


| 4.1 _Forward_Leakage_4p5V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                 |       |       |       |       |       |       |       |       |       |       |       |
| Tester                    |       |       |       |       |       |       |       |       |       |       |       |
| Test Number               |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                 | 0.23  | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit                 |       | mA    |       |       |       |       |       |       |       |       |       |
| Krad(Si)                  | 0     | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                        |       |       |       |       |       |       |       |       |       |       |       |
| Min                       | 0.036 | 0.032 | 0.037 | 0.035 | 0.031 | 0.028 | 0.036 | 0.034 | 0.031 | 0.029 | 0.029 |
| Average                   | 0.036 | 0.035 | 0.039 | 0.036 | 0.035 | 0.038 | 0.038 | 0.036 | 0.035 | 0.037 | 0.034 |
| Max                       | 0.036 | 0.040 | 0.040 | 0.038 | 0.037 | 0.055 | 0.043 | 0.040 | 0.037 | 0.044 | 0.037 |
| UL                        | 0.230 | 0.230 | 0.230 | 0.230 | 0.230 | 0.230 | 0.230 | 0.230 | 0.230 | 0.230 | 0.230 |

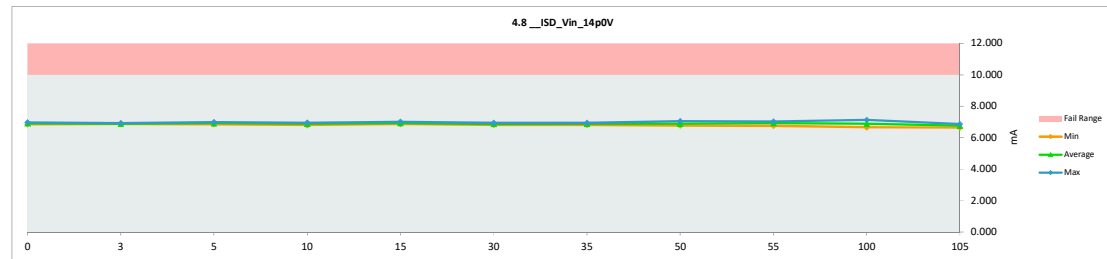


# HDR TID Report TPS7H2211-SP

|          |             | 4.8 __ISD_Vin_14p0V |       |        |
|----------|-------------|---------------------|-------|--------|
|          | Test Site   |                     |       |        |
|          | Tester      |                     |       |        |
|          | Test Number |                     |       |        |
|          | Unit        | mA                  | mA    |        |
|          | Max Limit   | 10                  | 10    |        |
|          | Min Limit   |                     |       |        |
| Krad(Si) | Serial #    | PRE                 | POST  | Delta  |
| 0        | 227         | 6.856               | 6.855 | -0.001 |
| 0        | 229         | 6.978               | 6.976 | -0.003 |
| 3        | 107         | 6.910               | 6.897 | -0.013 |
| 3        | 108         | 6.901               | 6.884 | -0.017 |
| 3        | 109         | 6.940               | 6.932 | -0.008 |
| 3        | 110         | 6.919               | 6.904 | -0.015 |
| 3        | 111         | 6.882               | 6.860 | -0.022 |
| 5        | 112         | 6.954               | 6.953 | -0.001 |
| 5        | 113         | 6.902               | 6.905 | 0.003  |
| 5        | 114         | 6.937               | 6.936 | 0.000  |
| 5        | 115         | 6.852               | 6.855 | 0.002  |
| 5        | 116         | 6.977               | 6.985 | 0.008  |
| 10       | 96          | 6.981               | 6.960 | -0.021 |
| 10       | 97          | 6.869               | 6.858 | -0.011 |
| 10       | 98          | 6.854               | 6.848 | -0.007 |
| 10       | 99          | 6.854               | 6.805 | -0.049 |
| 10       | 100         | 6.968               | 6.961 | -0.007 |
| 15       | 101         | 6.997               | 7.015 | 0.018  |
| 15       | 102         | 6.880               | 6.884 | 0.004  |
| 15       | 104         | 6.877               | 6.872 | -0.005 |
| 15       | 105         | 6.953               | 6.951 | -0.002 |
| 15       | 106         | 6.917               | 6.922 | 0.006  |
| 30       | 83          | 6.946               | 6.925 | -0.021 |
| 30       | 84          | 6.963               | 6.941 | -0.022 |
| 30       | 85          | 6.896               | 6.863 | -0.034 |
| 30       | 86          | 6.873               | 6.819 | -0.054 |
| 30       | 87          | 6.908               | 6.868 | -0.040 |
| 35       | 88          | 6.926               | 6.908 | -0.018 |
| 35       | 92          | 6.882               | 6.823 | -0.058 |
| 35       | 93          | 6.876               | 6.840 | -0.036 |
| 35       | 94          | 6.966               | 6.944 | -0.022 |
| 35       | 95          | 6.917               | 6.923 | 0.006  |
| 50       | 1           | 6.909               | 6.856 | -0.054 |
| 50       | 2           | 6.988               | 6.994 | 0.006  |
| 50       | 3           | 6.834               | 6.774 | -0.059 |
| 50       | 5           | 6.914               | 6.773 | -0.140 |
| 50       | 6           | 6.971               | 7.044 | 0.073  |
| 55       | 7           | 7.011               | 7.004 | -0.007 |
| 55       | 8           | 6.957               | 6.913 | -0.044 |
| 55       | 9           | 6.933               | 6.963 | 0.030  |
| 55       | 10          | 6.993               | 7.026 | 0.032  |
| 55       | 11          | 6.836               | 6.759 | -0.077 |
| 100      | 29          | 7.005               | 7.135 | 0.130  |
| 100      | 30          | 6.998               | 6.876 | -0.122 |
| 100      | 31          | 6.906               | 6.885 | -0.021 |
| 100      | 32          | 6.944               | 6.860 | -0.083 |
| 100      | 34          | 6.898               | 6.841 | -0.057 |
| 100      | 35          | 6.814               | 6.665 | -0.149 |
| 100      | 36          | 6.973               | 6.858 | -0.115 |
| 100      | 38          | 6.942               | 6.978 | 0.036  |
| 100      | 39          | 6.920               | 6.878 | -0.043 |
| 100      | 41          | 6.923               | 6.853 | -0.070 |
| 100      | 42          | 6.975               | 6.974 | 0.000  |
| 100      | 43          | 6.870               | 6.739 | -0.132 |
| 100      | 45          | 6.972               | 6.989 | 0.017  |
| 100      | 46          | 6.937               | 6.934 | -0.004 |
| 100      | 47          | 6.935               | 6.860 | -0.076 |
| 100      | 48          | 6.952               | 6.934 | -0.018 |
| 100      | 49          | 6.917               | 6.888 | -0.030 |
| 100      | 51          | 6.973               | 6.995 | 0.022  |
| 100      | 54          | 6.928               | 6.810 | -0.118 |
| 100      | 56          | 6.990               | 6.825 | -0.165 |
| 100      | 57          | 6.921               | 6.860 | -0.061 |
| 100      | 58          | 6.953               | 6.893 | -0.060 |
| 100      | 59          | 6.983               | 6.877 | -0.106 |
| 105      | 61          | 6.964               | 6.862 | -0.102 |
| 105      | 62          | 6.946               | 6.870 | -0.076 |
| 105      | 64          | 6.910               | 6.746 | -0.164 |
| 105      | 65          | 6.880               | 6.637 | -0.243 |
| 105      | 66          | 6.833               | 6.718 | -0.115 |
|          | Max         | 7.011               | 7.135 | 0.130  |
|          | Average     | 6.926               | 6.889 | -0.037 |
|          | Min         | 6.814               | 6.637 | -0.243 |
|          | Std Dev     | 0.048               | 0.086 | 0.060  |

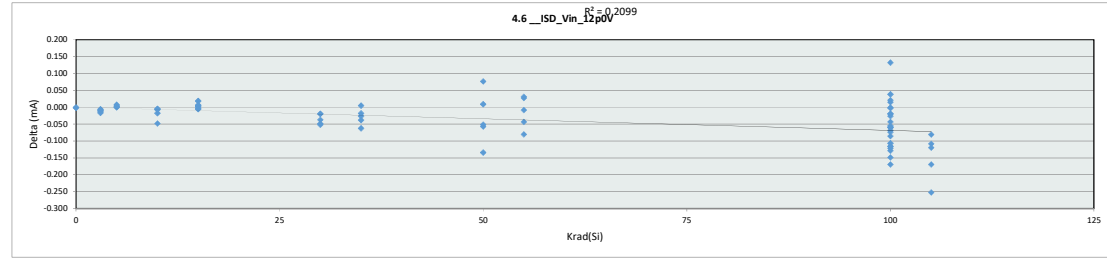


|             |         | 4.8 __ISD_Vin_14p0V |        |        |        |        |        |        |        |        |        |        |
|-------------|---------|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site   |         |                     |        |        |        |        |        |        |        |        |        |        |
| Tester      |         |                     |        |        |        |        |        |        |        |        |        |        |
| Test Number |         |                     |        |        |        |        |        |        |        |        |        |        |
| Max Limit   | 10      |                     | mA     |        |        |        |        |        |        |        |        |        |
| Min Limit   | mA      |                     |        |        |        |        |        |        |        |        |        |        |
| Krad(Si)    | 0       | 3                   | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |        |
| LL          | Min     | 6.855               | 6.860  | 6.855  | 6.805  | 6.872  | 6.819  | 6.823  | 6.774  | 6.759  | 6.665  | 6.637  |
|             | Average | 6.915               | 6.895  | 6.927  | 6.886  | 6.929  | 6.883  | 6.888  | 6.888  | 6.933  | 6.887  | 6.766  |
|             | Max     | 6.976               | 6.932  | 6.985  | 6.961  | 7.015  | 6.941  | 6.944  | 7.044  | 7.026  | 7.135  | 6.870  |
|             | UL      | 10.000              | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 |

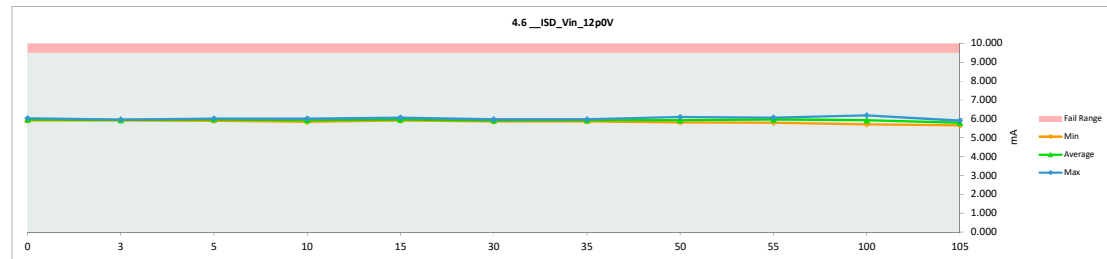


# HDR TID Report TPS7H2211-SP

| 4.6 __ISD_Vin_12p0V |          |       |       |        |
|---------------------|----------|-------|-------|--------|
| Test Site           |          |       |       |        |
| Tester              |          |       |       |        |
| Test Number         |          |       |       |        |
| Unit                |          | mA    | mA    |        |
| Max Limit           |          | 9.5   | 9.5   |        |
| Min Limit           |          |       |       |        |
| Krad(Si)            | Serial # | PRE   | POST  | Delta  |
| 0                   | 227      | 5.910 | 5.910 | 0.000  |
| 0                   | 229      | 6.027 | 6.025 | -0.002 |
| 3                   | 107      | 5.949 | 5.941 | -0.008 |
| 3                   | 108      | 5.941 | 5.928 | -0.013 |
| 3                   | 109      | 5.971 | 5.965 | -0.006 |
| 3                   | 110      | 5.959 | 5.949 | -0.010 |
| 3                   | 111      | 5.927 | 5.910 | -0.017 |
| 5                   | 112      | 5.993 | 5.992 | -0.001 |
| 5                   | 113      | 5.938 | 5.942 | 0.004  |
| 5                   | 114      | 5.972 | 5.972 | 0.000  |
| 5                   | 115      | 5.890 | 5.893 | 0.003  |
| 5                   | 116      | 6.003 | 6.011 | 0.008  |
| 10                  | 96       | 6.023 | 6.006 | -0.018 |
| 10                  | 97       | 5.909 | 5.902 | -0.007 |
| 10                  | 98       | 5.897 | 5.892 | -0.004 |
| 10                  | 99       | 5.897 | 5.848 | -0.048 |
| 10                  | 100      | 6.006 | 6.001 | -0.006 |
| 15                  | 101      | 6.036 | 6.054 | 0.018  |
| 15                  | 102      | 5.912 | 5.916 | 0.003  |
| 15                  | 104      | 5.917 | 5.911 | -0.006 |
| 15                  | 105      | 6.002 | 6.000 | -0.002 |
| 15                  | 106      | 5.954 | 5.960 | 0.006  |
| 30                  | 83       | 5.984 | 5.964 | -0.020 |
| 30                  | 84       | 5.990 | 5.971 | -0.019 |
| 30                  | 85       | 5.923 | 5.874 | -0.049 |
| 30                  | 86       | 5.917 | 5.865 | -0.052 |
| 30                  | 87       | 5.937 | 5.900 | -0.037 |
| 35                  | 88       | 5.966 | 5.947 | -0.018 |
| 35                  | 92       | 5.922 | 5.859 | -0.063 |
| 35                  | 93       | 5.915 | 5.877 | -0.038 |
| 35                  | 94       | 6.005 | 5.979 | -0.026 |
| 35                  | 95       | 5.961 | 5.965 | 0.005  |
| 50                  | 1        | 5.952 | 5.900 | -0.052 |
| 50                  | 2        | 6.019 | 6.028 | 0.009  |
| 50                  | 3        | 5.878 | 5.820 | -0.057 |
| 50                  | 5        | 5.942 | 5.808 | -0.134 |
| 50                  | 6        | 6.017 | 6.094 | 0.077  |
| 55                  | 7        | 6.037 | 6.029 | -0.009 |
| 55                  | 8        | 5.995 | 5.951 | -0.044 |
| 55                  | 9        | 5.972 | 6.000 | 0.027  |
| 55                  | 10       | 6.032 | 6.063 | 0.031  |
| 55                  | 11       | 5.874 | 5.794 | -0.081 |
| 100                 | 29       | 6.046 | 6.178 | 0.132  |
| 100                 | 30       | 6.026 | 5.904 | -0.122 |
| 100                 | 31       | 5.944 | 5.924 | -0.020 |
| 100                 | 32       | 5.971 | 5.885 | -0.086 |
| 100                 | 34       | 5.936 | 5.881 | -0.056 |
| 100                 | 35       | 5.856 | 5.707 | -0.149 |
| 100                 | 36       | 6.009 | 5.893 | -0.115 |
| 100                 | 38       | 5.965 | 6.003 | 0.038  |
| 100                 | 39       | 5.957 | 5.913 | -0.044 |
| 100                 | 41       | 5.959 | 5.891 | -0.069 |
| 100                 | 42       | 6.005 | 6.004 | -0.001 |
| 100                 | 43       | 5.907 | 5.778 | -0.129 |
| 100                 | 45       | 6.013 | 6.028 | 0.015  |
| 100                 | 46       | 5.977 | 5.974 | -0.003 |
| 100                 | 47       | 5.969 | 5.895 | -0.074 |
| 100                 | 48       | 5.978 | 5.958 | -0.020 |
| 100                 | 49       | 5.957 | 5.931 | -0.027 |
| 100                 | 51       | 6.009 | 6.030 | 0.021  |
| 100                 | 54       | 5.957 | 5.840 | -0.117 |
| 100                 | 56       | 6.017 | 5.847 | -0.170 |
| 100                 | 57       | 5.960 | 5.900 | -0.060 |
| 100                 | 58       | 5.995 | 5.935 | -0.060 |
| 100                 | 59       | 6.020 | 5.913 | -0.107 |
| 105                 | 61       | 6.000 | 5.891 | -0.109 |
| 105                 | 62       | 5.982 | 5.902 | -0.081 |
| 105                 | 64       | 5.952 | 5.782 | -0.170 |
| 105                 | 65       | 5.912 | 5.660 | -0.253 |
| 105                 | 66       | 5.877 | 5.757 | -0.120 |
| Max                 |          | 6.046 | 6.178 | 0.132  |
| Average             |          | 5.963 | 5.926 | -0.037 |
| Min                 |          | 5.856 | 5.660 | -0.253 |
| Std Dev             |          | 0.046 | 0.087 | 0.061  |



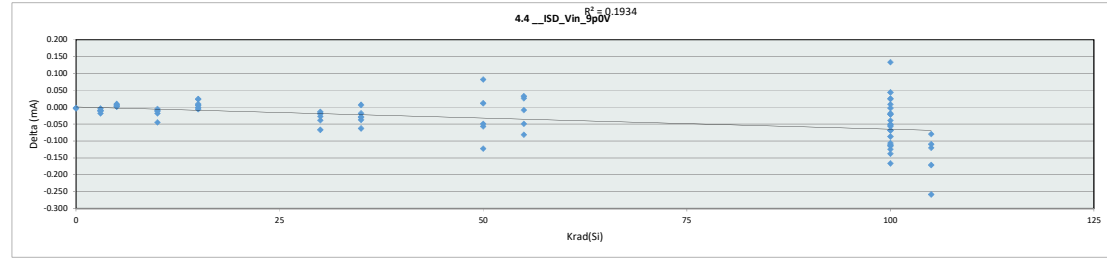
| 4.6 __ISD_Vin_12p0V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site           |       |       |       |       |       |       |       |       |       |       |       |
| Tester              |       |       |       |       |       |       |       |       |       |       |       |
| Test Number         |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit           |       | 9.5   | mA    |       |       |       |       |       |       |       |       |
| Min Limit           |       |       |       |       |       |       |       |       |       |       |       |
| Krad(Si)            | 0     | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                  | 5.910 | 5.910 | 5.893 | 5.849 | 5.911 | 5.865 | 5.859 | 5.808 | 5.794 | 5.707 | 5.660 |
| Min                 | 5.967 | 5.938 | 5.962 | 5.930 | 5.968 | 5.915 | 5.925 | 5.930 | 5.967 | 5.922 | 5.798 |
| Average             | 6.025 | 5.965 | 6.011 | 6.006 | 6.054 | 5.971 | 5.979 | 6.094 | 6.063 | 6.178 | 5.902 |
| Max                 | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 | 9.500 |
| UL                  |       |       |       |       |       |       |       |       |       |       |       |



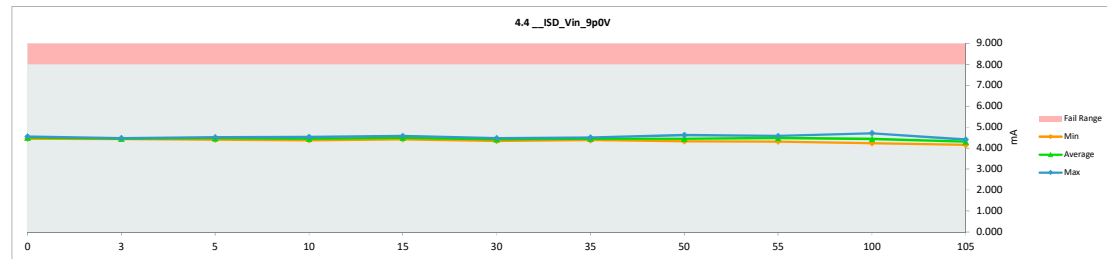
# HDR TID Report TPS7H2211-SP

| Test Site   | 4.4 | ISD_Vin_9p0V |
|-------------|-----|--------------|
| Tester      |     |              |
| Test Number |     |              |
| Unit        | mA  | mA           |
| Max Limit   | 8   | 8            |
| Min Limit   |     |              |

| Krad(Si) | Serial # | PRE   | POST  | Delta  |
|----------|----------|-------|-------|--------|
| 0        | 227      | 4.454 | 4.453 | -0.002 |
| 0        | 229      | 4.564 | 4.560 | -0.004 |
| 3        | 107      | 4.470 | 4.461 | -0.009 |
| 3        | 108      | 4.460 | 4.450 | -0.011 |
| 3        | 109      | 4.476 | 4.472 | -0.004 |
| 3        | 110      | 4.476 | 4.466 | -0.011 |
| 3        | 111      | 4.457 | 4.439 | -0.018 |
| 5        | 112      | 4.515 | 4.517 | 0.002  |
| 5        | 113      | 4.443 | 4.450 | 0.007  |
| 5        | 114      | 4.490 | 4.492 | 0.002  |
| 5        | 115      | 4.400 | 4.406 | 0.006  |
| 5        | 116      | 4.490 | 4.499 | 0.010  |
| 10       | 96       | 4.549 | 4.531 | -0.018 |
| 10       | 97       | 4.429 | 4.419 | -0.011 |
| 10       | 98       | 4.420 | 4.415 | -0.005 |
| 10       | 99       | 4.419 | 4.374 | -0.045 |
| 10       | 100      | 4.527 | 4.516 | -0.011 |
| 15       | 101      | 4.564 | 4.588 | 0.024  |
| 15       | 102      | 4.416 | 4.422 | 0.005  |
| 15       | 104      | 4.438 | 4.433 | -0.006 |
| 15       | 105      | 4.543 | 4.542 | -0.001 |
| 15       | 106      | 4.477 | 4.486 | 0.009  |
| 30       | 83       | 4.495 | 4.481 | -0.014 |
| 30       | 84       | 4.487 | 4.468 | -0.020 |
| 30       | 85       | 4.417 | 4.350 | -0.067 |
| 30       | 86       | 4.434 | 4.395 | -0.039 |
| 30       | 87       | 4.432 | 4.405 | -0.027 |
| 35       | 88       | 4.483 | 4.464 | -0.019 |
| 35       | 92       | 4.442 | 4.379 | -0.063 |
| 35       | 93       | 4.433 | 4.396 | -0.037 |
| 35       | 94       | 4.514 | 4.485 | -0.029 |
| 35       | 95       | 4.497 | 4.503 | 0.007  |
| 50       | 1        | 4.472 | 4.423 | -0.049 |
| 50       | 2        | 4.526 | 4.538 | 0.012  |
| 50       | 3        | 4.397 | 4.341 | -0.057 |
| 50       | 5        | 4.443 | 4.320 | -0.123 |
| 50       | 6        | 4.543 | 4.625 | 0.082  |
| 55       | 7        | 4.543 | 4.535 | -0.008 |
| 55       | 8        | 4.524 | 4.475 | -0.049 |
| 55       | 9        | 4.486 | 4.513 | 0.026  |
| 55       | 10       | 4.550 | 4.583 | 0.033  |
| 55       | 11       | 4.395 | 4.314 | -0.082 |
| 100      | 29       | 4.581 | 4.714 | 0.133  |
| 100      | 30       | 4.518 | 4.404 | -0.115 |
| 100      | 31       | 4.468 | 4.446 | -0.021 |
| 100      | 32       | 4.465 | 4.378 | -0.087 |
| 100      | 34       | 4.457 | 4.406 | -0.050 |
| 100      | 35       | 4.371 | 4.234 | -0.138 |
| 100      | 36       | 4.535 | 4.421 | -0.114 |
| 100      | 38       | 4.460 | 4.505 | 0.044  |
| 100      | 39       | 4.475 | 4.436 | -0.039 |
| 100      | 41       | 4.480 | 4.412 | -0.068 |
| 100      | 42       | 4.510 | 4.519 | 0.009  |
| 100      | 43       | 4.422 | 4.298 | -0.124 |
| 100      | 45       | 4.528 | 4.553 | 0.024  |
| 100      | 46       | 4.499 | 4.497 | -0.002 |
| 100      | 47       | 4.478 | 4.409 | -0.069 |
| 100      | 48       | 4.472 | 4.451 | -0.021 |
| 100      | 49       | 4.480 | 4.462 | -0.018 |
| 100      | 51       | 4.527 | 4.553 | 0.026  |
| 100      | 54       | 4.478 | 4.366 | -0.112 |
| 100      | 56       | 4.508 | 4.341 | -0.166 |
| 100      | 57       | 4.485 | 4.432 | -0.053 |
| 100      | 58       | 4.518 | 4.461 | -0.057 |
| 100      | 59       | 4.529 | 4.423 | -0.106 |
| 105      | 61       | 4.516 | 4.406 | -0.110 |
| 105      | 62       | 4.491 | 4.412 | -0.080 |
| 105      | 64       | 4.472 | 4.301 | -0.171 |
| 105      | 65       | 4.413 | 4.155 | -0.259 |
| 105      | 66       | 4.406 | 4.285 | -0.121 |
| Max      |          | 4.581 | 4.714 | 0.133  |
| Average  |          | 4.479 | 4.444 | -0.035 |
| Min      |          | 4.371 | 4.155 | -0.259 |
| Std Dev  |          | 0.047 | 0.090 | 0.061  |

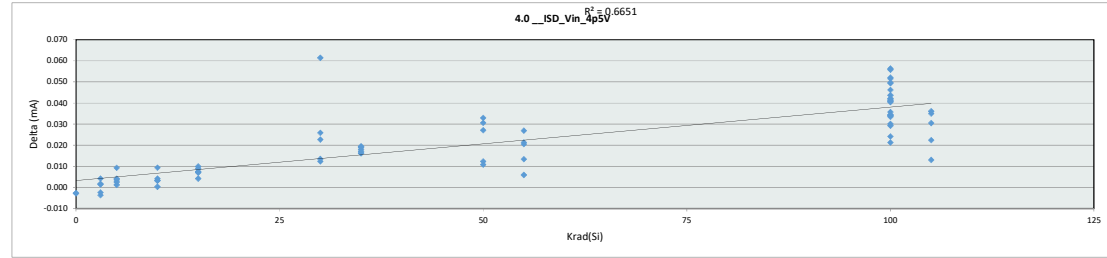


|             |                  |       |       |       |       |       |       |       |       |       |       |
|-------------|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|             | 4.4_ISD_Vin_9p0V |       |       |       |       |       |       |       |       |       |       |
| Test Site   |                  |       |       |       |       |       |       |       |       |       |       |
| Tester      |                  |       |       |       |       |       |       |       |       |       |       |
| Test Number |                  |       |       |       |       |       |       |       |       |       |       |
| Max Limit   | 8                | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit   |                  | mA    |       |       |       |       |       |       |       |       |       |
| Krad(Si)    | 0                | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL          | 4.453            | 4.439 | 4.406 | 4.375 | 4.422 | 4.350 | 4.379 | 4.320 | 4.314 | 4.234 | 4.155 |
| Average     | 4.506            | 4.457 | 4.473 | 4.451 | 4.494 | 4.420 | 4.446 | 4.449 | 4.484 | 4.440 | 4.312 |
| Max         | 4.560            | 4.472 | 4.518 | 4.531 | 4.588 | 4.481 | 4.504 | 4.625 | 4.583 | 4.714 | 4.412 |
| UL          | 8.000            | 8.000 | 8.000 | 8.000 | 8.000 | 8.000 | 8.000 | 8.000 | 8.000 | 8.000 | 8.000 |

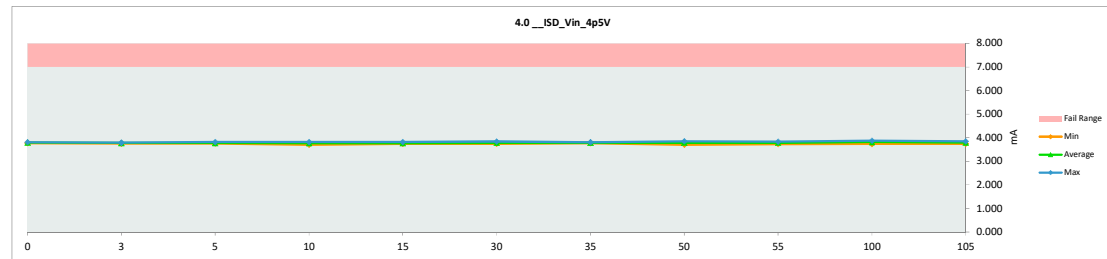


# HDR TID Report TPS7H2211-SP

| 4.0 __ISD_Vin_4p5V |          |       |       |        |
|--------------------|----------|-------|-------|--------|
| Test Site          |          |       |       |        |
| Tester             |          |       |       |        |
| Test Number        |          |       |       |        |
| Unit               |          | mA    | mA    |        |
| Max Limit          |          | 7     |       |        |
| Min Limit          |          |       |       |        |
| Krad(Si)           | Serial # | PRE   | POST  | Delta  |
| 0                  | 227      | 3.774 | 3.771 | -0.003 |
| 0                  | 229      | 3.813 | 3.810 | -0.003 |
| 3                  | 107      | 3.771 | 3.776 | 0.004  |
| 3                  | 108      | 3.769 | 3.770 | 0.001  |
| 3                  | 109      | 3.751 | 3.749 | -0.002 |
| 3                  | 110      | 3.786 | 3.788 | 0.002  |
| 3                  | 111      | 3.787 | 3.783 | -0.004 |
| 5                  | 112      | 3.770 | 3.773 | 0.003  |
| 5                  | 113      | 3.804 | 3.813 | 0.009  |
| 5                  | 114      | 3.755 | 3.759 | 0.004  |
| 5                  | 115      | 3.757 | 3.761 | 0.004  |
| 5                  | 116      | 3.757 | 3.758 | 0.001  |
| 10                 | 96       | 3.814 | 3.817 | 0.003  |
| 10                 | 97       | 3.771 | 3.780 | 0.009  |
| 10                 | 98       | 3.700 | 3.704 | 0.004  |
| 10                 | 99       | 3.760 | 3.760 | 0.000  |
| 10                 | 100      | 3.783 | 3.787 | 0.003  |
| 15                 | 101      | 3.801 | 3.810 | 0.009  |
| 15                 | 102      | 3.732 | 3.742 | 0.010  |
| 15                 | 104      | 3.743 | 3.747 | 0.004  |
| 15                 | 105      | 3.806 | 3.813 | 0.007  |
| 15                 | 106      | 3.729 | 3.737 | 0.007  |
| 30                 | 83       | 3.759 | 3.771 | 0.012  |
| 30                 | 84       | 3.781 | 3.807 | 0.026  |
| 30                 | 85       | 3.778 | 3.839 | 0.061  |
| 30                 | 86       | 3.730 | 3.743 | 0.013  |
| 30                 | 87       | 3.734 | 3.757 | 0.023  |
| 35                 | 88       | 3.787 | 3.806 | 0.019  |
| 35                 | 92       | 3.752 | 3.769 | 0.017  |
| 35                 | 93       | 3.760 | 3.776 | 0.016  |
| 35                 | 94       | 3.766 | 3.783 | 0.018  |
| 35                 | 95       | 3.767 | 3.787 | 0.019  |
| 50                 | 1        | 3.759 | 3.789 | 0.031  |
| 50                 | 2        | 3.812 | 3.839 | 0.027  |
| 50                 | 3        | 3.690 | 3.702 | 0.012  |
| 50                 | 5        | 3.720 | 3.731 | 0.011  |
| 50                 | 6        | 3.815 | 3.848 | 0.033  |
| 55                 | 7        | 3.788 | 3.809 | 0.020  |
| 55                 | 8        | 3.808 | 3.835 | 0.027  |
| 55                 | 9        | 3.740 | 3.754 | 0.013  |
| 55                 | 10       | 3.756 | 3.777 | 0.021  |
| 55                 | 11       | 3.720 | 3.725 | 0.006  |
| 100                | 29       | 3.821 | 3.871 | 0.050  |
| 100                | 30       | 3.791 | 3.820 | 0.029  |
| 100                | 31       | 3.775 | 3.816 | 0.041  |
| 100                | 32       | 3.739 | 3.769 | 0.030  |
| 100                | 34       | 3.727 | 3.767 | 0.040  |
| 100                | 35       | 3.700 | 3.735 | 0.035  |
| 100                | 36       | 3.798 | 3.822 | 0.024  |
| 100                | 38       | 3.715 | 3.757 | 0.042  |
| 100                | 39       | 3.770 | 3.827 | 0.056  |
| 100                | 41       | 3.754 | 3.806 | 0.052  |
| 100                | 42       | 3.775 | 3.810 | 0.034  |
| 100                | 43       | 3.787 | 3.828 | 0.041  |
| 100                | 45       | 3.780 | 3.822 | 0.042  |
| 100                | 46       | 3.810 | 3.846 | 0.036  |
| 100                | 47       | 3.776 | 3.832 | 0.056  |
| 100                | 48       | 3.725 | 3.759 | 0.034  |
| 100                | 49       | 3.779 | 3.801 | 0.021  |
| 100                | 51       | 3.807 | 3.856 | 0.049  |
| 100                | 54       | 3.787 | 3.829 | 0.041  |
| 100                | 56       | 3.809 | 3.860 | 0.051  |
| 100                | 57       | 3.777 | 3.811 | 0.033  |
| 100                | 58       | 3.809 | 3.855 | 0.046  |
| 100                | 59       | 3.809 | 3.852 | 0.044  |
| 105                | 61       | 3.811 | 3.841 | 0.031  |
| 105                | 62       | 3.761 | 3.783 | 0.022  |
| 105                | 64       | 3.777 | 3.813 | 0.036  |
| 105                | 65       | 3.727 | 3.763 | 0.035  |
| 105                | 66       | 3.731 | 3.744 | 0.013  |
| Max                |          | 3.821 | 3.871 | 0.061  |
| Average            |          | 3.768 | 3.791 | 0.022  |
| Min                |          | 3.690 | 3.702 | -0.004 |
| Std Dev            |          | 0.032 | 0.039 | 0.017  |



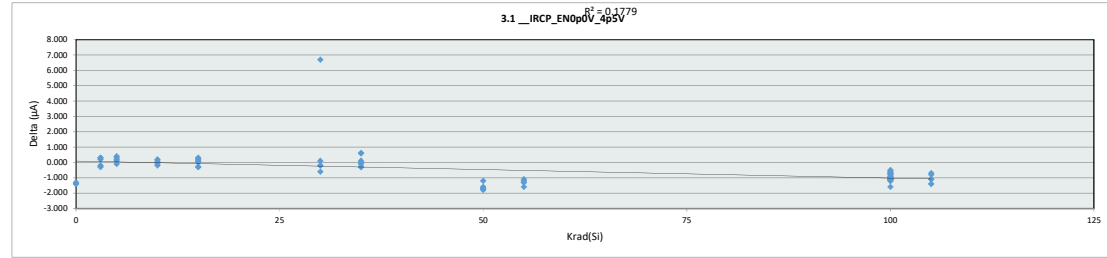
|             |                    |       |       |       |       |       |       |       |       |       |       |
|-------------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|             | 4.0 __ISD_Vin_4p5V |       |       |       |       |       |       |       |       |       |       |
| Test Site   |                    |       |       |       |       |       |       |       |       |       |       |
| Tester      |                    |       |       |       |       |       |       |       |       |       |       |
| Test Number |                    |       |       |       |       |       |       |       |       |       |       |
| Max Limit   | 7                  | mA    |       |       |       |       |       |       |       |       |       |
| Min Limit   |                    | mA    |       |       |       |       |       |       |       |       |       |
| Krad(Si)    | 0                  | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL          |                    |       |       |       |       |       |       |       |       |       |       |
| Min         | 3.771              | 3.749 | 3.758 | 3.704 | 3.737 | 3.743 | 3.769 | 3.702 | 3.725 | 3.735 | 3.744 |
| Average     | 3.791              | 3.773 | 3.773 | 3.770 | 3.770 | 3.784 | 3.784 | 3.782 | 3.780 | 3.815 | 3.789 |
| Max         | 3.810              | 3.788 | 3.813 | 3.817 | 3.813 | 3.839 | 3.806 | 3.848 | 3.835 | 3.871 | 3.841 |
| UL          | 7.000              | 7.000 | 7.000 | 7.000 | 7.000 | 7.000 | 7.000 | 7.000 | 7.000 | 7.000 | 7.000 |



