

# Certificate of Compliance

**Certificate Number:**

UL-US-L181974-14-  
32205102-9

**Report Reference:**

E181974-20150223

**Issue Date:**

2025-06-24

Issued to:

**Texas Instruments Incorporated  
12500 T I BLVD, DALLAS, TX, 75243, US**

This certificate confirms that representative samples of:

**FPPT2 - Nonoptical Isolating Devices - Component**

**See Addendum Page for Product Designation(s).**

Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

**UL 1577, Edition 5, Issue Date 2014-04-25, Revision Date 2023-07-06**

Additional Information:

See UL Product iQ® at <https://iq.ulprospector.com> for additional information.

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Recognized Component Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.



A handwritten signature in black ink that reads 'David Piecuch'.

David Piecuch  
UL Mark Certification Program Owner

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# CERTIFICATE OF COMPLIANCE

Certificate number UL-US-L181974-14-32205102-9  
Report reference E181974-20150223  
Date 2025-06-24

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

## Single protected non-optical isolators providing 3000 Vac isolation

**Model(s):** ISO7721FS\*

**Model(s):** ISO1211S (8D pkg), ISO1212S (16DBQ pkg) *May be followed by any suffix.*

## Single protected non-optical isolators providing 3000 Vac isolation,

**Model(s):** ISO1044\*, ISO1640 (8D pkg)\*, ISO1641 (8D pkg)\*, ISO6720 (8D pkg)\*, ISO6721 (8D pkg)\*, ISO7021\*

## Single protected non-optical isolators providing 5000 Vac isolation

**Model(s):** ISOW1412\*, ISOW7740\*, ISOW7741\*, ISOW7742\*, ISOW7743\*, ISOW7744\*

## Single protected non-optical isolators providing 5000 Vac isolation,

**Model(s):** ISO6720 (8DWV pkg)\*, ISO6721 (8DWV pkg)\*, ISO6731\*, ISO6740\*, ISO6741\*, ISO6742\*

## Single protection non-optical isolators at 3000 Vac isolation voltage

**Model(s):** ISO6721R (8D Pkg), ISOS141 (16DBQ Pkg), ISOUSB111B (16DW Pkg), ISOUSB211B (28DP Pkg) *May be followed by any suffix.*

## Single protection non-optical isolators at 3750 Vac / 5303 Vdc isolation voltage

**Model(s):** TPSI2072-Q1, TPSI2140-Q1 *May be followed by any suffix.*

## Single protection non-optical isolators at 3750 Vac isolation voltage

**Model(s):** ISOM8710, ISOM8711 *May be followed by any suffix.*

## Single protection non-optical isolators at 5000 Vac isolation voltage

**Model(s):** ISO1640 (16DW Pkg), ISO1641 (16DW Pkg), ISO1642 (16DW Pkg), ISO1643 (16DW Pkg), ISO1644 (16DW Pkg), ISO6760 (16DW Pkg), ISO6761 (16DW Pkg), ISO6762 (16DW Pkg), ISO6763 (16DW Pkg), ISOW1044 (20-DFM PKG), ISOW1432 (20-DFM PKG), ISOW7721 *May be followed by any suffix.*

## Single protection non-optical isolators at 5700 Vac isolation voltage

**Model(s):** ISOUSB111 (16DW Pkg), ISOUSB111 (DWX pkg), ISOUSB211 (28DP Pkg) *May be followed by any suffix.*

## Single protection, non-optical isolators at 3000 Vac isolation voltage

**Model(s):** ISO1211\*, ISO1212\*, ISO7041\*, ISO7310\*, ISO7320\*, ISO7321\*, ISO7330\*, ISO7331\*, ISO7340\*, ISO7341\*, ISO7342\*, ISO7741FS\*, ISO7742FS\*, ISO7760 (16DBQ pkg)\*, ISO7762 (16DBQ pkg)\*, ISO7763 (16DBQ pkg)\*, SN003021 (8D pkg)\*

