

Series CSR

High Energy Resistor, PCB mounting

A Miba Group Company

High energy pulse capability, suitable for electrical transmission, traction, pulse power supply, inductive heating, and other applications.

Features

- 100 % active materials
- Low inductance, suitable for HF applications
- Compact size
- PCB mounting
- Epoxy coating with good humidity resistance
- Materials in accordance with UL 94 V-0



Technical Specifications

Resistance value	see model specifications
Resistance tolerance	±20 % standard (±10 % on special request)
Temperature coefficient	-500 ppm/°C to -1500 ppm/°C
Linear expansion coefficient	~5 ppm/°C to 15 ppm/°C
Long term working temperature	up to 150°C (slight color change is normal, without functional influence)
Max. pulse voltage (kV) (1.2 / 50 µs)	see model specifications
Max. AC working voltage (50 Hz / rms)	see model specifications; t = insertion time (ms)
Thermal time constant	$T (s) = E_{max} (25^{\circ}C) / W_{max} (25^{\circ}C)$, cooling $t \geq 4T$
Contact	4 terminal spring contact for stable PCB mounting, the PCB hole diameter of ~2-3 mm is recommended. Mild solder material with melting point of 230°C or less is suggested
Terminals	gold plated brass material (other terminal options available on request)
Weight	depending on model no. (ask for details)

How to make an order

Model no._Ohmic value_Tolerance

For example:
CSR-29 100R 20%

Applicable Standard

IEC60115-1 : 2001

Model Specifications

Model no.	Rated Power @25°C (W)	Max. Energy @25°C (J)	Resistance values		Dimensions in millimeters			Max. pulse voltage (kV) (1.2 / 50 µs)	Max. AC working voltage (50 Hz / rms)
			Min. Ω	Max. Ω	Lo (max)	Lp	Do (max)		
CSR-27	3.5	1000	2R	500R	18	14.5 ± 0.5	21	$0.79R \times (-1 + \sqrt{1+29/R})$	$1.3 \times (2.0R/t)^{0.3}$
CSR-28	5	1775	2R	700R	29	25.5 ± 0.5	21	$0.79R \times (-1 + \sqrt{1+52/R})$	$2.4 \times (1.1R/t)^{0.3}$
CSR-29	6.5	2950	1R	500R	29	25.5 ± 0.5	26	$1.26R \times (-1 + \sqrt{1+33/R})$	$2.4 \times (1.8R/t)^{0.3}$

Dimensions in mm