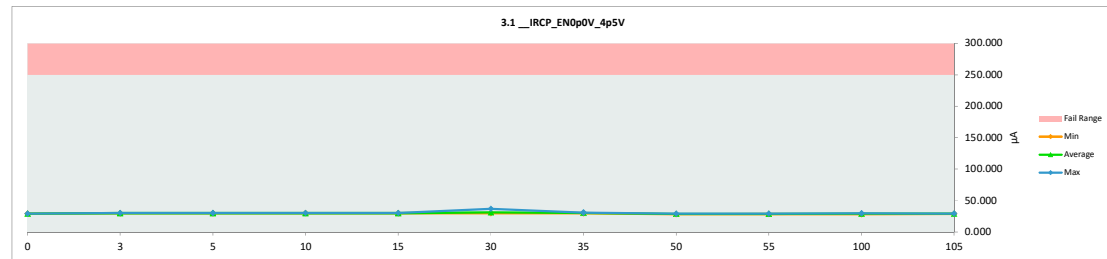
# HDR TID Report TPS7H2211-SP

| 3.1 __IRCP_EN0p0V_4p5V |     |     |
|------------------------|-----|-----|
| Test Site              |     |     |
| Tester                 |     |     |
| Test Number            |     |     |
| Unit                   | μA  | μA  |
| Max Limit              | 250 | 250 |
| Min Limit              |     |     |

| Krad(Si) | Serial # | PRE    | POST   | Delta  |
|----------|----------|--------|--------|--------|
| 0        | 227      | 30.400 | 29.000 | -1.400 |
| 0        | 229      | 30.200 | 28.900 | -1.300 |
| 3        | 107      | 29.900 | 30.200 | 0.300  |
| 3        | 108      | 30.000 | 29.700 | -0.300 |
| 3        | 109      | 29.300 | 29.500 | 0.200  |
| 3        | 110      | 30.000 | 29.800 | -0.200 |
| 3        | 111      | 29.900 | 30.200 | 0.300  |
| 5        | 112      | 29.700 | 30.000 | 0.300  |
| 5        | 113      | 29.600 | 30.000 | 0.400  |
| 5        | 114      | 29.700 | 29.900 | 0.200  |
| 5        | 115      | 29.700 | 29.800 | 0.100  |
| 5        | 116      | 29.800 | 29.700 | -0.100 |
| 10       | 96       | 30.100 | 29.900 | -0.200 |
| 10       | 97       | 29.900 | 30.000 | 0.100  |
| 10       | 98       | 29.800 | 29.800 | 0.000  |
| 10       | 99       | 29.700 | 29.900 | 0.200  |
| 10       | 100      | 30.000 | 29.900 | -0.100 |
| 15       | 101      | 30.000 | 30.200 | 0.200  |
| 15       | 102      | 30.000 | 29.700 | -0.300 |
| 15       | 104      | 29.800 | 29.800 | 0.000  |
| 15       | 105      | 29.700 | 30.000 | 0.300  |
| 15       | 106      | 29.700 | 29.800 | 0.100  |
| 30       | 83       | 30.300 | 29.700 | -0.600 |
| 30       | 84       | 30.000 | 29.800 | -0.200 |
| 30       | 85       | 29.900 | 36.600 | 6.700  |
| 30       | 86       | 29.600 | 29.700 | 0.100  |
| 30       | 87       | 30.100 | 29.900 | -0.200 |
| 35       | 88       | 30.000 | 29.700 | -0.300 |
| 35       | 92       | 29.900 | 29.900 | 0.000  |
| 35       | 93       | 30.000 | 29.900 | -0.100 |
| 35       | 94       | 30.200 | 30.800 | 0.600  |
| 35       | 95       | 30.200 | 30.300 | 0.100  |
| 50       | 1        | 30.400 | 28.700 | -1.700 |
| 50       | 2        | 30.400 | 28.700 | -1.700 |
| 50       | 3        | 30.000 | 28.400 | -1.600 |
| 50       | 5        | 30.000 | 28.200 | -1.800 |
| 50       | 6        | 30.100 | 28.900 | -1.200 |
| 55       | 7        | 30.200 | 28.900 | -1.300 |
| 55       | 8        | 30.300 | 29.100 | -1.200 |
| 55       | 9        | 29.900 | 28.600 | -1.300 |
| 55       | 10       | 30.100 | 29.000 | -1.100 |
| 55       | 11       | 30.000 | 28.400 | -1.600 |
| 100      | 29       | 30.300 | 29.300 | -1.000 |
| 100      | 30       | 30.100 | 29.100 | -1.000 |
| 100      | 31       | 30.200 | 29.000 | -1.200 |
| 100      | 32       | 29.400 | 28.900 | -0.500 |
| 100      | 34       | 29.900 | 28.900 | -1.000 |
| 100      | 35       | 29.800 | 28.200 | -1.600 |
| 100      | 36       | 30.100 | 29.300 | -0.800 |
| 100      | 38       | 29.600 | 28.900 | -0.700 |
| 100      | 39       | 30.000 | 29.100 | -0.900 |
| 100      | 41       | 29.600 | 28.900 | -0.700 |
| 100      | 42       | 30.100 | 29.100 | -1.000 |
| 100      | 43       | 30.100 | 29.000 | -1.100 |
| 100      | 45       | 30.000 | 29.000 | -1.000 |
| 100      | 46       | 30.300 | 29.600 | -0.700 |
| 100      | 47       | 30.100 | 29.000 | -1.100 |
| 100      | 48       | 30.000 | 28.900 | -1.100 |
| 100      | 49       | 30.300 | 29.200 | -1.100 |
| 100      | 51       | 30.100 | 28.900 | -1.200 |
| 100      | 54       | 30.100 | 29.400 | -0.700 |
| 100      | 56       | 30.000 | 29.100 | -0.900 |
| 100      | 57       | 30.100 | 29.100 | -1.000 |
| 100      | 58       | 29.900 | 28.900 | -1.000 |
| 100      | 59       | 30.000 | 29.400 | -0.600 |
| 105      | 61       | 30.100 | 28.700 | -1.400 |
| 105      | 62       | 30.000 | 29.200 | -0.800 |
| 105      | 64       | 30.300 | 29.200 | -1.100 |
| 105      | 65       | 29.800 | 29.100 | -0.700 |
| 105      | 66       | 30.100 | 29.000 | -1.100 |
| Max      |          | 30.400 | 36.600 | 6.700  |
| Average  |          | 29.984 | 29.461 | -0.523 |
| Min      |          | 29.300 | 28.200 | -1.800 |
| Std Dev  |          | 0.230  | 1.024  | 1.080  |



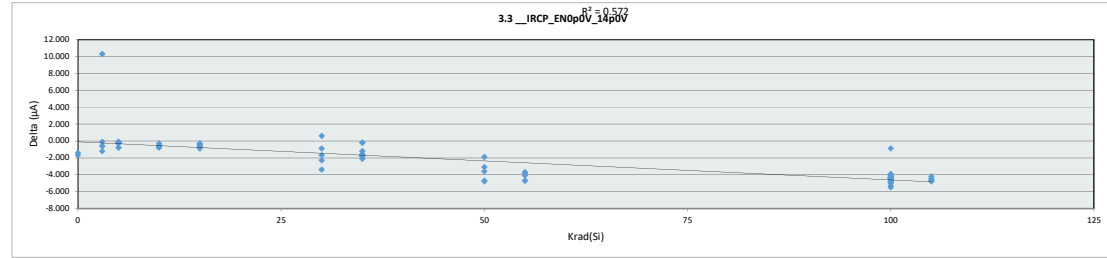
|             |         | 3.1_IRCP_EN0p0V_4p5V |         |         |         |         |         |         |         |         |         |
|-------------|---------|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site   |         |                      |         |         |         |         |         |         |         |         |         |
| Tester      |         |                      |         |         |         |         |         |         |         |         |         |
| Test Number |         |                      |         |         |         |         |         |         |         |         |         |
| Max Limit   | 250     | μA                   |         |         |         |         |         |         |         |         |         |
| Min Limit   |         | μA                   |         |         |         |         |         |         |         |         |         |
| Krad(Si)    | 0       | 3                    | 5       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| Min         | 28.900  | 29.500               | 29.700  | 29.800  | 29.700  | 29.700  | 29.700  | 28.200  | 28.400  | 28.200  | 28.700  |
| Average     | 28.950  | 29.880               | 29.880  | 29.900  | 29.900  | 31.140  | 30.120  | 28.580  | 28.800  | 29.052  | 29.040  |
| Max         | 29.000  | 30.200               | 30.000  | 30.000  | 30.200  | 36.600  | 30.800  | 28.900  | 29.100  | 29.600  | 29.200  |
| UL          | 250.000 | 250.000              | 250.000 | 250.000 | 250.000 | 250.000 | 250.000 | 250.000 | 250.000 | 250.000 | 250.000 |



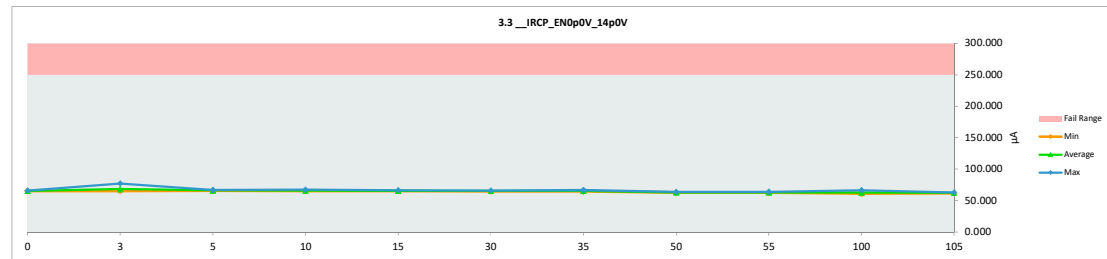
# HDR TID Report TPS7H2211-SP

| Test Site   | 3.3_IRCP_EN0p0V_14p0V |     |
|-------------|-----------------------|-----|
| Tester      |                       |     |
| Test Number |                       |     |
| Unit        | μA                    | μA  |
| Max Limit   | 250                   | 250 |
| Min Limit   |                       |     |

| Krad(Si) | Serial # | PRE    | POST   | Delta  |
|----------|----------|--------|--------|--------|
| 0        | 227      | 67.300 | 65.600 | -1.700 |
| 0        | 229      | 66.400 | 65.000 | -1.400 |
| 3        | 107      | 67.200 | 67.100 | -0.100 |
| 3        | 108      | 66.200 | 65.000 | -1.200 |
| 3        | 109      | 65.900 | 65.300 | -0.600 |
| 3        | 110      | 66.700 | 77.000 | 10.300 |
| 3        | 111      | 66.900 | 66.300 | -0.600 |
| 5        | 112      | 66.700 | 66.600 | -0.100 |
| 5        | 113      | 66.700 | 65.900 | -0.800 |
| 5        | 114      | 67.000 | 66.800 | -0.200 |
| 5        | 115      | 65.900 | 65.600 | -0.300 |
| 5        | 116      | 65.600 | 65.300 | -0.300 |
| 10       | 96       | 66.500 | 66.200 | -0.300 |
| 10       | 97       | 66.000 | 65.500 | -0.500 |
| 10       | 98       | 65.400 | 64.700 | -0.700 |
| 10       | 99       | 66.400 | 65.700 | -0.700 |
| 10       | 100      | 68.000 | 67.200 | -0.800 |
| 15       | 101      | 66.700 | 66.300 | -0.400 |
| 15       | 102      | 65.800 | 64.900 | -0.900 |
| 15       | 104      | 66.000 | 65.300 | -0.700 |
| 15       | 105      | 65.900 | 65.600 | -0.300 |
| 15       | 106      | 65.500 | 64.900 | -0.600 |
| 30       | 83       | 67.700 | 64.300 | -3.400 |
| 30       | 84       | 66.600 | 64.900 | -1.700 |
| 30       | 85       | 66.400 | 65.500 | -0.900 |
| 30       | 86       | 64.500 | 65.100 | 0.600  |
| 30       | 87       | 68.200 | 65.900 | -2.300 |
| 35       | 88       | 66.000 | 64.200 | -1.800 |
| 35       | 92       | 67.200 | 65.100 | -2.100 |
| 35       | 93       | 67.800 | 66.200 | -1.600 |
| 35       | 94       | 66.700 | 66.500 | -0.200 |
| 35       | 95       | 66.600 | 65.400 | -1.200 |
| 50       | 1        | 67.300 | 62.600 | -4.700 |
| 50       | 2        | 66.900 | 63.300 | -3.600 |
| 50       | 3        | 66.900 | 62.100 | -4.800 |
| 50       | 5        | 65.500 | 63.600 | -1.900 |
| 50       | 6        | 66.800 | 63.700 | -3.100 |
| 55       | 7        | 67.200 | 63.400 | -3.800 |
| 55       | 8        | 67.600 | 63.900 | -3.700 |
| 55       | 9        | 66.800 | 62.100 | -4.700 |
| 55       | 10       | 67.800 | 63.700 | -4.100 |
| 55       | 11       | 66.900 | 62.200 | -4.700 |
| 100      | 29       | 67.800 | 63.400 | -4.400 |
| 100      | 30       | 67.300 | 66.400 | -0.900 |
| 100      | 31       | 66.800 | 62.000 | -4.800 |
| 100      | 32       | 65.000 | 60.600 | -4.400 |
| 100      | 34       | 66.400 | 61.600 | -4.800 |
| 100      | 35       | 65.800 | 60.800 | -5.000 |
| 100      | 36       | 66.800 | 62.700 | -4.100 |
| 100      | 38       | 65.900 | 61.400 | -4.500 |
| 100      | 39       | 68.000 | 63.100 | -4.900 |
| 100      | 41       | 66.000 | 61.600 | -4.400 |
| 100      | 42       | 66.300 | 62.200 | -4.100 |
| 100      | 43       | 68.200 | 63.900 | -4.300 |
| 100      | 45       | 66.600 | 62.000 | -4.600 |
| 100      | 46       | 67.700 | 63.800 | -3.900 |
| 100      | 47       | 66.800 | 62.400 | -4.400 |
| 100      | 48       | 67.500 | 62.200 | -5.300 |
| 100      | 49       | 66.900 | 62.600 | -4.300 |
| 100      | 51       | 66.700 | 62.500 | -4.200 |
| 100      | 54       | 67.800 | 63.000 | -4.800 |
| 100      | 56       | 67.500 | 62.000 | -5.500 |
| 100      | 57       | 66.400 | 62.100 | -4.300 |
| 100      | 58       | 66.500 | 62.100 | -4.400 |
| 100      | 59       | 67.000 | 62.600 | -4.400 |
| 105      | 61       | 67.100 | 62.600 | -4.500 |
| 105      | 62       | 66.600 | 61.800 | -4.800 |
| 105      | 64       | 67.300 | 62.800 | -4.500 |
| 105      | 65       | 66.200 | 61.500 | -4.700 |
| 105      | 66       | 65.700 | 61.500 | -4.200 |
| Max      |          | 68.200 | 77.000 | 10.300 |
| Average  |          | 66.696 | 64.124 | -2.571 |
| Min      |          | 64.500 | 60.600 | -5.500 |
| Std Dev  |          | 0.775  | 2.360  | 2.432  |



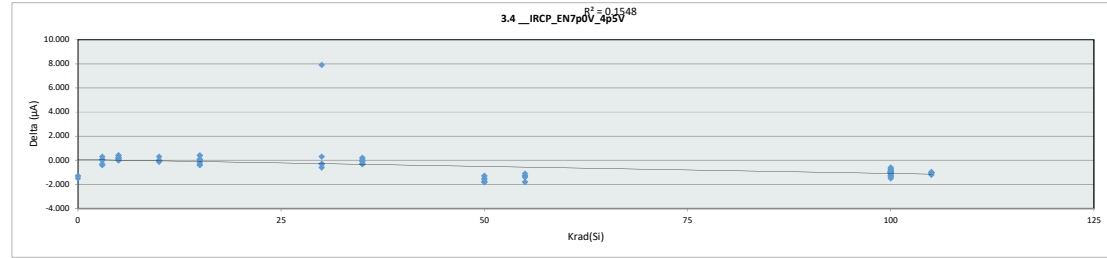
|             |                       |         |         |         |         |         |         |         |         |         |         |  |
|-------------|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
|             | 3.3_IRCP_EN0p0V_14p0V |         |         |         |         |         |         |         |         |         |         |  |
| Test Site   |                       |         |         |         |         |         |         |         |         |         |         |  |
| Tester      |                       |         |         |         |         |         |         |         |         |         |         |  |
| Test Number |                       |         |         |         |         |         |         |         |         |         |         |  |
| Max Limit   | 250                   |         | μA      |         |         |         |         |         |         |         |         |  |
| Min Limit   |                       |         | μA      |         |         |         |         |         |         |         |         |  |
| Krad(Si)    | 0                     | 3       | 5       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |  |
| Min         | 65.000                | 65.000  | 65.300  | 64.700  | 64.900  | 64.300  | 64.200  | 62.100  | 62.100  | 60.600  | 61.500  |  |
| Average     | 65.300                | 68.140  | 66.040  | 65.860  | 65.400  | 65.140  | 65.480  | 63.060  | 63.060  | 62.478  | 62.040  |  |
| Max         | 65.600                | 77.000  | 66.800  | 67.200  | 66.300  | 65.900  | 66.500  | 63.700  | 63.900  | 66.400  | 62.800  |  |
| UL          | 250.000               | 250.000 | 250.000 | 250.000 | 250.000 | 250.000 | 250.000 | 250.000 | 250.000 | 250.000 | 250.000 |  |



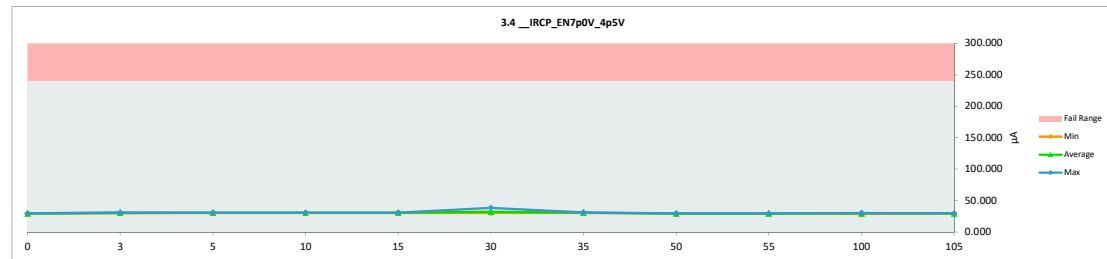
# HDR TID Report TPS7H2211-SP

| 3.4 __IRCP_EN7p0V_4p5V |     |     |  |
|------------------------|-----|-----|--|
| Test Site              |     |     |  |
| Tester                 |     |     |  |
| Test Number            |     |     |  |
| Unit                   | μA  | μA  |  |
| Max Limit              | 240 | 240 |  |
| Min Limit              |     |     |  |

| Krad(Si) | Serial # | PRE    | POST   | Delta  |
|----------|----------|--------|--------|--------|
| 0        | 227      | 30.900 | 29.400 | -1.500 |
| 0        | 229      | 30.800 | 29.500 | -1.300 |
| 3        | 107      | 30.500 | 30.800 | 0.300  |
| 3        | 108      | 30.600 | 30.200 | -0.400 |
| 3        | 109      | 29.800 | 29.800 | 0.000  |
| 3        | 110      | 30.500 | 30.200 | -0.300 |
| 3        | 111      | 30.400 | 30.500 | 0.100  |
| 5        | 112      | 30.200 | 30.400 | 0.200  |
| 5        | 113      | 30.200 | 30.600 | 0.400  |
| 5        | 114      | 30.300 | 30.500 | 0.200  |
| 5        | 115      | 30.300 | 30.300 | 0.000  |
| 5        | 116      | 30.200 | 30.300 | 0.100  |
| 10       | 96       | 30.600 | 30.500 | -0.100 |
| 10       | 97       | 30.300 | 30.600 | 0.300  |
| 10       | 98       | 30.400 | 30.400 | 0.000  |
| 10       | 99       | 30.400 | 30.300 | -0.100 |
| 10       | 100      | 30.500 | 30.400 | -0.100 |
| 15       | 101      | 30.600 | 30.600 | 0.000  |
| 15       | 102      | 30.700 | 30.300 | -0.400 |
| 15       | 104      | 30.400 | 30.200 | -0.200 |
| 15       | 105      | 30.300 | 30.700 | 0.400  |
| 15       | 106      | 30.300 | 30.400 | 0.100  |
| 30       | 83       | 30.800 | 30.200 | -0.600 |
| 30       | 84       | 30.700 | 30.400 | -0.300 |
| 30       | 85       | 30.400 | 38.300 | 7.900  |
| 30       | 86       | 30.100 | 30.400 | 0.300  |
| 30       | 87       | 30.700 | 30.400 | -0.300 |
| 35       | 88       | 30.600 | 30.300 | -0.300 |
| 35       | 92       | 30.600 | 30.300 | -0.300 |
| 35       | 93       | 30.600 | 30.600 | 0.000  |
| 35       | 94       | 30.600 | 30.800 | 0.200  |
| 35       | 95       | 30.800 | 30.700 | -0.100 |
| 50       | 1        | 31.000 | 29.400 | -1.600 |
| 50       | 2        | 31.000 | 29.200 | -1.800 |
| 50       | 3        | 30.700 | 29.200 | -1.500 |
| 50       | 5        | 30.700 | 28.900 | -1.800 |
| 50       | 6        | 30.800 | 29.500 | -1.300 |
| 55       | 7        | 30.900 | 29.500 | -1.400 |
| 55       | 8        | 30.900 | 29.600 | -1.300 |
| 55       | 9        | 30.500 | 29.200 | -1.300 |
| 55       | 10       | 30.700 | 29.600 | -1.100 |
| 55       | 11       | 30.800 | 29.000 | -1.800 |
| 100      | 29       | 31.000 | 29.700 | -1.300 |
| 100      | 30       | 30.700 | 29.600 | -1.100 |
| 100      | 31       | 30.800 | 29.500 | -1.300 |
| 100      | 32       | 30.000 | 29.300 | -0.700 |
| 100      | 34       | 30.500 | 29.500 | -1.000 |
| 100      | 35       | 30.300 | 28.800 | -1.500 |
| 100      | 36       | 30.700 | 29.700 | -1.000 |
| 100      | 38       | 30.200 | 29.500 | -0.700 |
| 100      | 39       | 30.500 | 29.500 | -1.000 |
| 100      | 41       | 30.400 | 29.400 | -1.000 |
| 100      | 42       | 30.700 | 29.600 | -1.100 |
| 100      | 43       | 30.600 | 29.700 | -0.900 |
| 100      | 45       | 30.500 | 29.500 | -1.000 |
| 100      | 46       | 30.800 | 30.200 | -0.600 |
| 100      | 47       | 30.800 | 29.700 | -1.100 |
| 100      | 48       | 30.600 | 29.600 | -1.000 |
| 100      | 49       | 31.000 | 29.600 | -1.400 |
| 100      | 51       | 30.700 | 29.400 | -1.300 |
| 100      | 54       | 30.700 | 29.800 | -0.900 |
| 100      | 56       | 30.600 | 29.600 | -1.000 |
| 100      | 57       | 30.600 | 29.800 | -0.800 |
| 100      | 58       | 30.500 | 29.500 | -1.000 |
| 100      | 59       | 30.700 | 29.800 | -0.900 |
| 105      | 61       | 30.500 | 29.500 | -1.000 |
| 105      | 62       | 30.500 | 29.500 | -1.000 |
| 105      | 64       | 30.700 | 29.500 | -1.200 |
| 105      | 65       | 30.400 | 29.300 | -1.100 |
| 105      | 66       | 30.500 | 29.500 | -1.000 |
| Max      |          | 31.000 | 38.300 | 7.900  |
| Average  |          | 30.566 | 30.000 | -0.566 |
| Min      |          | 29.800 | 28.800 | -1.800 |
| Std Dev  |          | 0.244  | 1.130  | 1.202  |



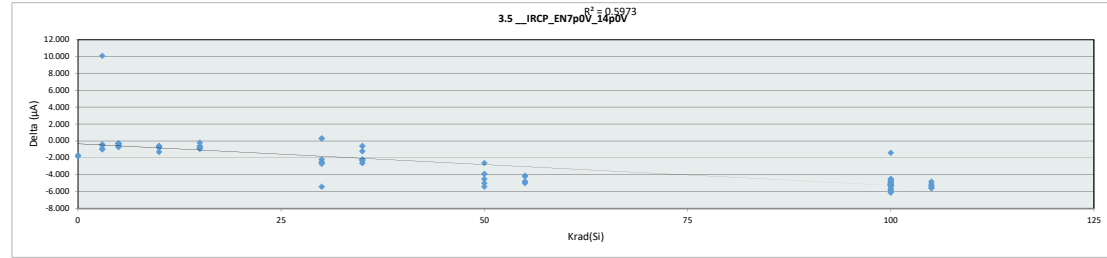
|             |                      |         |         |         |         |         |         |         |         |         |         |
|-------------|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|             | 3.4_IRCP_EN7p0V_4p5V |         |         |         |         |         |         |         |         |         |         |
| Test Site   |                      |         |         |         |         |         |         |         |         |         |         |
| Tester      |                      |         |         |         |         |         |         |         |         |         |         |
| Test Number |                      |         |         |         |         |         |         |         |         |         |         |
| Max Limit   | 240                  | μA      |         |         |         |         |         |         |         |         |         |
| Min Limit   |                      | μA      |         |         |         |         |         |         |         |         |         |
| Krad(Si)    | 0                    | 3       | 5       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL          | 29.400               | 29.800  | 30.300  | 30.300  | 30.200  | 30.200  | 30.300  | 28.900  | 29.000  | 28.800  | 29.300  |
| Min         | 29.450               | 30.300  | 30.420  | 30.440  | 30.440  | 31.940  | 30.540  | 29.240  | 29.380  | 29.578  | 29.460  |
| Average     | 29.500               | 30.800  | 30.600  | 30.600  | 30.700  | 38.300  | 30.800  | 29.500  | 29.600  | 30.200  | 29.500  |
| Max         | 29.500               | 30.800  | 30.600  | 30.600  | 30.700  | 38.300  | 30.800  | 29.500  | 29.600  | 30.200  | 29.500  |
| UL          | 240.000              | 240.000 | 240.000 | 240.000 | 240.000 | 240.000 | 240.000 | 240.000 | 240.000 | 240.000 | 240.000 |



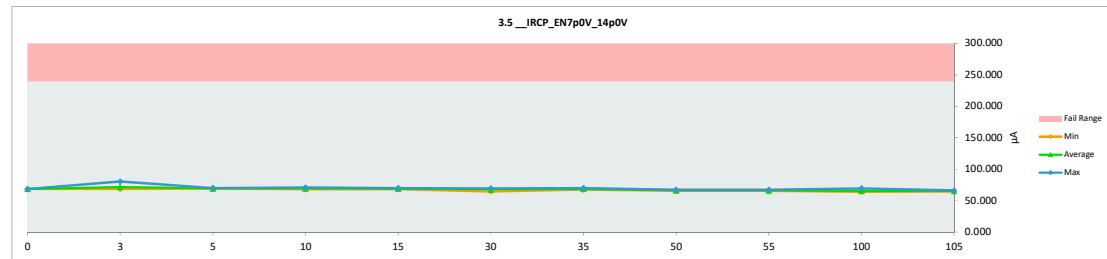
# HDR TID Report TPS7H2211-SP

| Test Site   | 3.5_IRCP_EN7p0V_14p0V |     |
|-------------|-----------------------|-----|
| Tester      |                       |     |
| Test Number |                       |     |
| Unit        | μA                    | μA  |
| Max Limit   | 240                   | 240 |
| Min Limit   |                       |     |

| Krad(Si) | Serial # | PRE    | POST   | Delta  |
|----------|----------|--------|--------|--------|
| 0        | 227      | 70.200 | 68.500 | -1.700 |
| 0        | 229      | 70.000 | 68.200 | -1.800 |
| 3        | 107      | 70.800 | 70.300 | -0.500 |
| 3        | 108      | 69.500 | 68.500 | -1.000 |
| 3        | 109      | 69.600 | 68.700 | -0.900 |
| 3        | 110      | 70.200 | 80.300 | 10.100 |
| 3        | 111      | 70.000 | 69.600 | -0.400 |
| 5        | 112      | 70.100 | 69.800 | -0.300 |
| 5        | 113      | 69.800 | 69.500 | -0.300 |
| 5        | 114      | 70.600 | 70.000 | -0.600 |
| 5        | 115      | 69.500 | 68.800 | -0.700 |
| 5        | 116      | 69.000 | 68.700 | -0.300 |
| 10       | 96       | 70.300 | 69.700 | -0.600 |
| 10       | 97       | 69.700 | 68.900 | -0.800 |
| 10       | 98       | 69.100 | 67.800 | -1.300 |
| 10       | 99       | 69.700 | 69.000 | -0.700 |
| 10       | 100      | 71.400 | 70.800 | -0.600 |
| 15       | 101      | 70.500 | 69.600 | -0.900 |
| 15       | 102      | 69.300 | 68.400 | -0.900 |
| 15       | 104      | 69.300 | 68.700 | -0.600 |
| 15       | 105      | 69.400 | 69.200 | -0.200 |
| 15       | 106      | 68.600 | 67.900 | -0.700 |
| 30       | 83       | 70.700 | 68.000 | -2.700 |
| 30       | 84       | 70.400 | 68.200 | -2.200 |
| 30       | 85       | 69.800 | 64.400 | -5.400 |
| 30       | 86       | 68.300 | 68.600 | 0.300  |
| 30       | 87       | 71.900 | 69.400 | -2.500 |
| 35       | 88       | 69.600 | 67.300 | -2.300 |
| 35       | 92       | 71.200 | 68.600 | -2.600 |
| 35       | 93       | 71.200 | 69.000 | -2.200 |
| 35       | 94       | 70.200 | 69.600 | -0.600 |
| 35       | 95       | 70.200 | 69.000 | -1.200 |
| 50       | 1        | 71.100 | 65.700 | -5.400 |
| 50       | 2        | 70.900 | 66.400 | -4.500 |
| 50       | 3        | 70.500 | 65.500 | -5.000 |
| 50       | 5        | 69.600 | 67.000 | -2.600 |
| 50       | 6        | 70.700 | 66.800 | -3.900 |
| 55       | 7        | 70.700 | 66.500 | -4.200 |
| 55       | 8        | 71.100 | 67.000 | -4.100 |
| 55       | 9        | 70.400 | 65.400 | -5.000 |
| 55       | 10       | 71.800 | 67.000 | -4.800 |
| 55       | 11       | 70.400 | 65.600 | -4.800 |
| 100      | 29       | 71.600 | 66.400 | -5.200 |
| 100      | 30       | 70.800 | 69.400 | -1.400 |
| 100      | 31       | 70.800 | 64.900 | -5.900 |
| 100      | 32       | 69.000 | 63.800 | -5.200 |
| 100      | 34       | 69.900 | 64.600 | -5.300 |
| 100      | 35       | 69.700 | 64.000 | -5.700 |
| 100      | 36       | 70.300 | 65.500 | -4.800 |
| 100      | 38       | 69.500 | 64.500 | -5.000 |
| 100      | 39       | 71.500 | 66.400 | -5.100 |
| 100      | 41       | 69.500 | 64.400 | -5.100 |
| 100      | 42       | 69.700 | 65.200 | -4.500 |
| 100      | 43       | 72.000 | 67.200 | -4.800 |
| 100      | 45       | 69.900 | 65.300 | -4.600 |
| 100      | 46       | 71.400 | 66.800 | -4.600 |
| 100      | 47       | 70.300 | 65.300 | -5.000 |
| 100      | 48       | 71.200 | 65.500 | -5.700 |
| 100      | 49       | 70.800 | 65.900 | -4.900 |
| 100      | 51       | 70.400 | 65.300 | -5.100 |
| 100      | 54       | 71.500 | 65.400 | -6.100 |
| 100      | 56       | 70.700 | 65.300 | -5.400 |
| 100      | 57       | 69.700 | 65.200 | -4.500 |
| 100      | 58       | 70.300 | 65.100 | -5.200 |
| 100      | 59       | 70.700 | 65.500 | -5.200 |
| 105      | 61       | 71.100 | 65.800 | -5.300 |
| 105      | 62       | 70.500 | 64.900 | -5.600 |
| 105      | 64       | 70.800 | 66.000 | -4.800 |
| 105      | 65       | 69.900 | 64.400 | -5.500 |
| 105      | 66       | 69.600 | 64.500 | -5.100 |
| Max      |          | 72.000 | 80.300 | 10.100 |
| Average  |          | 70.291 | 67.263 | -3.029 |
| Min      |          | 68.300 | 63.800 | -6.100 |
| Std Dev  |          | 0.797  | 2.467  | 2.604  |

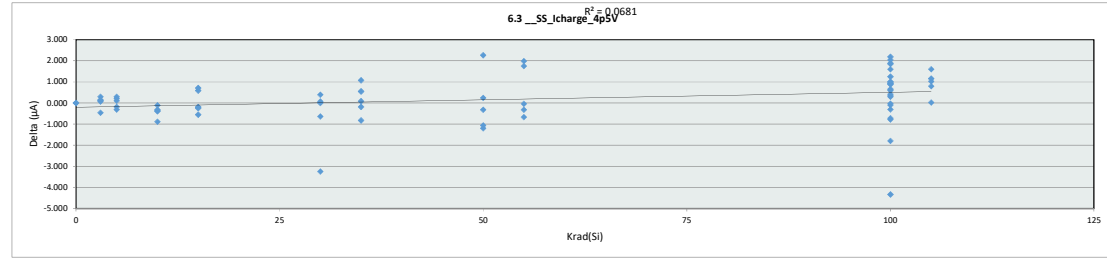


|             |                       |         |         |         |         |         |         |         |         |         |         |
|-------------|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|             | 3.5_IRCP_EN7p0V_14p0V |         |         |         |         |         |         |         |         |         |         |
| Test Site   |                       |         |         |         |         |         |         |         |         |         |         |
| Tester      |                       |         |         |         |         |         |         |         |         |         |         |
| Test Number |                       |         |         |         |         |         |         |         |         |         |         |
| Max Limit   | 240                   |         | μA      |         |         |         |         |         |         |         |         |
| Min Limit   |                       |         | μA      |         |         |         |         |         |         |         |         |
| Krad(Si)    | 0                     | 3       | 5       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL          | 68.200                | 68.500  | 68.700  | 67.800  | 67.900  | 64.400  | 67.300  | 65.500  | 65.400  | 63.800  | 64.400  |
| Min         | 68.350                | 71.480  | 69.360  | 69.240  | 68.760  | 67.720  | 68.700  | 66.280  | 66.300  | 65.517  | 65.120  |
| Average     | 68.500                | 80.300  | 70.000  | 70.800  | 69.600  | 69.400  | 69.600  | 67.000  | 67.000  | 69.400  | 66.000  |
| Max         | 68.500                | 80.300  | 70.000  | 70.800  | 69.600  | 69.400  | 69.600  | 67.000  | 67.000  | 69.400  | 66.000  |
| UL          | 240.000               | 240.000 | 240.000 | 240.000 | 240.000 | 240.000 | 240.000 | 240.000 | 240.000 | 240.000 | 240.000 |

