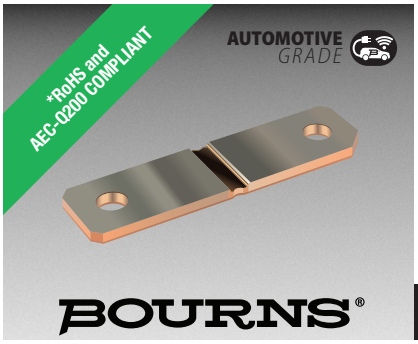


Features

- Tinned terminals
- Up to 36 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-6918 Series Current Sense Resistor w/Tinned Terminals

Electrical Characteristics

Characteristic	Model CSM2F-6918 Series
Resistance Range / Power Rating @ 70 °C**	50 μΩ / 36 W 100 μΩ / 36 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 - 6918 - L050 J 0 1

Model

No. of Terminals & Style

Size (Metric)

Resistance Code (Milliohms)
"L" Represents Decimal Point
L050 = 50 MicroOhms
L100 = 100 MicroOhms

Resistance Tolerance
J = ±5 %

Packaging
0 = Bulk Pack (50 pcs. per bag)
T = Tray Pack (52 pcs. per tray)

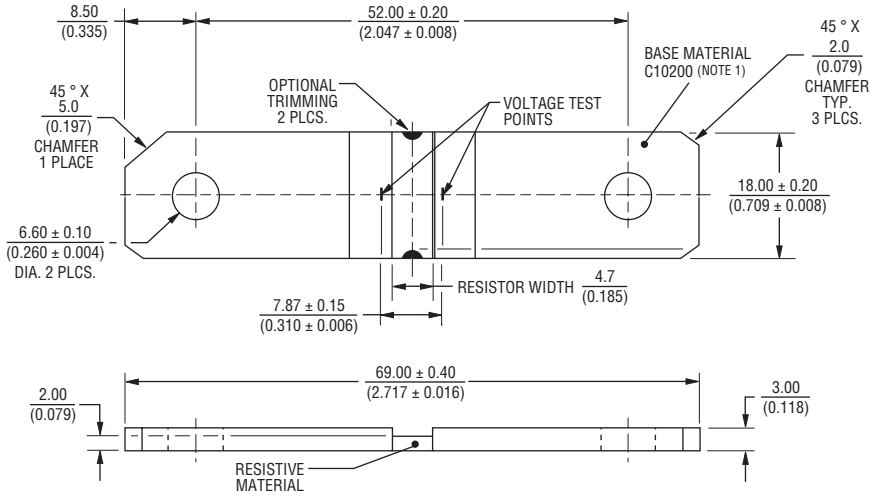
Surface Finishing
1 = Tinned Terminals

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:

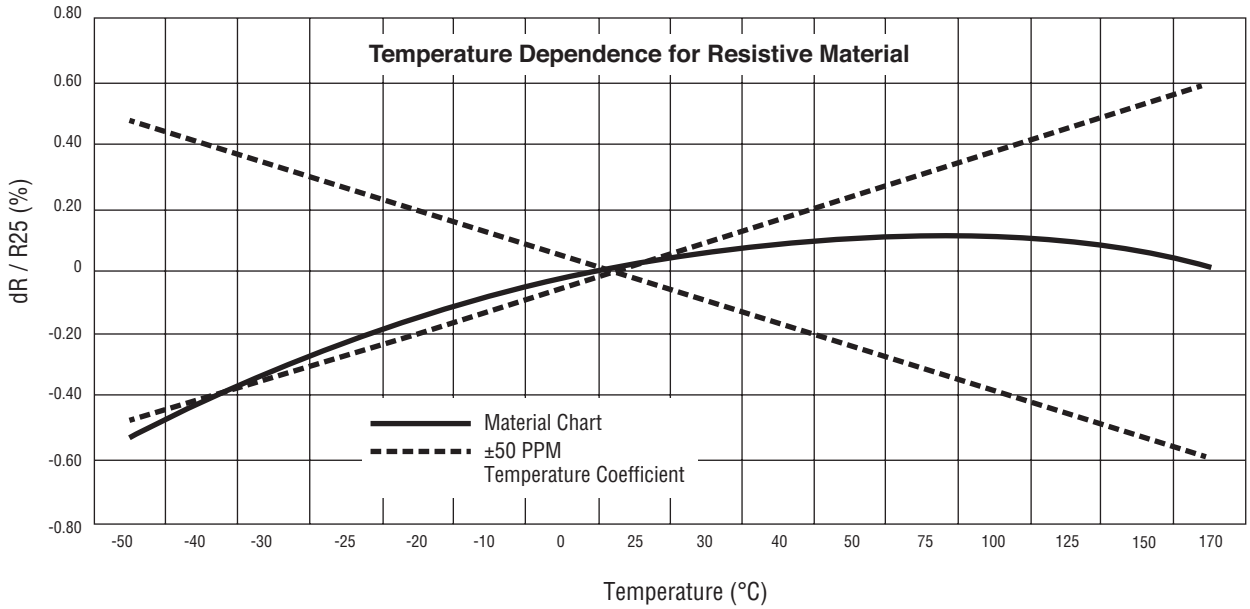
1. Tinned Terminals: 100 % Sn, RoHS Complaint, JESD201 Class-2, ST200 Process, 2.5 -8 micrometers, NI underplate 1.5- 4 micrometers.
2. Base Material Copper: C10200 Temper 1/2 Hard.

DIMENSIONS: MM / (INCHES)

TOLERANCES: 0.25 / (.010)

UNLESS OTHERWISE NOTED

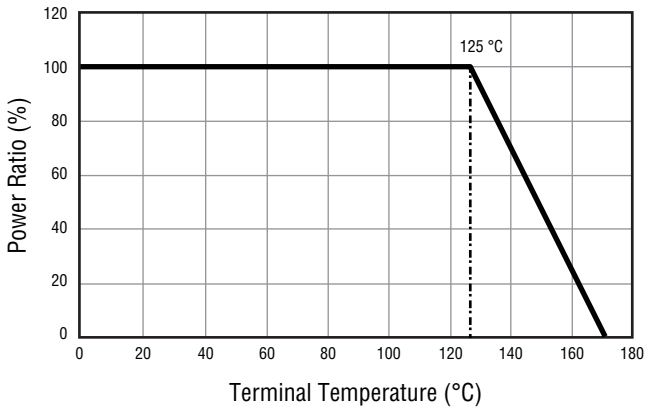
TCR Curves



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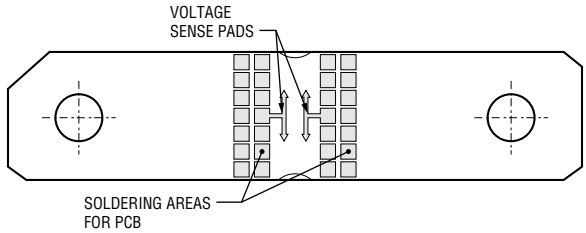
Power Derating Curve



Packaging Specifications

Bulk Pack.....50 pcs. per plastic bag
100 pcs. per box
Tray Pack .....52 pcs. per high impact polysterene tray
260 pcs. per box
Size.....300 mm x 246 mm (11.811 in. x 9.685 in.)

Reference Pad for SMD Mounting



General Specifications

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

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