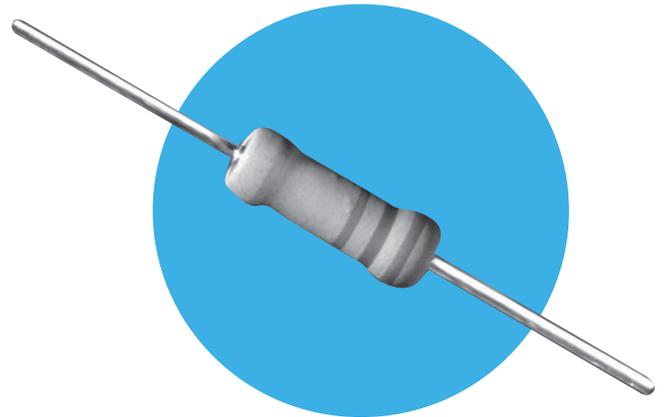


Pulse Withstanding Fusible Flameproof Metal Film Resistors

EMC Series

- UL1412 recognised*
- Failsafe 240V mains fusing
- Good pulse handling capability
- Small size for power rating
- UL94-V0 flameproof protection
- Surface mount ZI-form option



* Values 22R and above. UL file number E234469

All parts are Pb-free and comply with EU Directive 2011/65/EU (RoHS2)

Electrical Data

		EMC2
Power rating at 70°C	Watts	2
Resistance range	Ohms	4R7 – 68R
TCR (25 to 75°C)	ppm/°C	100
Isolation Voltage	Volts	500
Resistance Tolerance	%	10, 20
Standard Values		E12
Thermal Impedance	°C/Watt	82
Ambient temperature range	°C	-55 to +155

Physical Data

Dimensions (mm) & Weight (g)								
Type	L max	D max	f min	d nom	PCB mount centres	Min bend radius	Wt. nom	
EMC2	10	4	27	0.8	18.4	1.2	0.55	

Construction

The metal film is deposited onto a high purity ceramic rod. End caps are force fitted and termination wires are welded to the end caps. Finally, a cement protection is applied to the resistor body prior to marking with indelible ink. The cement protection is applied in a manner that leaves the terminations completely clear. This permits a well-defined body length (clean lead to clean lead dimension L).

Terminations

Material: Solder-coated copper wire

Strength: The terminations meet the requirements of IEC 68.2.21

Solderability: The terminations meet the requirements of IEC 115-1 Clause 4.17.3.2

Solvent Resistance

The body protection and marking are resistant to all normal industrial cleaning solvents suitable for printed circuits.

General Note

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EMC Series

Flammability

The resistor coating is UL94-V0 rated and will not burn or emit incandescent particles under any condition of applied temperature or power overload.

Marking

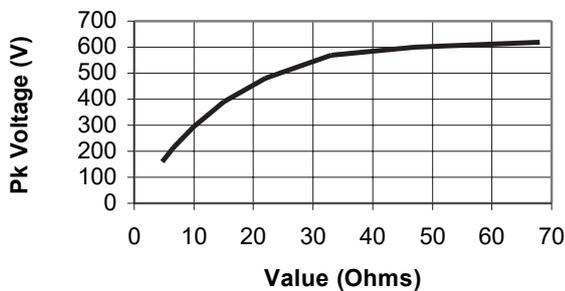
EMC resistors are colour coded with five bands. Four of the bands indicate value and tolerance in accordance with IEC62. Parts with 20% tolerance have no fourth band. A fifth yellow band denotes constant voltage fusibility.

Performance Data

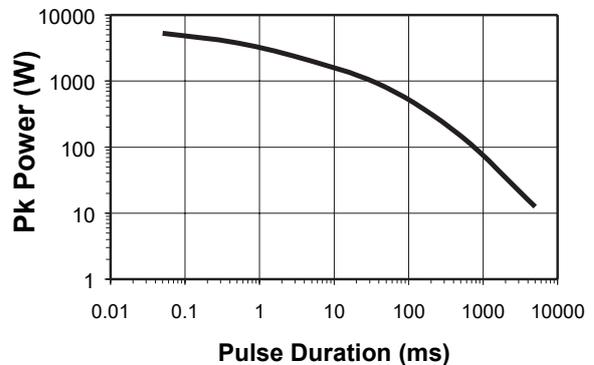
		Maximum
Load at Rated Power: 1000hrs @ 70°C	ΔR%	5
Shelf life: 12 months at room temperature	ΔR%	2
Derating from rated power at 70°C		Zero at 155°C
Climatic	ΔR%	3
Climatic Category		50/155/56
Temperature rapid change	ΔR%	0.5
Resistance to solder heat	ΔR%	0.5

Pulse Performance

IEC61000-4-5 1.2/50μs Pulse



Single Rectangular Pulse



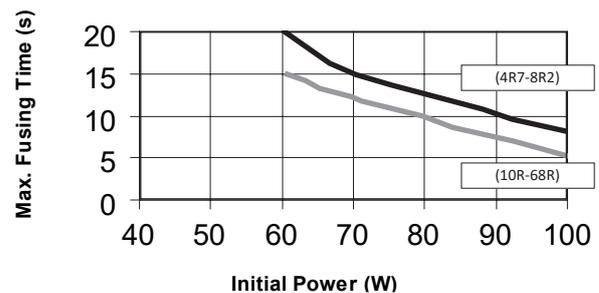
Fusing Performance

EMC resistors fuse open circuit at overload powers exceeding 60W within the time indicated on the Fusing Characteristic. Their fusing performance at lower overload powers is not specified.

EMC resistors fuse safely in the event of a 115Vrms / 240Vrms overload (line / mains short circuit condition) without burning or emitting incandescent particles.

After fusing, the resistance is at least 100 times greater than the original nominal value.

Fusing Characteristic (Constant Voltage)



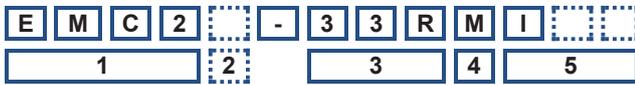
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EMC Series

Ordering Procedure

Example: EMC2-33RMI (EMC2, 33 ohms $\pm 20\%$, Pb-free)



1	2	3	4	5			
Type	Leadforming	Value	Tolerance	Packing			
EMC2	Blank = Axial	3/4 characters	K = $\pm 10\%$	I	EMC2	Ammo	2000/box
	R = Radial taped	R = ohms	M = $\pm 20\%$	T15	EMC2R	Reel	1500/reel

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