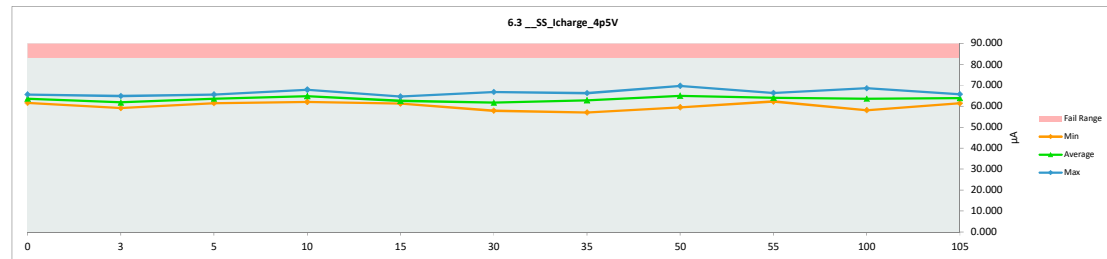


# HDR TID Report TPS7H2211-SP

| 6.3 __SS_Icharge_4p5V |          |        |        |        |
|-----------------------|----------|--------|--------|--------|
| Test Site             |          |        |        |        |
| Tester                |          |        |        |        |
| Test Number           |          |        |        |        |
| Unit                  | μA       | μA     |        |        |
| Max Limit             | 83       | 83     |        |        |
| Min Limit             |          |        |        |        |
| Krad(Si)              | Serial # | PRE    | POST   | Delta  |
| 0                     | 227      | 61.566 | 61.573 | 0.007  |
| 0                     | 229      | 65.604 | 65.598 | -0.006 |
| 3                     | 107      | 61.360 | 61.497 | 0.137  |
| 3                     | 108      | 64.839 | 64.906 | 0.067  |
| 3                     | 109      | 60.973 | 61.268 | 0.295  |
| 3                     | 110      | 62.448 | 62.581 | 0.133  |
| 3                     | 111      | 59.602 | 59.137 | -0.465 |
| 5                     | 112      | 62.902 | 62.719 | -0.183 |
| 5                     | 113      | 64.994 | 65.289 | 0.295  |
| 5                     | 114      | 62.419 | 62.625 | 0.206  |
| 5                     | 115      | 61.810 | 61.496 | -0.314 |
| 5                     | 116      | 65.528 | 65.632 | 0.104  |
| 10                    | 96       | 64.494 | 64.181 | -0.313 |
| 10                    | 97       | 66.272 | 66.158 | -0.114 |
| 10                    | 98       | 62.442 | 62.086 | -0.356 |
| 10                    | 99       | 64.699 | 63.812 | -0.887 |
| 10                    | 100      | 68.310 | 67.921 | -0.389 |
| 15                    | 101      | 61.936 | 61.378 | -0.558 |
| 15                    | 102      | 62.057 | 61.861 | -0.196 |
| 15                    | 104      | 63.890 | 64.601 | 0.711  |
| 15                    | 105      | 64.124 | 63.876 | -0.248 |
| 15                    | 106      | 60.754 | 61.338 | 0.584  |
| 30                    | 83       | 66.372 | 66.763 | 0.391  |
| 30                    | 84       | 61.589 | 61.590 | 0.001  |
| 30                    | 85       | 61.111 | 57.863 | -3.248 |
| 30                    | 86       | 61.027 | 60.388 | -0.639 |
| 30                    | 87       | 62.224 | 62.293 | 0.069  |
| 35                    | 88       | 61.556 | 62.631 | 1.075  |
| 35                    | 92       | 56.446 | 56.996 | 0.550  |
| 35                    | 93       | 62.876 | 62.961 | 0.085  |
| 35                    | 94       | 66.443 | 66.262 | -0.181 |
| 35                    | 95       | 66.127 | 65.295 | -0.832 |
| 50                    | 1        | 64.850 | 63.646 | -1.204 |
| 50                    | 2        | 69.196 | 69.437 | 0.241  |
| 50                    | 3        | 63.115 | 62.795 | -0.320 |
| 50                    | 5        | 60.559 | 59.492 | -1.067 |
| 50                    | 6        | 67.495 | 69.761 | 2.266  |
| 55                    | 7        | 62.453 | 64.435 | 1.982  |
| 55                    | 8        | 64.921 | 64.598 | -0.323 |
| 55                    | 9        | 66.348 | 66.306 | -0.042 |
| 55                    | 10       | 60.547 | 62.293 | 1.746  |
| 55                    | 11       | 63.665 | 62.992 | -0.673 |
| 100                   | 29       | 66.634 | 67.641 | 1.007  |
| 100                   | 30       | 62.582 | 62.272 | -0.310 |
| 100                   | 31       | 63.751 | 64.043 | 0.292  |
| 100                   | 32       | 65.422 | 63.621 | -1.801 |
| 100                   | 34       | 63.611 | 62.886 | -0.725 |
| 100                   | 35       | 60.899 | 60.866 | -0.033 |
| 100                   | 36       | 65.928 | 65.146 | -0.782 |
| 100                   | 38       | 61.303 | 61.890 | 0.587  |
| 100                   | 39       | 59.228 | 60.110 | 0.882  |
| 100                   | 41       | 63.424 | 63.763 | 0.339  |
| 100                   | 42       | 62.853 | 62.755 | -0.098 |
| 100                   | 43       | 65.111 | 66.057 | 0.946  |
| 100                   | 45       | 64.861 | 66.104 | 1.243  |
| 100                   | 46       | 66.440 | 68.290 | 1.850  |
| 100                   | 47       | 61.683 | 62.678 | 0.995  |
| 100                   | 48       | 56.259 | 58.142 | 1.883  |
| 100                   | 49       | 68.274 | 63.937 | -4.337 |
| 100                   | 51       | 60.098 | 62.138 | 2.040  |
| 100                   | 54       | 66.398 | 68.580 | 2.182  |
| 100                   | 56       | 60.404 | 61.328 | 0.924  |
| 100                   | 57       | 60.568 | 62.164 | 1.596  |
| 100                   | 58       | 64.797 | 65.213 | 0.416  |
| 100                   | 59       | 62.034 | 62.686 | 0.652  |
| 105                   | 61       | 59.822 | 61.423 | 1.601  |
| 105                   | 62       | 64.330 | 64.348 | 0.018  |
| 105                   | 64       | 63.974 | 65.129 | 1.155  |
| 105                   | 65       | 64.706 | 65.732 | 1.026  |
| 105                   | 66       | 62.177 | 62.973 | 0.796  |
| Max                   |          | 69.196 | 69.761 | 2.266  |
| Average               |          | 63.279 | 63.461 | 0.182  |
| Min                   |          | 56.259 | 56.996 | -4.337 |
| Std Dev               |          | 2.602  | 2.606  | 1.103  |

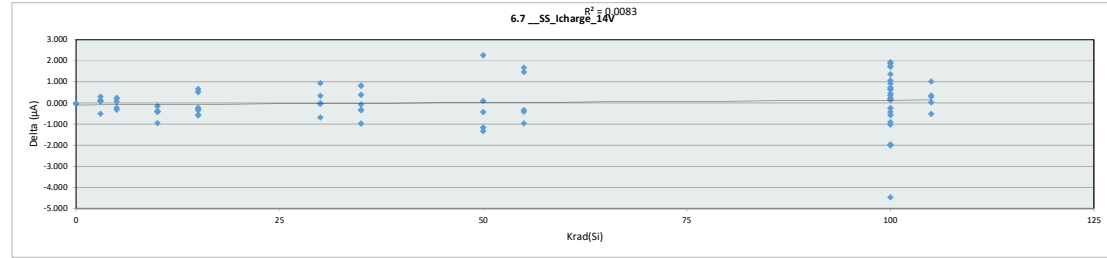


|             |        | 6.3_SS_Icharge_4p5V |        |        |        |        |        |        |        |        |        |
|-------------|--------|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site   |        |                     |        |        |        |        |        |        |        |        |        |
| Tester      |        |                     |        |        |        |        |        |        |        |        |        |
| Test Number |        |                     |        |        |        |        |        |        |        |        |        |
| Max Limit   | 83     | μA                  |        |        |        |        |        |        |        |        |        |
| Min Limit   |        | μA                  |        |        |        |        |        |        |        |        |        |
| Krad(Si)    | 0      | 3                   | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| Min         | 61.573 | 59.137              | 61.496 | 62.086 | 61.338 | 57.863 | 56.996 | 59.492 | 62.293 | 58.142 | 61.423 |
| Average     | 63.586 | 61.878              | 63.552 | 64.832 | 62.611 | 61.779 | 62.829 | 65.026 | 64.125 | 63.579 | 63.921 |
| Max         | 65.598 | 64.906              | 65.632 | 67.921 | 64.601 | 66.763 | 66.262 | 69.761 | 66.306 | 68.580 | 65.732 |
| UL          | 83.000 | 83.000              | 83.000 | 83.000 | 83.000 | 83.000 | 83.000 | 83.000 | 83.000 | 83.000 | 83.000 |

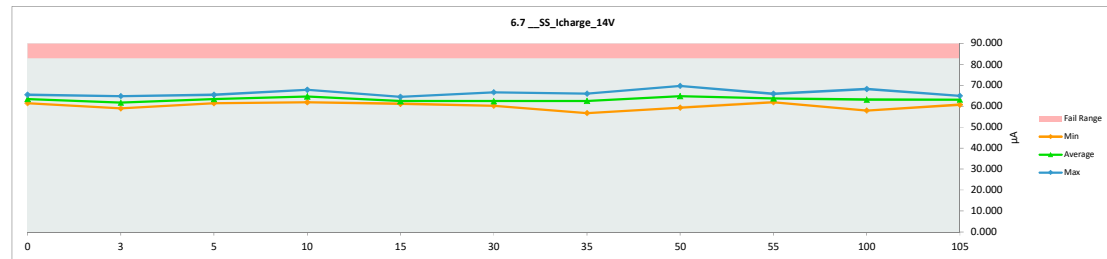


# HDR TID Report TPS7H2211-SP

| 6.7 __SS_Icharge_14V |          |        |        |        |
|----------------------|----------|--------|--------|--------|
| Test Site            |          |        |        |        |
| Tester               |          |        |        |        |
| Test Number          |          |        |        |        |
| Unit                 |          | µA     | µA     |        |
| Max Limit            |          | 83     | 83     |        |
| Min Limit            |          |        |        |        |
| Krad(Si)             | Serial # | PRE    | POST   | Delta  |
| 0                    | 227      | 61.488 | 61.460 | -0.028 |
| 0                    | 229      | 65.544 | 65.522 | -0.022 |
| 3                    | 107      | 61.297 | 61.407 | 0.110  |
| 3                    | 108      | 64.744 | 64.818 | 0.074  |
| 3                    | 109      | 60.869 | 61.168 | 0.299  |
| 3                    | 110      | 62.366 | 62.495 | 0.129  |
| 3                    | 111      | 59.504 | 58.999 | -0.505 |
| 5                    | 112      | 62.822 | 62.595 | -0.227 |
| 5                    | 113      | 64.867 | 65.115 | 0.248  |
| 5                    | 114      | 62.358 | 62.555 | 0.197  |
| 5                    | 115      | 61.713 | 61.393 | -0.320 |
| 5                    | 116      | 65.453 | 65.512 | 0.059  |
| 10                   | 96       | 64.421 | 64.039 | -0.382 |
| 10                   | 97       | 66.171 | 66.023 | -0.148 |
| 10                   | 98       | 62.361 | 61.934 | -0.427 |
| 10                   | 99       | 64.572 | 63.621 | -0.951 |
| 10                   | 100      | 68.235 | 67.842 | -0.393 |
| 15                   | 101      | 61.897 | 61.324 | -0.573 |
| 15                   | 102      | 61.967 | 61.729 | -0.238 |
| 15                   | 104      | 63.792 | 64.454 | 0.662  |
| 15                   | 105      | 64.064 | 63.721 | -0.343 |
| 15                   | 106      | 60.702 | 61.226 | 0.524  |
| 30                   | 83       | 66.328 | 66.671 | 0.343  |
| 30                   | 84       | 61.526 | 61.480 | -0.046 |
| 30                   | 85       | 61.012 | 61.950 | 0.938  |
| 30                   | 86       | 60.943 | 60.257 | -0.686 |
| 30                   | 87       | 62.137 | 62.123 | -0.014 |
| 35                   | 88       | 61.478 | 62.303 | 0.825  |
| 35                   | 92       | 56.359 | 56.743 | 0.384  |
| 35                   | 93       | 62.773 | 62.701 | -0.072 |
| 35                   | 94       | 66.358 | 66.027 | -0.331 |
| 35                   | 95       | 66.012 | 65.041 | -0.971 |
| 50                   | 1        | 64.771 | 63.433 | -1.338 |
| 50                   | 2        | 69.090 | 69.189 | 0.099  |
| 50                   | 3        | 63.034 | 62.606 | -0.428 |
| 50                   | 5        | 60.455 | 59.291 | -1.164 |
| 50                   | 6        | 67.432 | 69.694 | 2.262  |
| 55                   | 7        | 62.376 | 64.052 | 1.676  |
| 55                   | 8        | 64.835 | 64.425 | -0.410 |
| 55                   | 9        | 66.286 | 65.949 | -0.337 |
| 55                   | 10       | 60.471 | 61.940 | 1.469  |
| 55                   | 11       | 63.549 | 62.582 | -0.967 |
| 100                  | 29       | 66.585 | 67.509 | 0.924  |
| 100                  | 30       | 62.499 | 61.924 | -0.575 |
| 100                  | 31       | 63.664 | 63.800 | 0.136  |
| 100                  | 32       | 65.346 | 63.339 | -2.007 |
| 100                  | 34       | 63.552 | 62.649 | -0.903 |
| 100                  | 35       | 60.790 | 60.359 | -0.431 |
| 100                  | 36       | 65.834 | 64.812 | -1.022 |
| 100                  | 38       | 61.222 | 61.667 | 0.445  |
| 100                  | 39       | 59.159 | 59.822 | 0.663  |
| 100                  | 41       | 63.342 | 63.581 | 0.239  |
| 100                  | 42       | 62.782 | 62.540 | -0.242 |
| 100                  | 43       | 64.995 | 63.026 | -1.969 |
| 100                  | 45       | 64.776 | 65.846 | 1.070  |
| 100                  | 46       | 66.333 | 68.042 | 1.709  |
| 100                  | 47       | 61.606 | 62.330 | 0.724  |
| 100                  | 48       | 56.198 | 57.946 | 1.748  |
| 100                  | 49       | 68.168 | 63.701 | -4.467 |
| 100                  | 51       | 60.036 | 61.914 | 1.878  |
| 100                  | 54       | 66.309 | 68.246 | 1.937  |
| 100                  | 56       | 60.333 | 60.967 | 0.634  |
| 100                  | 57       | 60.492 | 61.858 | 1.366  |
| 100                  | 58       | 64.693 | 64.868 | 0.175  |
| 100                  | 59       | 61.953 | 62.313 | 0.360  |
| 105                  | 61       | 59.747 | 60.775 | 1.028  |
| 105                  | 62       | 64.237 | 63.714 | -0.523 |
| 105                  | 64       | 63.881 | 63.916 | 0.035  |
| 105                  | 65       | 64.591 | 64.945 | 0.354  |
| 105                  | 66       | 62.063 | 62.365 | 0.302  |
| Max                  |          | 69.090 | 69.694 | 2.262  |
| Average              |          | 63.195 | 63.231 | 0.037  |
| Min                  |          | 56.198 | 56.743 | -4.467 |
| Std Dev              |          | 2.599  | 2.502  | 1.021  |

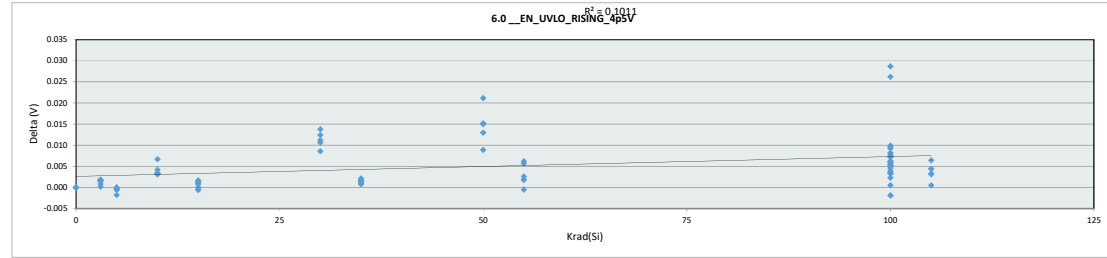


|             |        | 6.7_SS_Icharge_14V |        |        |        |        |        |        |        |        |        |
|-------------|--------|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site   |        |                    |        |        |        |        |        |        |        |        |        |
| Tester      |        |                    |        |        |        |        |        |        |        |        |        |
| Test Number |        |                    |        |        |        |        |        |        |        |        |        |
| Max Limit   | 83     | µA                 |        |        |        |        |        |        |        |        |        |
| Min Limit   |        | µA                 |        |        |        |        |        |        |        |        |        |
| Krad(Si)    | 0      | 3                  | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| Min         | 61.460 | 58.999             | 61.393 | 61.934 | 61.226 | 60.257 | 56.743 | 59.291 | 61.940 | 57.946 | 60.775 |
| Average     | 63.491 | 61.777             | 63.434 | 64.692 | 62.491 | 62.496 | 62.563 | 64.843 | 63.790 | 63.176 | 63.143 |
| Max         | 65.522 | 64.818             | 65.512 | 67.842 | 64.454 | 66.671 | 66.027 | 69.694 | 65.949 | 68.246 | 64.945 |
| UL          | 83.000 | 83.000             | 83.000 | 83.000 | 83.000 | 83.000 | 83.000 | 83.000 | 83.000 | 83.000 | 83.000 |

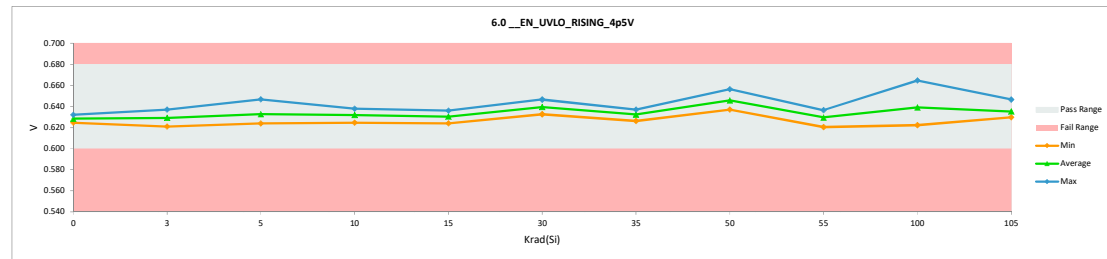


# HDR TID Report TPS7H2211-SP

| 6.0 __EN_UVLO_RISING_4p5V |          |       |       |        |
|---------------------------|----------|-------|-------|--------|
| Test Site                 |          |       |       |        |
| Tester                    |          |       |       |        |
| Test Number               |          |       |       |        |
| Unit                      |          | V     | V     |        |
| Max Limit                 |          | 0.68  | 0.68  |        |
| Min Limit                 |          | 0.6   | 0.6   |        |
| Krad(Si)                  | Serial # | PRE   | POST  | Delta  |
| 0                         | 227      | 0.625 | 0.625 | 0.000  |
| 0                         | 229      | 0.632 | 0.632 | 0.000  |
| 3                         | 107      | 0.621 | 0.623 | 0.002  |
| 3                         | 108      | 0.634 | 0.636 | 0.002  |
| 3                         | 109      | 0.636 | 0.637 | 0.001  |
| 3                         | 110      | 0.621 | 0.621 | 0.000  |
| 3                         | 111      | 0.629 | 0.630 | 0.002  |
| 5                         | 112      | 0.634 | 0.634 | 0.000  |
| 5                         | 113      | 0.627 | 0.625 | -0.002 |
| 5                         | 114      | 0.624 | 0.624 | 0.000  |
| 5                         | 115      | 0.634 | 0.634 | 0.000  |
| 5                         | 116      | 0.647 | 0.647 | -0.001 |
| 10                        | 96       | 0.627 | 0.631 | 0.003  |
| 10                        | 97       | 0.622 | 0.625 | 0.003  |
| 10                        | 98       | 0.634 | 0.638 | 0.004  |
| 10                        | 99       | 0.630 | 0.636 | 0.007  |
| 10                        | 100      | 0.627 | 0.630 | 0.003  |
| 15                        | 101      | 0.625 | 0.626 | 0.001  |
| 15                        | 102      | 0.625 | 0.624 | -0.001 |
| 15                        | 104      | 0.634 | 0.635 | 0.001  |
| 15                        | 105      | 0.635 | 0.636 | 0.002  |
| 15                        | 106      | 0.631 | 0.631 | 0.000  |
| 30                        | 83       | 0.626 | 0.635 | 0.009  |
| 30                        | 84       | 0.622 | 0.633 | 0.011  |
| 30                        | 85       | 0.631 | 0.641 | 0.011  |
| 30                        | 86       | 0.633 | 0.647 | 0.014  |
| 30                        | 87       | 0.630 | 0.643 | 0.012  |
| 35                        | 88       | 0.635 | 0.635 | 0.001  |
| 35                        | 92       | 0.636 | 0.637 | 0.001  |
| 35                        | 93       | 0.634 | 0.636 | 0.002  |
| 35                        | 94       | 0.626 | 0.627 | 0.002  |
| 35                        | 95       | 0.624 | 0.626 | 0.002  |
| 50                        | 1        | 0.624 | 0.637 | 0.013  |
| 50                        | 2        | 0.630 | 0.645 | 0.015  |
| 50                        | 3        | 0.635 | 0.650 | 0.015  |
| 50                        | 5        | 0.635 | 0.656 | 0.021  |
| 50                        | 6        | 0.632 | 0.641 | 0.009  |
| 55                        | 7        | 0.632 | 0.634 | 0.002  |
| 55                        | 8        | 0.631 | 0.637 | 0.006  |
| 55                        | 9        | 0.618 | 0.621 | 0.003  |
| 55                        | 10       | 0.621 | 0.621 | 0.000  |
| 55                        | 11       | 0.630 | 0.637 | 0.006  |
| 100                       | 29       | 0.619 | 0.622 | 0.003  |
| 100                       | 30       | 0.638 | 0.648 | 0.010  |
| 100                       | 31       | 0.631 | 0.640 | 0.009  |
| 100                       | 32       | 0.634 | 0.644 | 0.010  |
| 100                       | 34       | 0.623 | 0.632 | 0.008  |
| 100                       | 35       | 0.634 | 0.663 | 0.029  |
| 100                       | 36       | 0.635 | 0.641 | 0.006  |
| 100                       | 38       | 0.625 | 0.631 | 0.005  |
| 100                       | 39       | 0.638 | 0.645 | 0.007  |
| 100                       | 41       | 0.628 | 0.636 | 0.008  |
| 100                       | 42       | 0.631 | 0.636 | 0.005  |
| 100                       | 43       | 0.639 | 0.665 | 0.026  |
| 100                       | 45       | 0.627 | 0.631 | 0.004  |
| 100                       | 46       | 0.641 | 0.647 | 0.006  |
| 100                       | 47       | 0.631 | 0.633 | 0.002  |
| 100                       | 48       | 0.635 | 0.633 | -0.002 |
| 100                       | 49       | 0.627 | 0.631 | 0.003  |
| 100                       | 51       | 0.627 | 0.632 | 0.005  |
| 100                       | 54       | 0.635 | 0.641 | 0.006  |
| 100                       | 56       | 0.632 | 0.638 | 0.006  |
| 100                       | 57       | 0.631 | 0.634 | 0.003  |
| 100                       | 58       | 0.634 | 0.635 | 0.001  |
| 100                       | 59       | 0.638 | 0.645 | 0.007  |
| 105                       | 61       | 0.630 | 0.633 | 0.003  |
| 105                       | 62       | 0.630 | 0.633 | 0.003  |
| 105                       | 64       | 0.642 | 0.647 | 0.004  |
| 105                       | 65       | 0.629 | 0.630 | 0.001  |
| 105                       | 66       | 0.628 | 0.634 | 0.006  |
| Max                       |          | 0.647 | 0.665 | 0.029  |
| Average                   |          | 0.630 | 0.636 | 0.005  |
| Min                       |          | 0.618 | 0.621 | -0.002 |
| Std Dev                   |          | 0.006 | 0.009 | 0.006  |

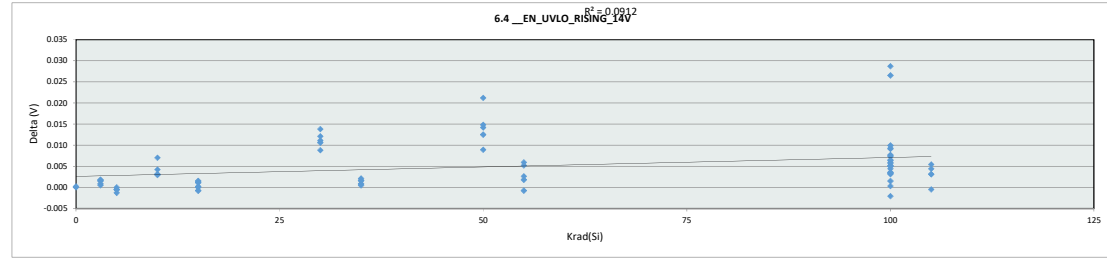


| 6.0 __EN_UVLO_RISING_4p5V |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                 |       |       |       |       |       |       |       |       |       |       |       |
| Tester                    |       |       |       |       |       |       |       |       |       |       |       |
| Test Number               |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                 |       | 0.68  | V     |       |       |       |       |       |       |       |       |
| Min Limit                 |       | 0.6   | V     |       |       |       |       |       |       |       |       |
| Krad(Si)                  | 0     | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                        | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 |
| Min                       | 0.625 | 0.621 | 0.624 | 0.625 | 0.624 | 0.633 | 0.626 | 0.637 | 0.621 | 0.622 | 0.630 |
| Average                   | 0.628 | 0.629 | 0.633 | 0.632 | 0.630 | 0.640 | 0.632 | 0.646 | 0.630 | 0.639 | 0.635 |
| Max                       | 0.632 | 0.637 | 0.647 | 0.638 | 0.636 | 0.647 | 0.637 | 0.657 | 0.637 | 0.665 | 0.647 |
| UL                        | 0.680 | 0.680 | 0.680 | 0.680 | 0.680 | 0.680 | 0.680 | 0.680 | 0.680 | 0.680 | 0.680 |

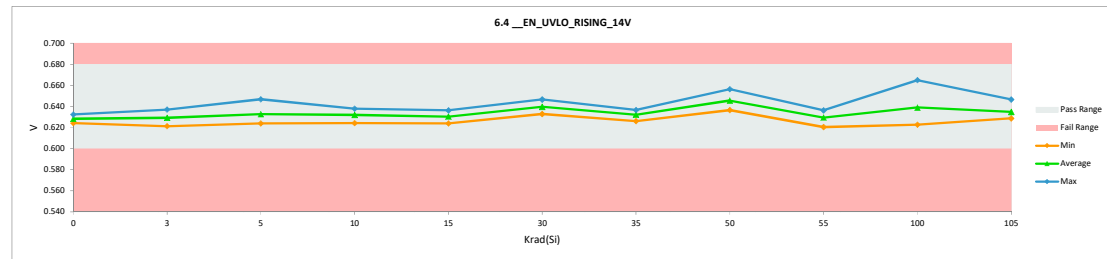


# HDR TID Report TPS7H2211-SP

| 6.4 __EN_UVLO_RISING_14V |          |       |       |        |
|--------------------------|----------|-------|-------|--------|
| Test Site                |          |       |       |        |
| Tester                   |          |       |       |        |
| Test Number              |          |       |       |        |
| Unit                     |          | V     | V     |        |
| Max Limit                |          | 0.68  | 0.68  |        |
| Min Limit                |          | 0.6   | 0.6   |        |
| Krad(Si)                 | Serial # | PRE   | POST  | Delta  |
| 0                        | 227      | 0.624 | 0.624 | 0.000  |
| 0                        | 229      | 0.632 | 0.632 | 0.000  |
| 3                        | 107      | 0.621 | 0.623 | 0.002  |
| 3                        | 108      | 0.634 | 0.635 | 0.002  |
| 3                        | 109      | 0.636 | 0.637 | 0.001  |
| 3                        | 110      | 0.621 | 0.621 | 0.000  |
| 3                        | 111      | 0.628 | 0.630 | 0.002  |
| 5                        | 112      | 0.634 | 0.634 | 0.000  |
| 5                        | 113      | 0.627 | 0.625 | -0.001 |
| 5                        | 114      | 0.624 | 0.624 | -0.001 |
| 5                        | 115      | 0.634 | 0.634 | 0.000  |
| 5                        | 116      | 0.647 | 0.647 | -0.001 |
| 10                       | 96       | 0.628 | 0.631 | 0.003  |
| 10                       | 97       | 0.622 | 0.624 | 0.003  |
| 10                       | 98       | 0.634 | 0.638 | 0.004  |
| 10                       | 99       | 0.629 | 0.636 | 0.007  |
| 10                       | 100      | 0.627 | 0.631 | 0.003  |
| 15                       | 101      | 0.626 | 0.626 | 0.000  |
| 15                       | 102      | 0.625 | 0.624 | -0.001 |
| 15                       | 104      | 0.634 | 0.635 | 0.001  |
| 15                       | 105      | 0.635 | 0.636 | 0.002  |
| 15                       | 106      | 0.631 | 0.631 | 0.000  |
| 30                       | 83       | 0.627 | 0.635 | 0.009  |
| 30                       | 84       | 0.622 | 0.633 | 0.011  |
| 30                       | 85       | 0.631 | 0.641 | 0.011  |
| 30                       | 86       | 0.633 | 0.647 | 0.014  |
| 30                       | 87       | 0.630 | 0.642 | 0.012  |
| 35                       | 88       | 0.635 | 0.635 | 0.001  |
| 35                       | 92       | 0.636 | 0.637 | 0.001  |
| 35                       | 93       | 0.634 | 0.636 | 0.002  |
| 35                       | 94       | 0.626 | 0.627 | 0.002  |
| 35                       | 95       | 0.624 | 0.626 | 0.002  |
| 50                       | 1        | 0.624 | 0.637 | 0.012  |
| 50                       | 2        | 0.631 | 0.645 | 0.015  |
| 50                       | 3        | 0.635 | 0.650 | 0.014  |
| 50                       | 5        | 0.635 | 0.656 | 0.021  |
| 50                       | 6        | 0.632 | 0.641 | 0.009  |
| 55                       | 7        | 0.632 | 0.634 | 0.002  |
| 55                       | 8        | 0.631 | 0.636 | 0.005  |
| 55                       | 9        | 0.618 | 0.621 | 0.003  |
| 55                       | 10       | 0.621 | 0.621 | -0.001 |
| 55                       | 11       | 0.630 | 0.636 | 0.006  |
| 100                      | 29       | 0.619 | 0.623 | 0.004  |
| 100                      | 30       | 0.638 | 0.648 | 0.010  |
| 100                      | 31       | 0.631 | 0.640 | 0.009  |
| 100                      | 32       | 0.634 | 0.643 | 0.009  |
| 100                      | 34       | 0.624 | 0.632 | 0.008  |
| 100                      | 35       | 0.634 | 0.663 | 0.029  |
| 100                      | 36       | 0.635 | 0.641 | 0.006  |
| 100                      | 38       | 0.625 | 0.631 | 0.005  |
| 100                      | 39       | 0.638 | 0.645 | 0.007  |
| 100                      | 41       | 0.628 | 0.636 | 0.007  |
| 100                      | 42       | 0.631 | 0.635 | 0.004  |
| 100                      | 43       | 0.639 | 0.665 | 0.026  |
| 100                      | 45       | 0.627 | 0.631 | 0.003  |
| 100                      | 46       | 0.641 | 0.647 | 0.007  |
| 100                      | 47       | 0.631 | 0.632 | 0.001  |
| 100                      | 48       | 0.635 | 0.633 | -0.002 |
| 100                      | 49       | 0.627 | 0.631 | 0.003  |
| 100                      | 51       | 0.627 | 0.632 | 0.005  |
| 100                      | 54       | 0.635 | 0.640 | 0.006  |
| 100                      | 56       | 0.632 | 0.637 | 0.005  |
| 100                      | 57       | 0.631 | 0.634 | 0.003  |
| 100                      | 58       | 0.634 | 0.635 | 0.000  |
| 100                      | 59       | 0.638 | 0.644 | 0.006  |
| 105                      | 61       | 0.630 | 0.633 | 0.003  |
| 105                      | 62       | 0.630 | 0.633 | 0.003  |
| 105                      | 64       | 0.642 | 0.647 | 0.004  |
| 105                      | 65       | 0.629 | 0.629 | -0.001 |
| 105                      | 66       | 0.628 | 0.633 | 0.005  |
| Max                      |          | 0.647 | 0.665 | 0.029  |
| Average                  |          | 0.630 | 0.636 | 0.005  |
| Min                      |          | 0.618 | 0.621 | -0.002 |
| Std Dev                  |          | 0.006 | 0.009 | 0.006  |



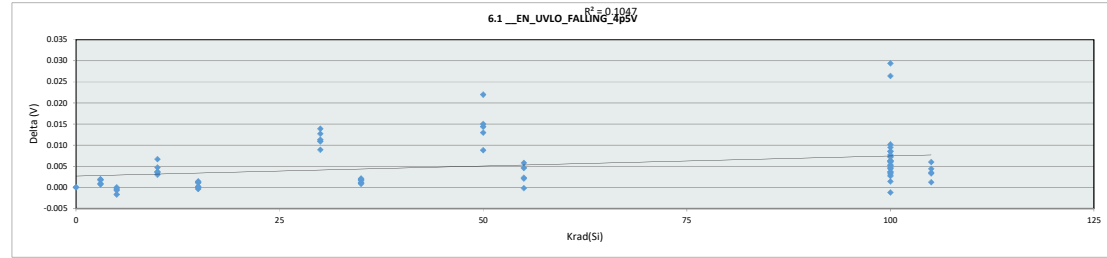
|             |       | 6.4 __EN_UVLO_RISING_14V |       |       |       |       |       |       |       |       |       |
|-------------|-------|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site   |       |                          |       |       |       |       |       |       |       |       |       |
| Tester      |       |                          |       |       |       |       |       |       |       |       |       |
| Test Number |       |                          |       |       |       |       |       |       |       |       |       |
| Max Limit   | 0.68  | V                        |       |       |       |       |       |       |       |       |       |
| Min Limit   | 0.6   | V                        |       |       |       |       |       |       |       |       |       |
| Krad(Si)    | 0     | 3                        | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL          | 0.600 | 0.600                    | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 | 0.600 |
| Min         | 0.624 | 0.621                    | 0.624 | 0.624 | 0.624 | 0.633 | 0.626 | 0.637 | 0.621 | 0.623 | 0.629 |
| Average     | 0.628 | 0.629                    | 0.633 | 0.632 | 0.630 | 0.640 | 0.632 | 0.646 | 0.630 | 0.639 | 0.635 |
| Max         | 0.632 | 0.637                    | 0.647 | 0.638 | 0.636 | 0.647 | 0.637 | 0.657 | 0.636 | 0.665 | 0.647 |
| UL          | 0.680 | 0.680                    | 0.680 | 0.680 | 0.680 | 0.680 | 0.680 | 0.680 | 0.680 | 0.680 | 0.680 |