**Model(s):** ISO1228, ISO1500 (16DBQ pkg), ISO6721R (8D pkg), ISO7710 (8D pkg), ISO7720 (8D pkg), ISO7721 (8D pkg), ISO7721FS (8D pkg), ISO7730 (16DBQ pkg), ISO7730 (16DW pkg), ISO7731 (16DBQ pkg), ISO7741 (16DBQ pkg), ISO7741FS (16DBQ pkg), ISO7742 (16DBQ pkg), ISO7742FS (16DBQ pkg), ISO7760 (16DBQ pkg), ISO7761 (16DBQ pkg), ISO7761 (16DBQ pkg)\*, ISO7761 (16DW pkg), ISO7762 (16DBQ pkg), ISO7763 (16DBQ pkg), SN003021 (8D pkg) *May be followed by any suffix.*

## Single protection, non-optical isolators at 3750 Vac isolation voltage

**Model(s):** ISOM8110, ISOM8111, ISOM8112, ISOM8113, ISOM8115, ISOM8116, ISOM8117, ISOM8118, ISOM8610 *May be followed by any suffix.*

## Single protection, non-optical isolators at 5000 Vac isolation voltage

**Model(s):** ISOW7820\*, ISOW7821\*, ISOW7822\*, ISOW7840\*, ISOW7841\*, ISOW7842\*, ISOW7843\*, ISOW7844\*



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# CERTIFICATE OF COMPLIANCE

**Certificate number** UL-US-L181974-14-32205102-9  
**Report reference** E181974-20150223  
**Date** 2025-06-24

**Model(s):** ISO1042 (16DW pkg), ISO1042 (8DWV pkg), ISO1410 (16DW pkg), ISO1412 (16DW pkg), ISO1430 (16DW pkg), ISO1432 (16DW pkg), ISO1450 (16DW pkg), ISO1452 (16DW pkg), ISO6163, ISO7741FT, ISO7741T, ISO7742FT, ISO7742T *May be followed by any suffix.*

## Single protection, non-optical isolators at 5700 Vac isolation voltage

**Model(s):** ISO5451\*, ISO5452\*, ISO5851\*, ISO5852S\*, ISO7710\*, ISO7720\*, ISO7721\*, ISO7761 (16DW pkg)\*, ISO7810\*, ISO7820\*, ISO7820LL\*, ISO7821\*, ISO7821LL\*, ISO7821LLS\*, ISO7830\*, ISO7831\*, ISO7840\*, ISO7841\*, ISO7842\*, SN005721\*, SN1506011\*

**Model(s):** ISO6742 (16DWW pkg), ISO7710 (16DW pkg), ISO7710 (8DWV pkg), ISO7720 (16DW pkg), ISO7720 (8DWV pkg), ISO7721 (16DW pkg), ISO7721 (8DWV pkg), ISO7731 (16DW pkg), ISO7740 (16DBQ pkg), ISO7740 (16DW pkg), ISO7741 (16DW pkg), ISO7741 (16DWW pkg), ISO7741E-Q1 (16DW pkg), ISO7742 (16DW pkg), ISO7760 (16DW pkg), ISO7762 (16DW pkg), ISO7763 (16DW pkg) *May be followed by any suffix.*



# Certificate of Compliance

## Certificate Number:

UL-CA-L181974-24-  
32205102-6

## Report Reference:

E181974-20150223

## Issue Date:

2025-06-24

Issued to:

**Texas Instruments Incorporated  
12500 T I BLVD, DALLAS, TX, 75243, US**

This certificate confirms that representative samples of:

**FPPT8 - Nonoptical Isolating Devices Certified for Canada -  
Component**

**See Addendum Page for Product Designation(s).**

Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

**CSA Component Acceptance Service Notice No. 5A, Issue Date:  
1998-01-23**

Additional Information:

See UL Product iQ® at <https://iq.ulprospector.com> for additional information.

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Recognized Component Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

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Look for the UL Recognized Component Mark on the product.



A handwritten signature in black ink, appearing to read 'David Piecuch'.

