

Features:

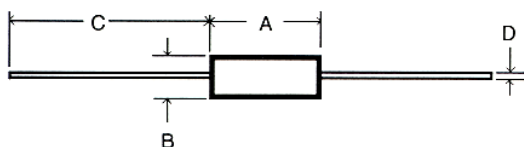
- Metal element resistors
- Excellent load life stability
- Tinned copper leads
- Low temperature coefficient
- RoHS compliant
- Molded bodies
- TMR – Kelvin Bridge Test
- MRS high stability version
- Cut and formed product is available on selected sizes - contact factory for details
- Values of 0.150 ohms and below are non-magnetic and non-inductive



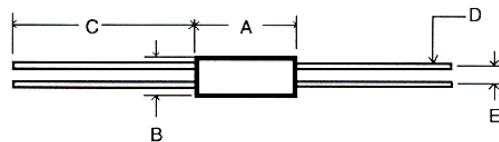
Electrical Specifications

| Type / Code | Power Rating (Watts) @ 70°C | Short Time Overload | Dielectric Strength | Resistance Temperature Coefficient | Ohmic Range (Ω) and Tolerance |
|-------------|-----------------------------------|--------------------------|------------------------|---------------------------------------|----------------------------------|
| | | | | | 1%, 5% |
| MR1 | 1W | 5 sec. at 5x rated power | 500 VAC | ±50 to ±400 ppm/°C (1) | 0.01 - 0.1 |
| MR3 | 3W | 5 sec. at 5x rated power | 500 VAC | ±50 to ±400 ppm/°C (1) | 0.005 - 0.2 |
| MR5 | 5W | 5 sec. at 5x rated power | 500 VAC | ±50 to ±400 ppm/°C (1) | 0.005 - 0.3 |
| MR10 | 10W | 5 sec. at 5x rated power | 500 VAC | ±50 to ±400 ppm/°C (1) | 0.01 - 0.5 |
| TMR3 | 3W | 5 sec. at 5x rated power | 500 VAC | ±40 ppm/°C | 0.005 - 0.2 |
| TMR5 | 5W | 5 sec. at 5x rated power | 500 VAC | ±40 ppm/°C | 0.005 - 0.3 |

(1) TCR is value dependent. Contact factory for specific data.



MR



TMR

Mechanical Specifications

| Type / Code | A Body Length | B Body Diameter | C Lead Length (Bulk)(1) | D Lead Diameter | E Lead Spacing (Ref.) | Unit |
|-------------|------------------|--------------------|----------------------------|--------------------|-----------------------------|--------|
| MR1 | 0.385 ± 0.015 | 0.135 ± 0.015 | 1.375 ± 0.125 | 0.032 ± 0.002 | - | inches |
| | 9.78 ± 0.38 | 3.43 ± 0.38 | 34.93 ± 3.18 | 0.81 ± 0.05 | | mm |
| MR3 | 0.560 ± 0.015 | 0.205 ± 0.015 | 1.375 ± 0.125 | 0.032 ± 0.002 | - | inches |
| | 14.22 ± 0.38 | 5.21 ± 0.38 | 34.93 ± 3.18 | 0.81 ± 0.05 | | mm |
| MR5 | 0.925 ± 0.015 | 0.330 ± 0.015 | 1.375 ± 0.125 | 0.036 ± 0.002 | - | inches |
| | 23.50 ± 0.38 | 8.38 ± 0.38 | 34.93 ± 3.18 | 0.91 ± 0.05 | | mm |
| MR10 | 1.925 ± 0.015 | 0.475 ± 0.015 | 1.375 ± 0.125 | 0.036 ± 0.002 | - | inches |
| | 48.90 ± 0.38 | 12.07 ± 0.38 | 34.93 ± 3.18 | 0.91 ± 0.05 | | mm |
| TMR3 | 0.625 ± 0.015 | 0.205 ± 0.015 | 1.375 ± 0.125 | 0.032 ± 0.002 | 0.125 | inches |
| | 15.88 ± 0.38 | 5.21 ± 0.38 | 34.93 ± 3.18 | 0.81 ± 0.05 | 3.18 | mm |
| TMR5 | 0.940 ± 0.015 | 0.330 ± 0.015 | 1.375 ± 0.125 | 0.036 ± 0.002 | 0.200 | inches |
| | 23.88 ± 0.38 | 8.38 ± 0.38 | 34.93 ± 3.18 | 0.91 ± 0.05 | 5.08 | mm |

