Eaton current sense resistors



Eaton's low resistance and TCR resistors for current sense applications



Eaton's metal foil and plate resistors and shunts are constructed with high accuracy resistive elements to provide high thermal conductivity, low inductance, and low noise.

Product description

Eaton's metal foil current sense resistors (CSR) are constructed using high accuracy foil on a substrate to provide high thermal conductivity, low inductance, and low noise. These products are offered in 0402 to 2512 EIA footprints with short and wide terminal configurations.

The metal plate CSR resistors are constructed using a metal plate resistors with an epoxy overcoat and end terminations to provide a low-temperature coefficient of resistance (TCR), low resistance, and high power capability. These products are offered in 0402 to 2512 EIA footprints with short and wide terminal configurations.

Eaton's metal shunts are automotive qualified and are available from 2512 to 5931 EIA footprints for high accuracy and reliability. They have power ratings up to 15 W and resistances up to 0.4 milliohm.

Features and benefits

- Ultra-low resistance values in metal film and plate technologies
- High-power and high current capability
- High accuracy and reliability
- Low TCR and high heat dissipation
- Variety of products to meet accuracy, power and cost needs
- Short and wide terminal configurations and multiple constructions in film and plate/ strip
- AEC-Q200 qualified product offerings for automotive and high-reliability applications





Product specifications

Eaton series	Technology	Size range	Min R (mΩ)	Max R (mΩ)	Min power (W)	Max power (W)	Terminal type incl.	Automotive qualified
MFS	Metal Foil	0402 - 2512	2	40	1/4	1.5	Short & wide	\checkmark
MFF	Metal Strip	0612	0.5	5	1	1	4 Terminal	✓
MSM	Metal Strip	0603 - 2512	0	680	1/4	3	Short & wide	✓
MSN	Metal Strip	0612 - 0915	1	30	1	1	Wide	
MST	Metal Strip	0603 - 0805	1	3	1/2	3/4	Short	
MFH	Metal Film	1206 - 2512	100	750	1	1.5	Short	Many
MFL	Metal Film	0402 - 2512	10	910	1/16	3/4	Short	Many
CHS	Shunt	2512 - 5931	0.1	5	3	15	Short	✓

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