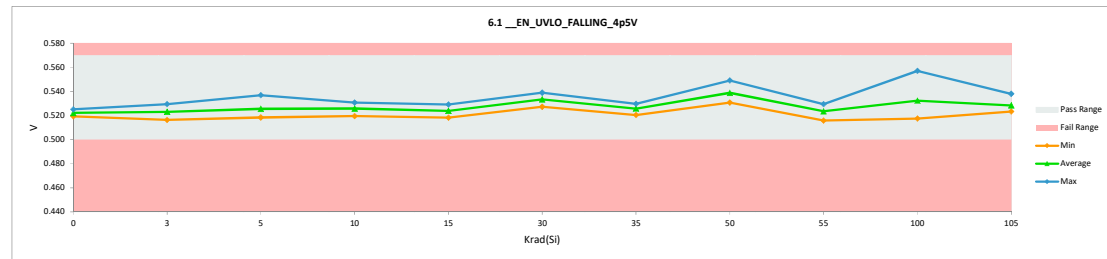
# HDR TID Report TPS7H2211-SP

| 6.1 __EN_UVLO_FALLING_4p5V |      |      |  |
|----------------------------|------|------|--|
| Test Site                  |      |      |  |
| Tester                     |      |      |  |
| Test Number                |      |      |  |
| Unit                       | V    | V    |  |
| Max Limit                  | 0.57 | 0.57 |  |
| Min Limit                  | 0.5  | 0.5  |  |

| Krad(Si) | Serial # | PRE   | POST  | Delta  |
|----------|----------|-------|-------|--------|
| 0        | 227      | 0.519 | 0.519 | 0.000  |
| 0        | 229      | 0.525 | 0.525 | 0.000  |
| 3        | 107      | 0.516 | 0.518 | 0.002  |
| 3        | 108      | 0.526 | 0.528 | 0.002  |
| 3        | 109      | 0.529 | 0.530 | 0.001  |
| 3        | 110      | 0.516 | 0.516 | 0.001  |
| 3        | 111      | 0.522 | 0.524 | 0.002  |
| 5        | 112      | 0.526 | 0.526 | 0.000  |
| 5        | 113      | 0.521 | 0.520 | -0.002 |
| 5        | 114      | 0.519 | 0.518 | 0.000  |
| 5        | 115      | 0.528 | 0.527 | -0.001 |
| 5        | 116      | 0.537 | 0.537 | -0.001 |
| 10       | 96       | 0.521 | 0.525 | 0.004  |
| 10       | 97       | 0.516 | 0.520 | 0.003  |
| 10       | 98       | 0.526 | 0.531 | 0.005  |
| 10       | 99       | 0.523 | 0.530 | 0.007  |
| 10       | 100      | 0.521 | 0.524 | 0.003  |
| 15       | 101      | 0.519 | 0.520 | 0.000  |
| 15       | 102      | 0.519 | 0.518 | 0.000  |
| 15       | 104      | 0.527 | 0.528 | 0.001  |
| 15       | 105      | 0.528 | 0.529 | 0.001  |
| 15       | 106      | 0.525 | 0.525 | 0.000  |
| 30       | 83       | 0.520 | 0.529 | 0.009  |
| 30       | 84       | 0.516 | 0.527 | 0.011  |
| 30       | 85       | 0.524 | 0.535 | 0.011  |
| 30       | 86       | 0.525 | 0.539 | 0.014  |
| 30       | 87       | 0.523 | 0.536 | 0.013  |
| 35       | 88       | 0.527 | 0.528 | 0.001  |
| 35       | 92       | 0.529 | 0.530 | 0.001  |
| 35       | 93       | 0.527 | 0.529 | 0.002  |
| 35       | 94       | 0.520 | 0.521 | 0.002  |
| 35       | 95       | 0.518 | 0.521 | 0.002  |
| 50       | 1        | 0.518 | 0.531 | 0.013  |
| 50       | 2        | 0.524 | 0.538 | 0.014  |
| 50       | 3        | 0.528 | 0.543 | 0.015  |
| 50       | 5        | 0.527 | 0.549 | 0.022  |
| 50       | 6        | 0.525 | 0.534 | 0.009  |
| 55       | 7        | 0.525 | 0.527 | 0.002  |
| 55       | 8        | 0.525 | 0.530 | 0.005  |
| 55       | 9        | 0.513 | 0.516 | 0.002  |
| 55       | 10       | 0.516 | 0.516 | 0.000  |
| 55       | 11       | 0.524 | 0.530 | 0.006  |
| 100      | 29       | 0.514 | 0.517 | 0.003  |
| 100      | 30       | 0.530 | 0.541 | 0.010  |
| 100      | 31       | 0.524 | 0.533 | 0.009  |
| 100      | 32       | 0.527 | 0.536 | 0.009  |
| 100      | 34       | 0.518 | 0.526 | 0.009  |
| 100      | 35       | 0.526 | 0.556 | 0.029  |
| 100      | 36       | 0.527 | 0.534 | 0.006  |
| 100      | 38       | 0.520 | 0.525 | 0.005  |
| 100      | 39       | 0.530 | 0.537 | 0.008  |
| 100      | 41       | 0.522 | 0.529 | 0.007  |
| 100      | 42       | 0.524 | 0.529 | 0.005  |
| 100      | 43       | 0.531 | 0.557 | 0.026  |
| 100      | 45       | 0.521 | 0.524 | 0.004  |
| 100      | 46       | 0.533 | 0.539 | 0.006  |
| 100      | 47       | 0.524 | 0.527 | 0.003  |
| 100      | 48       | 0.527 | 0.526 | -0.001 |
| 100      | 49       | 0.521 | 0.525 | 0.004  |
| 100      | 51       | 0.521 | 0.526 | 0.005  |
| 100      | 54       | 0.527 | 0.534 | 0.006  |
| 100      | 56       | 0.525 | 0.531 | 0.006  |
| 100      | 57       | 0.524 | 0.527 | 0.003  |
| 100      | 58       | 0.527 | 0.528 | 0.001  |
| 100      | 59       | 0.530 | 0.537 | 0.007  |
| 105      | 61       | 0.523 | 0.526 | 0.003  |
| 105      | 62       | 0.523 | 0.526 | 0.003  |
| 105      | 64       | 0.534 | 0.538 | 0.004  |
| 105      | 65       | 0.522 | 0.523 | 0.001  |
| 105      | 66       | 0.522 | 0.528 | 0.006  |
| Max      |          | 0.537 | 0.557 | 0.029  |
| Average  |          | 0.524 | 0.529 | 0.005  |
| Min      |          | 0.513 | 0.516 | -0.002 |
| Std Dev  |          | 0.005 | 0.008 | 0.006  |

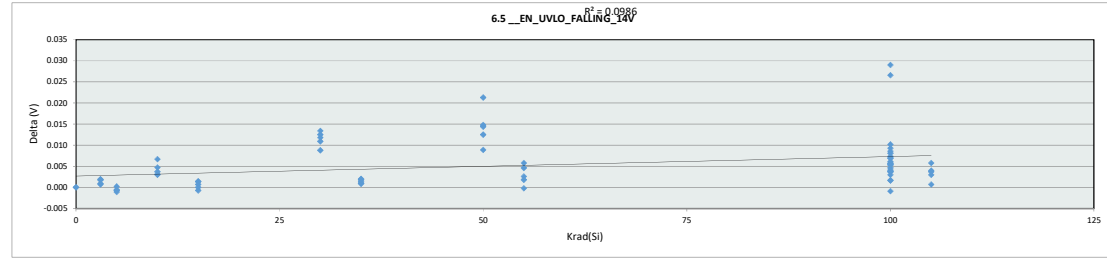


|             |                           |       |       |       |       |       |       |       |       |       |       |
|-------------|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|             | 6.1 __EN_UVLO_FALLING_4p5 |       |       |       |       |       |       |       |       |       |       |
| Test Site   |                           |       |       |       |       |       |       |       |       |       |       |
| Tester      |                           |       |       |       |       |       |       |       |       |       |       |
| Test Number |                           |       |       |       |       |       |       |       |       |       |       |
| Max Limit   | 0.57                      | V     |       |       |       |       |       |       |       |       |       |
| Min Limit   | 0.5                       | V     |       |       |       |       |       |       |       |       |       |
| Krad(Si)    | 0                         | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL          | 0.500                     | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 |
| Min         | 0.519                     | 0.516 | 0.518 | 0.520 | 0.518 | 0.527 | 0.521 | 0.531 | 0.516 | 0.518 | 0.523 |
| Average     | 0.522                     | 0.523 | 0.526 | 0.526 | 0.524 | 0.533 | 0.526 | 0.539 | 0.524 | 0.532 | 0.528 |
| Max         | 0.525                     | 0.530 | 0.537 | 0.531 | 0.529 | 0.539 | 0.530 | 0.549 | 0.530 | 0.557 | 0.538 |
| UL          | 0.570                     | 0.570 | 0.570 | 0.570 | 0.570 | 0.570 | 0.570 | 0.570 | 0.570 | 0.570 | 0.570 |

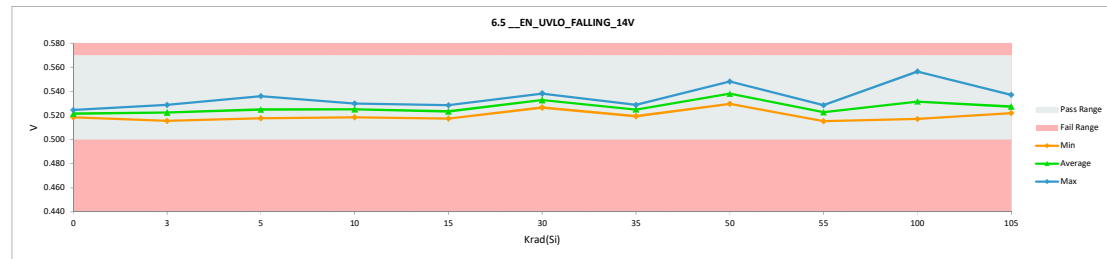


# HDR TID Report TPS7H2211-SP

| 6.5 __EN_UVLO_FALLING_14V |          |       |       |        |
|---------------------------|----------|-------|-------|--------|
| Test Site                 |          |       |       |        |
| Tester                    |          |       |       |        |
| Test Number               |          |       |       |        |
| Unit                      | V        | V     |       |        |
| Max Limit                 | 0.57     | 0.57  |       |        |
| Min Limit                 | 0.5      | 0.5   |       |        |
| Krad(Si)                  | Serial # | PRE   | POST  | Delta  |
| 0                         | 227      | 0.519 | 0.519 | 0.000  |
| 0                         | 229      | 0.525 | 0.525 | 0.000  |
| 3                         | 107      | 0.516 | 0.517 | 0.002  |
| 3                         | 108      | 0.525 | 0.527 | 0.002  |
| 3                         | 109      | 0.528 | 0.529 | 0.001  |
| 3                         | 110      | 0.515 | 0.516 | 0.001  |
| 3                         | 111      | 0.521 | 0.523 | 0.002  |
| 5                         | 112      | 0.526 | 0.526 | 0.000  |
| 5                         | 113      | 0.520 | 0.519 | -0.001 |
| 5                         | 114      | 0.518 | 0.518 | 0.000  |
| 5                         | 115      | 0.527 | 0.526 | -0.001 |
| 5                         | 116      | 0.537 | 0.536 | -0.001 |
| 10                        | 96       | 0.521 | 0.524 | 0.004  |
| 10                        | 97       | 0.516 | 0.519 | 0.003  |
| 10                        | 98       | 0.525 | 0.530 | 0.005  |
| 10                        | 99       | 0.523 | 0.530 | 0.007  |
| 10                        | 100      | 0.520 | 0.523 | 0.003  |
| 15                        | 101      | 0.519 | 0.519 | 0.001  |
| 15                        | 102      | 0.518 | 0.517 | -0.001 |
| 15                        | 104      | 0.526 | 0.528 | 0.001  |
| 15                        | 105      | 0.527 | 0.529 | 0.001  |
| 15                        | 106      | 0.524 | 0.524 | 0.000  |
| 30                        | 83       | 0.520 | 0.529 | 0.009  |
| 30                        | 84       | 0.516 | 0.527 | 0.011  |
| 30                        | 85       | 0.523 | 0.535 | 0.012  |
| 30                        | 86       | 0.525 | 0.538 | 0.013  |
| 30                        | 87       | 0.523 | 0.535 | 0.012  |
| 35                        | 88       | 0.527 | 0.528 | 0.001  |
| 35                        | 92       | 0.528 | 0.529 | 0.001  |
| 35                        | 93       | 0.526 | 0.528 | 0.002  |
| 35                        | 94       | 0.519 | 0.521 | 0.001  |
| 35                        | 95       | 0.517 | 0.520 | 0.002  |
| 50                        | 1        | 0.517 | 0.530 | 0.012  |
| 50                        | 2        | 0.523 | 0.537 | 0.014  |
| 50                        | 3        | 0.527 | 0.542 | 0.015  |
| 50                        | 5        | 0.527 | 0.548 | 0.021  |
| 50                        | 6        | 0.525 | 0.534 | 0.009  |
| 55                        | 7        | 0.524 | 0.526 | 0.002  |
| 55                        | 8        | 0.524 | 0.529 | 0.005  |
| 55                        | 9        | 0.513 | 0.515 | 0.003  |
| 55                        | 10       | 0.516 | 0.516 | 0.000  |
| 55                        | 11       | 0.523 | 0.529 | 0.006  |
| 100                       | 29       | 0.513 | 0.517 | 0.004  |
| 100                       | 30       | 0.530 | 0.540 | 0.010  |
| 100                       | 31       | 0.524 | 0.532 | 0.008  |
| 100                       | 32       | 0.526 | 0.535 | 0.009  |
| 100                       | 34       | 0.517 | 0.526 | 0.009  |
| 100                       | 35       | 0.526 | 0.555 | 0.029  |
| 100                       | 36       | 0.527 | 0.533 | 0.006  |
| 100                       | 38       | 0.519 | 0.525 | 0.006  |
| 100                       | 39       | 0.530 | 0.536 | 0.007  |
| 100                       | 41       | 0.521 | 0.529 | 0.007  |
| 100                       | 42       | 0.523 | 0.528 | 0.005  |
| 100                       | 43       | 0.530 | 0.557 | 0.027  |
| 100                       | 45       | 0.520 | 0.524 | 0.004  |
| 100                       | 46       | 0.532 | 0.538 | 0.006  |
| 100                       | 47       | 0.524 | 0.525 | 0.002  |
| 100                       | 48       | 0.527 | 0.526 | -0.001 |
| 100                       | 49       | 0.521 | 0.525 | 0.004  |
| 100                       | 51       | 0.521 | 0.526 | 0.005  |
| 100                       | 54       | 0.527 | 0.532 | 0.006  |
| 100                       | 56       | 0.524 | 0.530 | 0.005  |
| 100                       | 57       | 0.523 | 0.526 | 0.003  |
| 100                       | 58       | 0.526 | 0.528 | 0.002  |
| 100                       | 59       | 0.529 | 0.536 | 0.007  |
| 105                       | 61       | 0.522 | 0.525 | 0.003  |
| 105                       | 62       | 0.522 | 0.526 | 0.004  |
| 105                       | 64       | 0.533 | 0.537 | 0.004  |
| 105                       | 65       | 0.521 | 0.522 | 0.001  |
| 105                       | 66       | 0.521 | 0.527 | 0.006  |
| Max                       |          | 0.537 | 0.557 | 0.029  |
| Average                   |          | 0.523 | 0.528 | 0.005  |
| Min                       |          | 0.513 | 0.515 | -0.001 |
| Std Dev                   |          | 0.005 | 0.008 | 0.006  |



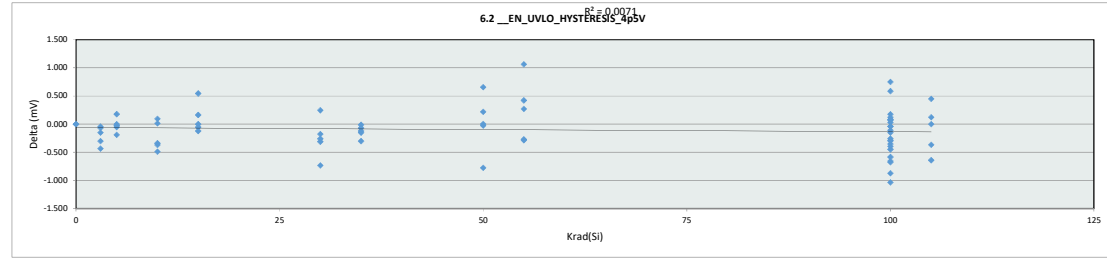
|             |                         |       |       |       |       |       |       |       |       |       |       |
|-------------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|             | 6.5_EN_UVLO_FALLING_14V |       |       |       |       |       |       |       |       |       |       |
| Test Site   |                         |       |       |       |       |       |       |       |       |       |       |
| Tester      |                         |       |       |       |       |       |       |       |       |       |       |
| Test Number |                         |       |       |       |       |       |       |       |       |       |       |
| Max Limit   | 0.57                    | V     |       |       |       |       |       |       |       |       |       |
| Min Limit   | 0.5                     | V     |       |       |       |       |       |       |       |       |       |
| Krad(Si)    | 0                       | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL          | 0.500                   | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 |
| Min         | 0.519                   | 0.516 | 0.518 | 0.519 | 0.518 | 0.527 | 0.520 | 0.530 | 0.515 | 0.517 | 0.522 |
| Average     | 0.522                   | 0.522 | 0.525 | 0.525 | 0.523 | 0.533 | 0.525 | 0.538 | 0.523 | 0.532 | 0.527 |
| Max         | 0.525                   | 0.529 | 0.536 | 0.530 | 0.529 | 0.538 | 0.529 | 0.548 | 0.529 | 0.557 | 0.537 |
| UL          | 0.570                   | 0.570 | 0.570 | 0.570 | 0.570 | 0.570 | 0.570 | 0.570 | 0.570 | 0.570 | 0.570 |



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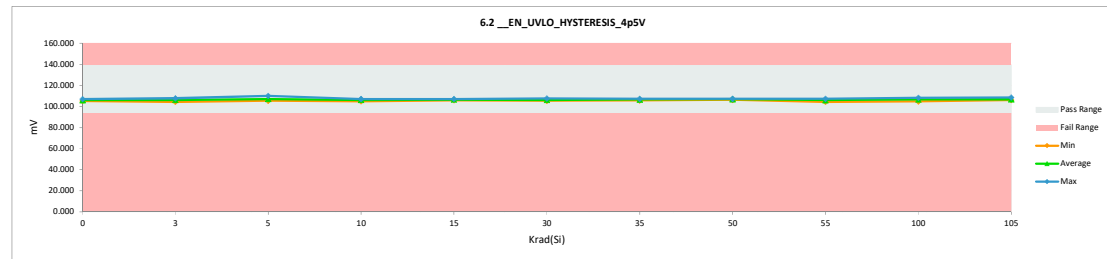
| 6.2 __EN_UVLO_HYSTERESIS_4p5V |  |     |     |  |
|-------------------------------|--|-----|-----|--|
| Test Site                     |  |     |     |  |
| Tester                        |  |     |     |  |
| Test Number                   |  |     |     |  |
| Unit                          |  | mV  | mV  |  |
| Max Limit                     |  | 139 | 139 |  |
| Min Limit                     |  | 94  | 94  |  |

| Krad(Si) | Serial # | PRE     | POST    | Delta  |
|----------|----------|---------|---------|--------|
| 0        | 227      | 105.338 | 105.338 | 0.000  |
| 0        | 229      | 107.056 | 107.056 | 0.000  |
| 3        | 107      | 104.465 | 104.424 | -0.041 |
| 3        | 108      | 107.943 | 107.875 | -0.068 |
| 3        | 109      | 107.725 | 107.576 | -0.149 |
| 3        | 110      | 105.160 | 104.724 | -0.436 |
| 3        | 111      | 106.702 | 106.401 | -0.301 |
| 5        | 112      | 107.711 | 107.711 | 0.000  |
| 5        | 113      | 106.074 | 105.883 | -0.191 |
| 5        | 114      | 105.514 | 105.487 | -0.027 |
| 5        | 115      | 106.579 | 106.757 | 0.178  |
| 5        | 116      | 110.059 | 110.004 | -0.055 |
| 10       | 96       | 106.333 | 105.993 | -0.340 |
| 10       | 97       | 105.010 | 105.106 | 0.096  |
| 10       | 98       | 107.684 | 107.194 | -0.490 |
| 10       | 99       | 106.320 | 106.334 | 0.014  |
| 10       | 100      | 106.770 | 106.401 | -0.369 |
| 15       | 101      | 105.597 | 106.142 | 0.545  |
| 15       | 102      | 106.033 | 105.978 | -0.055 |
| 15       | 104      | 107.275 | 107.153 | -0.122 |
| 15       | 105      | 106.838 | 107.002 | 0.164  |
| 15       | 106      | 106.225 | 106.225 | 0.000  |
| 30       | 83       | 105.706 | 105.447 | -0.259 |
| 30       | 84       | 105.242 | 105.489 | 0.247  |
| 30       | 85       | 106.660 | 105.926 | -0.734 |
| 30       | 86       | 107.834 | 107.658 | -0.176 |
| 30       | 87       | 107.097 | 106.786 | -0.311 |
| 35       | 88       | 107.302 | 107.153 | -0.149 |
| 35       | 92       | 107.466 | 107.344 | -0.122 |
| 35       | 93       | 107.275 | 106.975 | -0.300 |
| 35       | 94       | 106.401 | 106.333 | -0.068 |
| 35       | 95       | 105.746 | 105.733 | -0.013 |
| 50       | 1        | 106.442 | 106.417 | -0.025 |
| 50       | 2        | 106.633 | 107.290 | 0.657  |
| 50       | 3        | 107.098 | 107.318 | 0.220  |
| 50       | 5        | 108.080 | 107.305 | -0.775 |
| 50       | 6        | 106.770 | 106.771 | 0.001  |
| 55       | 7        | 107.520 | 107.248 | -0.272 |
| 55       | 8        | 105.993 | 107.057 | 1.064  |
| 55       | 9        | 104.396 | 104.668 | 0.272  |
| 55       | 10       | 104.751 | 104.465 | -0.286 |
| 55       | 11       | 106.633 | 107.057 | 0.424  |
| 100      | 29       | 104.969 | 104.860 | -0.109 |
| 100      | 30       | 107.684 | 107.331 | -0.353 |
| 100      | 31       | 106.920 | 107.671 | 0.751  |
| 100      | 32       | 107.507 | 107.590 | 0.083  |
| 100      | 34       | 105.665 | 105.379 | -0.286 |
| 100      | 35       | 107.711 | 107.033 | -0.678 |
| 100      | 36       | 107.562 | 107.522 | -0.040 |
| 100      | 38       | 105.419 | 105.270 | -0.149 |
| 100      | 39       | 108.380 | 107.986 | -0.394 |
| 100      | 41       | 106.156 | 106.743 | 0.587  |
| 100      | 42       | 106.920 | 106.948 | 0.028  |
| 100      | 43       | 107.971 | 107.715 | -0.256 |
| 100      | 45       | 106.252 | 106.429 | 0.177  |
| 100      | 46       | 108.476 | 108.177 | -0.299 |
| 100      | 47       | 106.660 | 106.212 | -0.448 |
| 100      | 48       | 107.562 | 106.907 | -0.655 |
| 100      | 49       | 106.565 | 105.530 | -1.035 |
| 100      | 51       | 106.074 | 106.156 | 0.082  |
| 100      | 54       | 107.302 | 107.262 | -0.040 |
| 100      | 56       | 107.547 | 106.962 | -0.585 |
| 100      | 57       | 106.920 | 107.043 | 0.123  |
| 100      | 58       | 107.248 | 106.375 | -0.873 |
| 100      | 59       | 108.121 | 108.190 | 0.069  |
| 105      | 61       | 106.552 | 106.675 | 0.123  |
| 105      | 62       | 107.043 | 106.675 | -0.368 |
| 105      | 64       | 108.585 | 108.585 | 0.000  |
| 105      | 65       | 107.220 | 106.579 | -0.641 |
| 105      | 66       | 105.665 | 106.116 | 0.451  |
| Max      |          | 110.059 | 110.004 | 1.064  |
| Average  |          | 106.744 | 106.645 | -0.100 |
| Min      |          | 104.396 | 104.424 | -1.035 |
| Std Dev  |          | 1.066   | 1.029   | 0.374  |



| 6.2 __EN_UVLO_HYSTERESIS |  |     |    |  |  |  |  |  |  |  |
|--------------------------|--|-----|----|--|--|--|--|--|--|--|
| Test Site                |  |     |    |  |  |  |  |  |  |  |
| Tester                   |  |     |    |  |  |  |  |  |  |  |
| Test Number              |  |     |    |  |  |  |  |  |  |  |
| Max Limit                |  | 139 | mV |  |  |  |  |  |  |  |
| Min Limit                |  | 94  | mV |  |  |  |  |  |  |  |

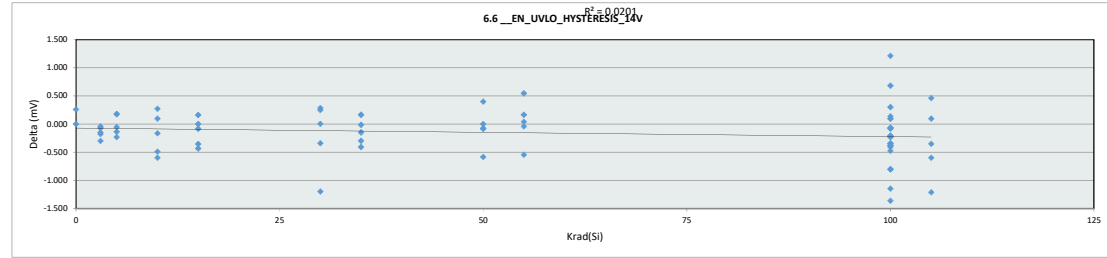
| Krad(Si) | 0       | 3       | 5       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| LL       | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  |
| Min      | 105.338 | 104.424 | 105.487 | 105.106 | 105.978 | 105.447 | 105.733 | 106.417 | 104.465 | 104.860 | 106.116 |
| Average  | 106.197 | 106.200 | 107.168 | 106.206 | 106.500 | 106.261 | 106.708 | 107.020 | 106.099 | 106.839 | 106.926 |
| Max      | 107.056 | 107.875 | 110.004 | 107.194 | 107.153 | 107.658 | 107.344 | 107.318 | 107.248 | 108.190 | 108.585 |
| UL       | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 |



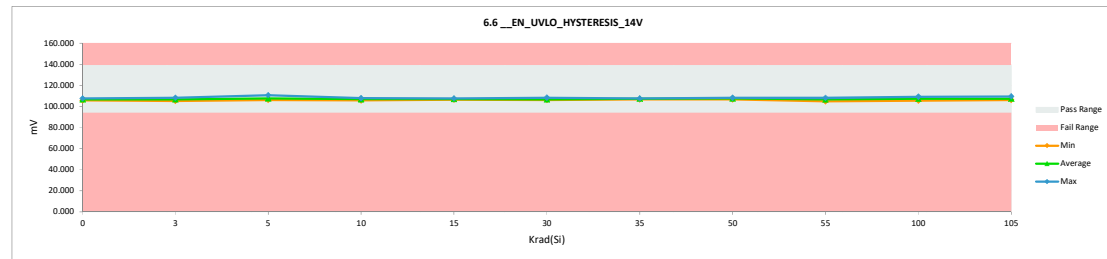
# HDR TID Report TPS7H2211-SP

| 6.6 __EN_UVLO_HYSTERESIS_14V |     |     |  |
|------------------------------|-----|-----|--|
| Test Site                    |     |     |  |
| Tester                       |     |     |  |
| Test Number                  |     |     |  |
| Unit                         | mV  | mV  |  |
| Max Limit                    | 139 | 139 |  |
| Min Limit                    | 94  | 94  |  |

| Krad(Si) | Serial # | PRE     | POST    | Delta  |
|----------|----------|---------|---------|--------|
| 0        | 227      | 105.773 | 105.773 | 0.000  |
| 0        | 229      | 107.520 | 107.779 | 0.259  |
| 3        | 107      | 105.419 | 105.379 | -0.040 |
| 3        | 108      | 108.380 | 108.312 | -0.068 |
| 3        | 109      | 108.420 | 108.271 | -0.149 |
| 3        | 110      | 105.856 | 105.678 | -0.178 |
| 3        | 111      | 106.879 | 106.579 | -0.300 |
| 5        | 112      | 108.434 | 108.202 | -0.232 |
| 5        | 113      | 106.484 | 106.347 | -0.137 |
| 5        | 114      | 106.237 | 106.183 | -0.054 |
| 5        | 115      | 107.275 | 107.452 | 0.177  |
| 5        | 116      | 110.522 | 110.700 | 0.178  |
| 10       | 96       | 107.288 | 106.689 | -0.599 |
| 10       | 97       | 105.937 | 105.773 | -0.164 |
| 10       | 98       | 108.380 | 107.889 | -0.491 |
| 10       | 99       | 106.525 | 106.798 | 0.273  |
| 10       | 100      | 107.261 | 107.356 | 0.095  |
| 15       | 101      | 107.069 | 106.633 | -0.436 |
| 15       | 102      | 106.497 | 106.415 | -0.082 |
| 15       | 104      | 107.970 | 107.616 | -0.354 |
| 15       | 105      | 107.562 | 107.725 | 0.163  |
| 15       | 106      | 106.920 | 106.920 | 0.000  |
| 30       | 83       | 106.455 | 106.457 | 0.002  |
| 30       | 84       | 105.964 | 106.212 | 0.248  |
| 30       | 85       | 107.356 | 106.158 | -1.198 |
| 30       | 86       | 108.066 | 108.353 | 0.287  |
| 30       | 87       | 107.561 | 107.221 | -0.340 |
| 35       | 88       | 107.766 | 107.616 | -0.150 |
| 35       | 92       | 108.161 | 107.752 | -0.409 |
| 35       | 93       | 107.970 | 107.671 | -0.299 |
| 35       | 94       | 106.865 | 107.029 | 0.164  |
| 35       | 95       | 106.674 | 106.660 | -0.014 |
| 50       | 1        | 106.905 | 106.825 | -0.080 |
| 50       | 2        | 107.588 | 107.986 | 0.398  |
| 50       | 3        | 108.312 | 107.727 | -0.585 |
| 50       | 5        | 108.312 | 108.232 | -0.080 |
| 50       | 6        | 107.002 | 107.003 | 0.001  |
| 55       | 7        | 108.215 | 108.175 | -0.040 |
| 55       | 8        | 106.920 | 107.466 | 0.546  |
| 55       | 9        | 105.350 | 105.392 | 0.042  |
| 55       | 10       | 105.446 | 104.900 | -0.546 |
| 55       | 11       | 107.561 | 107.725 | 0.164  |
| 100      | 29       | 105.692 | 105.610 | -0.082 |
| 100      | 30       | 108.380 | 108.027 | -0.353 |
| 100      | 31       | 107.152 | 108.366 | 1.214  |
| 100      | 32       | 107.943 | 107.740 | -0.203 |
| 100      | 34       | 106.646 | 105.843 | -0.803 |
| 100      | 35       | 108.175 | 107.960 | -0.215 |
| 100      | 36       | 108.026 | 107.957 | -0.069 |
| 100      | 38       | 106.115 | 105.733 | -0.382 |
| 100      | 39       | 108.612 | 108.913 | 0.301  |
| 100      | 41       | 107.110 | 107.207 | 0.097  |
| 100      | 42       | 107.616 | 107.384 | -0.232 |
| 100      | 43       | 108.666 | 108.438 | -0.228 |
| 100      | 45       | 107.233 | 106.892 | -0.341 |
| 100      | 46       | 108.681 | 109.363 | 0.682  |
| 100      | 47       | 107.152 | 107.084 | -0.068 |
| 100      | 48       | 108.544 | 107.398 | -1.146 |
| 100      | 49       | 107.029 | 106.225 | -0.804 |
| 100      | 51       | 106.770 | 106.361 | -0.409 |
| 100      | 54       | 107.766 | 107.903 | 0.137  |
| 100      | 56       | 107.984 | 107.603 | -0.381 |
| 100      | 57       | 107.616 | 107.711 | 0.095  |
| 100      | 58       | 108.202 | 106.838 | -1.364 |
| 100      | 59       | 108.816 | 108.340 | -0.476 |
| 105      | 61       | 107.247 | 107.344 | 0.097  |
| 105      | 62       | 107.738 | 107.139 | -0.599 |
| 105      | 64       | 109.049 | 109.513 | 0.464  |
| 105      | 65       | 107.916 | 106.702 | -1.214 |
| 105      | 66       | 106.592 | 106.239 | -0.353 |
| Max      |          | 110.522 | 110.700 | 1.214  |
| Average  |          | 107.393 | 107.241 | -0.152 |
| Min      |          | 105.350 | 104.900 | -1.364 |
| Std Dev  |          | 0.987   | 1.056   | 0.430  |



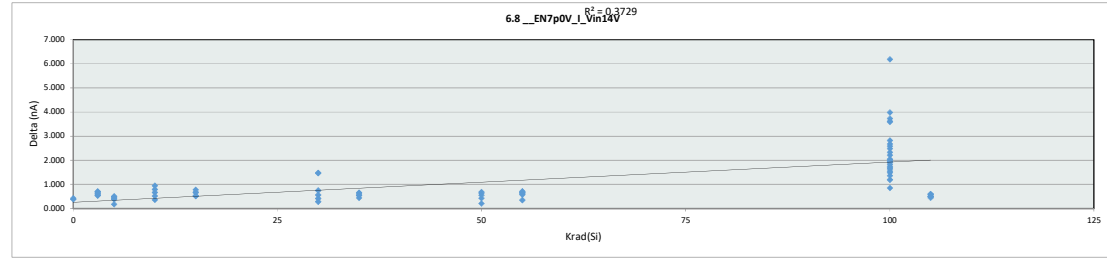
| 6.6 __EN_UVLO_HYSTERESIS |         |         |         |         |         |         |         |         |         |         |         |
|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Test Site                |         |         |         |         |         |         |         |         |         |         |         |
| Tester                   |         |         |         |         |         |         |         |         |         |         |         |
| Test Number              |         |         |         |         |         |         |         |         |         |         |         |
| Max Limit                | 139     | mV      |         |         |         |         |         |         |         |         |         |
| Min Limit                | 94      | mV      |         |         |         |         |         |         |         |         |         |
| Krad(Si)                 | 0       | 3       | 5       | 10      | 15      | 30      | 35      | 50      | 55      | 100     | 105     |
| LL                       | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  | 94.000  |
| Min                      | 105.773 | 105.379 | 106.183 | 105.773 | 106.415 | 106.158 | 106.660 | 106.825 | 104.900 | 105.610 | 106.239 |
| Average                  | 106.776 | 106.844 | 107.777 | 106.901 | 107.062 | 106.880 | 107.346 | 107.555 | 106.732 | 107.430 | 107.387 |
| Max                      | 107.779 | 108.312 | 110.700 | 107.889 | 107.725 | 108.353 | 107.752 | 108.232 | 108.175 | 109.363 | 109.513 |
| UL                       | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 | 139.000 |



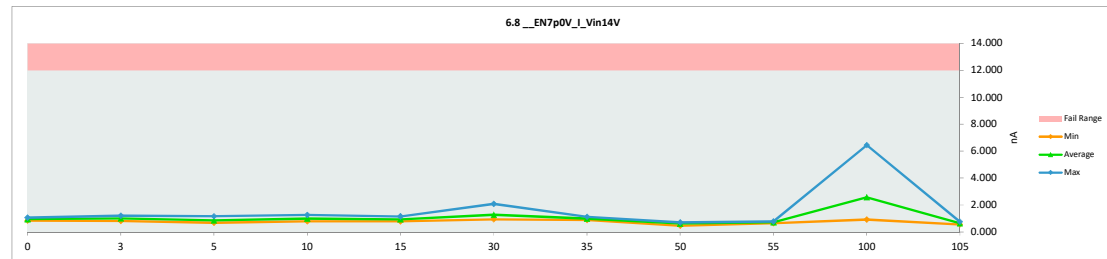
# HDR TID Report TPS7H2211-SP

| Test Site   | 6.8 _EN7p0V_I_Vin14V |    |
|-------------|----------------------|----|
| Tester      |                      |    |
| Test Number |                      |    |
| Unit        | nA                   | nA |
| Max Limit   | 12                   | 12 |
| Min Limit   |                      |    |

| Krad(Si) | Serial # | PRE   | POST  | Delta |
|----------|----------|-------|-------|-------|
| 0        | 227      | 0.630 | 1.057 | 0.427 |
| 0        | 229      | 0.455 | 0.837 | 0.382 |
| 3        | 107      | 0.467 | 1.173 | 0.706 |
| 3        | 108      | 0.241 | 0.922 | 0.681 |
| 3        | 109      | 0.282 | 0.915 | 0.633 |
| 3        | 110      | 0.646 | 1.208 | 0.562 |
| 3        | 111      | 0.274 | 0.809 | 0.535 |
| 5        | 112      | 0.304 | 0.684 | 0.380 |
| 5        | 113      | 0.350 | 0.851 | 0.501 |
| 5        | 114      | 0.739 | 1.165 | 0.426 |
| 5        | 115      | 0.374 | 0.846 | 0.472 |
| 5        | 116      | 0.547 | 0.719 | 0.172 |
| 10       | 96       | 0.437 | 0.792 | 0.355 |
| 10       | 97       | 0.374 | 0.892 | 0.518 |
| 10       | 98       | 0.374 | 1.165 | 0.791 |
| 10       | 99       | 0.310 | 1.257 | 0.947 |
| 10       | 100      | 0.196 | 0.859 | 0.663 |
| 15       | 101      | 0.348 | 1.027 | 0.679 |
| 15       | 102      | 0.378 | 1.154 | 0.776 |
| 15       | 104      | 0.192 | 0.847 | 0.655 |
| 15       | 105      | 0.360 | 0.888 | 0.528 |
| 15       | 106      | 0.276 | 0.788 | 0.512 |
| 30       | 83       | 0.816 | 1.096 | 0.280 |
| 30       | 84       | 0.612 | 2.081 | 1.469 |
| 30       | 85       | 0.766 | 1.181 | 0.415 |
| 30       | 86       | 0.338 | 1.082 | 0.744 |
| 30       | 87       | 0.374 | 0.934 | 0.560 |
| 35       | 88       | 0.411 | 0.968 | 0.557 |
| 35       | 92       | 0.415 | 0.957 | 0.542 |
| 35       | 93       | 0.477 | 1.117 | 0.640 |
| 35       | 94       | 0.444 | 0.881 | 0.437 |
| 35       | 95       | 0.380 | 1.033 | 0.653 |
| 50       | 1        | 0.104 | 0.532 | 0.428 |
| 50       | 2        | 0.022 | 0.703 | 0.681 |
| 50       | 3        | 0.038 | 0.678 | 0.640 |
| 50       | 5        | 0.259 | 0.465 | 0.206 |
| 50       | 6        | 0.138 | 0.692 | 0.554 |
| 55       | 7        | 0.297 | 0.644 | 0.347 |
| 55       | 8        | 0.174 | 0.747 | 0.573 |
| 55       | 9        | 0.055 | 0.690 | 0.635 |
| 55       | 10       | 0.059 | 0.716 | 0.657 |
| 55       | 11       | 0.068 | 0.777 | 0.709 |
| 100      | 29       | 0.324 | 2.368 | 2.044 |
| 100      | 30       | 0.274 | 2.245 | 1.971 |
| 100      | 31       | 0.112 | 1.801 | 1.689 |
| 100      | 32       | 0.274 | 2.951 | 2.677 |
| 100      | 34       | 0.106 | 2.028 | 1.922 |
| 100      | 35       | 0.107 | 3.839 | 3.732 |
| 100      | 36       | 0.252 | 3.072 | 2.820 |
| 100      | 38       | 0.124 | 3.713 | 3.589 |
| 100      | 39       | 0.058 | 1.801 | 1.743 |
| 100      | 41       | 0.037 | 1.675 | 1.638 |
| 100      | 42       | 0.732 | 3.212 | 2.480 |
| 100      | 43       | 0.196 | 1.684 | 1.488 |
| 100      | 45       | 0.072 | 2.400 | 2.328 |
| 100      | 46       | 0.023 | 1.383 | 1.360 |
| 100      | 47       | 0.001 | 2.207 | 2.206 |
| 100      | 48       | 0.054 | 3.669 | 3.615 |
| 100      | 49       | 0.067 | 0.916 | 0.849 |
| 100      | 51       | 0.030 | 4.014 | 3.984 |
| 100      | 54       | 0.064 | 1.606 | 1.542 |
| 100      | 56       | 0.259 | 6.447 | 6.188 |
| 100      | 57       | 0.303 | 2.135 | 1.832 |
| 100      | 58       | 0.169 | 2.752 | 2.583 |
| 100      | 59       | 0.171 | 1.363 | 1.192 |
| 105      | 61       | 0.156 | 0.749 | 0.593 |
| 105      | 62       | 0.097 | 0.600 | 0.503 |
| 105      | 64       | 0.069 | 0.664 | 0.595 |
| 105      | 65       | 0.110 | 0.552 | 0.442 |
| 105      | 66       | 0.123 | 0.636 | 0.513 |
| Max      |          | 0.816 | 6.447 | 6.188 |
| Average  |          | 0.274 | 1.447 | 1.174 |
| Min      |          | 0.001 | 0.465 | 0.172 |
| Std Dev  |          | 0.201 | 1.071 | 1.111 |

