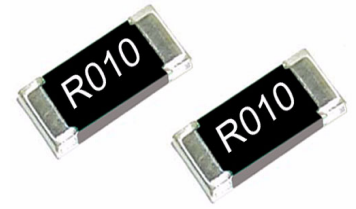


CSRF Series — Foil on Ceramic Current Sensing Chip Resistors

Features

- 2512 size
- Power ratings to 2W
- Low inductance – typically less than 0.2nH
- Resistance range (0.003Ω - 0.50Ω)
- Non-standard resistance values available
- Current handling to 40 amps
- TCR down to ±50 ppm/°C
- RoHS compliant / lead-free available



Electrical Specifications

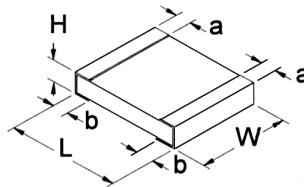
Type / Code	Package Type	Power Rating (Watts) @ 70°C	Dielectric Withstanding Voltage	Resistance Temperature Coefficient	Ohmic Range and Tolerance	
					1%	5%
CSRF 1/2	1206	0.5	200	±50 ppm/°C	0.005Ω – 0.009Ω	0.005Ω – 0.009Ω
CSRF 1	2010	1	200	±50 ppm/°C	0.001Ω – 0.500Ω	0.001Ω – 0.500Ω
CSRF 2	2512	2	200	±50 ppm/°C	0.003Ω – 0.500Ω	0.003Ω – 0.500Ω

Performance Characteristics

Test	Test Specification	Typical
Moisture Resistance	±0.5%	≤0.5%
Load Life	±0.5%	≤0.5%
Leach Resistance	90 seconds min	>90 seconds
Resistance to Soldering Heat	±0.5%	≤0.25%
Solderability	min 95% coverage	≥95%
Temperature Cycling	±0.5%	≤0.5%
Thermal Shock	±0.5%	≤0.5%
Short Time Overload	±0.5%	≤0.5%
Insulation Resistance	1MΩ minimum	≥1MΩ

Mechanical Specifications

Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Units
CSRF 1/2	0.126 ± 0.008	0.063 ± .008	0.032 ± .006	0.020 ± .006	0.020 ± .006	inches
	3.200 ± 0.200	1.600 ± 0.200	0.800 ± 0.150	0.500 ± 0.150	0.500 ± 0.150	mm
CSRF 1	0.197 ± 0.008	0.098 ± .008	0.032 ± .006	0.020 ± .006	0.039 ± .006	inches
	5.000 ± 0.200	2.500 ± 0.200	0.800 ± 0.150	0.500 ± 0.150	1.000 ± 0.150	mm
CSRF 2 (3-50mΩ)	0.256 ± 0.013	0.126 ± .008	0.032 ± .006	0.075 ± .006	0.075 ± .006	inches
	6.500 ± 0.330	3.200 ± 0.200	0.800 ± 0.150	1.900 ± 0.150	1.900 ± 0.150	mm



How to Order

CSRF		2			0.01			1%		R		
SEI Type		Code			Nominal Resistance			Tolerance		Packaging		
Type	Description	Code	Wattage	Size	Tolerance			Code	Description	Pkg Qty		
CSRF	Foil / Ceramic	1/2	0.5	1206	1%			R	7" - Paper	4000		
		1	1.0	2010	5%							
		2	2.0	2512								