431-Q1 Device Nomenclature

TLV431AQDBVRQ1

Part Number

Accuracy Grade

Operating Temperature Range

Q: -40°C to 125°C

Packages

AEC-Q100 Qualification

Reel (R: Large Reel)

431-Q1 Family of Devices

<table>
<thead>
<tr>
<th>Device</th>
<th>V_REF (typ)</th>
<th>V_KA (max)</th>
<th>I_KA (min)</th>
<th>I_KA (max)</th>
<th>I_REF (max)</th>
<th>I_dev (max)</th>
<th>Temp Drift (ppm/°C)</th>
<th>Voltage Options (Vg)</th>
<th>Initial Accuracy Grade (%)</th>
<th>I_Q</th>
<th>Pkg.</th>
<th>Notes</th>
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<tr>
<td>TL431LIA/B-Q1</td>
<td>2.5V</td>
<td>36V</td>
<td>1mA</td>
<td>15mA</td>
<td>0.4µA</td>
<td>0.3µA</td>
<td>66</td>
<td>1.225, 2.5</td>
<td>1</td>
<td>0.5</td>
<td>1mA</td>
<td>SOT23-3</td>
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<td>1mA</td>
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<td>1.225, 2.5</td>
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Design Resources

- Automotive LED Lighting with Adjustable Shunt References
- Using the TL431 as a Voltage Comparator
- Setting the Shunt Voltage on a Shunt Regulator
- Understanding Stability Boundary Conditions for TL431
- Flyback Compensation Network Design for TL431

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