David Piecuch  
UL Mark Certification Program Owner

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# CERTIFICATE OF COMPLIANCE

Certificate number UL-CA-L181974-24-32205102-6  
Report reference E181974-20150223  
Date 2025-06-24

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

## Single protected non-optical isolators providing 3000 Vac isolation,

**Model(s):** ISO1044\*, ISO1640 (8D pkg)\*, ISO1641 (8D pkg)\*, ISO6720 (8D pkg)\*, ISO6721 (8D pkg)\*, ISO7021\*

## Single protected non-optical isolators providing 5000 Vac isolation,

**Model(s):** ISO6720 (8DWV pkg)\*, ISO6721 (8DWV pkg)\*, ISO6731\*, ISO6740\*, ISO6741\*, ISO6742\*

## Single protection non-optical isolators at 3750 Vac / 5303 Vdc isolation voltage

**Model(s):** TPSI2072-Q1, TPSI2140-Q1 *May be followed by any suffix.*

## Single protection non-optical isolators at 5000 Vac isolation voltage

**Model(s):** ISO6760 (16DW Pkg) *May be followed by any suffix.*

## Single protection, non-optical isolators at 3000 Vac isolation voltage

**Model(s):** ISO7041\*

**Model(s):** ISO1228, ISO1500 (16DBQ pkg), ISO6721R (8D pkg), ISO7710 (8D pkg), ISO7720 (8D pkg), ISO7721 (8D pkg), ISO7721FS (8D pkg), ISO7730 (16DBQ pkg), ISO7731 (16DBQ pkg), ISO7741 (16DBQ pkg), ISO7741FS (16DBQ pkg), ISO7742 (16DBQ pkg), ISO7742FS (16DBQ pkg), ISO7760 (16DBQ pkg), ISO7761 (16DBQ pkg), ISO7761 (16DBQ pkg)\*, ISO7762 (16DBQ pkg), ISO7763 (16DBQ pkg), SN003021 (8D pkg) *May be followed by any suffix.*

## Single protection, non-optical isolators at 3750 Vac isolation voltage

**Model(s):** ISOM8110, ISOM8111, ISOM8112, ISOM8113, ISOM8115, ISOM8116, ISOM8117, ISOM8118, ISOM8610 *May be followed by any suffix.*

## Single protection, non-optical isolators at 5000 Vac isolation voltage

**Model(s):** ISO1042 (16DW pkg), ISO1042 (8DWV pkg), ISO1410 (16DW pkg), ISO1412 (16DW pkg), ISO1430 (16DW pkg), ISO1432 (16DW pkg), ISO1450 (16DW pkg), ISO1452 (16DW pkg), ISO6163, ISO7741FT, ISO7741T, ISO7742FT, ISO7742T *May be followed by any suffix.*

## Single protection, non-optical isolators at 5700 Vac isolation voltage

**Model(s):** ISO6742 (16DWW pkg), ISO7721 (8DWV pkg), ISO7740 (16DBQ pkg) *May be followed by any suffix.*



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File E181974  
Project 4786649330

Issued: February 23, 2015  
Revised: June 20, 2019

REPORT

On

COMPONENT - Nonoptical Isolating Devices

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Texas Instruments **Incorporated**  
**Dallas, TX**

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## DESCRIPTION

## PRODUCTS COVERED:

\*USR - Single Protection, Non-Optical Isolator, Models ISO1211, ISO1211S (8D pkg), ISO1212, ISO1212S (16DBQ pkg), ISO5451, ISO5452, ISO5851, ISO5852S, ISO7310, ISO7320, ISO7321, ISO7330, ISO7331, ISO7340, ISO7341, ISO7342, ISO7710 (8DWV pkg), ISO7710 (16DW pkg), ISO7720 (8DWV pkg), ISO7720 (16DW pkg), ISO7721, (8DWV pkg), ISO7721 (16DW pkg), ISO7730 (16DW pkg), ISO7731 (16DW pkg), ISO7740 (16DW pkg), ISO7741 (16DW pkg), ISO7741 (16DWW pkg), ISO7741E-Q1 (16DW pkg), ISO7742 (16DW pkg), ISO7760 (16DW pkg), ISO7761 (16DW pkg), ISO7762 (16DW pkg), ISO7763 (16DW pkg), ISO7810, ISO7820, ISO7820LL, ISO7821, ISO7821LL, ISO7821LLS, ISO7830, ISO7831, ISO7840, ISO7841, ISO7842, ISOUSB111 (16DW pkg), ISOUSB111 (DWX pkg), ISOUSB211 (28DP pkg), ISOUSB211B (28DP pkg), ISOW1044 (20-DFM pkg), ISOW1412, ISOW1432 (20-DFM pkg), ISOW7721, ISOW7740, ISOW7741, ISOW7742, ISOW7743, ISOW7744, ISOW7820, ISOW7821, ISOW7822, ISOW7840, ISOW7841, ISOW7842, ISOW7843, ISOW7844, SN005721, SN1506011. May be followed by any suffix.