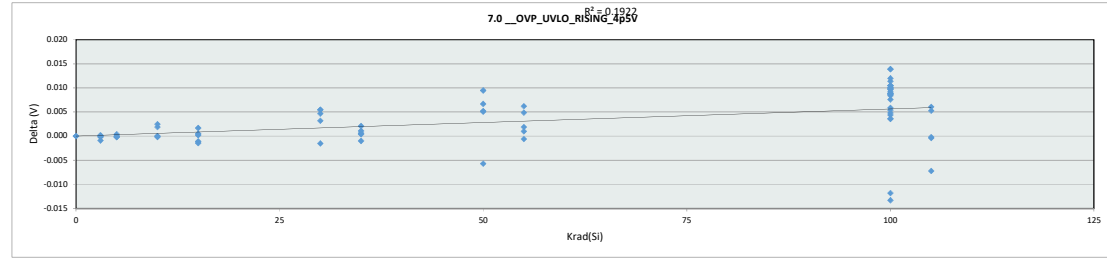


|             |                       |        |        |        |        |        |        |        |        |        |        |  |
|-------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
|             | 6.8 __EN7p0V_I_Vin14V |        |        |        |        |        |        |        |        |        |        |  |
| Test Site   |                       |        |        |        |        |        |        |        |        |        |        |  |
| Tester      |                       |        |        |        |        |        |        |        |        |        |        |  |
| Test Number |                       |        |        |        |        |        |        |        |        |        |        |  |
| Max Limit   | 12                    | nA     |        |        |        |        |        |        |        |        |        |  |
| Min Limit   |                       | nA     |        |        |        |        |        |        |        |        |        |  |
| Krad(Si)    | 0                     | 3      | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |  |
| LL          | 0.837                 | 0.809  | 0.684  | 0.792  | 0.788  | 0.934  | 0.881  | 0.465  | 0.644  | 0.916  | 0.552  |  |
| Average     | 0.947                 | 1.005  | 0.853  | 0.993  | 0.941  | 1.275  | 0.991  | 0.614  | 0.715  | 2.577  | 0.640  |  |
| Max         | 1.057                 | 1.208  | 1.165  | 1.257  | 1.154  | 2.081  | 1.117  | 0.703  | 0.777  | 6.447  | 0.749  |  |
| UL          | 12.000                | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 |  |

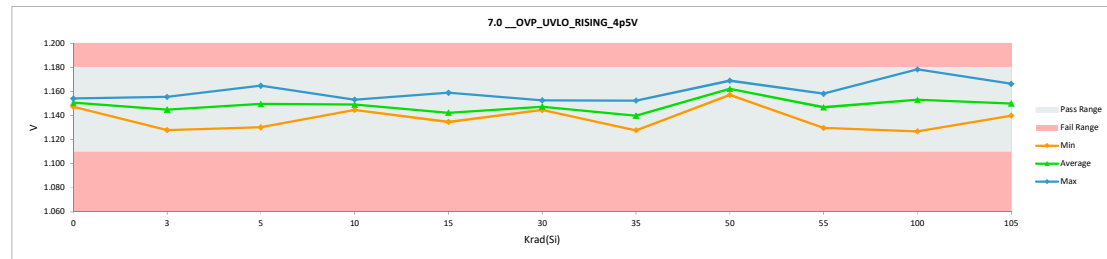


# HDR TID Report TPS7H2211-SP

| 7.0 __OVP_UVLO_RISING_4p5V |          |       |       |        |
|----------------------------|----------|-------|-------|--------|
| Test Site                  |          |       |       |        |
| Tester                     |          |       |       |        |
| Test Number                |          |       |       |        |
| Unit                       | V        | V     |       |        |
| Max Limit                  | 1.18     | 1.18  |       |        |
| Min Limit                  | 1.11     | 1.11  |       |        |
| Krad(Si)                   | Serial # | PRE   | POST  | Delta  |
| 0                          | 227      | 1.154 | 1.154 | 0.000  |
| 0                          | 229      | 1.147 | 1.147 | 0.000  |
| 3                          | 107      | 1.147 | 1.148 | 0.000  |
| 3                          | 108      | 1.145 | 1.145 | 0.000  |
| 3                          | 109      | 1.156 | 1.156 | -0.001 |
| 3                          | 110      | 1.128 | 1.128 | 0.000  |
| 3                          | 111      | 1.149 | 1.149 | 0.000  |
| 5                          | 112      | 1.161 | 1.161 | 0.000  |
| 5                          | 113      | 1.151 | 1.151 | 0.000  |
| 5                          | 114      | 1.130 | 1.130 | 0.000  |
| 5                          | 115      | 1.142 | 1.142 | 0.000  |
| 5                          | 116      | 1.165 | 1.165 | 0.000  |
| 10                         | 96       | 1.153 | 1.153 | 0.000  |
| 10                         | 97       | 1.149 | 1.152 | 0.003  |
| 10                         | 98       | 1.147 | 1.147 | 0.000  |
| 10                         | 99       | 1.145 | 1.145 | 0.000  |
| 10                         | 100      | 1.147 | 1.149 | 0.002  |
| 15                         | 101      | 1.138 | 1.137 | -0.001 |
| 15                         | 102      | 1.140 | 1.139 | -0.001 |
| 15                         | 104      | 1.157 | 1.159 | 0.002  |
| 15                         | 105      | 1.135 | 1.135 | 0.000  |
| 15                         | 106      | 1.142 | 1.143 | 0.001  |
| 30                         | 83       | 1.142 | 1.145 | 0.003  |
| 30                         | 84       | 1.147 | 1.153 | 0.006  |
| 30                         | 85       | 1.146 | 1.145 | -0.002 |
| 30                         | 86       | 1.143 | 1.148 | 0.006  |
| 30                         | 87       | 1.142 | 1.146 | 0.005  |
| 35                         | 88       | 1.138 | 1.137 | -0.001 |
| 35                         | 92       | 1.151 | 1.152 | 0.001  |
| 35                         | 93       | 1.148 | 1.149 | 0.000  |
| 35                         | 94       | 1.127 | 1.128 | 0.001  |
| 35                         | 95       | 1.132 | 1.134 | 0.002  |
| 50                         | 1        | 1.150 | 1.159 | 0.010  |
| 50                         | 2        | 1.162 | 1.169 | 0.007  |
| 50                         | 3        | 1.152 | 1.157 | 0.005  |
| 50                         | 5        | 1.163 | 1.157 | -0.006 |
| 50                         | 6        | 1.163 | 1.168 | 0.005  |
| 55                         | 7        | 1.157 | 1.157 | -0.001 |
| 55                         | 8        | 1.153 | 1.158 | 0.005  |
| 55                         | 9        | 1.129 | 1.130 | 0.001  |
| 55                         | 10       | 1.130 | 1.132 | 0.002  |
| 55                         | 11       | 1.152 | 1.158 | 0.006  |
| 100                        | 29       | 1.135 | 1.145 | 0.011  |
| 100                        | 30       | 1.156 | 1.165 | 0.009  |
| 100                        | 31       | 1.131 | 1.141 | 0.010  |
| 100                        | 32       | 1.153 | 1.163 | 0.010  |
| 100                        | 34       | 1.133 | 1.147 | 0.014  |
| 100                        | 35       | 1.139 | 1.127 | -0.012 |
| 100                        | 36       | 1.146 | 1.154 | 0.008  |
| 100                        | 38       | 1.152 | 1.158 | 0.005  |
| 100                        | 39       | 1.157 | 1.166 | 0.010  |
| 100                        | 41       | 1.134 | 1.145 | 0.011  |
| 100                        | 42       | 1.141 | 1.149 | 0.008  |
| 100                        | 43       | 1.146 | 1.133 | -0.013 |
| 100                        | 45       | 1.148 | 1.156 | 0.009  |
| 100                        | 46       | 1.137 | 1.146 | 0.009  |
| 100                        | 47       | 1.141 | 1.146 | 0.004  |
| 100                        | 48       | 1.164 | 1.178 | 0.014  |
| 100                        | 49       | 1.152 | 1.162 | 0.010  |
| 100                        | 51       | 1.141 | 1.146 | 0.005  |
| 100                        | 54       | 1.144 | 1.150 | 0.006  |
| 100                        | 56       | 1.130 | 1.139 | 0.009  |
| 100                        | 57       | 1.161 | 1.173 | 0.012  |
| 100                        | 58       | 1.171 | 1.174 | 0.004  |
| 100                        | 59       | 1.153 | 1.157 | 0.004  |
| 105                        | 61       | 1.140 | 1.140 | 0.000  |
| 105                        | 62       | 1.161 | 1.166 | 0.005  |
| 105                        | 64       | 1.143 | 1.142 | 0.000  |
| 105                        | 65       | 1.157 | 1.149 | -0.007 |
| 105                        | 66       | 1.146 | 1.152 | 0.006  |
| Max                        |          | 1.171 | 1.178 | 0.014  |
| Average                    |          | 1.147 | 1.150 | 0.003  |
| Min                        |          | 1.127 | 1.127 | -0.013 |
| Std Dev                    |          | 0.010 | 0.012 | 0.005  |

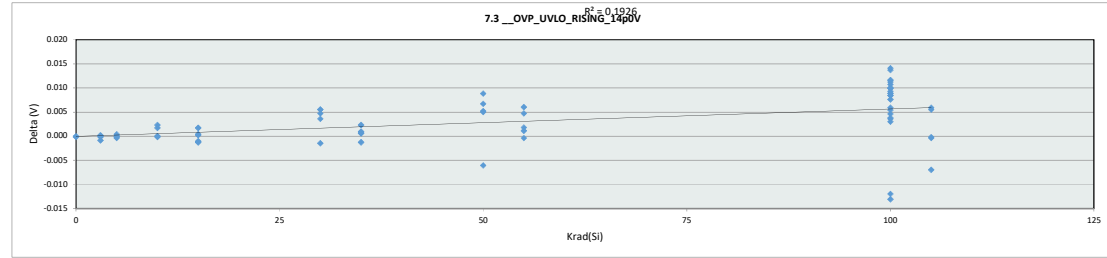


| 7.0 __OVP_UVLO_RISING_4p5V |       |       |       |       |       |       |       |       |       |       |       |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                  |       |       |       |       |       |       |       |       |       |       |       |
| Tester                     |       |       |       |       |       |       |       |       |       |       |       |
| Test Number                |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                  | 1.18  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit                  | 1.11  | V     |       |       |       |       |       |       |       |       |       |
| Krad(Si)                   | 0     | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                         | 1.110 | 1.110 | 1.110 | 1.110 | 1.110 | 1.110 | 1.110 | 1.110 | 1.110 | 1.110 | 1.110 |
| Min                        | 1.147 | 1.128 | 1.130 | 1.145 | 1.135 | 1.145 | 1.128 | 1.157 | 1.130 | 1.127 | 1.140 |
| Average                    | 1.151 | 1.145 | 1.150 | 1.149 | 1.142 | 1.147 | 1.140 | 1.162 | 1.147 | 1.153 | 1.150 |
| Max                        | 1.154 | 1.156 | 1.165 | 1.153 | 1.159 | 1.153 | 1.152 | 1.169 | 1.158 | 1.178 | 1.166 |
| UL                         | 1.180 | 1.180 | 1.180 | 1.180 | 1.180 | 1.180 | 1.180 | 1.180 | 1.180 | 1.180 | 1.180 |

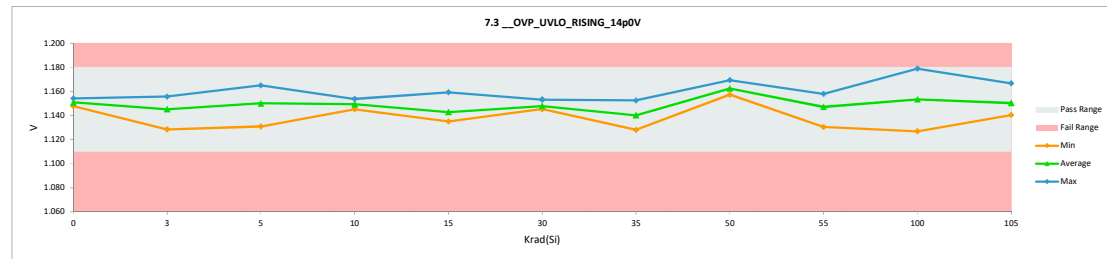


# HDR TID Report TPS7H2211-SP

| 7.3 __OVP_UVLO_RISING_14p0V |          |       |       |        |
|-----------------------------|----------|-------|-------|--------|
| Test Site                   |          |       |       |        |
| Tester                      |          |       |       |        |
| Test Number                 |          |       |       |        |
| Unit                        |          | V     | V     |        |
| Max Limit                   |          | 1.18  | 1.18  |        |
| Min Limit                   |          | 1.11  | 1.11  |        |
| Krad(Si)                    | Serial # | PRE   | POST  | Delta  |
| 0                           | 227      | 1.154 | 1.154 | 0.000  |
| 0                           | 229      | 1.148 | 1.148 | 0.000  |
| 3                           | 107      | 1.148 | 1.148 | 0.000  |
| 3                           | 108      | 1.145 | 1.145 | 0.000  |
| 3                           | 109      | 1.157 | 1.156 | -0.001 |
| 3                           | 110      | 1.129 | 1.129 | 0.000  |
| 3                           | 111      | 1.149 | 1.149 | 0.000  |
| 5                           | 112      | 1.161 | 1.161 | 0.000  |
| 5                           | 113      | 1.151 | 1.151 | 0.000  |
| 5                           | 114      | 1.130 | 1.131 | 0.000  |
| 5                           | 115      | 1.143 | 1.143 | 0.000  |
| 5                           | 116      | 1.165 | 1.165 | 0.000  |
| 10                          | 96       | 1.154 | 1.154 | 0.000  |
| 10                          | 97       | 1.149 | 1.152 | 0.002  |
| 10                          | 98       | 1.148 | 1.147 | 0.000  |
| 10                          | 99       | 1.145 | 1.145 | 0.000  |
| 10                          | 100      | 1.147 | 1.149 | 0.002  |
| 15                          | 101      | 1.139 | 1.138 | -0.001 |
| 15                          | 102      | 1.140 | 1.139 | -0.001 |
| 15                          | 104      | 1.158 | 1.159 | 0.002  |
| 15                          | 105      | 1.135 | 1.135 | 0.000  |
| 15                          | 106      | 1.143 | 1.143 | 0.000  |
| 30                          | 83       | 1.142 | 1.146 | 0.004  |
| 30                          | 84       | 1.148 | 1.153 | 0.006  |
| 30                          | 85       | 1.147 | 1.145 | -0.002 |
| 30                          | 86       | 1.143 | 1.149 | 0.005  |
| 30                          | 87       | 1.142 | 1.146 | 0.005  |
| 35                          | 88       | 1.138 | 1.137 | -0.001 |
| 35                          | 92       | 1.152 | 1.153 | 0.001  |
| 35                          | 93       | 1.149 | 1.149 | 0.001  |
| 35                          | 94       | 1.128 | 1.128 | 0.001  |
| 35                          | 95       | 1.132 | 1.134 | 0.002  |
| 50                          | 1        | 1.150 | 1.159 | 0.009  |
| 50                          | 2        | 1.163 | 1.169 | 0.007  |
| 50                          | 3        | 1.153 | 1.158 | 0.005  |
| 50                          | 5        | 1.163 | 1.157 | -0.006 |
| 50                          | 6        | 1.164 | 1.169 | 0.005  |
| 55                          | 7        | 1.158 | 1.157 | 0.000  |
| 55                          | 8        | 1.153 | 1.158 | 0.005  |
| 55                          | 9        | 1.129 | 1.130 | 0.001  |
| 55                          | 10       | 1.130 | 1.132 | 0.002  |
| 55                          | 11       | 1.152 | 1.158 | 0.006  |
| 100                         | 29       | 1.135 | 1.146 | 0.011  |
| 100                         | 30       | 1.157 | 1.166 | 0.009  |
| 100                         | 31       | 1.131 | 1.142 | 0.011  |
| 100                         | 32       | 1.153 | 1.163 | 0.010  |
| 100                         | 34       | 1.134 | 1.147 | 0.014  |
| 100                         | 35       | 1.139 | 1.127 | -0.012 |
| 100                         | 36       | 1.147 | 1.155 | 0.008  |
| 100                         | 38       | 1.152 | 1.158 | 0.006  |
| 100                         | 39       | 1.157 | 1.168 | 0.010  |
| 100                         | 41       | 1.134 | 1.146 | 0.012  |
| 100                         | 42       | 1.141 | 1.150 | 0.008  |
| 100                         | 43       | 1.147 | 1.134 | -0.013 |
| 100                         | 45       | 1.148 | 1.157 | 0.009  |
| 100                         | 46       | 1.137 | 1.146 | 0.009  |
| 100                         | 47       | 1.142 | 1.145 | 0.004  |
| 100                         | 48       | 1.165 | 1.179 | 0.014  |
| 100                         | 49       | 1.152 | 1.162 | 0.010  |
| 100                         | 51       | 1.141 | 1.146 | 0.005  |
| 100                         | 54       | 1.144 | 1.150 | 0.005  |
| 100                         | 56       | 1.131 | 1.139 | 0.008  |
| 100                         | 57       | 1.162 | 1.173 | 0.012  |
| 100                         | 58       | 1.171 | 1.174 | 0.003  |
| 100                         | 59       | 1.154 | 1.158 | 0.004  |
| 105                         | 61       | 1.141 | 1.140 | 0.000  |
| 105                         | 62       | 1.161 | 1.167 | 0.005  |
| 105                         | 64       | 1.143 | 1.143 | 0.000  |
| 105                         | 65       | 1.157 | 1.150 | -0.007 |
| 105                         | 66       | 1.146 | 1.152 | 0.006  |
| Max                         |          | 1.171 | 1.179 | 0.014  |
| Average                     |          | 1.147 | 1.150 | 0.003  |
| Min                         |          | 1.128 | 1.127 | -0.013 |
| Std Dev                     |          | 0.010 | 0.012 | 0.005  |

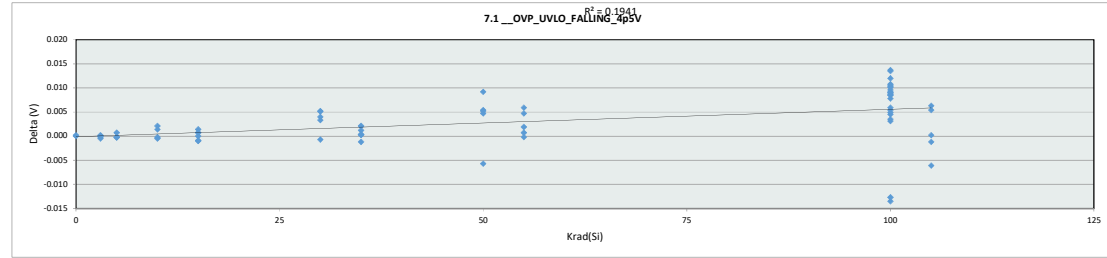


|             |       |                             |       |       |       |       |       |       |       |       |       |
|-------------|-------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|             |       | 7.3 __OVP_UVLO_RISING_14p0V |       |       |       |       |       |       |       |       |       |
| Test Site   |       |                             |       |       |       |       |       |       |       |       |       |
| Tester      |       |                             |       |       |       |       |       |       |       |       |       |
| Test Number |       |                             |       |       |       |       |       |       |       |       |       |
| Max Limit   | 1.18  | V                           |       |       |       |       |       |       |       |       |       |
| Min Limit   | 1.11  | V                           |       |       |       |       |       |       |       |       |       |
| Krad(Si)    | 0     | 3                           | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL          | 1.110 | 1.110                       | 1.110 | 1.110 | 1.110 | 1.110 | 1.110 | 1.110 | 1.110 | 1.110 | 1.110 |
| Min         | 1.148 | 1.129                       | 1.131 | 1.145 | 1.135 | 1.145 | 1.128 | 1.157 | 1.131 | 1.127 | 1.140 |
| Average     | 1.151 | 1.145                       | 1.150 | 1.149 | 1.143 | 1.148 | 1.140 | 1.162 | 1.147 | 1.153 | 1.150 |
| Max         | 1.154 | 1.156                       | 1.165 | 1.154 | 1.159 | 1.153 | 1.153 | 1.169 | 1.158 | 1.179 | 1.167 |
| UL          | 1.180 | 1.180                       | 1.180 | 1.180 | 1.180 | 1.180 | 1.180 | 1.180 | 1.180 | 1.180 | 1.180 |

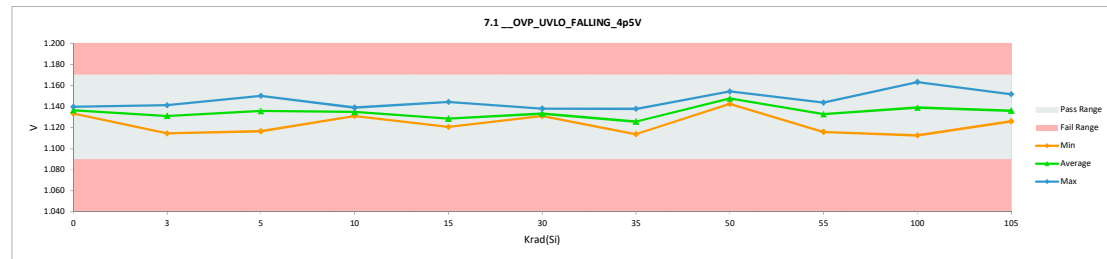


# HDR TID Report TPS7H2211-SP

| 7.1 __OVP_UVLO_FALLING_4p5V |          |       |       |        |
|-----------------------------|----------|-------|-------|--------|
| Test Site                   |          |       |       |        |
| Tester                      |          |       |       |        |
| Test Number                 |          |       |       |        |
| Unit                        | V        | V     |       |        |
| Max Limit                   | 1.17     | 1.17  |       |        |
| Min Limit                   | 1.09     | 1.09  |       |        |
| Krad(Si)                    | Serial # | PRE   | POST  | Delta  |
| 0                           | 227      | 1.140 | 1.140 | 0.000  |
| 0                           | 229      | 1.133 | 1.133 | 0.000  |
| 3                           | 107      | 1.134 | 1.134 | 0.000  |
| 3                           | 108      | 1.131 | 1.131 | 0.000  |
| 3                           | 109      | 1.142 | 1.141 | -0.001 |
| 3                           | 110      | 1.115 | 1.115 | 0.000  |
| 3                           | 111      | 1.134 | 1.134 | 0.000  |
| 5                           | 112      | 1.147 | 1.146 | 0.000  |
| 5                           | 113      | 1.138 | 1.138 | 0.000  |
| 5                           | 114      | 1.116 | 1.117 | 0.001  |
| 5                           | 115      | 1.128 | 1.128 | 0.000  |
| 5                           | 116      | 1.150 | 1.150 | 0.000  |
| 10                          | 96       | 1.140 | 1.139 | 0.000  |
| 10                          | 97       | 1.135 | 1.137 | 0.002  |
| 10                          | 98       | 1.133 | 1.133 | 0.000  |
| 10                          | 99       | 1.131 | 1.131 | 0.000  |
| 10                          | 100      | 1.133 | 1.134 | 0.001  |
| 15                          | 101      | 1.124 | 1.123 | -0.001 |
| 15                          | 102      | 1.127 | 1.126 | -0.001 |
| 15                          | 104      | 1.143 | 1.144 | 0.001  |
| 15                          | 105      | 1.121 | 1.121 | 0.000  |
| 15                          | 106      | 1.128 | 1.128 | 0.001  |
| 30                          | 83       | 1.128 | 1.131 | 0.003  |
| 30                          | 84       | 1.133 | 1.138 | 0.005  |
| 30                          | 85       | 1.132 | 1.132 | -0.001 |
| 30                          | 86       | 1.129 | 1.134 | 0.005  |
| 30                          | 87       | 1.128 | 1.132 | 0.004  |
| 35                          | 88       | 1.124 | 1.122 | -0.001 |
| 35                          | 92       | 1.137 | 1.138 | 0.001  |
| 35                          | 93       | 1.134 | 1.134 | 0.000  |
| 35                          | 94       | 1.113 | 1.114 | 0.000  |
| 35                          | 95       | 1.118 | 1.120 | 0.002  |
| 50                          | 1        | 1.135 | 1.144 | 0.009  |
| 50                          | 2        | 1.149 | 1.154 | 0.005  |
| 50                          | 3        | 1.138 | 1.143 | 0.005  |
| 50                          | 5        | 1.148 | 1.143 | -0.006 |
| 50                          | 6        | 1.149 | 1.154 | 0.005  |
| 55                          | 7        | 1.143 | 1.143 | 0.000  |
| 55                          | 8        | 1.139 | 1.144 | 0.005  |
| 55                          | 9        | 1.115 | 1.116 | 0.001  |
| 55                          | 10       | 1.116 | 1.118 | 0.002  |
| 55                          | 11       | 1.137 | 1.143 | 0.006  |
| 100                         | 29       | 1.121 | 1.131 | 0.010  |
| 100                         | 30       | 1.143 | 1.152 | 0.009  |
| 100                         | 31       | 1.117 | 1.127 | 0.011  |
| 100                         | 32       | 1.138 | 1.149 | 0.010  |
| 100                         | 34       | 1.120 | 1.134 | 0.014  |
| 100                         | 35       | 1.125 | 1.113 | -0.013 |
| 100                         | 36       | 1.132 | 1.140 | 0.008  |
| 100                         | 38       | 1.138 | 1.143 | 0.005  |
| 100                         | 39       | 1.142 | 1.152 | 0.010  |
| 100                         | 41       | 1.120 | 1.131 | 0.011  |
| 100                         | 42       | 1.127 | 1.135 | 0.008  |
| 100                         | 43       | 1.132 | 1.119 | -0.013 |
| 100                         | 45       | 1.134 | 1.142 | 0.008  |
| 100                         | 46       | 1.123 | 1.132 | 0.009  |
| 100                         | 47       | 1.128 | 1.133 | 0.005  |
| 100                         | 48       | 1.150 | 1.163 | 0.014  |
| 100                         | 49       | 1.138 | 1.148 | 0.009  |
| 100                         | 51       | 1.128 | 1.132 | 0.005  |
| 100                         | 54       | 1.130 | 1.136 | 0.006  |
| 100                         | 56       | 1.117 | 1.126 | 0.009  |
| 100                         | 57       | 1.147 | 1.159 | 0.012  |
| 100                         | 58       | 1.156 | 1.159 | 0.003  |
| 100                         | 59       | 1.139 | 1.143 | 0.003  |
| 105                         | 61       | 1.126 | 1.126 | 0.000  |
| 105                         | 62       | 1.146 | 1.152 | 0.005  |
| 105                         | 64       | 1.129 | 1.128 | -0.001 |
| 105                         | 65       | 1.142 | 1.136 | -0.006 |
| 105                         | 66       | 1.132 | 1.138 | 0.006  |
| Max                         |          | 1.156 | 1.163 | 0.014  |
| Average                     |          | 1.133 | 1.136 | 0.003  |
| Min                         |          | 1.113 | 1.113 | -0.013 |
| Std Dev                     |          | 0.010 | 0.011 | 0.005  |

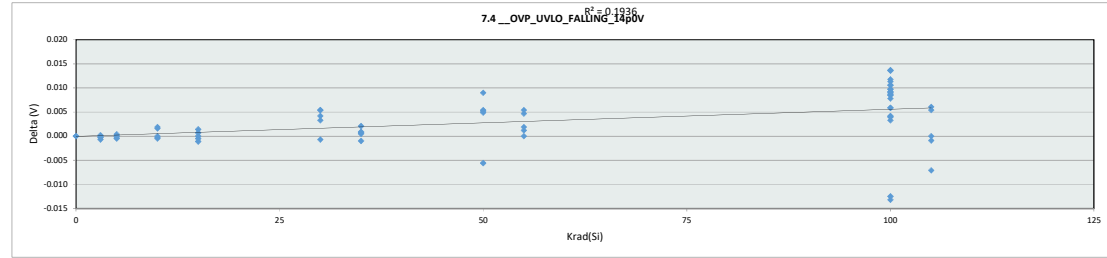


|             |                             |       |       |       |       |       |       |       |       |       |       |
|-------------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|             | 7.1 __OVP_UVLO_FALLING_4p5V |       |       |       |       |       |       |       |       |       |       |
| Test Site   |                             |       |       |       |       |       |       |       |       |       |       |
| Tester      |                             |       |       |       |       |       |       |       |       |       |       |
| Test Number |                             |       |       |       |       |       |       |       |       |       |       |
| Max Limit   | 1.17                        | V     |       |       |       |       |       |       |       |       |       |
| Min Limit   | 1.09                        | V     |       |       |       |       |       |       |       |       |       |
| Krad(Si)    | 0                           | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL          | 1.090                       | 1.090 | 1.090 | 1.090 | 1.090 | 1.090 | 1.090 | 1.090 | 1.090 | 1.090 | 1.090 |
| Min         | 1.133                       | 1.117 | 1.131 | 1.137 | 1.121 | 1.131 | 1.114 | 1.143 | 1.116 | 1.113 | 1.126 |
| Average     | 1.137                       | 1.131 | 1.136 | 1.135 | 1.128 | 1.133 | 1.126 | 1.148 | 1.133 | 1.139 | 1.136 |
| Max         | 1.140                       | 1.141 | 1.150 | 1.139 | 1.144 | 1.138 | 1.138 | 1.154 | 1.144 | 1.163 | 1.152 |
| UL          | 1.170                       | 1.170 | 1.170 | 1.170 | 1.170 | 1.170 | 1.170 | 1.170 | 1.170 | 1.170 | 1.170 |

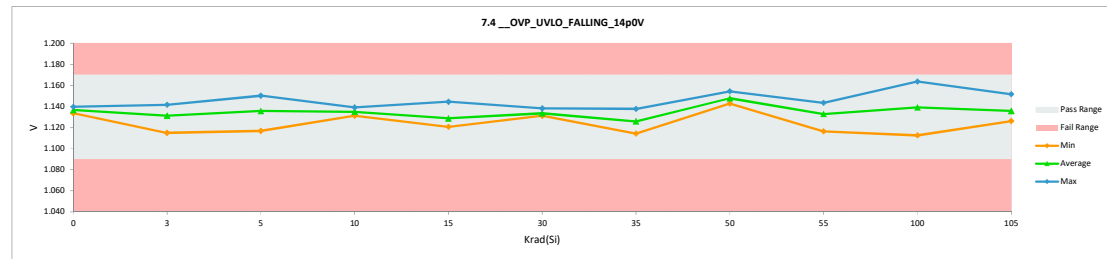


# HDR TID Report TPS7H2211-SP

| 7.4 __OVP_UVLO_FALLING_14p0V |          |       |       |        |
|------------------------------|----------|-------|-------|--------|
| Test Site                    |          |       |       |        |
| Tester                       |          |       |       |        |
| Test Number                  |          |       |       |        |
| Unit                         | V        |       | V     |        |
| Max Limit                    | 1.17     |       | 1.17  |        |
| Min Limit                    | 1.09     |       | 1.09  |        |
| Krad(Si)                     | Serial # | PRE   | POST  | Delta  |
| 0                            | 227      | 1.140 | 1.140 | 0.000  |
| 0                            | 229      | 1.134 | 1.134 | 0.000  |
| 3                            | 107      | 1.134 | 1.134 | 0.000  |
| 3                            | 108      | 1.131 | 1.131 | 0.000  |
| 3                            | 109      | 1.142 | 1.142 | -0.001 |
| 3                            | 110      | 1.115 | 1.115 | 0.000  |
| 3                            | 111      | 1.134 | 1.134 | 0.000  |
| 5                            | 112      | 1.147 | 1.146 | 0.000  |
| 5                            | 113      | 1.138 | 1.138 | 0.000  |
| 5                            | 114      | 1.116 | 1.117 | 0.000  |
| 5                            | 115      | 1.128 | 1.128 | 0.000  |
| 5                            | 116      | 1.150 | 1.150 | 0.000  |
| 10                           | 96       | 1.140 | 1.139 | 0.000  |
| 10                           | 97       | 1.135 | 1.137 | 0.002  |
| 10                           | 98       | 1.133 | 1.133 | 0.000  |
| 10                           | 99       | 1.132 | 1.131 | -0.001 |
| 10                           | 100      | 1.133 | 1.135 | 0.002  |
| 15                           | 101      | 1.125 | 1.124 | -0.001 |
| 15                           | 102      | 1.127 | 1.126 | -0.001 |
| 15                           | 104      | 1.143 | 1.145 | 0.001  |
| 15                           | 105      | 1.121 | 1.121 | 0.000  |
| 15                           | 106      | 1.128 | 1.129 | 0.001  |
| 30                           | 83       | 1.128 | 1.131 | 0.003  |
| 30                           | 84       | 1.133 | 1.138 | 0.005  |
| 30                           | 85       | 1.133 | 1.132 | -0.001 |
| 30                           | 86       | 1.129 | 1.134 | 0.005  |
| 30                           | 87       | 1.128 | 1.132 | 0.004  |
| 35                           | 88       | 1.124 | 1.123 | -0.001 |
| 35                           | 92       | 1.137 | 1.138 | 0.001  |
| 35                           | 93       | 1.134 | 1.135 | 0.001  |
| 35                           | 94       | 1.114 | 1.114 | 0.000  |
| 35                           | 95       | 1.118 | 1.120 | 0.002  |
| 50                           | 1        | 1.135 | 1.144 | 0.009  |
| 50                           | 2        | 1.149 | 1.155 | 0.005  |
| 50                           | 3        | 1.138 | 1.143 | 0.005  |
| 50                           | 5        | 1.148 | 1.143 | -0.006 |
| 50                           | 6        | 1.150 | 1.155 | 0.005  |
| 55                           | 7        | 1.143 | 1.143 | 0.000  |
| 55                           | 8        | 1.139 | 1.143 | 0.005  |
| 55                           | 9        | 1.115 | 1.116 | 0.001  |
| 55                           | 10       | 1.116 | 1.118 | 0.002  |
| 55                           | 11       | 1.138 | 1.143 | 0.005  |
| 100                          | 29       | 1.121 | 1.132 | 0.011  |
| 100                          | 30       | 1.143 | 1.152 | 0.009  |
| 100                          | 31       | 1.117 | 1.127 | 0.011  |
| 100                          | 32       | 1.138 | 1.148 | 0.010  |
| 100                          | 34       | 1.120 | 1.134 | 0.014  |
| 100                          | 35       | 1.125 | 1.113 | -0.013 |
| 100                          | 36       | 1.133 | 1.140 | 0.008  |
| 100                          | 38       | 1.138 | 1.144 | 0.006  |
| 100                          | 39       | 1.143 | 1.153 | 0.010  |
| 100                          | 41       | 1.121 | 1.131 | 0.011  |
| 100                          | 42       | 1.127 | 1.135 | 0.008  |
| 100                          | 43       | 1.132 | 1.119 | -0.013 |
| 100                          | 45       | 1.134 | 1.142 | 0.008  |
| 100                          | 46       | 1.123 | 1.132 | 0.009  |
| 100                          | 47       | 1.128 | 1.132 | 0.004  |
| 100                          | 48       | 1.150 | 1.164 | 0.014  |
| 100                          | 49       | 1.138 | 1.148 | 0.009  |
| 100                          | 51       | 1.128 | 1.132 | 0.004  |
| 100                          | 54       | 1.130 | 1.136 | 0.006  |
| 100                          | 56       | 1.117 | 1.126 | 0.009  |
| 100                          | 57       | 1.147 | 1.159 | 0.012  |
| 100                          | 58       | 1.156 | 1.160 | 0.003  |
| 100                          | 59       | 1.139 | 1.143 | 0.004  |
| 105                          | 61       | 1.126 | 1.126 | 0.000  |
| 105                          | 62       | 1.146 | 1.152 | 0.005  |
| 105                          | 64       | 1.129 | 1.128 | -0.001 |
| 105                          | 65       | 1.142 | 1.135 | -0.007 |
| 105                          | 66       | 1.132 | 1.138 | 0.006  |
| Max                          |          | 1.156 | 1.164 | 0.014  |
| Average                      |          | 1.133 | 1.136 | 0.003  |
| Min                          |          | 1.114 | 1.113 | -0.013 |
| Std Dev                      |          | 0.010 | 0.011 | 0.005  |



