

# MR/MRS/TMR Series

Low Resistance Value Resistor – Molded 2 and 4 Leads

Stackpole Electronics, Inc.

Resistive Product Solutions

**Features:**

- Metal element resistors
- Excellent load life stability
- Inherently non-inductive
- 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



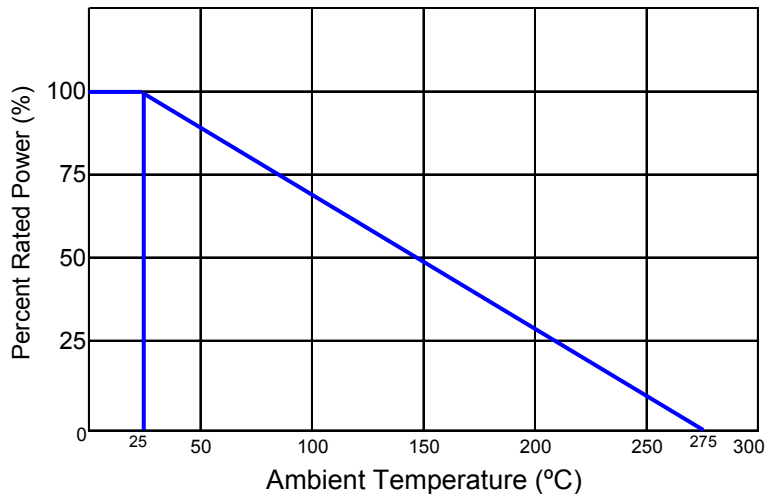
Electrical Specifications					
Type / Code	Power Rating (Watts) @ 70°C	Short Time Overload	Dielectric Strength	Resistance Temperature Coefficient	Ohmic Range (Ω) and Tolerance
					1%, 5%
MR1	1W	5 sec. at 5x rated power	500 VAC	±50 to ±400 ppm/°C (1)	0.01 - 0.1
MR3	3W	5 sec. at 5x rated power	500 VAC	±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.

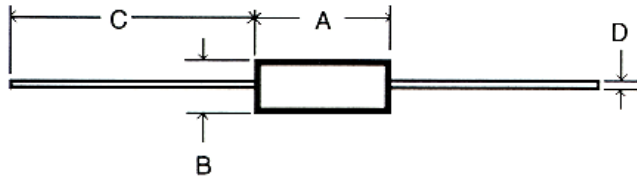
Performance Characteristics	
Test	Test Results
Moisture Resistance	±5%
Thermal Shock	±2%
Load Life @ 70°C - 1,000 hrs.	±5%
Resistance to Soldering Heat	±2%
Short Time Overload	±2%
Dielectric Withstanding Voltage	±2%