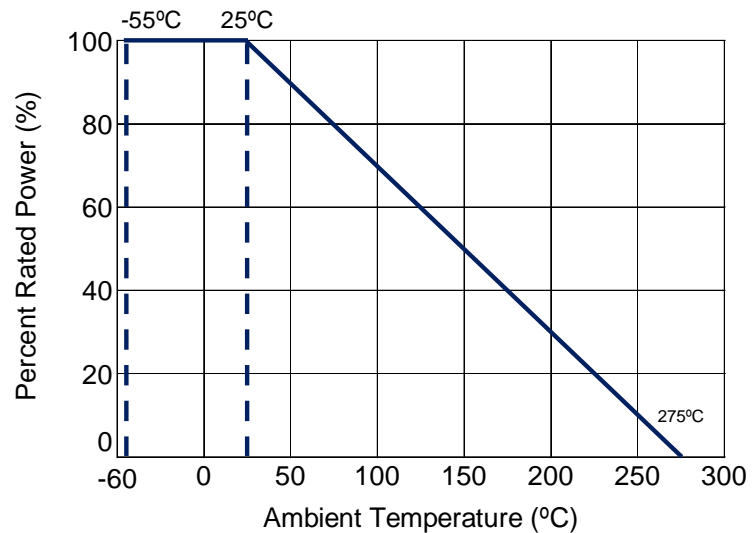
(1) See "Resistor Packaging Specification Document" for lead length dimension for tape and reel packaged product

Performance Characteristics

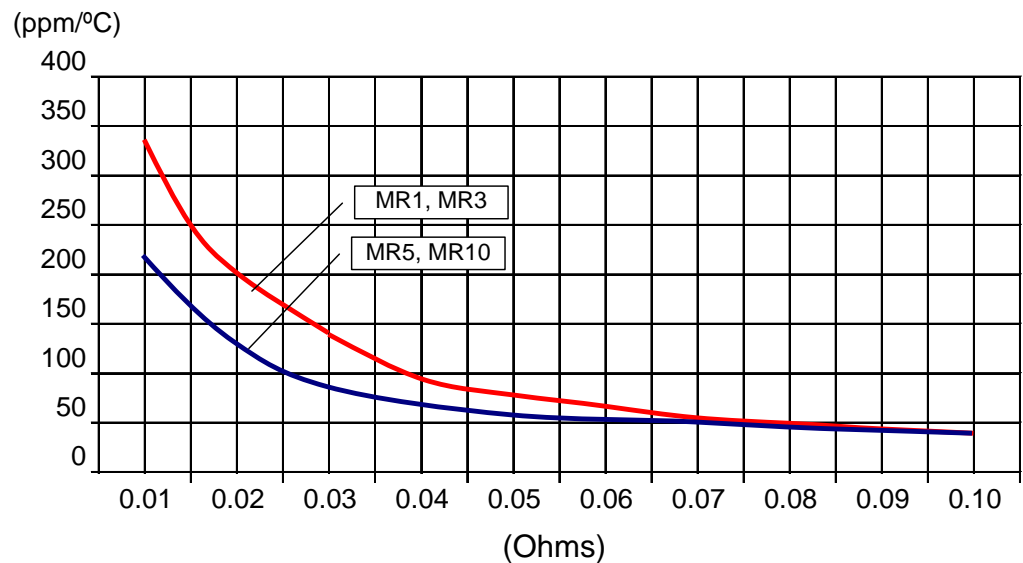
| Test | Test Results |
|---------------------------------|--------------|
| Moisture Resistance | ±5% |
| Thermal Shock | ±2% |
| Load Life @ 70°C - 1,000 hrs. | ±5% |
| Resistance to Soldering Heat | ±2% |
| Short Time Overload | ±2% |
| Dielectric Withstanding Voltage | ±2% |

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

Power Derating Curve:



TCR x Resistance:



MR/MRS/TMR Series

Low Resistance Value Resistor – Molded 2 and 4 Leads

Stackpole Electronics, Inc.

Resistive Product Solutions

How to Order

