

Features

- Tinned terminals
- Up to 50 W permanent power
- High pulse power rating
- Maximum fastening torque: 10 Nm
- Customized versions available
- AEC-Q200 and RoHS* compliant

Applications

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

Model CSM2F-7036 Series Current Sense Resistor w/Tinned Terminals

Electrical Characteristics

Characteristic	Model CSM2F-7036 Series
Resistance Range / Power Rating @ 70 °C**	25 μΩ / 50 W 50 μΩ / 50 W
Operating Temperature Range	-40 °C to +170 °C
TCR on Test Points	±150 ppm/°C
TCR Resistance Alloy***	< 50 ppm/°C
Thermal EMF (μV/K)	< 0.25 for 50 μΩ
Resistance Tolerance	±5 %

** Terminal temperature
*** For full TCR range, refer to TCR curve.

Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

Environmental Characteristics

Characteristic	Test Condition	ΔTR Max.
Thermal Shock	-55 to +150 °C / 1000 cycles	±1.0 %
Resistance to Soldering Heat	+260 °C / 10 seconds	±0.5 %
High Temperature Exposure	+170 °C / 1000 hours	±1.5 %
Low Temperature Storage	-65 °C/ 24 hours	±0.5 %
Biased Humidity Test	+85 °C, 85 % RH, 10 % bias, 1000 hours	±0.5 %
Mechanical Shock	100 g, 6 milliseconds, 5 pulses	±0.5 %
Vibration, High Frequency	10-2000 Hz in 1 minute, 3 directions, 12 hours	±0.5 %
Load Life	1000 hours at max. load, derated at 70 °C	±1.0 %
Solderability	J-STD-002	95 % coverage min.

How to Order

CSM 2F - 7036 - L050 J 0 1

Model

No. of Terminals & Style

Size (Metric)

Resistance Code (Milliohms)
"L" Represents Decimal Point
L025 = 25 MicroOhms
L050 = 50 MicroOhms

Resistance Tolerance
J = ±5 %

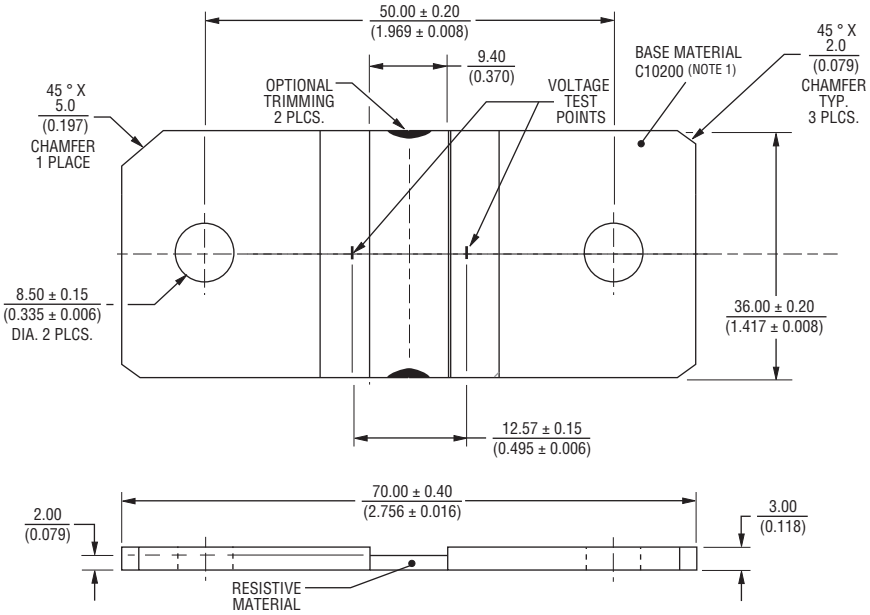
Packaging
0 = Bulk Pack (50 pcs. per bag)
T = Tray Pack (28 pcs. per tray)

Surface Finishing
1 = Tinned Terminals

WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
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Product Dimensions



NOTES:

