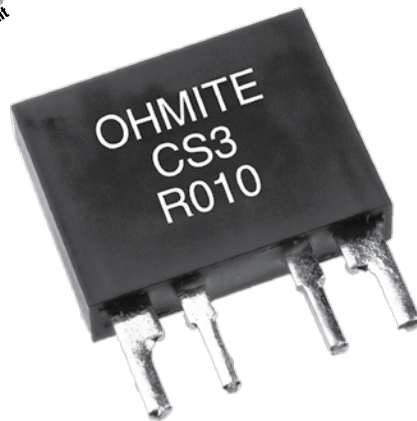


# CS3 Series

## 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.



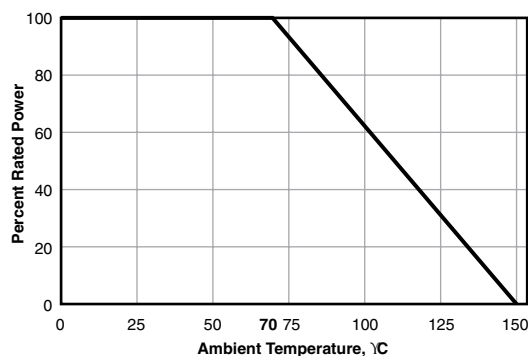
### FEATURES

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

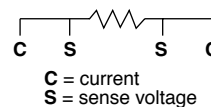
### CHARACTERISTICS

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

### Derating



### Internal Circuit



### PERFORMANCE DATA

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

(continued)

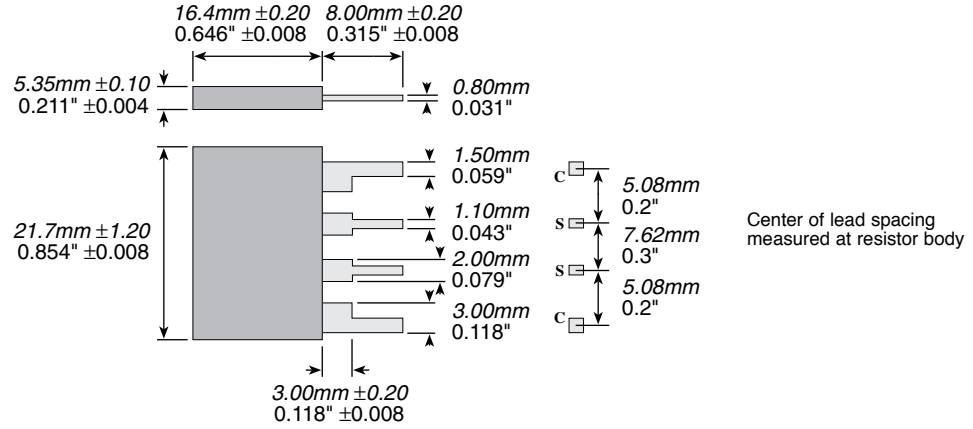
**OHMITE**

# CS3 Series

## Wire Element Four Terminal Precision Current Sense

### DIMENSIONS

(mm/in.)



### ORDERING INFORMATION

<b>C</b>	<b>S</b>	<b>3</b>	<b>J</b>	<b>R</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>E</b>
Style	Tolerance	Ohms	RoHS Compliant					
	F = 1% G = 2% J = 5%	R = Decimal Example: R010 = 0.010 R005 = 0.005	Non-compliant version not recommended for new designs					

#### Standard part numbers for CS3 series

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