

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

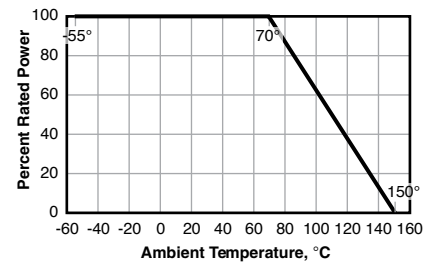
- 10W operating power
- 4 terminal connection
- Low TCR
- Strong pulse load capability
- Aluminum base plate, mounted with M3 screws
- Non-Inductive design
- Heatsinkable design for use with Ohmite VR series heatsinks



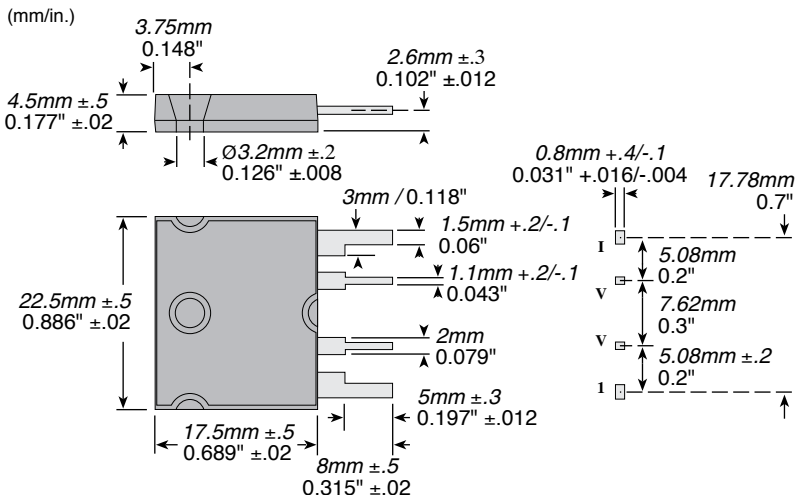
CHARACTERISTICS

Resistance value	1mΩ ≤ 500mΩ
Resistance tolerance	±0.1% to ±10%
Temperature coefficient	±5ppm/°C to ±100ppm/°C (+25°C to +105°C, ref. to +25°C)
Power rating	10 W at 70°C bottom case temperature
Dielectric strength	500VAC / 10 sec.
Load life	1,000 hours at rated power, 70°C, ΔR ≤ ±(0.20%R + 0.001Ω)
Moisture resistance	MIL-Std.-202, method 106, ΔR ≤ ±(0.20%R + 0.001Ω)
Thermal shock	MIL-Std.-202, method 107, Cond. C, ΔR ≤ ±(0.20%R + 0.001Ω)
Working temperature	-55°C to +150°C
Installation	M3 screw, max. torque 0.9 Nm
Lead material	tinned copper
Weight	~4.8g
Application Standard	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	Non-compliant
F	1%	Example:	version not recommended for new designs
G	2%	R010 = 0.010	
J	5%	R005 = 0.005	

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