

MR/TMR Series — Low Resistance Value - Molded 2 and 4 Leads



Features

- Metal element resistors
- Excellent load life stability
- Inherently non-inductive
- Tinned copper leads - 10 lbs. pull
- Low temperature coefficient
- RoHS compliant / lead-free
- High power to size ratio
- Molded bodies
- Two or four terminal
- TMR - Kelvin Bridge Test
- Cut and formed product is available on select sizes; contact factory for details



Electrical Specifications

Type / Code	Power Rating (Watts) @ 70°C	Short Time Overload	Dielectric Strength	Resistance Temperature Coefficient	Ohmic Range and Tolerance
					1%, 5%
MR 1	1W	5 sec. at 5x Rated Power	500 VAC	±50 to ±400 ppm/°C*	0.01Ω – 0.1Ω
MR 3	3W	5 sec. at 5x Rated Power	500 VAC	±50 to ±400 ppm/°C*	0.005Ω – 0.2Ω
MR 5	5W	5 sec. at 5x Rated Power	500 VAC	±50 to ±400 ppm/°C*	0.005Ω – 0.3Ω
MR 10	10W	5 sec. at 5x Rated Power	500 VAC	±50 to ±400 ppm/°C*	0.01Ω – 0.5Ω
TMR 3	3W	5 sec. at 5x Rated Power	500 VAC	±40 ppm/°C	0.005Ω – 0.2Ω
TMR 5	5W	5 sec. at 5x Rated Power	500 VAC	±40 ppm/°C	0.005Ω – 0.3Ω

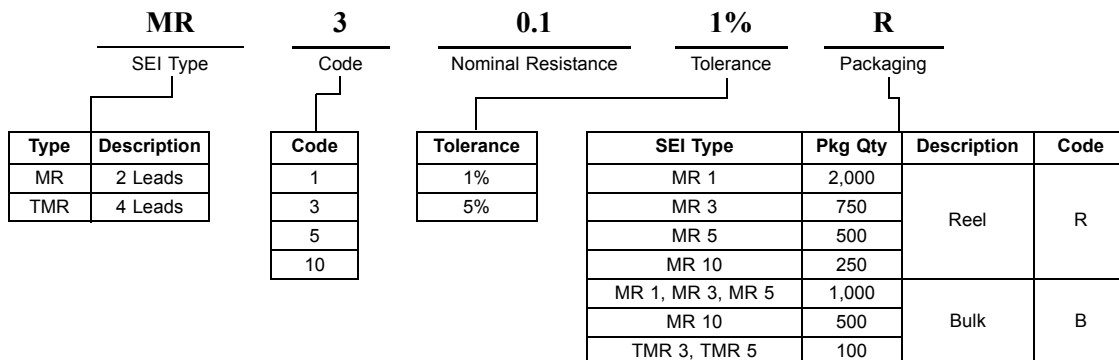
*TCR is value dependent. Please contact factory for specific data.

Performance Characteristics

Test	Test Results
Moisture Resistance	±5%
Thermal Shock	±2%
Load Life @ 70°C – 1,000 hrs.	±5%
Resistance to Soldering Heat	±2%
Short Time Overload	±2%
Dielectric Withstanding Voltage	±2%

Operating Temperature Range : -55°C to +275°C

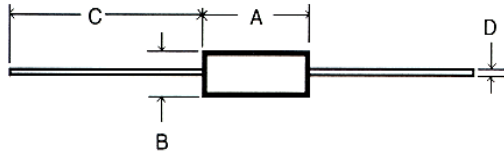
How to Order



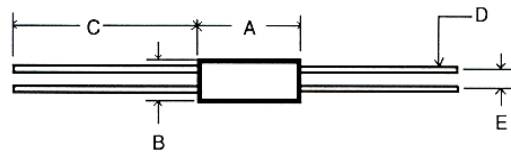
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MR



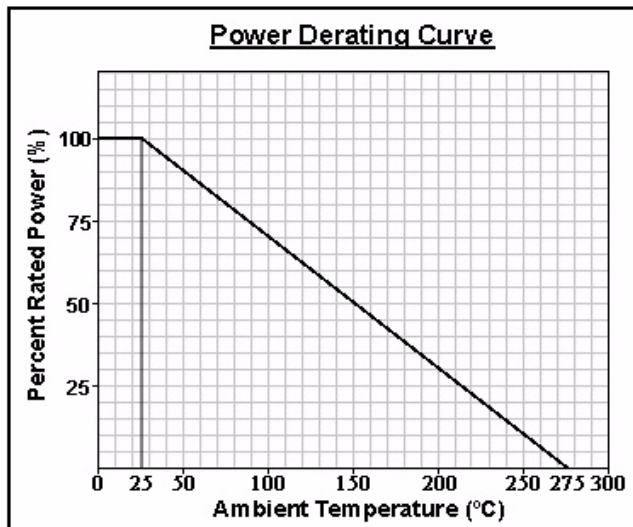
TMR



Mechanical Specifications

Type / Code	A Body Length	B Body Diameter	C Lead Length	D Lead Diameter	E Lead Spacing	Units
Tolerance	±0.015	±0.015	±0.125	±0.002	inches	inches
	±0.40	±0.40	±3.40	±0.05	mm	mm
MR 1	0.385 9.80	0.135 3.40	1.375 34.90	0.032 0.81	—	inches mm
MR 3	0.560 14.20	0.205 5.20	1.375 34.90	0.032 0.81	—	inches mm
MR 5	0.925 23.50	0.330 8.40	1.375 34.90	0.036 0.91	—	inches mm
MR 10	1.925 46.40	0.475 10.00	1.375 34.90	0.036 0.91	—	inches mm
TMR 3	0.625 15.90	0.205 5.20	1.375 34.90	0.032 0.81	0.125 3.20	inches mm
TMR 5	0.940 23.90	0.330 8.40	1.375 34.90	0.036 0.91	0.200 5.10	inches mm

Power Derating Curve



TCR vs Resistance

