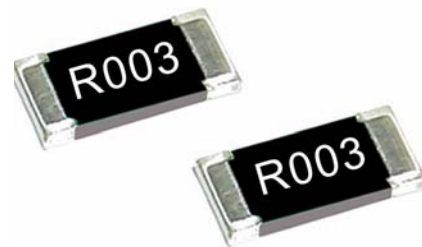


CSRL / CSNL Series — Metal Foil Current Sensing Resistors

Features

- 2512 size
- 2W of power
- Low inductance – typically less than 0.1nH
- Resistances down to 0.0005 (1/2 milliΩ)
- TCR down to ± 50 ppm/°C
- Current handling to 63 amps
- Non-standard resistance values available
- RoHS compliant / lead-free available



Electrical Specifications

Type / Code	Package Type	Power Rating (Watts) @ 70°C	Dielectric Withstanding Voltage	Resistance Temperature Coefficient	Ohmic Range and Tolerance	
					1%	5%
CSRL 2	2512	2W	200V	± 50 ppm/°C	0.001Ω, 0.002Ω	0.001Ω, 0.002Ω
CSNL 2	2512	2W	200V	± 50 ppm/°C	0.001Ω – 0.007Ω	0.001Ω – 0.007Ω

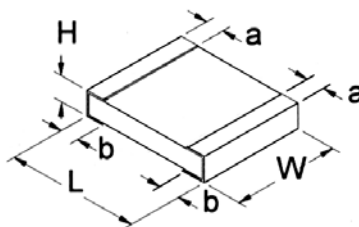
Performance Characteristics

Test	Test Specification	Typical
Moisture Resistance	$\pm 0.5\%$	$\leq 0.5\%$
Load Life	$\pm 0.5\%$	$\leq 0.5\%$
Leach Resistance	90 seconds min	>90 seconds
Resistance to Soldering Heat	$\pm 0.5\%$	$\leq 0.25\%$
Solderability	min 95% coverage	$\geq 95\%$
Temperature Cycling	$\pm 0.5\%$	$\leq 0.5\%$
Thermal Shock	$\pm 0.5\%$	$\leq 0.5\%$
Short Time Overload	$\pm 0.5\%$	$\leq 0.5\%$
Insulation Resistance	1MΩ minimum	$\geq 1M\Omega$

How to Order



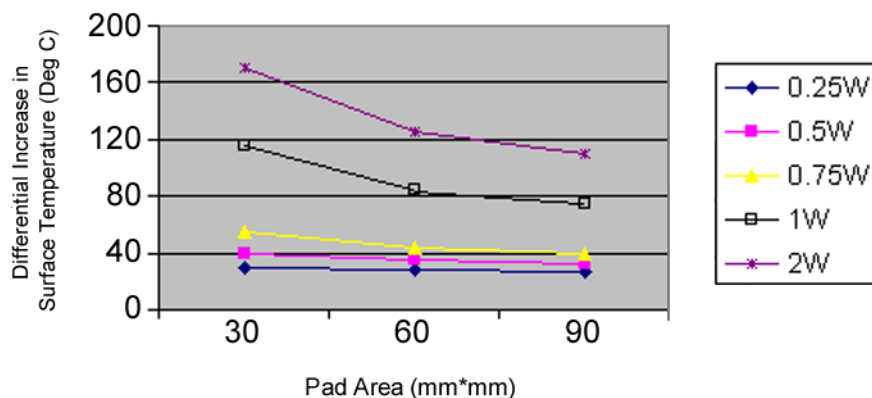
CSRL / CSNL Series — Metal Foil Current Sensing Resistors



Mechanical Specifications

Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Units
CSRL 2 (2mΩ)	6.50 ± 0.33	3.20 ± 0.33	0.70 ± 0.15	1.90 ± 0.15	1.90 ± 0.15	mm
CSRL 2 (1mΩ)	6.50 ± 0.33	3.20 ± 0.33	0.80 ± 0.15	2.50 ± 2.50	2.50 ± 0.15	mm
CSNL 2 (0.5mΩ)	6.35 ± 0.25	3.18 ± 0.25	1.40 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (0.75mΩ)	6.35 ± 0.25	3.18 ± 0.25	1.00 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (1mΩ)	6.35 ± 0.25	3.18 ± 0.25	0.80 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (1.5mΩ)	6.35 ± 0.25	3.18 ± 0.25	0.65 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (2mΩ)	6.35 ± 0.25	3.18 ± 0.25	0.50 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (2.5mΩ)	6.35 ± 0.25	3.18 ± 0.25	1.00 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (3mΩ)	6.35 ± 0.25	3.18 ± 0.25	0.70 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (3.5mΩ)	6.35 ± 0.25	3.18 ± 0.25	0.71 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (4mΩ)	6.35 ± 0.25	3.18 ± 0.25	0.60 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (4.5mΩ)	6.35 ± 0.25	3.18 ± 0.25	0.58 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (5mΩ)	6.35 ± 0.25	3.18 ± 0.25	0.50 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (5.5mΩ)	6.35 ± 0.25	3.18 ± 0.25	0.47 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (6mΩ)	6.35 ± 0.25	3.18 ± 0.25	0.50 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (6.5mΩ)	6.35 ± 0.25	3.18 ± 0.25	0.47 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm
CSNL 2 (7mΩ)	6.35 ± 0.25	3.18 ± 0.25	0.45 ± 0.20	1.30 ± 0.30	1.30 ± 0.30	mm

R001



Solder Pad Dimensions

Type / Code	L Total Length	W Total Width	D Pad Depth	Units
CSRL 2	8.00	4.00	3.35	mm
CSNL 2	8.00	4.00	2.00	mm