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

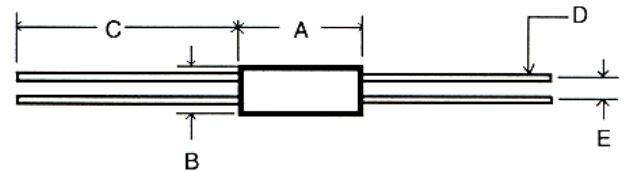
**Power Derating Curve:**



### MR



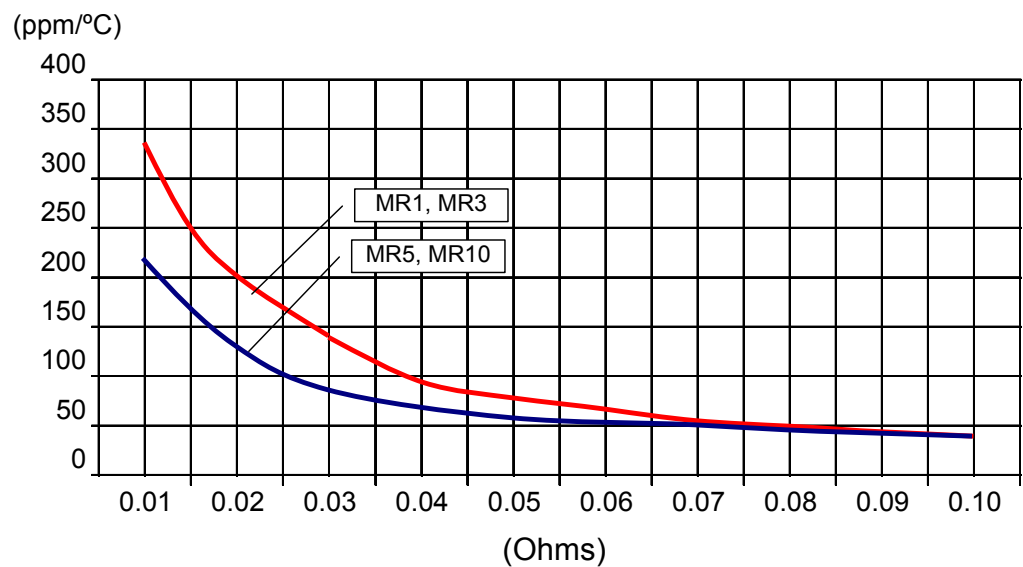
### TMR



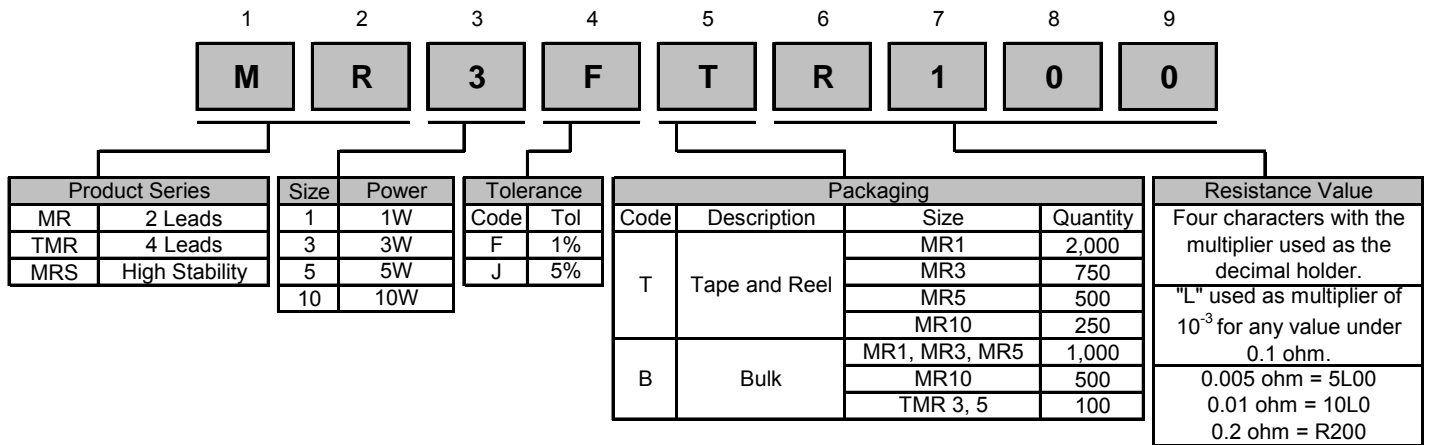
### Mechanical Specifications

Type / Code	A Body Length	B Body Diameter	C Lead Length	D Lead Diameter	E Lead Spacing (Ref.)	Unit
Tolerance	±0.015 ±0.4	±0.015 ±0.4	±0.125 ±3.4	±0.002 ±0.05	-	inches mm
MR1	0.385 9.8	0.135 3.4	1.375 34.9	0.032 0.81	-	inches mm
MR3	0.56 14.2	0.205 5.2	1.375 34.9	0.032 0.81	-	inches mm
MR5	0.925 23.5	0.33 8.4	1.375 34.9	0.036 0.91	-	inches mm
MR10	1.925 46.4	0.475 10	1.375 34.9	0.036 0.91	-	inches mm
TMR3	0.625 15.9	0.205 5.2	1.375 34.9	0.032 0.81	0.125 3.2	inches mm
TMR5	0.94 23.9	0.33 8.4	1.375 34.9	0.036 0.91	0.2 5.1	inches mm

### TCR x Resistance:



## How to Order



Legacy Part Number (before January 3, 2011):

SEI Type		Code	Nominal Resistance	Tolerance	Packaging			
<b>MR</b>		<b>3</b>	<b>0.1</b>	<b>1%</b>	<b>R</b>			
Type	Description	Code		Tolerance	Type	Pkg Qty	Description	Code
MR	2 Leads	1		1%	MR1	2,000	Tape and Reel	R
TMR	4 Leads	3		5%	MR3	750		
MRS	High Stability	5			MR5	500		
		10		MR10	250			
					MR1, MR3, MR5	1,000	Bulk	B
					MR10	500		
					TMR3, TMR5	100		