USR/CNR - Single Protection, Non-Optical Isolator, Models ISO1042 (8DWV pkg), ISO1042 (16DW pkg), ISO1044, ISO1228, ISO1410 (16DW pkg), ISO1412 (16DW pkg), ISO1430 (16DW pkg), ISO1432 (16DW pkg), ISO1450 (16DW pkg), ISO1452 (16DW pkg), ISO1500 (16DBQ pkg), ISO1640 (8D pkg), ISO1640 (16DW Pkg), ISO1641 (8D pkg), ISO1641 (16DW Pkg), ISO1642 (16DW Pkg), ISO1643 (16DW Pkg), ISO1644 (16DW Pkg), ISO6163, ISO6720 (8D pkg), ISO6720 (8DWV pkg), ISO6721 (8D pkg), ISO6721 (8DWV pkg), ISO6721R (8D pkg), ISO6731, ISO6740, ISO6741, ISO6742, ISO6742 (16DWW pkg), ISO6760 (16DW pkg), ISO6761 (16DW pkg), ISO6762 (16DW pkg), ISO6763 (16DW pkg), ISO7021, ISO7041, ISO7710 (8D pkg), ISO7720 (8D pkg), ISO7721 (8D pkg), ISO7721FS (8D pkg), ISO7730 (16DBQ pkg), ISO7731 (16DBQ pkg), ISO7740 (16DBQ pkg), ISO7741 (16DBQ pkg), ISO7741FS (16DBQ pkg), ISO7741FT, ISO7741T, ISO7742 (16DBQ pkg), ISO7742FS (16DBQ pkg), ISO7742FT, ISO7742T, ISO7760 (16DBQ pkg), ISO7761 (16DBQ pkg), ISO7762 (16DBQ pkg), ISO7763 (16DBQ pkg), ISOM8110, ISOM8111, ISOM8112, ISOM8113, ISOM8115, ISOM8116, ISOM8117, ISOM8118, ISOM8610, ISOM8710, ISOM8711, ISOS141 (16DBQ pkg), ISOUSB111B (16DW pkg), SN003021 (8D pkg), TPSI2140-Q1, and TPSI2072-Q1. May be followed by any suffix.

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## MAXIMUM RATINGS PER CHANNEL (at 25°C ambient) (\$):