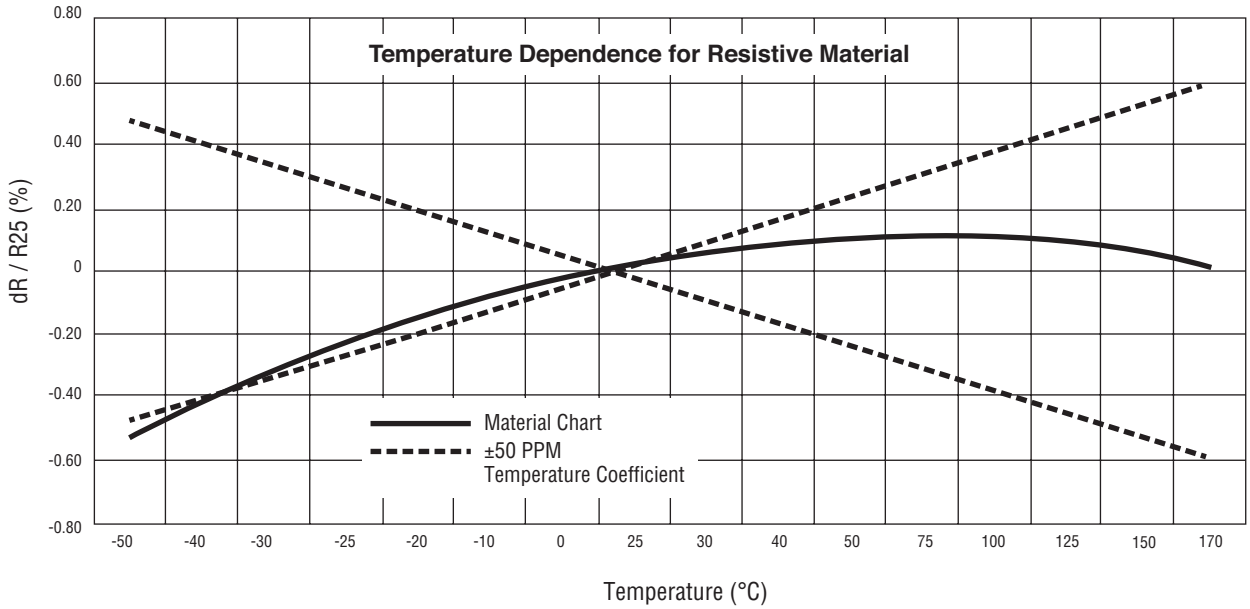
1. Tinned Terminals: 100 % Sn, RoHS Complaint, JESD201 Class-2, ST200 Process, 2.5 -8 micrometers, NI underplate 1.5- 4 micrometers.
2. Base Material Copper: C10200 Temper 1/2 Hard.

DIMENSIONS: MM (INCHES)

TOLERANCES: 0.25 (.010)

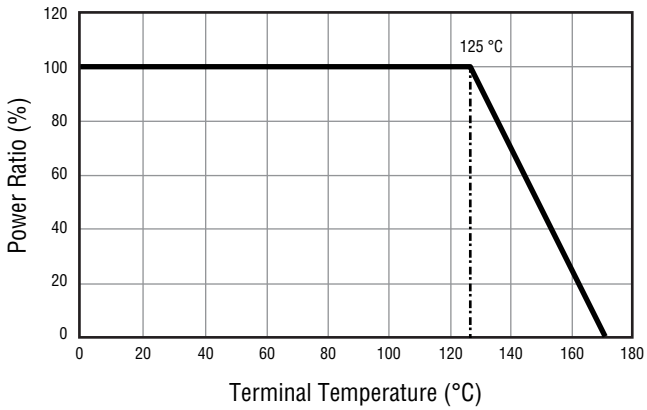
UNLESS OTHERWISE NOTED

TCR Curves

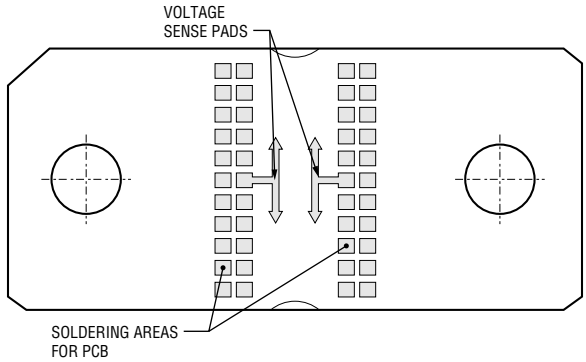


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Power Derating Curve



Reference Pad for SMD Mounting



Packaging Specifications

Bulk Pack.....50 pcs. per plastic bag
100 pcs. per box
Tray Pack .....28 pcs. per high impact polysterene tray
140 pcs. per box
Size..... 235 mm x 225 mm (9.252 in. x 8.858 in.)

General Specifications

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

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