

Type OS Series

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The OS Series is designed for current sensing using a range of low TCR resistive alloys to create the value and current capability you require.

The ribbon is welded to 1mm diameter solid (OFHC) copper leads that are tin/lead electroplated. The OS is ideally suited to current detection in power supply circuits, electric meter sensing, protection feed back circuits and a wide range of automotive positions.

Key Features

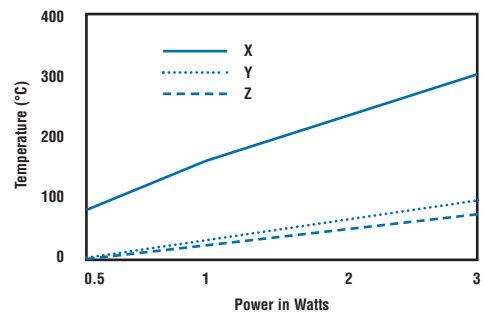
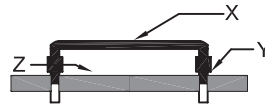
- Small Size Light Weight
- Easy to Mount
- Completely Non Inductive
- Temperature Range -55°C to +155°C
- High Power up to 5 Watts
- High Current up to 14 Amps
- Custom Designs Welcomed

Characteristics - Electrical

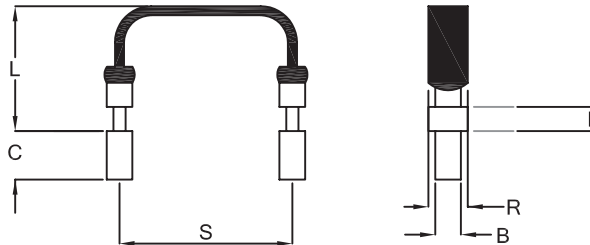
|  |   |
|--|---|
| Resistance Value:                      | R005, R01, R015, R022, R025, R033, R047, R051 (or custom) |
| Resistance Tolerance:                  | 5%, 10% (tighter by discussion)                           |
| Temperature Coefficient of Resistance: | Material 20ppm/°C Effective 100ppm/°C over range          |
| Rated Ambient Temperature:             | +70°C   |
| Operating Temperature Range:           | - 40°C + 200°C  |
| Load Life @ 125°C:                     | 1000 hours $\Delta R < \pm 2\%$ max.                      |
| Temperature Cycling:                   | - 40°C + 125°C 1000 $\Delta R < \pm 2\%$ max.             |
| Moisture No Load:                      | 1000 hours $\Delta R < \pm 1\%$ max.                      |
| Pack Quantity:                         | 500 boxed - loose pack                                    |

Temperature Rise Curve

Typical Temperature Rise Under Load Condition Type OS3



Dimensions



| Type | S     | L        | C ±0.25 | P ±0.1 | R ±0.1 | B ±0.05 |
|------|-------|----------|---------|--------|--------|---------|
| OS-1 | 11.43 | 5.0±2.5  | 3.2     | 1.2    | 2.0    | 1.7     |
| OS-3 | 15.20 | 25.4 Max | 3.2     | 1.2    | 2.0    | 1.7     |
| OS-5 | 20.30 | 25.4 Max | 3.2     | 1.2    | 2.0    | 1.7     |

How to Order

| OS   | 3  | R01                         | 15                                  | J  |
|--|--|-----------------------------|-------------------------------------|--|
| Common Part  | Rated Power  | Resistance Value            | Insertion Pitch                     | Tolerance                                |
| OS - Open Wire Resistor (Radial)<br>LW - Leaded Wire (Axial) Resistor (Custom) | 1 - 1 Watt<br>3 - 3 Watt<br>5 - 5 Watt (Or Custom) | 0.01 Ohm (10 milli Ohm) R01 | 12 - 12mm<br>15 - 15mm<br>20 - 20mm | J ±5%<br>K ±10%<br>Tighter by Discussion |