Model	Current (mA)		Power (mW)		Isolation Voltage at 60 sec Vrms	Max Operating Ambient Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)	Max Data Rate (Mbps)
	Encoder (Side 1)	Decoder (Side 2)	Encoder (Side 1)	Decoder (side 2)					
ISO1042 (8DW pkg)	3.5	73.4	25	360	5000	125	150	150	5
ISO1042 (16DW pkg)	3.5	73.4	25	360	5000	125	150	150	5
ISO1044	2.8	24	15	131	3000	125	150	150	5
ISO1211	2	7	20	430	3000	125	150	150	4
ISO1211S (8D pkg)	2	7	20	430	3000	125	150	150	4
ISO1212	2	7	20	430	3000	125	150	150	4
ISO1212S (16DBQ pkg)	2	7	20	430	3000	125	150	150	4
ISO1228	22.3	5.5	535	30	3000	125	150	150	1.5
ISO1410 (16DW pkg)	5.1	160	28	528	5000	125	150	150	0.5
ISO1412 (16DW pkg)	5.1	160	28	528	5000	125	150	150	0.5
ISO1430 (16DW pkg)	6	122	33	319	5000	125	150	150	12
ISO1432 (16DW pkg)	6	122	33	319	5000	125	150	150	12
ISO1450 (16DW pkg)	8.9	162	49	539	5000	125	150	150	50
ISO1452 (16DW pkg)	8.9	162	49	539	5000	125	150	150	50
ISO1500 (16DBQ pkg)	5.2	80	28	200	3000	125	150	150	1
ISO1640 (8D Pkg)	3.3	3	18	16	3000	125	150	150	3.4
ISO1640 (16DW Pkg)	4.0	4.9	21.5	26.5	5000	125	150	150	3.4
ISO1641 (8D Pkg)	2.8	2.6	15	14	3000	125	150	150	3.4



Model	Current (mA)		Power (mW)		Isolation Voltage at 60 sec Vrms	Max Operating Ambient Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)	Max Data Rate (Mbps)
	Encoder (Side 1)	Decoder (side 2)	Encoder (Side 1)	Decoder (Side 2)					
ISO1641 (16DW Pkg)	3.7	4.3	20	23.5	5000	125	150	150	3.4
ISO1642 (16DW Pkg)	3.8	4.7	20.75	25.5	5000	125	150	150	50
ISO1643 (16DW Pkg)	3.1	5.4	16.75	29.5	5000	125	150	150	50
ISO1644 (16DW Pkg)	3.2	4.5	17.6	24.4	5000	125	150	150	50
ISO5451	32	36	175	1080	5700	125	150	150	2
ISO5452	32	36	175	1080	5700	125	150	150	2
ISO5851	32	36	175	1080	5700	125	150	150	2
ISO5852S	32	36	175	1080	5700	125	150	150	2
<b>ISO6163</b>	<b>7.5</b>	<b>7.5</b>	<b>60</b>	<b>60</b>	<b>5000</b>	<b>125</b>	<b>150</b>	<b>150</b>	<b>50</b>
ISO6720 (8D Pkg)	1.9	4.8	10	26	3000	125	150	150	50
ISO6720 (8DWV Pkg)	1.9	4.8	10	26	5000	125	150	150	50
ISO6721 (8D Pkg)	3.5	3.5	19	19	3000	125	150	150	50
ISO6721 (8DWV Pkg)	3.5	3.5	19	19	5000	125	150	150	50
<b>ISO6721R (8D Pkg)</b>	<b>4.0</b>	<b>4.0</b>	<b>21.5</b>	<b>21.5</b>	<b>3000</b>	<b>125</b>	<b>150</b>	<b>150</b>	<b>50</b>
ISO6731	3.1	5.3	17	29	5000	125	150	150	50
ISO6740	1.7	4.6	9	25	5000	125	150	150	50
ISO6741	2.4	4	13	22	5000	125	150	150	50
ISO6742	3.3	3.3	18	18	5000	125	150	150	50
<b>ISO6742 (16DWW pkg)</b>	<b>12.5</b>	<b>12.5</b>	<b>69</b>	<b>69</b>	<b>5700</b>	<b>125</b>	<b>150</b>	<b>150</b>	<b>50</b>
ISO6760 (16DW Pkg)	1.4	4.5	7.5	24.5	5000	125	150	150	50
ISO6761 (16DW Pkg)	2.0	4.1	10.5	22.4	5000	125	150	150	50
ISO6762 (16DW Pkg)	2.5	3.6	13.5	19.4	5000	125	150	150	50
ISO6763 (16DW Pkg)	3.0	3.0	16.4	16.4	5000	125	150	150	50
ISO7021	0.39	0.39	2.1	2.1	3000	125	150	150	4
ISO7041 (16DBQ pkg)	0.4	0.2	2.7	1.8	3000	125	150	150	2
ISO7310	1.3	4.2	7.2	23.1	3000	125	150	150	25
ISO7320	3	8	16.5	44	3000	125	150	150	25
ISO7321	6.5	6.5	35.8	35.8	3000	125	150	150	25
ISO7330	4	10	22	55	3000	125	150	150	25

