

# 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

<b>Resistance value</b>	see model specifications
<b>Resistance tolerance</b>	±20 % standard (down to ±5 % on request)
<b>Temperature coefficient</b>	-500 ppm/°C to -1500 ppm/°C
<b>Linear expansion coefficient</b>	~5 ppm/°C to 15 ppm/°C
<b>Long term working temperature</b>	up to 150°C (slight color change is normal, without functional influence)
<b>Max. pulse voltage (kV) (1.2 / 50 µs)</b>	see model specifications
<b>Max. AC working voltage (50 Hz / rms)</b>	see model specifications; t = insertion time (ms)
<b>Thermal time constant</b>	$T (s) = E_{max} (25^\circ C) / W_{max} (25^\circ C)$ , cooling $t \geq 4T$
<b>Contact</b>	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
<b>Terminals</b>	nickel plated brass material, gold plated on special request (other terminal options available on request)
<b>Weight</b>	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 (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 × (-1+√(1+29/R))	1.3 × (2.0R/t) <sup>0.3</sup>
CSR-28	5	1775	2R	700R	29	25.5 ± 0.5	21	0.79R × (-1+√(1+52/R))	2.4 × (1.1R/t) <sup>0.3</sup>
CSR-29	6.5	2950	1R	500R	29	25.5 ± 0.5	26	1.26R × (-1+√(1+33/R))	2.4 × (1.8R/t) <sup>0.3</sup>

## Dimensions in mm

