

# CS10 Series

## Precision Current Sense Resistor



The Ohmite CS10 is a heat-sinkable Kelvin connect resistor. The metal alloy construction produces a resistor with great stability. The CS10 pairs well with the Ohmite VR series heatsinks to achieve higher wattage levels. The CS10 series is ideal for current monitoring and control applications.

### FEATURES

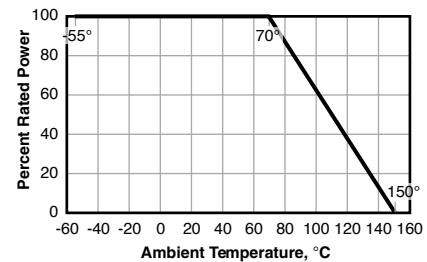
- 10W operating power
- 4 terminal connection
- Low TCR
- Strong pulse load capability
- Aluminum base plate, mounted with M3 screws
- Non-Inductive design
- Heatsinkable design for use with Ohmite VR series heatsinks



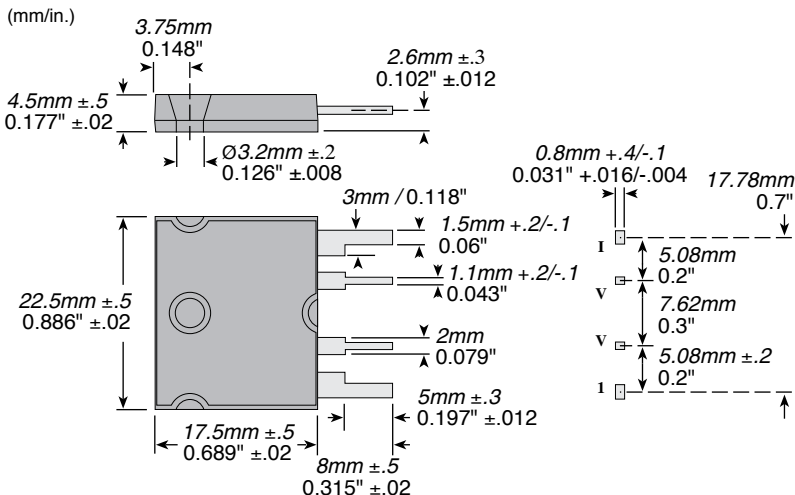
### CHARACTERISTICS

<b>Resistance value</b>	1mΩ ≤ 500mΩ
<b>Resistance tolerance</b>	±0.1% to ±10%
<b>Temperature coefficient</b>	±5ppm/°C to ±100ppm/°C (+25°C to +105°C, ref. to +25°C)
<b>Power rating</b>	10 W at 70°C bottom case temperature
<b>Dielectric strength</b>	500VAC / 10 sec.
<b>Load life</b>	1,000 hours at rated power, 70°C, ΔR ≤ ±(0.20%R + 0.001Ω)
<b>Moisture resistance</b>	MIL-Std.-202, method 106, ΔR ≤ ±(0.20%R + 0.001Ω)
<b>Thermal shock</b>	MIL-Std.-202, method 107, Cond. C, ΔR ≤ ±(0.20%R + 0.001Ω)
<b>Working temperature</b>	-55°C to +150°C
<b>Installation</b>	M3 screw, max. torque 0.9 Nm
<b>Lead material</b>	tinned copper
<b>Weight</b>	~4.8g
<b>Application Standard</b>	GB/T5729-2003 - Part 1: Fixed resistors for use in electric equipment. Equivalent specification: MIL-STD-202

### Derating



### DIMENSIONS



### ORDERING INFORMATION

## CS10DR050E

Series	Tolerance	Ohms	RoHS Compliant
D = 0.5%	R = Decimal	R = Decimal	Non-compliant
F = 1%	Example:	R010 = 0.010	version not recommended for new designs
G = 2%		R005 = 0.005	
J = 5%			

### Standard part numbers

Ohms	Tolerance	Part Number
0.001	1%	CS10FR001E
0.002	1%	CS10FR002E
0.003	1%	CS10FR003E
0.005	1%	CS10FR005E
0.01	0.5%	CS10DR010E
0.02	0.5%	CS10DR020E
0.05	0.5%	CS10DR050E