Model	Current (mA)		Power (mW)		Isolation Voltage at 60 sec Vrms	Max Operating Ambient Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)	Max Data Rate (Mbps)
	Encoder (Side 1)	Decoder (Side 2)	Encoder (Side 1)	Decoder (Side 2)					
ISO7331	6.5	9	35.8	49.5	3000	125	150	150	25
ISO7340	5	13	27.5	71.5	3000	125	150	150	25
ISO7341	7	11	38.5	60.5	3000	125	150	150	25
ISO7342	5.6	9	30.8	49.5	3000	125	150	150	25
ISO7710 (8D pkg)	3	8	16.5	44	3000	125	150	150	100
ISO7710 (8DWV pkg)	3	8	16.5	44	5700	125	150	150	100
<b>ISO7710 (16DW pkg)</b>	<b>3</b>	<b>8</b>	<b>16.5</b>	<b>44</b>	<b>5700</b>	<b>125</b>	<b>150</b>	<b>150</b>	<b>100</b>
ISO7720 (8D pkg)	1.6	7	10	40	3000	125	150	150	100
ISO7720 (8DWV pkg)	1.6	7	10	40	5700	125	150	150	100
<b>ISO7720 (16DW pkg)</b>	<b>1.6</b>	<b>7</b>	<b>10</b>	<b>40</b>	<b>5700</b>	<b>125</b>	<b>150</b>	<b>150</b>	<b>100</b>
ISO7721 (8D pkg)	4.5	4.5	25	25	3000	125	150	150	100
ISO7721 (8DWV pkg)	4.5	4.5	25	25	5700	125	150	150	100
<b>ISO7721 (16DW pkg)</b>	<b>4.5</b>	<b>4.5</b>	<b>25</b>	<b>25</b>	<b>5700</b>	<b>125</b>	<b>150</b>	<b>150</b>	<b>100</b>
ISO7721FS (8D pkg)	4.5	4.5	25	25	3000	125	150	150	100
ISO7730 (16DBQ pkg)	6	23	33	126.5	3000	125	150	150	100
ISO7730 (16DW pkg)	6	23	33	126.5	5700	125	150	150	100
ISO7731 (16DBQ pkg)	12	17	66	93.5	3000	125	150	150	100
ISO7731 (16DW pkg)	12	17	66	93.5	5700	125	150	150	100
ISO7740 (16DBQ pkg)	7	31	38.5	170.5	3000	125	150	150	100
ISO7740 (16DW pkg)	7	31	38.5	170.5	5700	125	150	150	100
ISO7741 (16DBQ pkg)	13	25	71.5	137.5	3000	125	150	150	100
ISO7741 (16DW pkg)	13	25	71.5	137.5	5700	125	150	150	100
ISO7741 (16DWW pkg)	13	25	71.5	137.5	5700	125	150	150	100
ISO7741E-Q1 (16DW pkg)	13	25	71.5	137.5	5700	150	175	150	100
ISO7741FS (16DBQ pkg)	13	25	71.5	137.5	3000	125	150	150	100
<b>ISO7741FT</b>	<b>16</b>	<b>27</b>	<b>266</b>	<b>135</b>	<b>5000</b>	<b>125</b>	<b>150</b>	<b>150</b>	<b>100</b>
<b>ISO7741T</b>	<b>16</b>	<b>27</b>	<b>266</b>	<b>135</b>	<b>5000</b>	<b>125</b>	<b>150</b>	<b>150</b>	<b>100</b>
ISO7742 (16DBQ pkg)	18	18	99	99	3000	125	150	150	100
ISO7742 (16DW pkg)	18	18	99	99	5700	125	150	150	100
ISO7742FS (16DBQ pkg)	18	18	99	99	3000	125	150	150	100

