**Model CSM2F-8536 Series Current Sense Resistor / Fully Tinned**

**Features**
- Fully tinned terminals and resistive element
- Up to 50 W permanent power
- High pulse power rating
- Maximum fastening torque: 10 Nm
- AEC-Q200 compliant
- RoHS compliant* / lead free
- Customized versions available

**Applications**
- Battery management systems
- Current sensing for hybrid and electric vehicles
- Current sensing in bus bars
- Current sensing in welding equipment
- Frequency converters

**Environmental Characteristics**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Test Condition</th>
<th>△TR Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Shock</td>
<td>-65 °C to +150 °C / 1000 cycles</td>
<td>±0.5 %</td>
</tr>
<tr>
<td>High Temperature Exposure</td>
<td>+170 °C / 1000 hours</td>
<td>±1.0 %</td>
</tr>
<tr>
<td>Low Temperature Storage</td>
<td>-65 °C/24 hours</td>
<td>±0.5 %</td>
</tr>
<tr>
<td>Biased Humidity Test</td>
<td>+85 °C, 85 % RH, 10 % bias, 1000 hours</td>
<td>±0.5 %</td>
</tr>
<tr>
<td>Mechanical Shock</td>
<td>100 g, 6 milliseconds, 5 pulses</td>
<td>±0.5 %</td>
</tr>
<tr>
<td>Vibration, High Frequency</td>
<td>10-2000 Hz in 1 minute, 3 directions, 12 hours</td>
<td>±0.5 %</td>
</tr>
<tr>
<td>Load Life</td>
<td>+125 °C / 2000 hours at maximum current rating</td>
<td>±1.0 %</td>
</tr>
<tr>
<td>Solderability*</td>
<td>J-STD-002</td>
<td>95 % coverage min.</td>
</tr>
<tr>
<td>ESD</td>
<td>25 KV ± polarity</td>
<td>±0.5 %</td>
</tr>
</tbody>
</table>

* Limited to dipping terminals

**Additional Information**

Click these links for more information:

- PRODUCT
- TECHNICAL LIBRARY
- INVENTORY
- SAMPLES
- CONTACT

**How to Order**

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CSM 2F - 8536 - L050 J T 2
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- **Model**
- **No. of Terminals & Style**
- **Size (Metric)**
- **Resistance Code (Milliohms)**
  - “L” Represents Decimal Point
  - L025 = 25 MicroOhms
  - L050 = 50 MicroOhms
  - L100 = 100 MicroOhms
- **Resistance Tolerance**
  - J = ±5 %
- **Packaging**
  - 0 = Bulk Pack (50 pcs. per bag)
  - T = Tray Pack (15 pcs. per tray)
- **Surface Finishing**
  - 2 = Fully Tinned Terminals and Resistive Element

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- Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

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**WARNING Cancer and Reproductive Harm**

www.P65Warnings.ca.gov
Model CSM2F-8536 Series Current Sense Resistor / Fully Tinned

Product Dimensions

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Dim A</th>
<th>Dim B</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSM2F-8536-L025J02</td>
<td>4.70</td>
<td>7.87</td>
</tr>
<tr>
<td>CSM2F-8536-L050J02</td>
<td>9.40</td>
<td>12.57</td>
</tr>
<tr>
<td>CSM2F-8536-L100J02</td>
<td>20.0</td>
<td>23.18</td>
</tr>
</tbody>
</table>

Note: Fully plated with nickel barrier and 100% Sn.

Power Derating Curve

Reference Pad for SMD Mounting

Packaging Specifications

Bulk Pack........................................50 pcs. per plastic bag
100 pcs. per box
Tray Pack ......................................15 pcs. per high impact polysterene tray
105 pcs. per box
Size........................................300 mm x 246 mm (11.811 in. x 9.685 in.)

General Specifications

Moisture Sensitivity Level..............................................1
ESD Classification......................................................Level 6
per AEC-Q200-002,
≥ 25,000 V air discharge

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