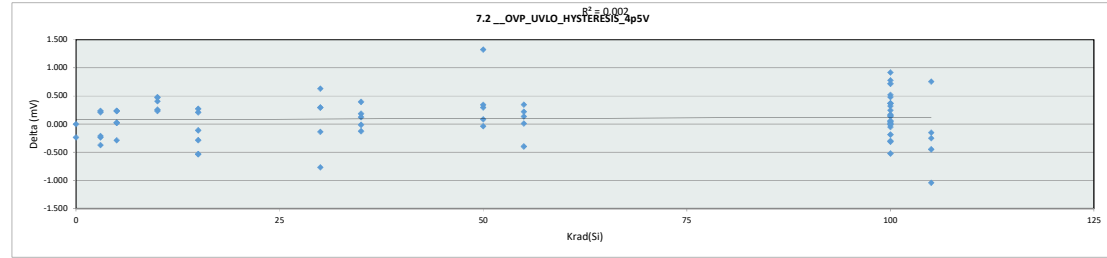
| 7.4_OVP_UVLO_FALLING_14p0V |       |       |       |       |       |       |       |       |       |       |       |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Test Site                  |       |       |       |       |       |       |       |       |       |       |       |
| Tester                     |       |       |       |       |       |       |       |       |       |       |       |
| Test Number                |       |       |       |       |       |       |       |       |       |       |       |
| Max Limit                  | 1.17  | V     |       |       |       |       |       |       |       |       |       |
| Min Limit                  | 1.09  | V     |       |       |       |       |       |       |       |       |       |
| Krad(Si)                   | 0     | 3     | 5     | 10    | 15    | 30    | 35    | 50    | 55    | 100   | 105   |
| LL                         | 1.090 | 1.090 | 1.090 | 1.090 | 1.090 | 1.090 | 1.090 | 1.090 | 1.090 | 1.090 | 1.090 |
| Min                        | 1.134 | 1.115 | 1.117 | 1.131 | 1.121 | 1.131 | 1.114 | 1.143 | 1.116 | 1.113 | 1.126 |
| Average                    | 1.137 | 1.131 | 1.136 | 1.135 | 1.129 | 1.134 | 1.126 | 1.148 | 1.133 | 1.139 | 1.136 |
| Max                        | 1.140 | 1.142 | 1.150 | 1.139 | 1.145 | 1.138 | 1.138 | 1.155 | 1.144 | 1.164 | 1.152 |
| UL                         | 1.170 | 1.170 | 1.170 | 1.170 | 1.170 | 1.170 | 1.170 | 1.170 | 1.170 | 1.170 | 1.170 |



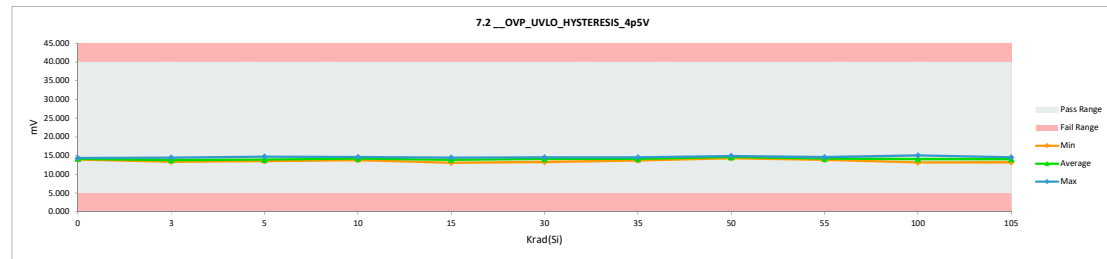
# HDR TID Report TPS7H2211-SP

| 7.2 __OVP_UVLO_HYSTERESIS_4p5V |    |    |  |
|--------------------------------|----|----|--|
| Test Site                      |    |    |  |
| Tester                         |    |    |  |
| Test Number                    |    |    |  |
| Unit                           | mV | mV |  |
| Max Limit                      | 40 | 40 |  |
| Min Limit                      | 5  | 5  |  |

| Krad(Si) | Serial # | PRE    | POST   | Delta  |
|----------|----------|--------|--------|--------|
| 0        | 227      | 14.363 | 14.363 | 0.000  |
| 0        | 229      | 14.215 | 13.980 | -0.235 |
| 3        | 107      | 13.509 | 13.720 | 0.211  |
| 3        | 108      | 13.595 | 13.360 | -0.235 |
| 3        | 109      | 14.561 | 14.189 | -0.372 |
| 3        | 110      | 13.201 | 13.436 | 0.235  |
| 3        | 111      | 14.723 | 14.512 | -0.211 |
| 5        | 112      | 14.040 | 14.065 | 0.025  |
| 5        | 113      | 13.508 | 13.532 | 0.024  |
| 5        | 114      | 13.920 | 13.634 | -0.286 |
| 5        | 115      | 13.448 | 13.683 | 0.235  |
| 5        | 116      | 14.511 | 14.746 | 0.235  |
| 10       | 96       | 13.967 | 14.227 | 0.260  |
| 10       | 97       | 14.228 | 14.637 | 0.409  |
| 10       | 98       | 13.980 | 14.215 | 0.235  |
| 10       | 99       | 13.335 | 13.806 | 0.471  |
| 10       | 100      | 13.819 | 14.301 | 0.482  |
| 15       | 101      | 13.869 | 13.758 | -0.111 |
| 15       | 102      | 13.646 | 13.113 | -0.533 |
| 15       | 104      | 14.226 | 14.499 | 0.273  |
| 15       | 105      | 13.845 | 14.056 | 0.211  |
| 15       | 106      | 14.364 | 14.080 | -0.284 |
| 30       | 83       | 13.943 | 13.806 | -0.137 |
| 30       | 84       | 14.240 | 14.537 | 0.297  |
| 30       | 85       | 14.079 | 13.311 | -0.768 |
| 30       | 86       | 14.055 | 14.352 | 0.297  |
| 30       | 87       | 13.943 | 14.575 | 0.632  |
| 35       | 88       | 13.944 | 14.068 | 0.124  |
| 35       | 92       | 14.686 | 14.562 | -0.124 |
| 35       | 93       | 14.116 | 14.301 | 0.185  |
| 35       | 94       | 13.536 | 13.932 | 0.396  |
| 35       | 95       | 13.721 | 13.708 | -0.013 |
| 50       | 1        | 14.649 | 14.945 | 0.296  |
| 50       | 2        | 13.395 | 14.721 | 1.326  |
| 50       | 3        | 14.351 | 14.437 | 0.086  |
| 50       | 5        | 14.734 | 14.697 | -0.037 |
| 50       | 6        | 13.978 | 14.324 | 0.346  |
| 55       | 7        | 14.437 | 14.041 | -0.396 |
| 55       | 8        | 14.227 | 14.363 | 0.136  |
| 55       | 9        | 13.573 | 13.920 | 0.347  |
| 55       | 10       | 14.105 | 14.118 | 0.013  |
| 55       | 11       | 14.401 | 14.623 | 0.222  |
| 100      | 29       | 13.584 | 13.756 | 0.172  |
| 100      | 30       | 13.383 | 13.519 | 0.136  |
| 100      | 31       | 14.056 | 13.757 | -0.299 |
| 100      | 32       | 14.487 | 14.474 | -0.013 |
| 100      | 34       | 13.287 | 13.533 | 0.246  |
| 100      | 35       | 13.348 | 14.267 | 0.919  |
| 100      | 36       | 14.079 | 13.892 | -0.187 |
| 100      | 38       | 14.351 | 14.413 | 0.062  |
| 100      | 39       | 14.512 | 14.548 | 0.036  |
| 100      | 41       | 13.237 | 14.017 | 0.780  |
| 100      | 42       | 14.489 | 14.438 | -0.051 |
| 100      | 43       | 14.315 | 14.465 | 0.150  |
| 100      | 45       | 13.720 | 14.090 | 0.370  |
| 100      | 46       | 13.361 | 13.683 | 0.322  |
| 100      | 47       | 13.732 | 13.211 | -0.521 |
| 100      | 48       | 14.561 | 15.042 | 0.481  |
| 100      | 49       | 13.644 | 14.362 | 0.718  |
| 100      | 51       | 13.521 | 13.893 | 0.372  |
| 100      | 54       | 13.695 | 13.706 | 0.011  |
| 100      | 56       | 13.634 | 13.324 | -0.310 |
| 100      | 57       | 14.461 | 14.460 | -0.001 |
| 100      | 58       | 14.547 | 15.067 | 0.520  |
| 100      | 59       | 14.438 | 14.486 | 0.048  |
| 105      | 61       | 14.353 | 13.906 | -0.447 |
| 105      | 62       | 14.722 | 14.572 | -0.150 |
| 105      | 64       | 13.584 | 14.340 | 0.756  |
| 105      | 65       | 14.301 | 13.260 | -1.041 |
| 105      | 66       | 14.575 | 14.326 | -0.249 |
| Max      |          | 14.734 | 15.067 | 1.326  |
| Average  |          | 14.014 | 14.115 | 0.101  |
| Min      |          | 13.201 | 13.113 | -1.041 |
| Std Dev  |          | 0.435  | 0.458  | 0.386  |



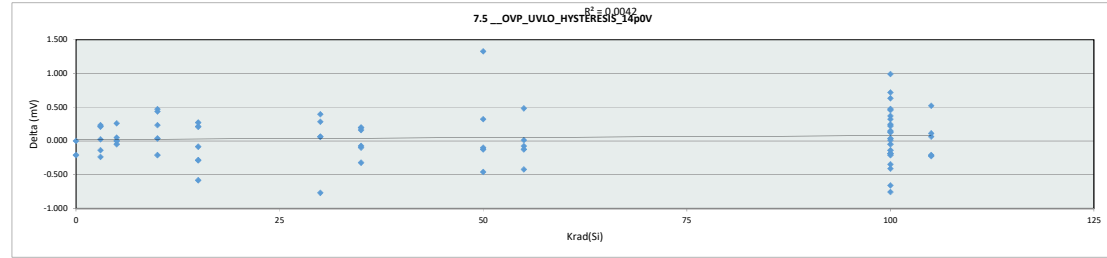
| 7.2 __OVP_UVLO_HYSTERESIS |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                 |        |        |        |        |        |        |        |        |        |        |        |
| Tester                    |        |        |        |        |        |        |        |        |        |        |        |
| Test Number               |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                 | 40     | mV     |        |        |        |        |        |        |        |        |        |
| Min Limit                 | 5      | mV     |        |        |        |        |        |        |        |        |        |
|                           | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |        |        |
| Krad(Si)                  | 0      | 3      | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                        | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  |
| Min                       | 13.980 | 13.532 | 13.806 | 13.113 | 13.311 | 13.708 | 14.324 | 13.920 | 13.211 | 13.260 |        |
| Average                   | 14.172 | 13.843 | 13.932 | 14.237 | 13.901 | 14.116 | 14.114 | 14.625 | 14.213 | 14.104 | 14.081 |
| Max                       | 14.363 | 14.512 | 14.746 | 14.637 | 14.499 | 14.575 | 14.562 | 14.945 | 14.623 | 15.067 | 14.572 |
| UL                        | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 |



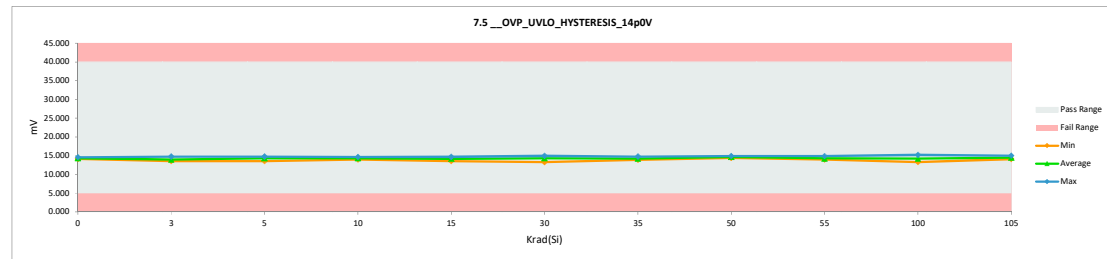
# HDR TID Report TPS7H2211-SP

| 7.5 __OVP_UVLO_HYSTERESIS_14p0V |    |    |  |
|---------------------------------|----|----|--|
| Test Site                       |    |    |  |
| Tester                          |    |    |  |
| Test Number                     |    |    |  |
| Unit                            | mV | mV |  |
| Max Limit                       | 40 | 40 |  |
| Min Limit                       | 5  | 5  |  |

| Krad(Si) | Serial # | PRE    | POST   | Delta  |
|----------|----------|--------|--------|--------|
| 0        | 227      | 14.574 | 14.574 | 0.000  |
| 0        | 229      | 14.376 | 14.165 | -0.211 |
| 3        | 107      | 13.694 | 13.905 | 0.211  |
| 3        | 108      | 13.782 | 13.546 | -0.236 |
| 3        | 109      | 14.301 | 14.165 | -0.136 |
| 3        | 110      | 13.362 | 13.597 | 0.235  |
| 3        | 111      | 14.723 | 14.748 | 0.025  |
| 5        | 112      | 14.226 | 14.487 | 0.261  |
| 5        | 113      | 13.483 | 13.532 | 0.049  |
| 5        | 114      | 14.081 | 14.032 | -0.049 |
| 5        | 115      | 14.762 | 14.762 | 0.000  |
| 5        | 116      | 14.722 | 14.722 | 0.000  |
| 10       | 96       | 14.388 | 14.623 | 0.235  |
| 10       | 97       | 14.202 | 14.637 | 0.435  |
| 10       | 98       | 14.426 | 14.215 | -0.211 |
| 10       | 99       | 13.521 | 13.992 | 0.471  |
| 10       | 100      | 14.215 | 14.252 | 0.037  |
| 15       | 101      | 14.266 | 13.683 | -0.583 |
| 15       | 102      | 13.621 | 13.535 | -0.086 |
| 15       | 104      | 14.413 | 14.685 | 0.272  |
| 15       | 105      | 14.031 | 14.242 | 0.211  |
| 15       | 106      | 14.762 | 14.476 | -0.286 |
| 30       | 83       | 14.129 | 14.414 | 0.285  |
| 30       | 84       | 14.872 | 14.934 | 0.062  |
| 30       | 85       | 14.029 | 13.261 | -0.768 |
| 30       | 86       | 14.476 | 14.537 | 0.061  |
| 30       | 87       | 14.154 | 14.550 | 0.396  |
| 35       | 88       | 14.576 | 14.253 | -0.323 |
| 35       | 92       | 14.872 | 14.773 | -0.099 |
| 35       | 93       | 14.301 | 14.228 | -0.073 |
| 35       | 94       | 13.722 | 13.883 | 0.161  |
| 35       | 95       | 13.932 | 14.130 | 0.198  |
| 50       | 1        | 14.835 | 14.734 | -0.101 |
| 50       | 2        | 13.581 | 14.907 | 1.326  |
| 50       | 3        | 14.537 | 14.413 | -0.124 |
| 50       | 5        | 15.131 | 14.673 | -0.458 |
| 50       | 6        | 14.163 | 14.485 | 0.322  |
| 55       | 7        | 14.413 | 13.991 | -0.422 |
| 55       | 8        | 14.463 | 14.387 | -0.076 |
| 55       | 9        | 14.205 | 14.081 | -0.124 |
| 55       | 10       | 14.081 | 14.093 | 0.012  |
| 55       | 11       | 14.375 | 14.858 | 0.483  |
| 100      | 29       | 14.006 | 13.868 | -0.138 |
| 100      | 30       | 13.334 | 13.469 | 0.135  |
| 100      | 31       | 14.242 | 14.390 | 0.148  |
| 100      | 32       | 14.487 | 14.734 | 0.247  |
| 100      | 34       | 13.708 | 13.744 | 0.036  |
| 100      | 35       | 13.795 | 14.267 | 0.472  |
| 100      | 36       | 14.264 | 14.078 | -0.186 |
| 100      | 38       | 14.562 | 14.574 | 0.012  |
| 100      | 39       | 14.673 | 14.895 | 0.222  |
| 100      | 41       | 13.424 | 14.414 | 0.990  |
| 100      | 42       | 14.439 | 14.389 | -0.050 |
| 100      | 43       | 14.500 | 14.626 | 0.126  |
| 100      | 45       | 13.930 | 14.301 | 0.371  |
| 100      | 46       | 13.547 | 13.868 | 0.321  |
| 100      | 47       | 13.943 | 13.285 | -0.658 |
| 100      | 48       | 14.746 | 15.203 | 0.457  |
| 100      | 49       | 13.855 | 14.573 | 0.718  |
| 100      | 51       | 13.732 | 14.364 | 0.632  |
| 100      | 54       | 14.117 | 13.706 | -0.411 |
| 100      | 56       | 14.056 | 13.299 | -0.757 |
| 100      | 57       | 14.648 | 14.460 | -0.188 |
| 100      | 58       | 14.919 | 14.572 | -0.347 |
| 100      | 59       | 14.623 | 14.413 | -0.210 |
| 105      | 61       | 14.303 | 14.092 | -0.211 |
| 105      | 62       | 14.932 | 14.994 | 0.062  |
| 105      | 64       | 13.794 | 14.315 | 0.521  |
| 105      | 65       | 14.512 | 14.624 | 0.112  |
| 105      | 66       | 14.786 | 14.562 | -0.224 |
| Max      |          | 15.131 | 15.203 | 1.326  |
| Average  |          | 14.238 | 14.289 | 0.051  |
| Min      |          | 13.334 | 13.261 | -0.768 |
| Std Dev  |          | 0.433  | 0.445  | 0.366  |



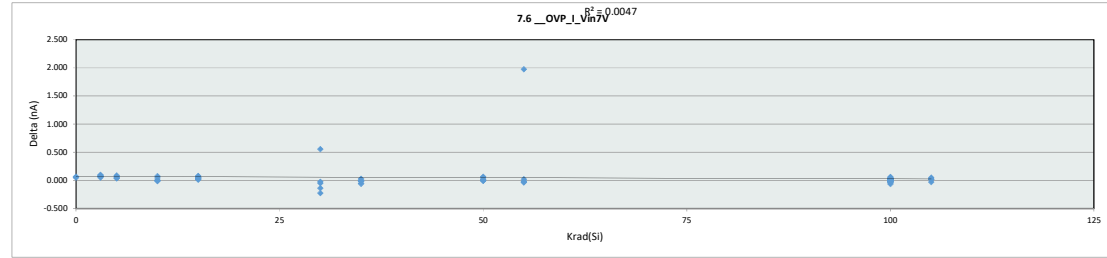
| 7.5 __OVP_UVLO_HYSTERESIS_14p0V |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site                       |        |        |        |        |        |        |        |        |        |        |        |
| Tester                          |        |        |        |        |        |        |        |        |        |        |        |
| Test Number                     |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit                       | 40     | mV     |        |        |        |        |        |        |        |        |        |
| Min Limit                       | 5      | mV     |        |        |        |        |        |        |        |        |        |
| Krad(Si)                        | 0      | 3      | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                              | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  | 5.000  |
| Min                             | 14.165 | 13.546 | 13.532 | 13.992 | 13.535 | 13.261 | 13.883 | 14.413 | 13.991 | 13.285 | 14.092 |
| Average                         | 14.370 | 13.992 | 14.307 | 14.344 | 14.124 | 14.339 | 14.253 | 14.642 | 14.282 | 14.239 | 14.517 |
| Max                             | 14.574 | 14.748 | 14.762 | 14.637 | 14.685 | 14.934 | 14.773 | 14.907 | 14.858 | 15.203 | 14.994 |
| UL                              | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 |



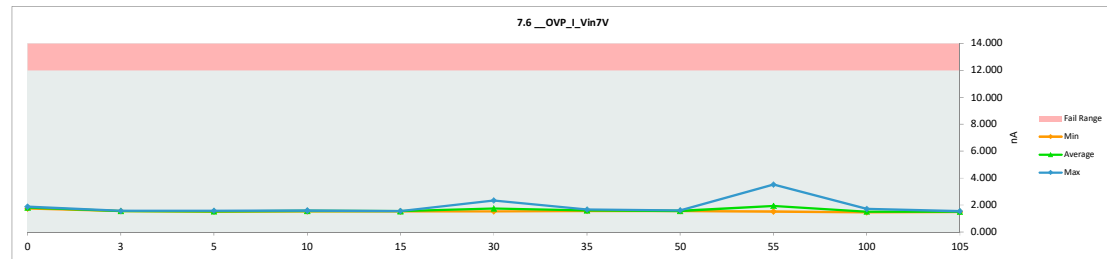
# HDR TID Report TPS7H2211-SP

| 7.6 __OVP_I_Vin7V |    |    |
|-------------------|----|----|
| Test Site         |    |    |
| Tester            |    |    |
| Test Number       |    |    |
| Unit              | nA | nA |
| Max Limit         | 12 | 12 |
| Min Limit         |    |    |

| Krad(Si) | Serial # | PRE   | POST  | Delta  |
|----------|----------|-------|-------|--------|
| 0        | 227      | 1.822 | 1.871 | 0.049  |
| 0        | 229      | 1.673 | 1.739 | 0.066  |
| 3        | 107      | 1.474 | 1.552 | 0.078  |
| 3        | 108      | 1.471 | 1.566 | 0.095  |
| 3        | 109      | 1.499 | 1.548 | 0.049  |
| 3        | 110      | 1.485 | 1.557 | 0.072  |
| 3        | 111      | 1.469 | 1.539 | 0.070  |
| 5        | 112      | 1.457 | 1.543 | 0.086  |
| 5        | 113      | 1.460 | 1.497 | 0.037  |
| 5        | 114      | 1.447 | 1.518 | 0.071  |
| 5        | 115      | 1.463 | 1.502 | 0.039  |
| 5        | 116      | 1.528 | 1.577 | 0.049  |
| 10       | 96       | 1.569 | 1.558 | -0.011 |
| 10       | 97       | 1.577 | 1.578 | 0.001  |
| 10       | 98       | 1.519 | 1.561 | 0.042  |
| 10       | 99       | 1.529 | 1.533 | 0.004  |
| 10       | 100      | 1.497 | 1.572 | 0.075  |
| 15       | 101      | 1.538 | 1.553 | 0.015  |
| 15       | 102      | 1.509 | 1.537 | 0.028  |
| 15       | 104      | 1.479 | 1.556 | 0.077  |
| 15       | 105      | 1.512 | 1.556 | 0.044  |
| 15       | 106      | 1.475 | 1.525 | 0.050  |
| 30       | 83       | 1.900 | 1.673 | -0.227 |
| 30       | 84       | 1.785 | 2.341 | 0.556  |
| 30       | 85       | 1.659 | 1.521 | -0.138 |
| 30       | 86       | 1.639 | 1.614 | -0.025 |
| 30       | 87       | 1.632 | 1.581 | -0.051 |
| 35       | 88       | 1.624 | 1.608 | -0.016 |
| 35       | 92       | 1.595 | 1.585 | -0.010 |
| 35       | 93       | 1.678 | 1.668 | -0.010 |
| 35       | 94       | 1.578 | 1.603 | 0.025  |
| 35       | 95       | 1.609 | 1.551 | -0.058 |
| 50       | 1        | 1.607 | 1.600 | -0.007 |
| 50       | 2        | 1.515 | 1.577 | 0.062  |
| 50       | 3        | 1.549 | 1.571 | 0.022  |
| 50       | 5        | 1.541 | 1.548 | 0.007  |
| 50       | 6        | 1.545 | 1.540 | -0.005 |
| 55       | 7        | 1.561 | 1.544 | -0.017 |
| 55       | 8        | 1.547 | 1.516 | -0.031 |
| 55       | 9        | 1.537 | 3.513 | 1.976  |
| 55       | 10       | 1.538 | 1.558 | 0.020  |
| 55       | 11       | 1.555 | 1.519 | -0.036 |
| 100      | 29       | 1.548 | 1.575 | 0.027  |
| 100      | 30       | 1.533 | 1.490 | -0.043 |
| 100      | 31       | 1.534 | 1.468 | -0.066 |
| 100      | 32       | 1.495 | 1.482 | -0.013 |
| 100      | 34       | 1.505 | 1.498 | -0.007 |
| 100      | 35       | 1.495 | 1.487 | -0.008 |
| 100      | 36       | 1.650 | 1.709 | 0.059  |
| 100      | 38       | 1.485 | 1.512 | 0.027  |
| 100      | 39       | 1.487 | 1.486 | -0.001 |
| 100      | 41       | 1.472 | 1.504 | 0.032  |
| 100      | 42       | 1.481 | 1.473 | -0.008 |
| 100      | 43       | 1.447 | 1.499 | 0.052  |
| 100      | 45       | 1.474 | 1.487 | 0.013  |
| 100      | 46       | 1.497 | 1.510 | 0.013  |
| 100      | 47       | 1.497 | 1.454 | -0.043 |
| 100      | 48       | 1.486 | 1.473 | -0.013 |
| 100      | 49       | 1.554 | 1.568 | 0.014  |
| 100      | 51       | 1.519 | 1.494 | -0.025 |
| 100      | 54       | 1.450 | 1.476 | 0.026  |
| 100      | 56       | 1.472 | 1.454 | -0.018 |
| 100      | 57       | 1.458 | 1.480 | 0.022  |
| 100      | 58       | 1.519 | 1.524 | 0.005  |
| 100      | 59       | 1.480 | 1.491 | 0.011  |
| 105      | 61       | 1.521 | 1.537 | 0.016  |
| 105      | 62       | 1.486 | 1.506 | 0.020  |
| 105      | 64       | 1.525 | 1.495 | -0.030 |
| 105      | 65       | 1.490 | 1.512 | 0.022  |
| 105      | 66       | 1.470 | 1.519 | 0.049  |
| Max      |          | 1.900 | 3.513 | 1.976  |
| Average  |          | 1.538 | 1.585 | 0.047  |
| Min      |          | 1.447 | 1.454 | -0.227 |
| Std Dev  |          | 0.086 | 0.261 | 0.248  |



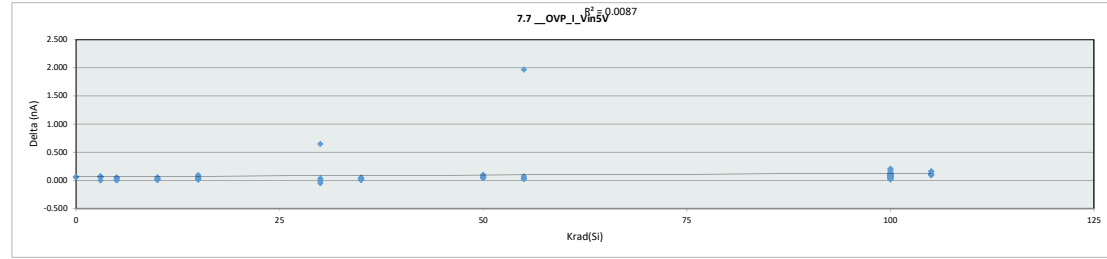
|             |        | 7.6 __OVP_I_Vin7V |        |        |        |        |        |        |        |        |        |
|-------------|--------|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site   |        |                   |        |        |        |        |        |        |        |        |        |
| Tester      |        |                   |        |        |        |        |        |        |        |        |        |
| Test Number |        |                   |        |        |        |        |        |        |        |        |        |
| Max Limit   | 12     | nA                |        |        |        |        |        |        |        |        |        |
| Min Limit   |        | nA                |        |        |        |        |        |        |        |        |        |
| Krad(Si)    | 0      | 3                 | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL          |        |                   |        |        |        |        |        |        |        |        |        |
| Min         | 1.739  | 1.539             | 1.497  | 1.533  | 1.525  | 1.521  | 1.551  | 1.540  | 1.516  | 1.454  | 1.495  |
| Average     | 1.805  | 1.552             | 1.527  | 1.560  | 1.545  | 1.746  | 1.603  | 1.567  | 1.930  | 1.504  | 1.514  |
| Max         | 1.871  | 1.566             | 1.577  | 1.578  | 1.556  | 2.341  | 1.668  | 1.600  | 3.513  | 1.709  | 1.537  |
| UL          | 12.000 | 12.000            | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 |



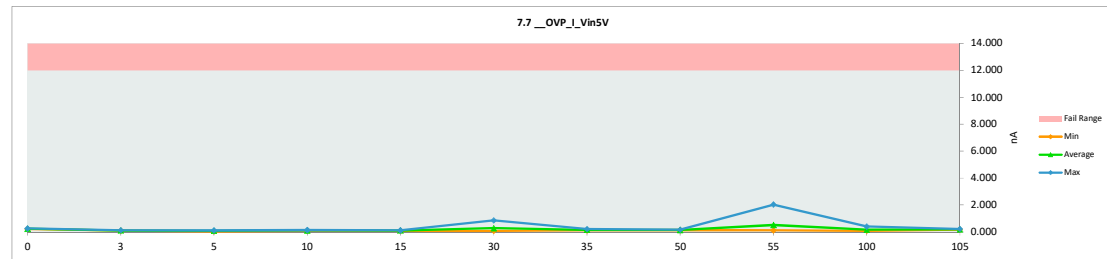
# HDR TID Report TPS7H2211-SP

| 7.7 __OVP_I_Vin5V |    |
|-------------------|----|
| Test Site         |    |
| Tester            |    |
| Test Number       |    |
| Unit              | nA |
| Max Limit         | 12 |
| Min Limit         | 12 |

| Krad(Si) | Serial # | PRE   | POST  | Delta  |
|----------|----------|-------|-------|--------|
| 0        | 227      | 0.207 | 0.261 | 0.054  |
| 0        | 229      | 0.150 | 0.216 | 0.066  |
| 3        | 107      | 0.048 | 0.119 | 0.071  |
| 3        | 108      | 0.033 | 0.104 | 0.071  |
| 3        | 109      | 0.102 | 0.104 | 0.002  |
| 3        | 110      | 0.043 | 0.099 | 0.056  |
| 3        | 111      | 0.026 | 0.093 | 0.067  |
| 5        | 112      | 0.055 | 0.101 | 0.046  |
| 5        | 113      | 0.035 | 0.039 | 0.004  |
| 5        | 114      | 0.027 | 0.081 | 0.054  |
| 5        | 115      | 0.057 | 0.062 | 0.005  |
| 5        | 116      | 0.087 | 0.112 | 0.025  |
| 10       | 96       | 0.125 | 0.133 | 0.008  |
| 10       | 97       | 0.113 | 0.124 | 0.011  |
| 10       | 98       | 0.075 | 0.109 | 0.034  |
| 10       | 99       | 0.069 | 0.093 | 0.024  |
| 10       | 100      | 0.030 | 0.086 | 0.056  |
| 15       | 101      | 0.076 | 0.091 | 0.015  |
| 15       | 102      | 0.057 | 0.101 | 0.044  |
| 15       | 104      | 0.023 | 0.116 | 0.093  |
| 15       | 105      | 0.060 | 0.114 | 0.054  |
| 15       | 106      | 0.064 | 0.087 | 0.023  |
| 30       | 83       | 0.210 | 0.201 | -0.009 |
| 30       | 84       | 0.212 | 0.859 | 0.647  |
| 30       | 85       | 0.122 | 0.073 | -0.049 |
| 30       | 86       | 0.135 | 0.139 | 0.004  |
| 30       | 87       | 0.112 | 0.147 | 0.035  |
| 35       | 88       | 0.104 | 0.136 | 0.032  |
| 35       | 92       | 0.133 | 0.142 | 0.009  |
| 35       | 93       | 0.198 | 0.213 | 0.015  |
| 35       | 94       | 0.113 | 0.161 | 0.048  |
| 35       | 95       | 0.079 | 0.118 | 0.039  |
| 50       | 1        | 0.093 | 0.141 | 0.048  |
| 50       | 2        | 0.068 | 0.166 | 0.098  |
| 50       | 3        | 0.087 | 0.154 | 0.067  |
| 50       | 5        | 0.089 | 0.131 | 0.042  |
| 50       | 6        | 0.090 | 0.140 | 0.050  |
| 55       | 7        | 0.112 | 0.184 | 0.072  |
| 55       | 8        | 0.101 | 0.122 | 0.021  |
| 55       | 9        | 0.060 | 2.031 | 1.971  |
| 55       | 10       | 0.089 | 0.128 | 0.039  |
| 55       | 11       | 0.076 | 0.113 | 0.037  |
| 100      | 29       | 0.130 | 0.217 | 0.087  |
| 100      | 30       | 0.083 | 0.157 | 0.074  |
| 100      | 31       | 0.094 | 0.156 | 0.062  |
| 100      | 32       | 0.076 | 0.115 | 0.039  |
| 100      | 34       | 0.047 | 0.099 | 0.052  |
| 100      | 35       | 0.051 | 0.100 | 0.049  |
| 100      | 36       | 0.192 | 0.397 | 0.205  |
| 100      | 38       | 0.100 | 0.117 | 0.017  |
| 100      | 39       | 0.042 | 0.118 | 0.076  |
| 100      | 41       | 0.065 | 0.128 | 0.063  |
| 100      | 42       | 0.057 | 0.164 | 0.107  |
| 100      | 43       | 0.009 | 0.188 | 0.179  |
| 100      | 45       | 0.038 | 0.124 | 0.086  |
| 100      | 46       | 0.061 | 0.188 | 0.127  |
| 100      | 47       | 0.059 | 0.188 | 0.129  |
| 100      | 48       | 0.043 | 0.082 | 0.039  |
| 100      | 49       | 0.145 | 0.254 | 0.109  |
| 100      | 51       | 0.077 | 0.154 | 0.077  |
| 100      | 54       | 0.044 | 0.174 | 0.130  |
| 100      | 56       | 0.037 | 0.087 | 0.050  |
| 100      | 57       | 0.083 | 0.169 | 0.086  |
| 100      | 58       | 0.078 | 0.182 | 0.104  |
| 100      | 59       | 0.063 | 0.196 | 0.133  |
| 105      | 61       | 0.074 | 0.172 | 0.098  |
| 105      | 62       | 0.063 | 0.183 | 0.120  |
| 105      | 64       | 0.078 | 0.171 | 0.093  |
| 105      | 65       | 0.061 | 0.221 | 0.160  |
| 105      | 66       | 0.057 | 0.214 | 0.157  |
| Max      |          | 0.212 | 2.031 | 1.971  |
| Average  |          | 0.084 | 0.181 | 0.097  |
| Min      |          | 0.009 | 0.039 | -0.049 |
| Std Dev  |          | 0.046 | 0.246 | 0.242  |

