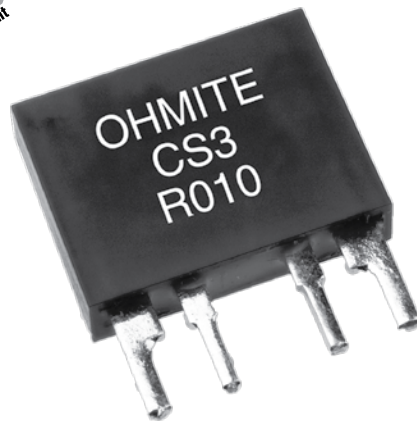


CS3 Series



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.



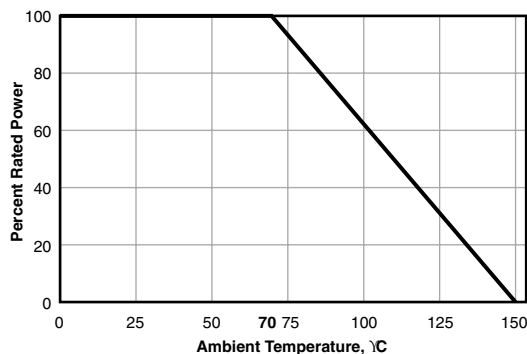
FEATURES

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

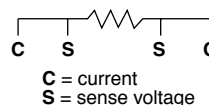
CHARACTERISTICS

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.

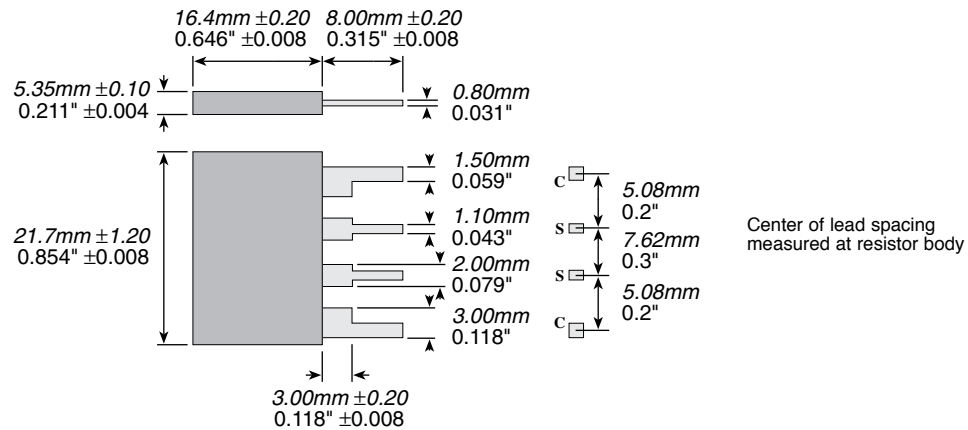
(continued)

CS3 Series

Wire Element Four Terminal Precision Current Sense

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

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Ohmite:](#)

[CS3FR025E](#) [CS3FR020E](#) [CS3FR003E](#) [CS3FR005E](#) [CS3FR001E](#) [CS3FR002E](#) [CS3FR060E](#) [CS3FR050E](#)
[CS3FR015E](#) [CS3FR010E](#) [CS3FR030E](#) [CS3FR036E](#)