

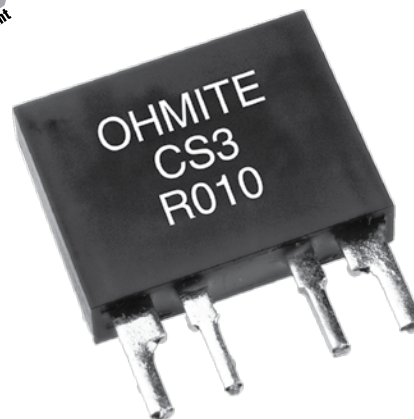
CS3 Series

Wire Element Four Terminal Precision Current Sense

The CS3 Series utilizes state of the art technology to achieve highly reliable non-inductive performance. The CS3 is ideal for current monitoring and control applications.

FEATURES

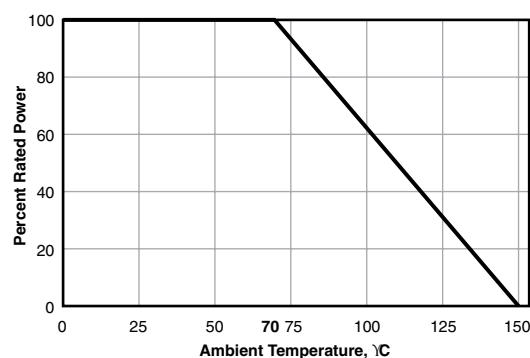
- Values beginning at 1 milliohm
- Non Inductive Design
- Four terminal Kelvin connection



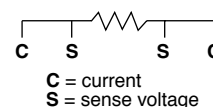
CHARACTERISTICS

Terminal Material	Kelvin Terminals; 97% Sn / 3% Ag solder over copper
Encapsulation	Polyester over resistance element
Standard Resistance Values	1 mΩ - 50 mΩ
Resistance Tolerances	1%, 2%, 5%
Temperature Coefficient	TC referenced to 25°C, ΔR taken at -15°C and +105°C, 60ppm/°C
Power Rating	3W at 70°C max. 40Amp permanent
Operating Temp.	-55°C to 150°C
Storage Temp.	-40°C to 85°C

Derating



Internal Circuit



PERFORMANCE DATA

Load Life	(1,000 hours at rated power at 70°C)	ΔR 0.2% max.
Moisture Resistance	(Mil-Std-202, Method 106, Cond. A)	ΔR 0.2% max.
Thermal Shock	(Mil-Std-202, Method 107)	ΔR 0.2% max.

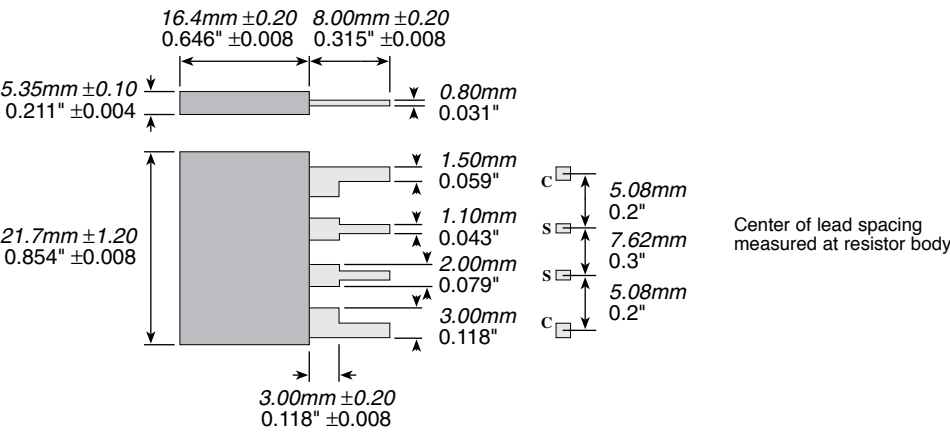
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DIMENSIONS

(mm/in.)



ORDERING INFORMATION

C S 3 J R 0 5 0 E

Style Tolerance Ohms RoHS Compliant

F = 1% R = Decimal Non-compliant
G = 2% Example: version not
J = 5% R010 = 0.010 recommended for
R005 = 0.005 new designs

Standard part numbers for CS3 series

Series Tolerance	CS3F 1%	Series Tolerance	CS3F 1%
Ohms		Ohms	
0.001	CS3FR001E	0.015	CS3FR015E
0.002	CS3FR002E	0.02	CS3FR020E
0.003	CS3FR003E	0.025	CS3FR025E
0.005	CS3FR005E	0.03	CS3FR030E
0.01	CS3FR010E	0.036	CS3FR036E
		0.05	CS3FR050E

Mouser Electronics

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