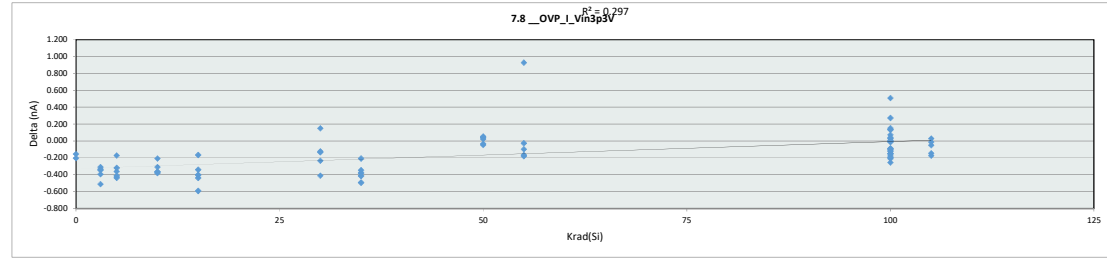


| 7.7 __OVP_I_Vin5V |        |        |        |        |        |        |        |        |        |        |        |
|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site         |        |        |        |        |        |        |        |        |        |        |        |
| Tester            |        |        |        |        |        |        |        |        |        |        |        |
| Test Number       |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit         | 12 nA  |        |        |        |        |        |        |        |        |        |        |
| Min Limit         | nA     |        |        |        |        |        |        |        |        |        |        |
| Krad(Si)          | 0      | 3      | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                | 0.216  | 0.093  | 0.039  | 0.086  | 0.087  | 0.073  | 0.118  | 0.131  | 0.113  | 0.082  | 0.171  |
| Average           | 0.239  | 0.104  | 0.079  | 0.109  | 0.102  | 0.284  | 0.154  | 0.146  | 0.516  | 0.163  | 0.192  |
| Max               | 0.261  | 0.119  | 0.112  | 0.133  | 0.116  | 0.859  | 0.213  | 0.166  | 2.031  | 0.397  | 0.221  |
| UL                | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 |

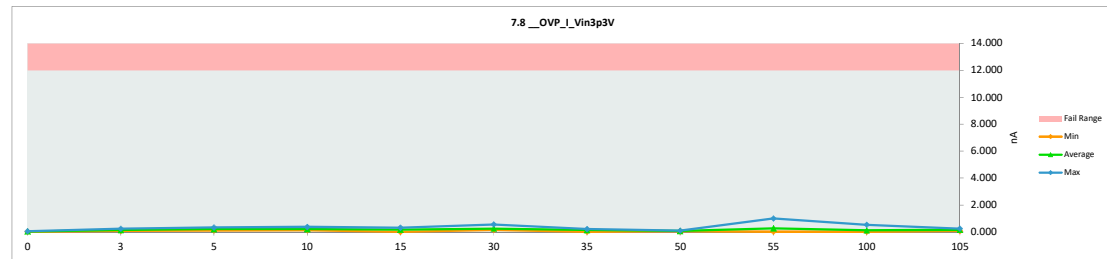


# HDR TID Report TPS7H2211-SP

| 7.8 __OVP_I_Vin3p3V |          |       |       |        |
|---------------------|----------|-------|-------|--------|
| Test Site           |          |       |       |        |
| Tester              |          |       |       |        |
| Test Number         |          |       |       |        |
| Unit                |          | nA    | nA    |        |
| Max Limit           |          | 12    |       |        |
| Min Limit           |          |       | 12    |        |
| Krad(Si)            | Serial # | PRE   | POST  | Delta  |
| 0                   | 227      | 0.213 | 0.057 | -0.156 |
| 0                   | 229      | 0.217 | 0.013 | -0.204 |
| 3                   | 107      | 0.508 | 0.160 | -0.348 |
| 3                   | 108      | 0.445 | 0.111 | -0.334 |
| 3                   | 109      | 0.524 | 0.129 | -0.395 |
| 3                   | 110      | 0.552 | 0.241 | -0.311 |
| 3                   | 111      | 0.591 | 0.079 | -0.512 |
| 5                   | 112      | 0.558 | 0.143 | -0.415 |
| 5                   | 113      | 0.507 | 0.333 | -0.174 |
| 5                   | 114      | 0.429 | 0.109 | -0.320 |
| 5                   | 115      | 0.678 | 0.241 | -0.437 |
| 5                   | 116      | 0.636 | 0.274 | -0.362 |
| 10                  | 96       | 0.490 | 0.123 | -0.367 |
| 10                  | 97       | 0.546 | 0.180 | -0.366 |
| 10                  | 98       | 0.519 | 0.208 | -0.311 |
| 10                  | 99       | 0.611 | 0.231 | -0.380 |
| 10                  | 100      | 0.580 | 0.370 | -0.210 |
| 15                  | 101      | 0.763 | 0.171 | -0.592 |
| 15                  | 102      | 0.477 | 0.311 | -0.166 |
| 15                  | 104      | 0.555 | 0.214 | -0.341 |
| 15                  | 105      | 0.448 | 0.009 | -0.439 |
| 15                  | 106      | 0.526 | 0.123 | -0.403 |
| 30                  | 83       | 0.268 | 0.144 | -0.124 |
| 30                  | 84       | 0.401 | 0.551 | 0.150  |
| 30                  | 85       | 0.366 | 0.231 | -0.135 |
| 30                  | 86       | 0.409 | 0.174 | -0.235 |
| 30                  | 87       | 0.559 | 0.148 | -0.411 |
| 35                  | 88       | 0.590 | 0.210 | -0.380 |
| 35                  | 92       | 0.525 | 0.177 | -0.348 |
| 35                  | 93       | 0.511 | 0.097 | -0.414 |
| 35                  | 94       | 0.508 | 0.014 | -0.494 |
| 35                  | 95       | 0.416 | 0.207 | -0.209 |
| 50                  | 1        | 0.092 | 0.044 | -0.048 |
| 50                  | 2        | 0.025 | 0.047 | 0.022  |
| 50                  | 3        | 0.025 | 0.079 | 0.054  |
| 50                  | 5        | 0.086 | 0.052 | -0.034 |
| 50                  | 6        | 0.060 | 0.100 | 0.040  |
| 55                  | 7        | 0.225 | 0.043 | -0.182 |
| 55                  | 8        | 0.260 | 0.092 | -0.168 |
| 55                  | 9        | 0.080 | 1.008 | 0.928  |
| 55                  | 10       | 0.271 | 0.172 | -0.099 |
| 55                  | 11       | 0.038 | 0.010 | -0.028 |
| 100                 | 29       | 0.082 | 0.088 | 0.006  |
| 100                 | 30       | 0.124 | 0.029 | -0.095 |
| 100                 | 31       | 0.200 | 0.098 | -0.102 |
| 100                 | 32       | 0.249 | 0.123 | -0.126 |
| 100                 | 34       | 0.041 | 0.028 | -0.013 |
| 100                 | 35       | 0.229 | 0.077 | -0.152 |
| 100                 | 36       | 0.008 | 0.050 | 0.042  |
| 100                 | 38       | 0.026 | 0.018 | -0.008 |
| 100                 | 39       | 0.002 | 0.274 | 0.272  |
| 100                 | 41       | 0.086 | 0.217 | 0.131  |
| 100                 | 42       | 0.366 | 0.109 | -0.257 |
| 100                 | 43       | 0.143 | 0.281 | 0.138  |
| 100                 | 45       | 0.174 | 0.058 | -0.116 |
| 100                 | 46       | 0.213 | 0.047 | -0.166 |
| 100                 | 47       | 0.296 | 0.104 | -0.192 |
| 100                 | 48       | 0.023 | 0.532 | 0.509  |
| 100                 | 49       | 0.086 | 0.158 | 0.072  |
| 100                 | 51       | 0.081 | 0.233 | 0.152  |
| 100                 | 54       | 0.224 | 0.013 | -0.211 |
| 100                 | 56       | 0.256 | 0.057 | -0.199 |
| 100                 | 57       | 0.167 | 0.078 | -0.089 |
| 100                 | 58       | 0.274 | 0.125 | -0.149 |
| 100                 | 59       | 0.175 | 0.204 | 0.029  |
| 105                 | 61       | 0.155 | 0.183 | 0.028  |
| 105                 | 62       | 0.267 | 0.253 | -0.014 |
| 105                 | 64       | 0.231 | 0.084 | -0.147 |
| 105                 | 65       | 0.263 | 0.212 | -0.051 |
| 105                 | 66       | 0.244 | 0.069 | -0.175 |
| Max                 |          | 0.763 | 1.008 | 0.928  |
| Average             |          | 0.311 | 0.160 | -0.151 |
| Min                 |          | 0.002 | 0.009 | -0.592 |
| Std Dev             |          | 0.204 | 0.150 | 0.240  |

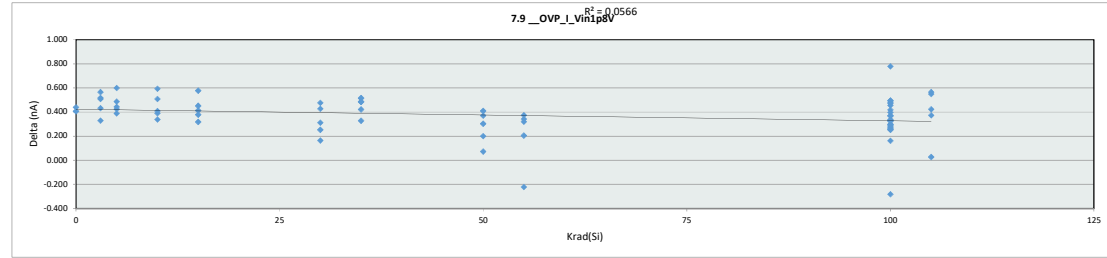


|             |        | 7.8 __OVP_I_Vin3p3V |        |        |        |        |        |        |        |        |        |
|-------------|--------|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site   |        |                     |        |        |        |        |        |        |        |        |        |
| Tester      |        |                     |        |        |        |        |        |        |        |        |        |
| Test Number |        |                     |        |        |        |        |        |        |        |        |        |
| Max Limit   | 12     | nA                  |        |        |        |        |        |        |        |        |        |
| Min Limit   |        | nA                  |        |        |        |        |        |        |        |        |        |
| Krad(Si)    | 0      | 3                   | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL          |        |                     |        |        |        |        |        |        |        |        |        |
| Min         | 0.013  | 0.079               | 0.109  | 0.123  | 0.009  | 0.144  | 0.014  | 0.044  | 0.010  | 0.013  | 0.069  |
| Average     | 0.035  | 0.144               | 0.220  | 0.222  | 0.166  | 0.250  | 0.141  | 0.064  | 0.265  | 0.130  | 0.160  |
| Max         | 0.057  | 0.241               | 0.333  | 0.370  | 0.311  | 0.551  | 0.210  | 0.100  | 1.008  | 0.532  | 0.253  |
| UL          | 12.000 | 12.000              | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 |

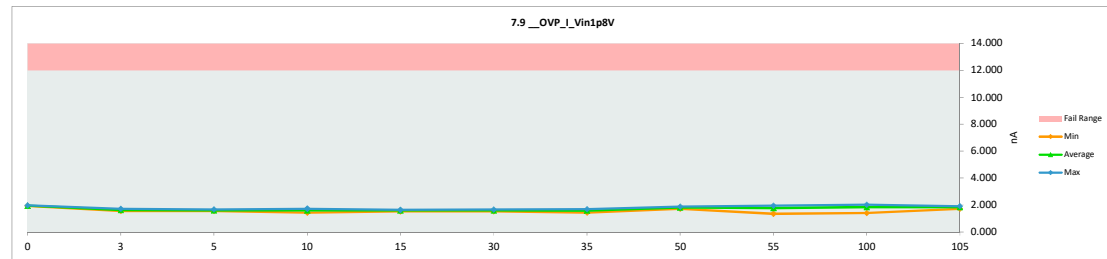


# HDR TID Report TPS7H2211-SP

| 7.9 __OVP_I_Vin1p8V |          |       |       |        |
|---------------------|----------|-------|-------|--------|
| Test Site           |          |       |       |        |
| Tester              |          |       |       |        |
| Test Number         |          |       |       |        |
| Unit                | nA       | nA    |       |        |
| Max Limit           | 12       | 12    |       |        |
| Min Limit           |          |       |       |        |
| Krad(Si)            | Serial # | PRE   | POST  | Delta  |
| 0                   | 227      | 1.527 | 1.965 | 0.438  |
| 0                   | 229      | 1.514 | 1.921 | 0.407  |
| 3                   | 107      | 1.224 | 1.553 | 0.329  |
| 3                   | 108      | 1.151 | 1.716 | 0.565  |
| 3                   | 109      | 1.153 | 1.585 | 0.432  |
| 3                   | 110      | 1.106 | 1.614 | 0.508  |
| 3                   | 111      | 1.174 | 1.691 | 0.517  |
| 5                   | 112      | 1.064 | 1.551 | 0.487  |
| 5                   | 113      | 1.160 | 1.584 | 0.424  |
| 5                   | 114      | 1.231 | 1.674 | 0.443  |
| 5                   | 115      | 1.011 | 1.610 | 0.599  |
| 5                   | 116      | 1.198 | 1.586 | 0.388  |
| 10                  | 96       | 1.171 | 1.560 | 0.389  |
| 10                  | 97       | 1.128 | 1.721 | 0.593  |
| 10                  | 98       | 0.935 | 1.443 | 0.508  |
| 10                  | 99       | 1.350 | 1.688 | 0.338  |
| 10                  | 100      | 1.137 | 1.545 | 0.408  |
| 15                  | 101      | 1.222 | 1.634 | 0.412  |
| 15                  | 102      | 1.007 | 1.584 | 0.577  |
| 15                  | 104      | 1.202 | 1.580 | 0.378  |
| 15                  | 105      | 1.158 | 1.609 | 0.451  |
| 15                  | 106      | 1.215 | 1.533 | 0.318  |
| 30                  | 83       | 1.328 | 1.581 | 0.253  |
| 30                  | 84       | 1.362 | 1.525 | 0.163  |
| 30                  | 85       | 1.182 | 1.658 | 0.476  |
| 30                  | 86       | 1.230 | 1.657 | 0.427  |
| 30                  | 87       | 1.244 | 1.556 | 0.312  |
| 35                  | 88       | 1.200 | 1.684 | 0.484  |
| 35                  | 92       | 1.109 | 1.437 | 0.328  |
| 35                  | 93       | 1.032 | 1.547 | 0.515  |
| 35                  | 94       | 1.185 | 1.606 | 0.421  |
| 35                  | 95       | 1.070 | 1.555 | 0.485  |
| 50                  | 1        | 1.505 | 1.808 | 0.303  |
| 50                  | 2        | 1.640 | 1.712 | 0.072  |
| 50                  | 3        | 1.503 | 1.873 | 0.370  |
| 50                  | 5        | 1.458 | 1.867 | 0.409  |
| 50                  | 6        | 1.555 | 1.755 | 0.200  |
| 55                  | 7        | 1.518 | 1.860 | 0.342  |
| 55                  | 8        | 1.581 | 1.954 | 0.373  |
| 55                  | 9        | 1.567 | 1.345 | -0.222 |
| 55                  | 10       | 1.658 | 1.863 | 0.205  |
| 55                  | 11       | 1.535 | 1.855 | 0.320  |
| 100                 | 29       | 1.577 | 1.906 | 0.329  |
| 100                 | 30       | 1.415 | 1.911 | 0.496  |
| 100                 | 31       | 1.551 | 2.022 | 0.471  |
| 100                 | 32       | 1.466 | 1.948 | 0.482  |
| 100                 | 34       | 1.441 | 1.809 | 0.368  |
| 100                 | 35       | 1.594 | 1.867 | 0.273  |
| 100                 | 36       | 1.633 | 1.884 | 0.251  |
| 100                 | 38       | 1.499 | 1.868 | 0.369  |
| 100                 | 39       | 1.044 | 1.823 | 0.779  |
| 100                 | 41       | 1.604 | 1.899 | 0.295  |
| 100                 | 42       | 1.629 | 1.928 | 0.299  |
| 100                 | 43       | 1.540 | 1.796 | 0.256  |
| 100                 | 45       | 1.563 | 1.886 | 0.323  |
| 100                 | 46       | 1.485 | 1.816 | 0.331  |
| 100                 | 47       | 1.346 | 1.839 | 0.493  |
| 100                 | 48       | 1.675 | 1.393 | -0.282 |
| 100                 | 49       | 1.529 | 1.814 | 0.285  |
| 100                 | 51       | 1.545 | 1.999 | 0.454  |
| 100                 | 54       | 1.568 | 1.729 | 0.161  |
| 100                 | 56       | 1.477 | 1.737 | 0.260  |
| 100                 | 57       | 1.427 | 1.845 | 0.418  |
| 100                 | 58       | 1.549 | 1.887 | 0.338  |
| 100                 | 59       | 1.469 | 1.865 | 0.396  |
| 105                 | 61       | 1.684 | 1.710 | 0.026  |
| 105                 | 62       | 1.345 | 1.910 | 0.565  |
| 105                 | 64       | 1.500 | 1.872 | 0.372  |
| 105                 | 65       | 1.437 | 1.860 | 0.423  |
| 105                 | 66       | 1.331 | 1.880 | 0.549  |
| Max                 |          | 1.684 | 2.022 | 0.779  |
| Average             |          | 1.363 | 1.734 | 0.370  |
| Min                 |          | 0.935 | 1.345 | -0.282 |
| Std Dev             |          | 0.203 | 0.162 | 0.165  |

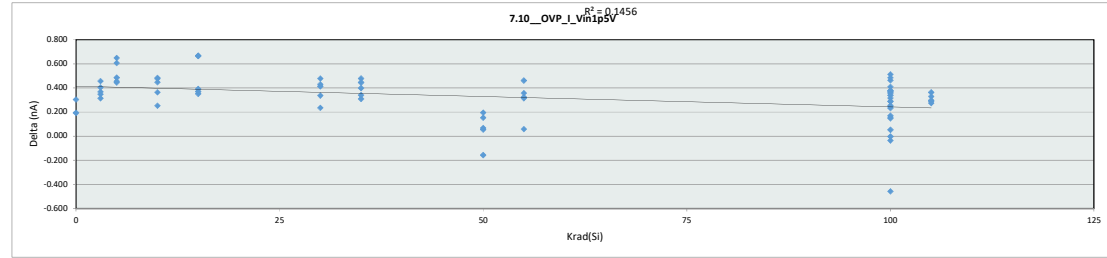


| 7.9 __OVP_I_Vin1p8V |        |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site           |        |        |        |        |        |        |        |        |        |        |        |
| Tester              |        |        |        |        |        |        |        |        |        |        |        |
| Test Number         |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit           | 12     | nA     |        |        |        |        |        |        |        |        |        |
| Min Limit           |        | nA     |        |        |        |        |        |        |        |        |        |
| Krad(Si)            | 0      | 3      | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                  |        |        |        |        |        |        |        |        |        |        |        |
| Min                 | 1.921  | 1.553  | 1.551  | 1.443  | 1.533  | 1.525  | 1.437  | 1.712  | 1.345  | 1.393  | 1.710  |
| Average             | 1.943  | 1.632  | 1.601  | 1.591  | 1.588  | 1.595  | 1.566  | 1.803  | 1.775  | 1.847  | 1.846  |
| Max                 | 1.965  | 1.716  | 1.674  | 1.721  | 1.634  | 1.658  | 1.684  | 1.873  | 1.954  | 2.022  | 1.910  |
| UL                  | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 |

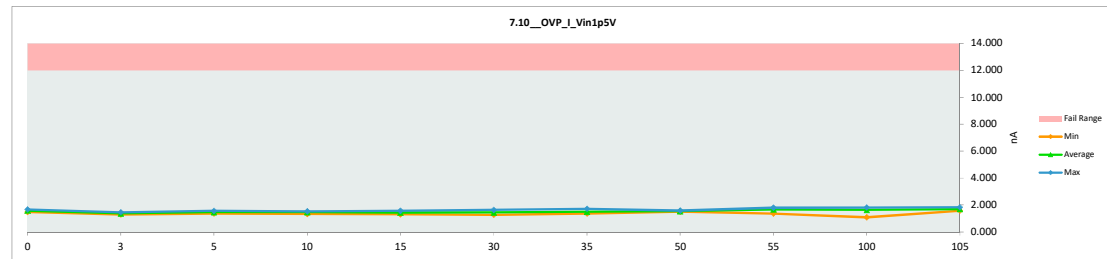


# HDR TID Report TPS7H2211-SP

| 7.10_OVP_I_Vin1p5V |          |       |       |        |
|--------------------|----------|-------|-------|--------|
| Test Site          |          |       |       |        |
| Tester             |          |       |       |        |
| Test Number        |          |       |       |        |
| Unit               | nA       | nA    |       |        |
| Max Limit          | 12       | 12    |       |        |
| Min Limit          |          |       |       |        |
| Krad(Si)           | Serial # | PRE   | POST  | Delta  |
| 0                  | 227      | 1.373 | 1.677 | 0.304  |
| 0                  | 229      | 1.278 | 1.471 | 0.193  |
| 3                  | 107      | 1.069 | 1.437 | 0.368  |
| 3                  | 108      | 0.937 | 1.394 | 0.457  |
| 3                  | 109      | 0.984 | 1.298 | 0.314  |
| 3                  | 110      | 0.985 | 1.334 | 0.349  |
| 3                  | 111      | 1.055 | 1.459 | 0.404  |
| 5                  | 112      | 0.880 | 1.366 | 0.486  |
| 5                  | 113      | 0.879 | 1.528 | 0.649  |
| 5                  | 114      | 0.954 | 1.560 | 0.606  |
| 5                  | 115      | 1.059 | 1.515 | 0.456  |
| 5                  | 116      | 0.965 | 1.409 | 0.444  |
| 10                 | 96       | 0.978 | 1.461 | 0.483  |
| 10                 | 97       | 1.172 | 1.536 | 0.364  |
| 10                 | 98       | 1.079 | 1.331 | 0.252  |
| 10                 | 99       | 1.074 | 1.522 | 0.448  |
| 10                 | 100      | 1.027 | 1.503 | 0.476  |
| 15                 | 101      | 0.856 | 1.524 | 0.668  |
| 15                 | 102      | 0.959 | 1.311 | 0.352  |
| 15                 | 104      | 0.997 | 1.389 | 0.392  |
| 15                 | 105      | 0.894 | 1.559 | 0.665  |
| 15                 | 106      | 1.031 | 1.401 | 0.370  |
| 30                 | 83       | 1.299 | 1.636 | 0.337  |
| 30                 | 84       | 1.027 | 1.263 | 0.236  |
| 30                 | 85       | 1.050 | 1.463 | 0.413  |
| 30                 | 86       | 1.114 | 1.545 | 0.431  |
| 30                 | 87       | 0.876 | 1.355 | 0.479  |
| 35                 | 88       | 1.315 | 1.714 | 0.399  |
| 35                 | 92       | 1.135 | 1.445 | 0.310  |
| 35                 | 93       | 0.895 | 1.374 | 0.479  |
| 35                 | 94       | 1.061 | 1.507 | 0.446  |
| 35                 | 95       | 1.086 | 1.426 | 0.340  |
| 50                 | 1        | 1.319 | 1.514 | 0.195  |
| 50                 | 2        | 1.529 | 1.584 | 0.055  |
| 50                 | 3        | 1.489 | 1.557 | 0.068  |
| 50                 | 5        | 1.386 | 1.539 | 0.153  |
| 50                 | 6        | 1.671 | 1.514 | -0.157 |
| 55                 | 7        | 1.337 | 1.799 | 0.462  |
| 55                 | 8        | 1.370 | 1.684 | 0.314  |
| 55                 | 9        | 1.304 | 1.363 | 0.059  |
| 55                 | 10       | 1.395 | 1.753 | 0.358  |
| 55                 | 11       | 1.422 | 1.745 | 0.323  |
| 100                | 29       | 1.522 | 1.777 | 0.255  |
| 100                | 30       | 1.392 | 1.624 | 0.232  |
| 100                | 31       | 1.359 | 1.603 | 0.244  |
| 100                | 32       | 1.273 | 1.737 | 0.464  |
| 100                | 34       | 1.296 | 1.466 | 0.170  |
| 100                | 35       | 1.326 | 1.665 | 0.339  |
| 100                | 36       | 1.530 | 1.583 | 0.053  |
| 100                | 38       | 1.414 | 1.561 | 0.147  |
| 100                | 39       | 1.419 | 1.577 | 0.158  |
| 100                | 41       | 1.235 | 1.748 | 0.513  |
| 100                | 42       | 1.604 | 1.601 | -0.003 |
| 100                | 43       | 1.340 | 1.824 | 0.484  |
| 100                | 45       | 1.279 | 1.569 | 0.290  |
| 100                | 46       | 1.489 | 1.453 | -0.036 |
| 100                | 47       | 1.306 | 1.684 | 0.378  |
| 100                | 48       | 1.541 | 1.083 | -0.458 |
| 100                | 49       | 1.403 | 1.761 | 0.358  |
| 100                | 51       | 1.514 | 1.801 | 0.287  |
| 100                | 54       | 1.293 | 1.671 | 0.378  |
| 100                | 56       | 1.232 | 1.599 | 0.367  |
| 100                | 57       | 1.315 | 1.632 | 0.317  |
| 100                | 58       | 1.279 | 1.688 | 0.409  |
| 100                | 59       | 1.433 | 1.801 | 0.368  |
| 105                | 61       | 1.403 | 1.677 | 0.274  |
| 105                | 62       | 1.290 | 1.578 | 0.288  |
| 105                | 64       | 1.434 | 1.731 | 0.297  |
| 105                | 65       | 1.497 | 1.826 | 0.329  |
| 105                | 66       | 1.296 | 1.659 | 0.363  |
| Max                |          | 1.671 | 1.826 | 0.668  |
| Average            |          | 1.233 | 1.553 | 0.321  |
| Min                |          | 0.856 | 1.083 | -0.458 |
| Std Dev            |          | 0.212 | 0.155 | 0.184  |

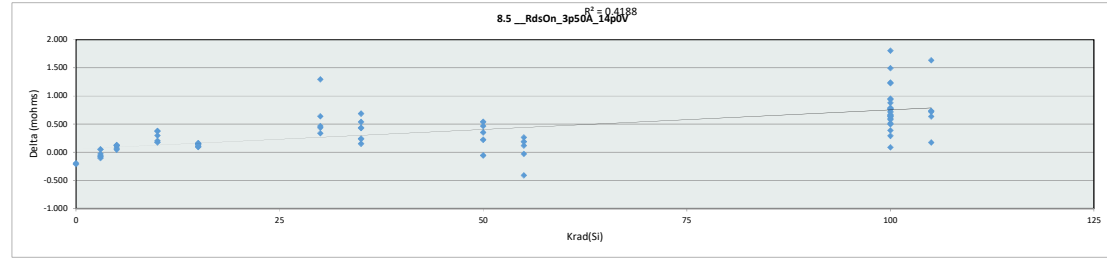


| 7.10_OVP_I_Vin1p5V |        |        |        |        |        |        |        |        |        |        |        |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site          |        |        |        |        |        |        |        |        |        |        |        |
| Tester             |        |        |        |        |        |        |        |        |        |        |        |
| Test Number        |        |        |        |        |        |        |        |        |        |        |        |
| Max Limit          | 12     | nA     |        |        |        |        |        |        |        |        |        |
| Min Limit          |        | nA     |        |        |        |        |        |        |        |        |        |
| Krad(Si)           | 0      | 3      | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL                 | 1.471  | 1.298  | 1.366  | 1.331  | 1.311  | 1.263  | 1.374  | 1.514  | 1.363  | 1.083  | 1.578  |
| Average            | 1.574  | 1.384  | 1.476  | 1.471  | 1.437  | 1.452  | 1.493  | 1.542  | 1.669  | 1.631  | 1.694  |
| Max                | 1.677  | 1.459  | 1.560  | 1.536  | 1.559  | 1.636  | 1.714  | 1.584  | 1.799  | 1.824  | 1.826  |
| UL                 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 | 12.000 |

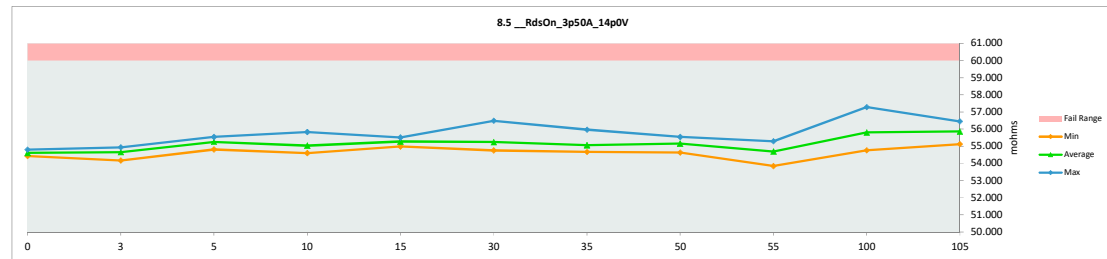


# HDR TID Report TPS7H2211-SP

| 8.5 __RdsOn_3p50A_14p0V |          |        |        |        |
|-------------------------|----------|--------|--------|--------|
| Test Site               |          |        |        |        |
| Tester                  |          |        |        |        |
| Test Number             |          |        |        |        |
| Unit                    | mohms    | mohms  |        |        |
| Max Limit               | 60       |        |        |        |
| Min Limit               |          |        |        |        |
| Krad(Si)                | Serial # | PRE    | POST   | Delta  |
| 0                       | 227      | 54.637 | 54.425 | -0.212 |
| 0                       | 229      | 54.998 | 54.804 | -0.194 |
| 3                       | 107      | 54.603 | 54.656 | 0.053  |
| 3                       | 108      | 54.852 | 54.824 | -0.028 |
| 3                       | 109      | 54.803 | 54.701 | -0.102 |
| 3                       | 110      | 55.002 | 54.938 | -0.064 |
| 3                       | 111      | 54.239 | 54.169 | -0.070 |
| 5                       | 112      | 55.493 | 55.541 | 0.048  |
| 5                       | 113      | 55.148 | 55.279 | 0.131  |
| 5                       | 114      | 55.009 | 55.129 | 0.120  |
| 5                       | 115      | 55.405 | 55.521 | 0.116  |
| 5                       | 116      | 54.738 | 54.813 | 0.075  |
| 10                      | 96       | 54.399 | 54.604 | 0.205  |
| 10                      | 97       | 54.667 | 55.043 | 0.376  |
| 10                      | 98       | 55.529 | 55.829 | 0.300  |
| 10                      | 99       | 54.473 | 54.651 | 0.178  |
| 10                      | 100      | 54.677 | 55.056 | 0.379  |
| 15                      | 101      | 55.376 | 55.511 | 0.135  |
| 15                      | 102      | 55.075 | 55.183 | 0.108  |
| 15                      | 104      | 55.123 | 55.285 | 0.162  |
| 15                      | 105      | 55.251 | 55.400 | 0.149  |
| 15                      | 106      | 54.899 | 54.993 | 0.094  |
| 30                      | 83       | 54.114 | 54.753 | 0.639  |
| 30                      | 84       | 54.769 | 55.204 | 0.435  |
| 30                      | 85       | 55.195 | 56.493 | 1.298  |
| 30                      | 86       | 54.433 | 54.899 | 0.466  |
| 30                      | 87       | 54.549 | 54.888 | 0.339  |
| 35                      | 88       | 54.461 | 54.701 | 0.240  |
| 35                      | 92       | 54.329 | 54.762 | 0.433  |
| 35                      | 93       | 55.282 | 55.971 | 0.689  |
| 35                      | 94       | 54.129 | 54.669 | 0.540  |
| 35                      | 95       | 55.047 | 55.200 | 0.153  |
| 50                      | 1        | 54.993 | 55.458 | 0.465  |
| 50                      | 2        | 55.022 | 55.245 | 0.223  |
| 50                      | 3        | 55.191 | 55.544 | 0.353  |
| 50                      | 5        | 54.344 | 54.886 | 0.542  |
| 50                      | 6        | 54.693 | 54.637 | -0.056 |
| 55                      | 7        | 54.281 | 54.252 | -0.029 |
| 55                      | 8        | 54.558 | 54.822 | 0.264  |
| 55                      | 9        | 55.180 | 55.297 | 0.117  |
| 55                      | 10       | 54.253 | 53.843 | -0.410 |
| 55                      | 11       | 55.055 | 55.245 | 0.190  |
| 100                     | 29       | 54.677 | 54.767 | 0.090  |
| 100                     | 30       | 55.321 | 55.612 | 0.291  |
| 100                     | 31       | 55.335 | 55.968 | 0.633  |
| 100                     | 32       | 54.637 | 55.294 | 0.657  |
| 100                     | 34       | 54.722 | 55.439 | 0.717  |
| 100                     | 35       | 55.844 | 56.615 | 0.771  |
| 100                     | 36       | 54.824 | 55.704 | 0.880  |
| 100                     | 38       | 54.737 | 55.407 | 0.670  |
| 100                     | 39       | 55.370 | 56.131 | 0.761  |
| 100                     | 41       | 54.307 | 55.535 | 1.228  |
| 100                     | 42       | 55.103 | 55.619 | 0.516  |
| 100                     | 43       | 55.477 | 57.284 | 1.807  |
| 100                     | 45       | 54.637 | 55.217 | 0.580  |
| 100                     | 46       | 54.964 | 55.755 | 0.791  |
| 100                     | 47       | 55.153 | 55.751 | 0.598  |
| 100                     | 48       | 55.250 | 56.032 | 0.782  |
| 100                     | 49       | 55.013 | 55.403 | 0.390  |
| 100                     | 51       | 55.100 | 55.746 | 0.646  |
| 100                     | 54       | 55.022 | 56.260 | 1.238  |
| 100                     | 56       | 55.425 | 56.921 | 1.496  |
| 100                     | 57       | 54.852 | 55.805 | 0.953  |
| 100                     | 58       | 55.075 | 55.573 | 0.498  |
| 100                     | 59       | 54.740 | 55.677 | 0.937  |
| 105                     | 61       | 55.044 | 55.763 | 0.719  |
| 105                     | 62       | 55.435 | 56.072 | 0.637  |
| 105                     | 64       | 54.814 | 56.450 | 1.636  |
| 105                     | 65       | 55.195 | 55.930 | 0.735  |
| 105                     | 66       | 54.949 | 55.124 | 0.175  |
| Max                     |          | 55.844 | 57.284 | 1.807  |
| Average                 |          | 54.904 | 55.343 | 0.438  |
| Min                     |          | 54.114 | 53.843 | -0.410 |
| Std Dev                 |          | 0.380  | 0.639  | 0.438  |



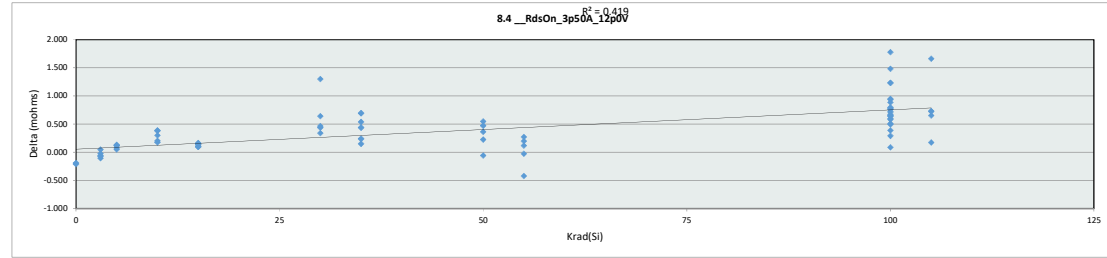
|             |                         |        |        |        |        |        |        |        |        |        |        |
|-------------|-------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|             | 8.5 __RdsOn_3p50A_14p0V |        |        |        |        |        |        |        |        |        |        |
| Test Site   |                         |        |        |        |        |        |        |        |        |        |        |
| Tester      |                         |        |        |        |        |        |        |        |        |        |        |
| Test Number |                         |        |        |        |        |        |        |        |        |        |        |
| Max Limit   | 60                      | mohms  |        |        |        |        |        |        |        |        |        |
| Min Limit   |                         | mohms  |        |        |        |        |        |        |        |        |        |
| Krad(Si)    | 0                       | 3      | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL          |                         |        |        |        |        |        |        |        |        |        |        |
| Min         | 54.425                  | 54.169 | 54.813 | 54.604 | 54.993 | 54.753 | 54.669 | 54.637 | 53.843 | 54.767 | 55.124 |
| Average     | 54.615                  | 54.658 | 55.257 | 55.037 | 55.274 | 55.247 | 55.061 | 55.154 | 54.692 | 55.805 | 55.868 |
| Max         | 54.804                  | 54.938 | 55.541 | 55.829 | 55.511 | 56.493 | 55.971 | 55.544 | 55.297 | 57.284 | 56.450 |
| UL          | 60.000                  | 60.000 | 60.000 | 60.000 | 60.000 | 60.000 | 60.000 | 60.000 | 60.000 | 60.000 | 60.000 |



