

# Type SR Precision Current Sense Resistors

## Non-inductive Design - Compact Footprint Minimizes Circuit Board Space Kelvin Terminals (Four Wire) - Resistance Values 0.008Ω to 1.00Ω

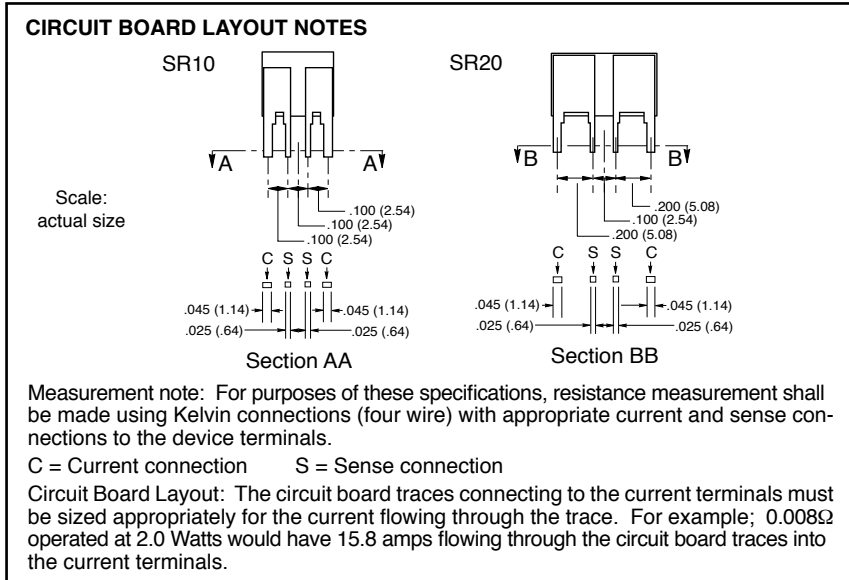
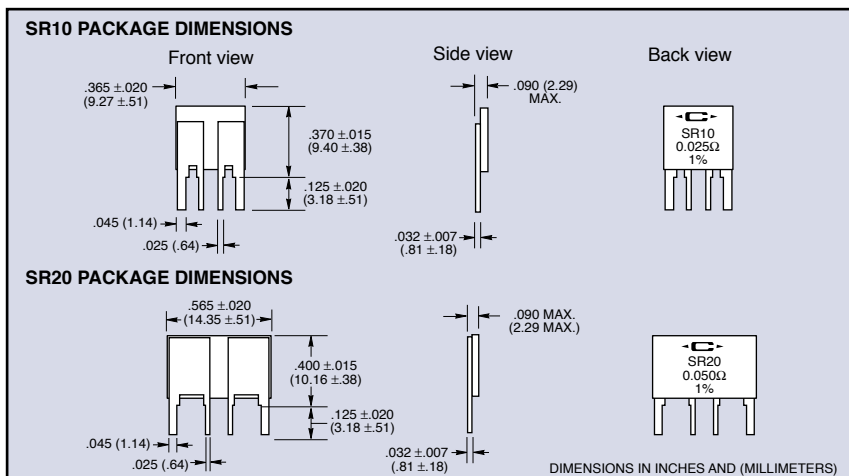
Type SR Current Sense Resistors utilize Caddock's Micronox® resistance films to achieve a low cost resistor with Non-inductive Performance. This compact construction makes this sense resistor ideal for many current monitoring or control applications.

The special performance features of these Type SR Current Sense Resistors include:

- Available in Standard Resistances down to 8 milliohm.
- Non-Inductive Design.
- Terminals are constructed for Kelvin connections to the circuit board.
- Compact footprint.



Model No.	Power Rating at 70°C *	Voltage Rating	Terminal Material
SR10	1.0 Watt	Power Limited	Solderable
SR20	2.0 Watts	Power Limited	Solderable



### Standard Resistance Values:

0.008 Ω	0.030 Ω	0.10 Ω	0.75 Ω
0.010 Ω	0.033 Ω	0.20 Ω	1.00 Ω
0.015 Ω	0.040 Ω	0.25 Ω	
0.020 Ω	0.050 Ω	0.40 Ω	
0.025 Ω	0.075 Ω	0.50 Ω	

Custom resistance values can be manufactured for high quantity applications. Please contact Caddock Applications Engineering.

### Specifications:

**Resistance Tolerance:** ±1.0%

**Temperature Coefficient:** TC referenced to +25°C, ΔR taken at -15°C and +105°C.

0.081 to 1.00 ohm	-50 to +100 ppm/°C
0.025 to 0.080 ohm	0 to +150 ppm/°C
0.008 to 0.024 ohm	0 to +200 ppm/°C

**Load Life:** 1000 hours at rated power at +70°C, ΔR 0.2% max.

**Thermal Shock:** Mil-Std-202, Method 107, Cond. A, ΔR 0.2% max.

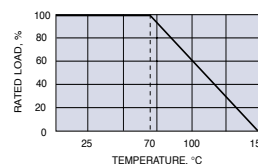
**Moisture Resistance:** Mil-Std-202, Method 106, ΔR 0.2% max.

**Encapsulation:** Polymer over resistance element.

### Power Derating Curve:

#### \* Power rating:

The power rating should be limited as shown by the derating curve based upon the maximum ambient temperature. The derating curve is based on still air with natural convection around the resistor.



### Ordering Information:

Model Number: **SR10 - 0.050 - 1%** Tolerance  
Resistor Value: