



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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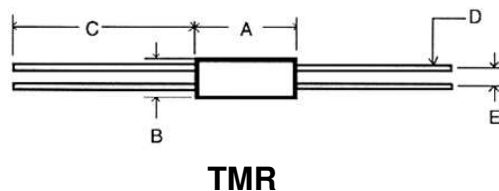
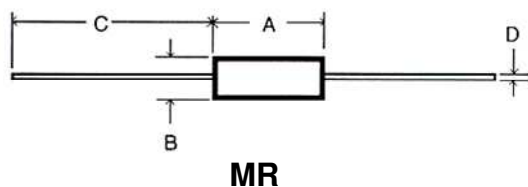
### Features:

- 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.



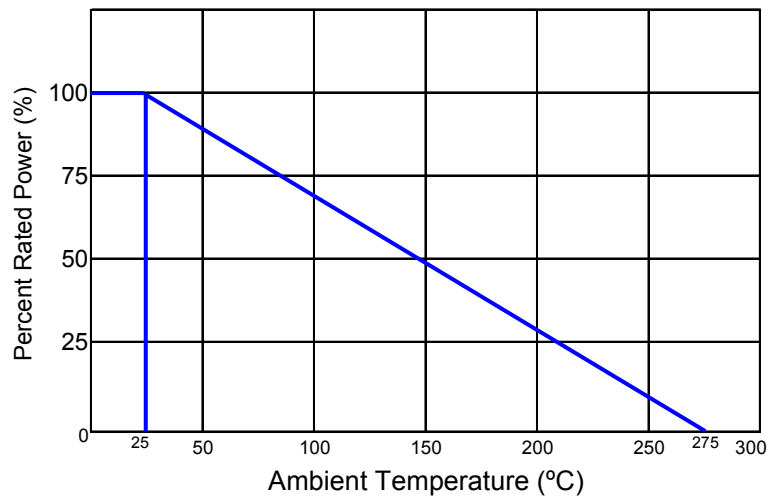
Mechanical Specifications						
Type / Code	A Body Length	B Body Diameter	C Lead Length (Bulk)(1)	D Lead Diameter	E Lead Spacing (Ref.)	Unit
MR1	0.385 ± 0.015	0.135 ± 0.015	1.375 ± 0.125	0.032 ± 0.002	-	inches
	9.78 ± 0.38	3.43 ± 0.38	34.93 ± 3.18	0.81 ± 0.05		mm
MR3	0.560 ± 0.015	0.205 ± 0.015	1.375 ± 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

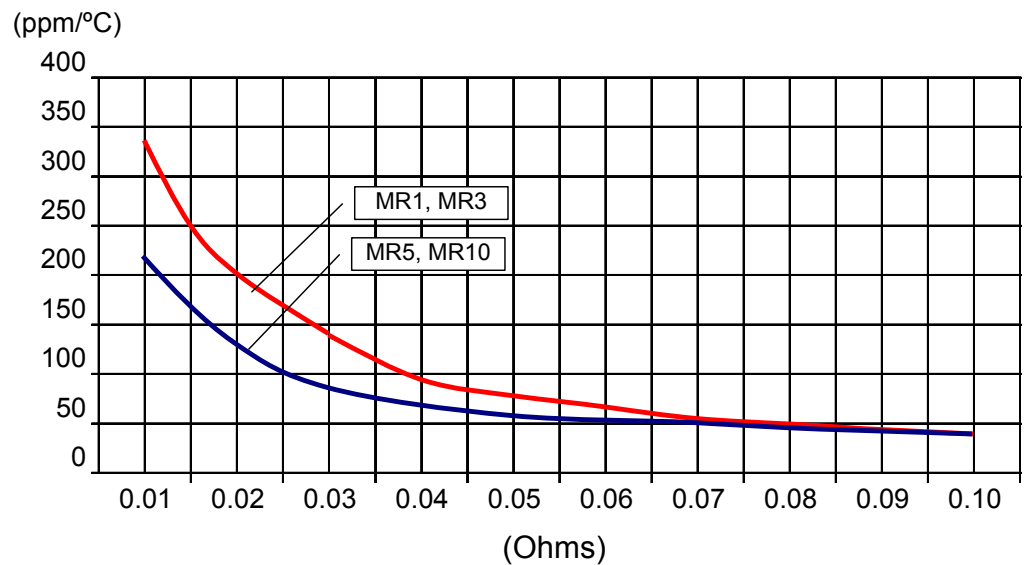
Performance Characteristics	
Test	Test Results
Moisture Resistance	±5%
Thermal Shock	±2%
Load Life @ 70°C - 1,000 hrs.	±5%
Resistance to Soldering Heat	±2%
Short Time Overload	±2%
Dielectric Withstanding Voltage	±2%

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

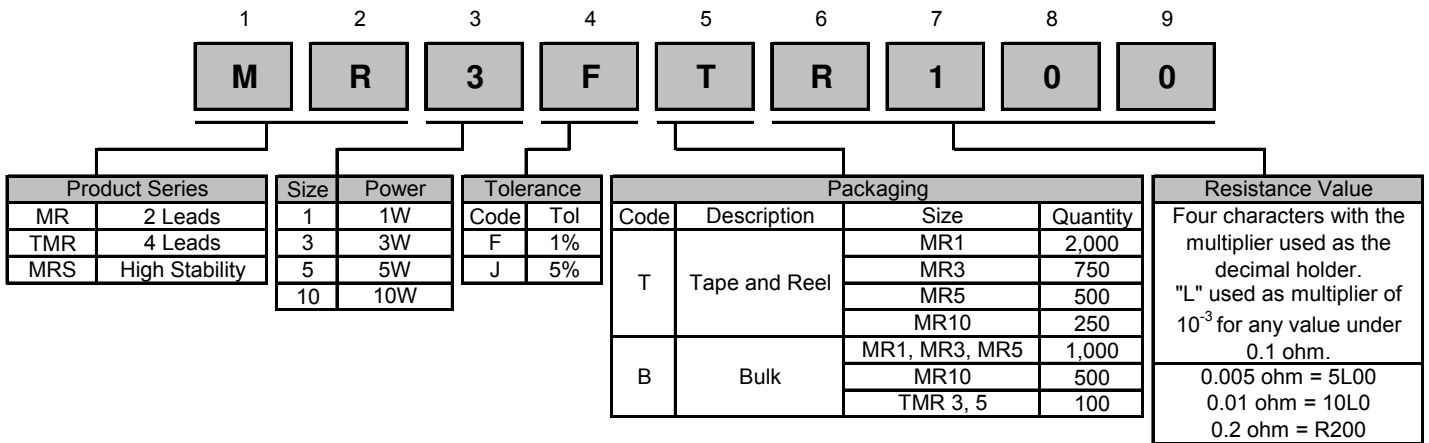
### Power Derating Curve:



### TCR x Resistance:



### 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		