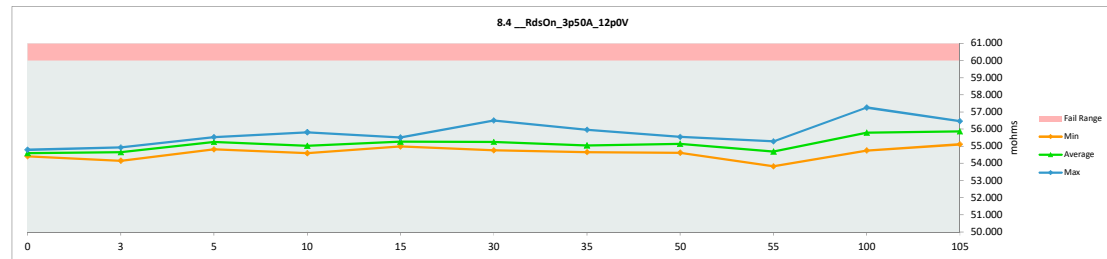
# HDR TID Report TPS7H2211-SP

| 8.4 __RdsOn_3p50A_12p0V |       |       |  |  |
|-------------------------|-------|-------|--|--|
| Test Site               |       |       |  |  |
| Tester                  |       |       |  |  |
| Test Number             |       |       |  |  |
| Unit                    | mohms | mohms |  |  |
| Max Limit               | 60    |       |  |  |
| Min Limit               |       |       |  |  |

| Krad(Si) | Serial # | PRE    | POST   | Delta  |
|----------|----------|--------|--------|--------|
| 0        | 227      | 54.627 | 54.414 | -0.213 |
| 0        | 229      | 54.987 | 54.793 | -0.194 |
| 3        | 107      | 54.598 | 54.643 | 0.045  |
| 3        | 108      | 54.851 | 54.825 | -0.026 |
| 3        | 109      | 54.812 | 54.706 | -0.106 |
| 3        | 110      | 54.992 | 54.927 | -0.065 |
| 3        | 111      | 54.225 | 54.155 | -0.070 |
| 5        | 112      | 55.482 | 55.531 | 0.049  |
| 5        | 113      | 55.149 | 55.280 | 0.131  |
| 5        | 114      | 55.012 | 55.132 | 0.120  |
| 5        | 115      | 55.400 | 55.516 | 0.116  |
| 5        | 116      | 54.739 | 54.815 | 0.076  |
| 10       | 96       | 54.392 | 54.593 | 0.201  |
| 10       | 97       | 54.638 | 55.024 | 0.386  |
| 10       | 98       | 55.520 | 55.820 | 0.300  |
| 10       | 99       | 54.465 | 54.639 | 0.174  |
| 10       | 100      | 54.673 | 55.050 | 0.377  |
| 15       | 101      | 55.371 | 55.504 | 0.133  |
| 15       | 102      | 55.077 | 55.179 | 0.102  |
| 15       | 104      | 55.124 | 55.287 | 0.163  |
| 15       | 105      | 55.242 | 55.389 | 0.147  |
| 15       | 106      | 54.897 | 54.991 | 0.094  |
| 30       | 83       | 54.123 | 54.762 | 0.639  |
| 30       | 84       | 54.766 | 55.203 | 0.437  |
| 30       | 85       | 55.202 | 56.502 | 1.300  |
| 30       | 86       | 54.421 | 54.884 | 0.463  |
| 30       | 87       | 54.538 | 54.877 | 0.339  |
| 35       | 88       | 54.454 | 54.693 | 0.239  |
| 35       | 92       | 54.320 | 54.756 | 0.436  |
| 35       | 93       | 55.268 | 55.961 | 0.693  |
| 35       | 94       | 54.115 | 54.653 | 0.538  |
| 35       | 95       | 55.033 | 55.181 | 0.148  |
| 50       | 1        | 54.974 | 55.446 | 0.472  |
| 50       | 2        | 55.011 | 55.234 | 0.223  |
| 50       | 3        | 55.186 | 55.546 | 0.360  |
| 50       | 5        | 54.329 | 54.875 | 0.546  |
| 50       | 6        | 54.684 | 54.624 | -0.060 |
| 55       | 7        | 54.263 | 54.236 | -0.027 |
| 55       | 8        | 54.564 | 54.835 | 0.271  |
| 55       | 9        | 55.168 | 55.284 | 0.116  |
| 55       | 10       | 54.247 | 53.823 | -0.424 |
| 55       | 11       | 55.052 | 55.250 | 0.198  |
| 100      | 29       | 54.666 | 54.753 | 0.087  |
| 100      | 30       | 55.316 | 55.607 | 0.291  |
| 100      | 31       | 55.338 | 55.982 | 0.644  |
| 100      | 32       | 54.625 | 55.265 | 0.640  |
| 100      | 34       | 54.724 | 55.440 | 0.716  |
| 100      | 35       | 55.834 | 56.607 | 0.773  |
| 100      | 36       | 54.818 | 55.703 | 0.885  |
| 100      | 38       | 54.736 | 55.407 | 0.671  |
| 100      | 39       | 55.364 | 56.124 | 0.760  |
| 100      | 41       | 54.307 | 55.539 | 1.232  |
| 100      | 42       | 55.095 | 55.606 | 0.511  |
| 100      | 43       | 55.481 | 57.259 | 1.778  |
| 100      | 45       | 54.622 | 55.202 | 0.580  |
| 100      | 46       | 54.954 | 55.741 | 0.787  |
| 100      | 47       | 55.149 | 55.747 | 0.598  |
| 100      | 48       | 55.236 | 56.032 | 0.796  |
| 100      | 49       | 55.001 | 55.390 | 0.389  |
| 100      | 51       | 55.103 | 55.754 | 0.651  |
| 100      | 54       | 55.010 | 56.242 | 1.232  |
| 100      | 56       | 55.423 | 56.904 | 1.481  |
| 100      | 57       | 54.850 | 55.798 | 0.948  |
| 100      | 58       | 55.063 | 55.557 | 0.494  |
| 100      | 59       | 54.736 | 55.673 | 0.937  |
| 105      | 61       | 55.048 | 55.771 | 0.723  |
| 105      | 62       | 55.421 | 56.073 | 0.652  |
| 105      | 64       | 54.803 | 56.465 | 1.662  |
| 105      | 65       | 55.194 | 55.925 | 0.731  |
| 105      | 66       | 54.938 | 55.111 | 0.173  |
| Max      |          | 55.834 | 57.259 | 1.778  |
| Average  |          | 54.898 | 55.336 | 0.438  |
| Min      |          | 54.115 | 53.823 | -0.424 |
| Std Dev  |          | 0.381  | 0.640  | 0.438  |



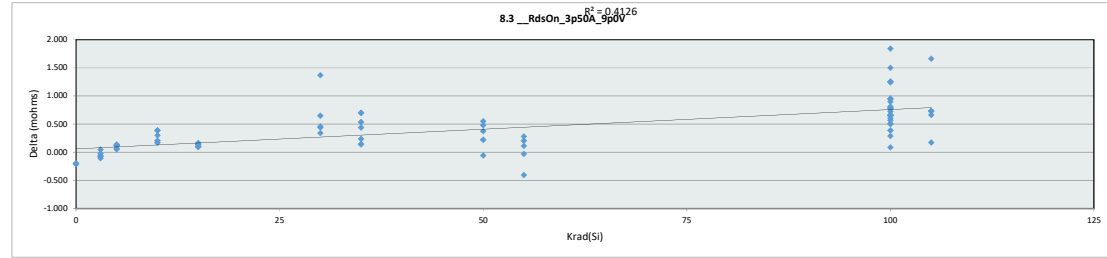
|             |                       |        |        |        |        |        |        |        |        |        |        |
|-------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|             | 8.4_RdsOn_3p50A_12p0V |        |        |        |        |        |        |        |        |        |        |
| Test Site   |                       |        |        |        |        |        |        |        |        |        |        |
| Tester      |                       |        |        |        |        |        |        |        |        |        |        |
| Test Number |                       |        |        |        |        |        |        |        |        |        |        |
| Max Limit   | 60                    | mohms  |        |        |        |        |        |        |        |        |        |
| Min Limit   |                       | mohms  |        |        |        |        |        |        |        |        |        |
| Krad(Si)    | 0                     | 3      | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL          |                       |        |        |        |        |        |        |        |        |        |        |
| Min         | 54.414                | 54.155 | 54.815 | 54.593 | 54.991 | 54.762 | 54.653 | 54.624 | 53.823 | 54.753 | 55.111 |
| Average     | 54.604                | 54.651 | 55.255 | 55.025 | 55.270 | 55.246 | 55.049 | 55.145 | 54.686 | 55.797 | 55.869 |
| Max         | 54.793                | 54.927 | 55.531 | 55.820 | 55.504 | 56.502 | 55.961 | 55.546 | 55.284 | 57.259 | 56.465 |
| UL          | 60.000                | 60.000 | 60.000 | 60.000 | 60.000 | 60.000 | 60.000 | 60.000 | 60.000 | 60.000 | 60.000 |



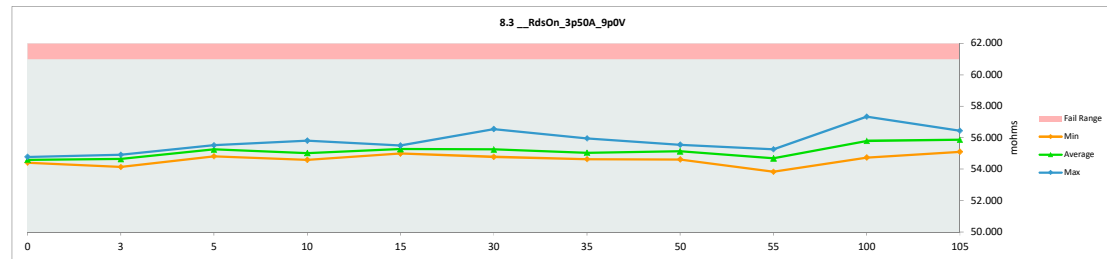
# HDR TID Report TPS7H2211-SP

| 8.3 __RdsOn_3p50A_9p0V |       |       |  |
|------------------------|-------|-------|--|
| Test Site              |       |       |  |
| Tester                 |       |       |  |
| Test Number            |       |       |  |
| Unit                   | mohms | mohms |  |
| Max Limit              | 61    |       |  |
| Min Limit              |       |       |  |

| Krad(Si) | Serial # | PRE    | POST   | Delta  |
|----------|----------|--------|--------|--------|
| 0        | 227      | 54.616 | 54.405 | -0.211 |
| 0        | 229      | 54.974 | 54.778 | -0.196 |
| 3        | 107      | 54.586 | 54.632 | 0.046  |
| 3        | 108      | 54.854 | 54.828 | -0.026 |
| 3        | 109      | 54.821 | 54.715 | -0.106 |
| 3        | 110      | 54.977 | 54.914 | -0.063 |
| 3        | 111      | 54.209 | 54.136 | -0.073 |
| 5        | 112      | 55.468 | 55.516 | 0.048  |
| 5        | 113      | 55.153 | 55.290 | 0.137  |
| 5        | 114      | 55.019 | 55.137 | 0.118  |
| 5        | 115      | 55.400 | 55.518 | 0.118  |
| 5        | 116      | 54.747 | 54.821 | 0.074  |
| 10       | 96       | 54.382 | 54.587 | 0.205  |
| 10       | 97       | 54.612 | 55.003 | 0.391  |
| 10       | 98       | 55.512 | 55.812 | 0.300  |
| 10       | 99       | 54.457 | 54.628 | 0.171  |
| 10       | 100      | 54.679 | 55.063 | 0.384  |
| 15       | 101      | 55.367 | 55.501 | 0.134  |
| 15       | 102      | 55.081 | 55.183 | 0.102  |
| 15       | 104      | 55.128 | 55.289 | 0.161  |
| 15       | 105      | 55.235 | 55.379 | 0.144  |
| 15       | 106      | 54.897 | 54.992 | 0.095  |
| 30       | 83       | 54.139 | 54.786 | 0.647  |
| 30       | 84       | 54.770 | 55.209 | 0.439  |
| 30       | 85       | 55.182 | 56.551 | 1.369  |
| 30       | 86       | 54.407 | 54.867 | 0.460  |
| 30       | 87       | 54.527 | 54.866 | 0.339  |
| 35       | 88       | 54.451 | 54.687 | 0.236  |
| 35       | 92       | 54.313 | 54.754 | 0.441  |
| 35       | 93       | 55.253 | 55.953 | 0.700  |
| 35       | 94       | 54.098 | 54.634 | 0.536  |
| 35       | 95       | 55.015 | 55.157 | 0.142  |
| 50       | 1        | 54.944 | 55.424 | 0.480  |
| 50       | 2        | 54.995 | 55.218 | 0.223  |
| 50       | 3        | 55.178 | 55.551 | 0.373  |
| 50       | 5        | 54.313 | 54.863 | 0.550  |
| 50       | 6        | 54.673 | 54.614 | -0.059 |
| 55       | 7        | 54.245 | 54.215 | -0.030 |
| 55       | 8        | 54.576 | 54.858 | 0.282  |
| 55       | 9        | 55.156 | 55.267 | 0.111  |
| 55       | 10       | 54.235 | 53.828 | -0.407 |
| 55       | 11       | 55.052 | 55.256 | 0.204  |
| 100      | 29       | 54.648 | 54.736 | 0.088  |
| 100      | 30       | 55.311 | 55.599 | 0.288  |
| 100      | 31       | 55.341 | 55.991 | 0.650  |
| 100      | 32       | 54.610 | 55.257 | 0.647  |
| 100      | 34       | 54.730 | 55.453 | 0.723  |
| 100      | 35       | 55.822 | 56.604 | 0.782  |
| 100      | 36       | 54.814 | 55.711 | 0.897  |
| 100      | 38       | 54.738 | 55.409 | 0.671  |
| 100      | 39       | 55.360 | 56.130 | 0.770  |
| 100      | 41       | 54.311 | 55.553 | 1.242  |
| 100      | 42       | 55.087 | 55.597 | 0.510  |
| 100      | 43       | 55.499 | 57.340 | 1.841  |
| 100      | 45       | 54.604 | 55.171 | 0.567  |
| 100      | 46       | 54.940 | 55.732 | 0.792  |
| 100      | 47       | 55.146 | 55.744 | 0.598  |
| 100      | 48       | 55.223 | 56.034 | 0.811  |
| 100      | 49       | 54.991 | 55.376 | 0.385  |
| 100      | 51       | 55.116 | 55.766 | 0.650  |
| 100      | 54       | 54.994 | 56.250 | 1.256  |
| 100      | 56       | 55.430 | 56.930 | 1.500  |
| 100      | 57       | 54.849 | 55.802 | 0.953  |
| 100      | 58       | 55.049 | 55.550 | 0.501  |
| 100      | 59       | 54.734 | 55.677 | 0.943  |
| 105      | 61       | 55.057 | 55.785 | 0.728  |
| 105      | 62       | 55.404 | 56.066 | 0.662  |
| 105      | 64       | 54.786 | 56.449 | 1.663  |
| 105      | 65       | 55.187 | 55.925 | 0.738  |
| 105      | 66       | 54.928 | 55.102 | 0.174  |
| Max      |          | 55.822 | 57.340 | 1.841  |
| Average  |          | 54.891 | 55.335 | 0.443  |
| Min      |          | 54.098 | 53.828 | -0.407 |
| Std Dev  |          | 0.382  | 0.648  | 0.445  |



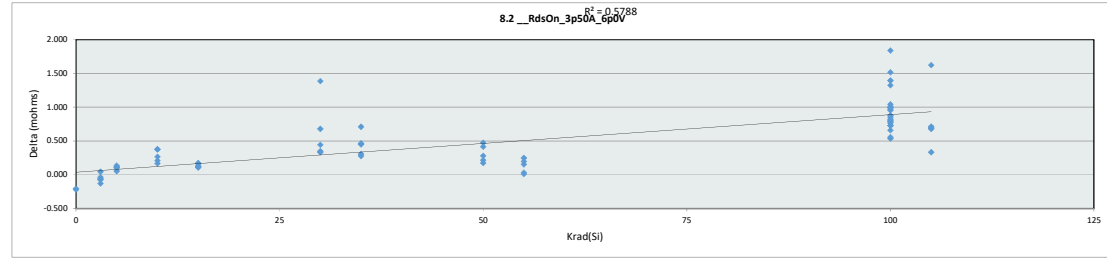
|             |        | 8.3 __RdsOn_3p50A_9p0V |        |        |        |        |        |        |        |        |        |
|-------------|--------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Test Site   |        |                        |        |        |        |        |        |        |        |        |        |
| Tester      |        |                        |        |        |        |        |        |        |        |        |        |
| Test Number |        |                        |        |        |        |        |        |        |        |        |        |
| Max Limit   | 61     |                        | mohms  |        |        |        |        |        |        |        |        |
| Min Limit   |        |                        | mohms  |        |        |        |        |        |        |        |        |
| Krad(Si)    | 0      | 3                      | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| Min         | 54.405 | 54.136                 | 54.821 | 54.587 | 54.992 | 54.786 | 54.634 | 54.614 | 53.828 | 54.736 | 55.102 |
| Average     | 54.592 | 54.645                 | 55.256 | 55.019 | 55.269 | 55.256 | 55.037 | 55.134 | 54.685 | 55.801 | 55.865 |
| Max         | 54.778 | 54.914                 | 55.518 | 55.812 | 55.501 | 56.551 | 55.953 | 55.551 | 55.267 | 57.340 | 56.449 |
| UL          | 61.000 | 61.000                 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 |



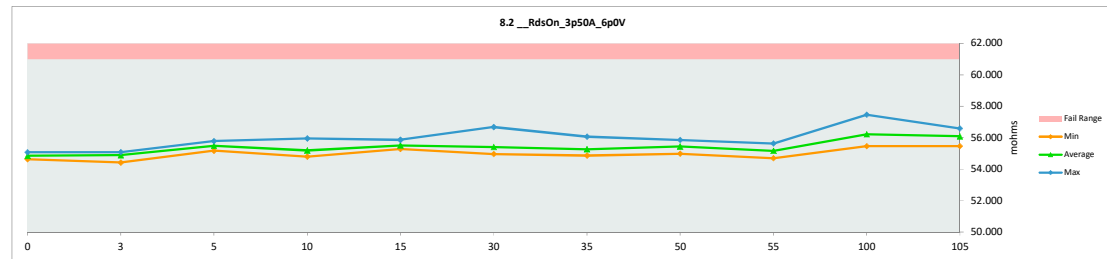
# HDR TID Report TPS7H2211-SP

| 8.2 __RdsOn_3p50A_6p0V |       |       |  |
|------------------------|-------|-------|--|
| Test Site              |       |       |  |
| Tester                 |       |       |  |
| Test Number            |       |       |  |
| Unit                   | mohms | mohms |  |
| Max Limit              | 61    |       |  |
| Min Limit              |       |       |  |

| Krad(Si) | Serial # | PRE    | POST   | Delta  |
|----------|----------|--------|--------|--------|
| 0        | 227      | 54.841 | 54.623 | -0.218 |
| 0        | 229      | 55.277 | 55.073 | -0.204 |
| 3        | 107      | 54.754 | 54.799 | 0.045  |
| 3        | 108      | 55.121 | 55.085 | -0.036 |
| 3        | 109      | 55.188 | 55.058 | -0.130 |
| 3        | 110      | 55.142 | 55.068 | -0.074 |
| 3        | 111      | 54.478 | 54.418 | -0.060 |
| 5        | 112      | 55.726 | 55.780 | 0.054  |
| 5        | 113      | 55.280 | 55.416 | 0.136  |
| 5        | 114      | 55.325 | 55.427 | 0.102  |
| 5        | 115      | 55.497 | 55.613 | 0.116  |
| 5        | 116      | 55.063 | 55.171 | 0.108  |
| 10       | 96       | 54.661 | 54.871 | 0.210  |
| 10       | 97       | 54.720 | 55.098 | 0.378  |
| 10       | 98       | 55.686 | 55.952 | 0.266  |
| 10       | 99       | 54.623 | 54.790 | 0.167  |
| 10       | 100      | 54.839 | 55.216 | 0.377  |
| 15       | 101      | 55.695 | 55.865 | 0.170  |
| 15       | 102      | 55.224 | 55.342 | 0.118  |
| 15       | 104      | 55.253 | 55.419 | 0.166  |
| 15       | 105      | 55.531 | 55.638 | 0.107  |
| 15       | 106      | 55.155 | 55.283 | 0.128  |
| 30       | 83       | 54.313 | 54.993 | 0.680  |
| 30       | 84       | 54.938 | 55.382 | 0.444  |
| 30       | 85       | 55.291 | 56.678 | 1.387  |
| 30       | 86       | 54.687 | 55.021 | 0.334  |
| 30       | 87       | 54.611 | 54.958 | 0.347  |
| 35       | 88       | 54.589 | 54.897 | 0.308  |
| 35       | 92       | 54.408 | 54.859 | 0.451  |
| 35       | 93       | 55.349 | 56.059 | 0.710  |
| 35       | 94       | 54.409 | 54.874 | 0.465  |
| 35       | 95       | 55.374 | 55.652 | 0.278  |
| 50       | 1        | 55.242 | 55.657 | 0.415  |
| 50       | 2        | 55.255 | 55.536 | 0.281  |
| 50       | 3        | 55.376 | 55.851 | 0.475  |
| 50       | 5        | 54.804 | 54.979 | 0.175  |
| 50       | 6        | 54.959 | 55.177 | 0.218  |
| 55       | 7        | 54.685 | 54.695 | 0.010  |
| 55       | 8        | 54.953 | 55.107 | 0.154  |
| 55       | 9        | 55.433 | 55.631 | 0.198  |
| 55       | 10       | 54.962 | 54.993 | 0.031  |
| 55       | 11       | 55.141 | 55.390 | 0.249  |
| 100      | 29       | 54.920 | 55.457 | 0.537  |
| 100      | 30       | 55.777 | 56.335 | 0.558  |
| 100      | 31       | 55.450 | 56.244 | 0.794  |
| 100      | 32       | 54.859 | 55.703 | 0.844  |
| 100      | 34       | 55.001 | 55.732 | 0.731  |
| 100      | 35       | 55.932 | 56.805 | 0.873  |
| 100      | 36       | 55.266 | 56.266 | 1.000  |
| 100      | 38       | 55.139 | 55.905 | 0.766  |
| 100      | 39       | 55.505 | 56.458 | 0.953  |
| 100      | 41       | 54.536 | 55.863 | 1.327  |
| 100      | 42       | 55.387 | 56.169 | 0.782  |
| 100      | 43       | 55.628 | 57.468 | 1.840  |
| 100      | 45       | 54.985 | 55.804 | 0.819  |
| 100      | 46       | 55.076 | 56.120 | 1.044  |
| 100      | 47       | 55.305 | 56.032 | 0.727  |
| 100      | 48       | 55.454 | 56.255 | 0.801  |
| 100      | 49       | 55.287 | 55.946 | 0.659  |
| 100      | 51       | 55.405 | 56.405 | 1.000  |
| 100      | 54       | 55.160 | 56.555 | 1.395  |
| 100      | 56       | 55.606 | 57.125 | 1.519  |
| 100      | 57       | 55.187 | 56.160 | 0.973  |
| 100      | 58       | 55.334 | 56.212 | 0.878  |
| 100      | 59       | 55.008 | 56.018 | 1.010  |
| 105      | 61       | 55.295 | 55.990 | 0.695  |
| 105      | 62       | 55.593 | 56.273 | 0.680  |
| 105      | 64       | 54.964 | 56.589 | 1.625  |
| 105      | 65       | 55.407 | 56.120 | 0.713  |
| 105      | 66       | 55.128 | 55.461 | 0.333  |
| Max      |          | 55.932 | 57.468 | 1.840  |
| Average  |          | 55.135 | 55.641 | 0.506  |
| Min      |          | 54.313 | 54.418 | -0.218 |
| Std Dev  |          | 0.361  | 0.634  | 0.457  |

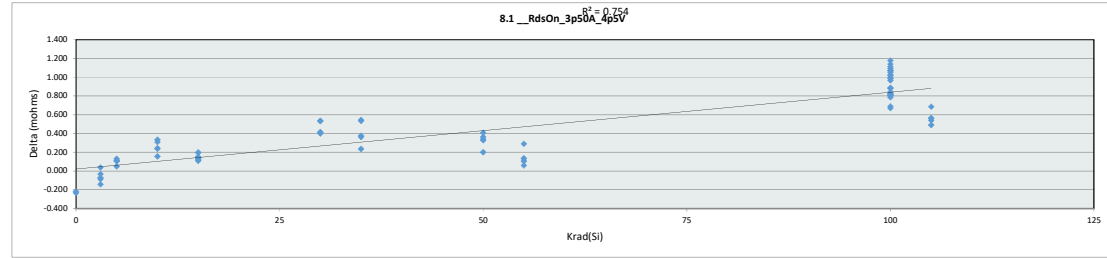


|             |                      |        |        |        |        |        |        |        |        |        |        |
|-------------|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|             | 8.2_RdsOn_3p50A_6p0V |        |        |        |        |        |        |        |        |        |        |
| Test Site   |                      |        |        |        |        |        |        |        |        |        |        |
| Tester      |                      |        |        |        |        |        |        |        |        |        |        |
| Test Number |                      |        |        |        |        |        |        |        |        |        |        |
| Max Limit   | 61                   | mohms  |        |        |        |        |        |        |        |        |        |
| Min Limit   |                      | mohms  |        |        |        |        |        |        |        |        |        |
| Krad(Si)    | 0                    | 3      | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |
| LL          | 54.623               | 54.418 | 55.171 | 54.790 | 55.283 | 54.958 | 54.859 | 54.979 | 54.695 | 55.457 | 55.461 |
| Min         | 54.848               | 54.886 | 55.481 | 55.185 | 55.509 | 55.406 | 55.268 | 55.440 | 55.163 | 56.219 | 56.087 |
| Average     | 55.073               | 55.085 | 55.780 | 55.952 | 55.865 | 56.678 | 56.059 | 55.851 | 55.631 | 57.468 | 56.589 |
| Max         | 61.000               | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 |
| UL          | 61.000               | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 | 61.000 |

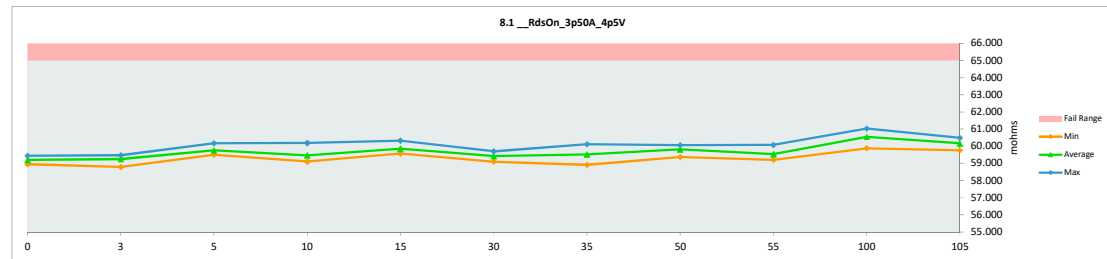


# HDR TID Report TPS7H2211-SP

| 8.1 __RdsOn_3p50A_4p5V |          |        |        |        |
|------------------------|----------|--------|--------|--------|
| Test Site              |          |        |        |        |
| Tester                 |          |        |        |        |
| Test Number            |          |        |        |        |
| Unit                   |          | mohms  | mohms  |        |
| Max Limit              |          | 65     |        |        |
| Min Limit              |          |        |        |        |
| Krad(Si)               | Serial # | PRE    | POST   | Delta  |
| 0                      | 227      | 59.183 | 58.951 | -0.232 |
| 0                      | 229      | 59.662 | 59.445 | -0.217 |
| 3                      | 107      | 59.087 | 59.124 | 0.037  |
| 3                      | 108      | 59.509 | 59.476 | -0.033 |
| 3                      | 109      | 59.545 | 59.403 | -0.142 |
| 3                      | 110      | 59.556 | 59.470 | -0.086 |
| 3                      | 111      | 58.865 | 58.793 | -0.072 |
| 5                      | 112      | 60.123 | 60.174 | 0.051  |
| 5                      | 113      | 59.567 | 59.698 | 0.131  |
| 5                      | 114      | 59.666 | 59.779 | 0.113  |
| 5                      | 115      | 59.548 | 59.653 | 0.105  |
| 5                      | 116      | 59.392 | 59.506 | 0.114  |
| 10                     | 96       | 59.052 | 59.289 | 0.237  |
| 10                     | 97       | 58.983 | 59.292 | 0.309  |
| 10                     | 98       | 59.950 | 60.194 | 0.244  |
| 10                     | 99       | 58.951 | 59.108 | 0.157  |
| 10                     | 100      | 59.116 | 59.450 | 0.334  |
| 15                     | 101      | 60.128 | 60.325 | 0.197  |
| 15                     | 102      | 59.458 | 59.580 | 0.122  |
| 15                     | 104      | 59.564 | 59.701 | 0.137  |
| 15                     | 105      | 59.952 | 60.061 | 0.109  |
| 15                     | 106      | 59.510 | 59.659 | 0.149  |
| 30                     | 83       | 58.563 | 59.099 | 0.536  |
| 30                     | 84       | 59.290 | 59.701 | 0.411  |
| 30                     | 85       | 59.071 | 59.604 | 0.533  |
| 30                     | 86       | 58.996 | 59.396 | 0.400  |
| 30                     | 87       | 58.937 | 59.353 | 0.416  |
| 35                     | 88       | 58.903 | 59.278 | 0.375  |
| 35                     | 92       | 58.677 | 58.913 | 0.236  |
| 35                     | 93       | 59.476 | 60.019 | 0.543  |
| 35                     | 94       | 58.733 | 59.270 | 0.537  |
| 35                     | 95       | 59.754 | 60.119 | 0.365  |
| 50                     | 1        | 59.634 | 59.998 | 0.364  |
| 50                     | 2        | 59.624 | 59.953 | 0.329  |
| 50                     | 3        | 59.658 | 60.066 | 0.408  |
| 50                     | 5        | 59.168 | 59.368 | 0.200  |
| 50                     | 6        | 59.329 | 59.669 | 0.340  |
| 55                     | 7        | 59.105 | 59.210 | 0.105  |
| 55                     | 8        | 59.391 | 59.524 | 0.133  |
| 55                     | 9        | 59.787 | 60.077 | 0.290  |
| 55                     | 10       | 59.322 | 59.457 | 0.135  |
| 55                     | 11       | 59.383 | 59.442 | 0.059  |
| 100                    | 29       | 59.359 | 60.165 | 0.806  |
| 100                    | 30       | 60.212 | 61.032 | 0.820  |
| 100                    | 31       | 59.819 | 60.622 | 0.803  |
| 100                    | 32       | 59.192 | 60.036 | 0.844  |
| 100                    | 34       | 59.337 | 60.163 | 0.826  |
| 100                    | 35       | 60.280 | 60.951 | 0.671  |
| 100                    | 36       | 59.671 | 60.742 | 1.071  |
| 100                    | 38       | 59.510 | 60.526 | 1.016  |
| 100                    | 39       | 59.883 | 60.908 | 1.025  |
| 100                    | 41       | 58.892 | 59.882 | 0.990  |
| 100                    | 42       | 59.737 | 60.704 | 0.967  |
| 100                    | 43       | 59.475 | 60.261 | 0.786  |
| 100                    | 45       | 59.325 | 60.420 | 1.095  |
| 100                    | 46       | 59.455 | 60.526 | 1.071  |
| 100                    | 47       | 59.702 | 60.585 | 0.883  |
| 100                    | 48       | 59.804 | 60.494 | 0.690  |
| 100                    | 49       | 59.680 | 60.567 | 0.887  |
| 100                    | 51       | 59.806 | 60.984 | 1.178  |
| 100                    | 54       | 59.532 | 60.585 | 1.053  |
| 100                    | 56       | 59.876 | 60.864 | 0.988  |
| 100                    | 57       | 59.598 | 60.738 | 1.140  |
| 100                    | 58       | 59.715 | 60.826 | 1.111  |
| 100                    | 59       | 59.385 | 60.200 | 0.815  |
| 105                    | 61       | 59.692 | 60.378 | 0.686  |
| 105                    | 62       | 59.928 | 60.496 | 0.568  |
| 105                    | 64       | 59.223 | 59.762 | 0.539  |
| 105                    | 65       | 59.746 | 60.306 | 0.560  |
| 105                    | 66       | 59.461 | 59.952 | 0.491  |
| Max                    |          | 60.280 | 61.032 | 1.178  |
| Average                |          | 59.464 | 59.933 | 0.469  |
| Min                    |          | 58.563 | 58.793 | -0.232 |
| Std Dev                |          | 0.370  | 0.582  | 0.384  |



|             |                      |        |        |        |        |        |        |        |        |        |        |  |
|-------------|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
|             | 8.1_RdsOn_3p50A_4p5V |        |        |        |        |        |        |        |        |        |        |  |
| Test Site   |                      |        |        |        |        |        |        |        |        |        |        |  |
| Tester      |                      |        |        |        |        |        |        |        |        |        |        |  |
| Test Number |                      |        |        |        |        |        |        |        |        |        |        |  |
| Max Limit   | 65                   | mohms  |        |        |        |        |        |        |        |        |        |  |
| Min Limit   |                      | mohms  |        |        |        |        |        |        |        |        |        |  |
| Krad(Si)    | 0                    | 3      | 5      | 10     | 15     | 30     | 35     | 50     | 55     | 100    | 105    |  |
| UL          | 58.951               | 58.793 | 59.506 | 59.108 | 59.580 | 59.099 | 58.913 | 59.368 | 59.210 | 59.882 | 59.762 |  |
| Min         | 59.198               | 59.253 | 59.762 | 59.467 | 59.865 | 59.431 | 59.520 | 59.811 | 59.542 | 60.556 | 60.179 |  |
| Average     | 59.445               | 59.476 | 60.174 | 60.194 | 60.325 | 59.701 | 60.119 | 60.066 | 60.077 | 61.032 | 60.496 |  |
| Max         | 65.000               | 65.000 | 65.000 | 65.000 | 65.000 | 65.000 | 65.000 | 65.000 | 65.000 | 65.000 | 65.000 |  |
| UL          | 65.000               | 65.000 | 65.000 | 65.000 | 65.000 | 65.000 | 65.000 | 65.000 | 65.000 | 65.000 | 65.000 |  |



## 7 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

| Changes from Revision D (July 2026) to Revision E (August 2026) | Page |
|-----------------------------------------------------------------|------|
|-----------------------------------------------------------------|------|

- |                                                        |                   |
|--------------------------------------------------------|-------------------|
| • Removed all low dose rate data from publication..... | <a href="#">1</a> |
|--------------------------------------------------------|-------------------|

| Changes from Revision C (June 2026) to Revision D (July 2026) | Page |
|---------------------------------------------------------------|------|
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- |                         |                    |
|-------------------------|--------------------|
| • Removed LDR data..... | <a href="#">10</a> |
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| Changes from Revision B (June 2026) to Revision C (June 2026) | Page |
|---------------------------------------------------------------|------|
|---------------------------------------------------------------|------|

- |                                                             |                   |
|-------------------------------------------------------------|-------------------|
| • Changed all instances of SN54AC00-SP to TPS7H2211-SP..... | <a href="#">1</a> |
|-------------------------------------------------------------|-------------------|

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