Model	Current (mA)		Power (mW)		Isolation Voltage at 60 sec Vrms	Max Operating Ambient Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)	Max Data Rate (Mbps)
	Encoder (Side 1)	Decoder (Side 2)	Encoder (Side 1)	Decoder (Side 2)					
ISO7742FT	19	19	288	101	5000	125	150	150	100
ISO7742T	19	19	288	101	5000	125	150	150	100
ISO7760 (16DBQ pkg)	1.5	7.4	8.4	40.4	3000	125	150	150	100
ISO7760 (16DW pkg)	1.5	7.4	8.4	40.4	5700	125	150	150	100
ISO7761 (16DBQ pkg)	2.5	6.4	13.9	34.9	3000	125	150	150	100
ISO7761 (16DW pkg)	2.5	6.4	13.9	34.9	5700	125	150	150	100
ISO7762 (16DBQ pkg)	3.5	5.4	19.4	29.4	3000	125	150	150	100



**MAXIMUM RATINGS PER CHANNEL (at 25°C ambient) (\$) (CONT):**

Model	Current (mA)		Power (mW)		Isolation Voltage at 60 sec Vrms	Max Operating Ambient Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)	Max Data Rate (Mbps)
	Encoder (Side 1)	Decoder (Side 2)	Encoder (Side 1)	Decoder (Side 2)					
ISOW7721	135	135	740	740	5000	125	150	150	100
ISOW7740	135	135	740	740	5000	125	150	150	100
ISOW7741	135	135	740	740	5000	125	150	150	100
ISOW7742	135	135	740	740	5000	125	150	150	100
ISOW7743	135	135	740	740	5000	125	150	150	100
ISOW7744	135	135	740	740	5000	125	150	150	100
ISOW7820	160	60	275	275	5000	125	150	150	100
ISOW7821	160	60	275	275	5000	125	150	150	100
ISOW7822	160	60	275	275	5000	125	150	150	100
ISOW7840	80	30	137.5	137.5	5000	125	150	150	100
ISOW7841	80	30	137.5	137.5	5000	125	150	150	100
ISOW7842	80	30	137.5	137.5	5000	125	150	150	100
ISOW7843	80	30	137.5	137.5	5000	125	150	150	100
ISOW7844	80	30	137.5	137.5	5000	125	150	150	100
SN003021 (8D pkg)	4.5	4.5	25	25	3000	125	150	150	100
SN005721	5.5	5.5	30.3	30.3	5700	125	150	150	100
SN1506011	12	17	66	93.5	5700	125	150	150	100
TPSI2140-Q1	12	--	50	--	3750 Vrms / 5303 Vdc	125	150	150	--
TPSI2072-Q1	12	--	50	--	3750 Vrms / 5303 Vdc	125	150	150	--

(\$) - For ambient temperatures higher than 25°C and up to T<sub>moa</sub>, refer to manufacturer's specifications and/or thermal derating curve data for complete electrical ratings.

**GENERAL:**

These non-optical isolator devices consist of a transmitter coupled to a receiver. The transmitter and receiver are separated by an insulating barrier. Internal chips are connected to lead frames that are molded into the enclosure.

## TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in products where the acceptability of the combination is determined by UL LLC.

USR indicates this product was investigated under the UL Standard for Safety for Optical Isolators, UL 1577, Fifth Edition, revised July 6, 2023.

CNR indicates this product was investigated under the Canadian Certification Notice, CSA Component Acceptance Service No. 5A, dated January 23, 1998.

Conditions of Acceptability - Each device shall be reviewed with respect to the following conditions of acceptability:

1. The capability of the device to control a load has not been investigated.
2. These devices should be installed in a suitable end product enclosure.
3. The maximum junction temperature shall not be exceeded.
4. **For single protection devices, the insulation to the case has not been evaluated. For double protection devices, the insulation to the case has been evaluated to the isolation voltage specified in the ratings table.**
- \*5. **In addition to meeting single protection requirements, double protection optical isolators have also been investigated for use in up to 250 V, 50/60 Hz circuits in audio, video, and similar equipment in applications in which breakdown of the optical isolator may result in a risk of fire, electrical shock, or injury to persons.**

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