Series CSR

High Energy Resistor, PCB mounting



A Miba Group Company

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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 (down to ±5 % on 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) = Emax (25°C) / Wmax (25°C), cooling $t \ge 4 T$			
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	nickel plated brass material, gold plated on special request (other terminal options available on request)			

Weight

depending on model no. (ask for details)

How to make a request

Model no._Ohmic value_Tolerance

For example: CSR-29 100R 20%

Applicable Standard

GB/T5729-2003 fixed resistor for electrical equipment: general specification

Model Specifications

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

Dimensions in mm



