

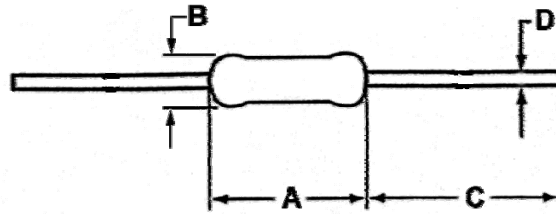
- Features:
- High voltage capability from 1600 to 4000 volts
  - Inexpensive high voltage leaded resistor solution
  - High resistance values up to 200M
  - Tolerances as low as 1%; TCRs as low as 50PPM/°C
  - Flameproof coating (brown) standard; epoxy coating (blue) available



Electrical Specifications						
Type / Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage	Dielectric Withstanding Voltage		Resistance Temperature Coefficient (1)	Ohmic Range (Ω) and Tolerance
			Silicone	Epoxy		1%, 5%, 10%
MG14	0.25W	1600V	400V	500V	±100 ppm/°C	100K - 1G
MG12	0.5W	2000V	500V	700V		
MG1	1W	3000V	500V	1000V		
MG2	2W	3500V	700V	1200V		
MGM12	0.5W	1800V	400V	500V		
MGM1	1W	2500V	500V	700V		
MGM2	2W	3500V	500V	1000V		
MGM3	3W	3500V	700V	1200V		

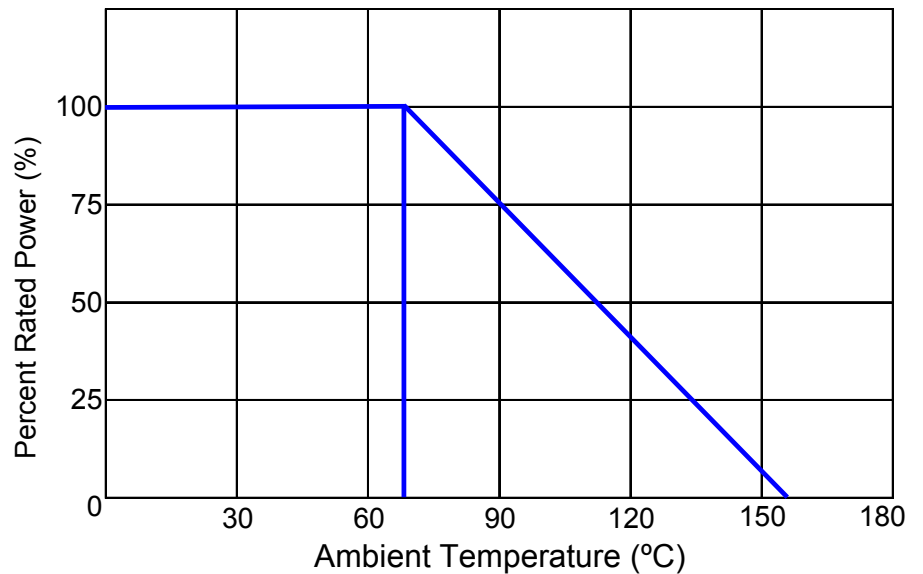
(1) ±50 ppm/°C available for some values and sizes. Contact factory.

Performance Characteristics	
Test	Requirement
Short Time Overload	± (1% + 0.05Ω)
Moisture Resistance	± (5% + 0.05Ω)
Load Life	± (3% + 0.05Ω)
Insulation Resistance	> 10,000 MΩ
Resistance to Soldering Heat	± (1% + 0.05Ω)
Temperature Cycling	± (1% + 0.05Ω)
Terminal Strength	± (1% + 0.05Ω)
Intermittent Overload	± (1% + 0.05Ω)



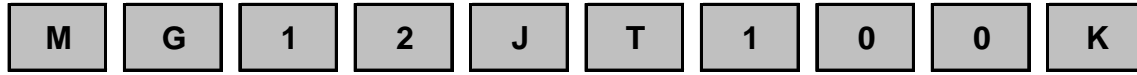
Mechanical Specifications					
Type / Code	A Body Length	B Body Diameter	C Lead Length (Bulk)	D Lead Diameter	Unit
MG14	0.248 ± 0.02	0.091 ± 0.012	1.102 ± 0.079	0.022 ± 0.012	inches
	6.3 ± 0.5	2.3 ± 0.3	28.0 ± 2.0	0.55 ± 0.03	mm
MG12	0.354 ± 0.02	0.126 ± 0.02	1.02 ± 0.079	0.026 ± 0.012	inches
	9.0 ± 0.5	3.2 ± 0.5	26.0 ± 2.0	0.65 ± 0.03	mm
MG1	0.453 ± 0.039	0.157 ± 0.02	1.378 ± 0.079	0.031 ± 0.012	inches
	11.5 ± 1.0	4.0 ± 0.5	35.0 ± 2.0	0.78 ± 0.03	mm
MG2	0.61 ± 0.039	0.197 ± 0.2	1.26 ± 0.079	0.031 ± 0.012	inches
	15.5 ± 1.0	5.0 ± 0.5	32.0 ± 2.0	0.78 ± 0.03	mm
MGM12	0.248 ± 0.02	0.091 ± 0.012	1.102 ± 0.079	0.022 ± 0.012	inches
	6.3 ± 0.5	2.3 ± 0.3	28.0 ± 2.0	0.55 ± 0.03	mm
MGM1	0.354 ± 0.02	0.157 ± 0.02	1.02 ± 0.079	0.026 ± 0.012	inches
	9.0 ± 0.5	4.0 ± 0.5	26.0 ± 2.0	0.65 ± 0.03	mm
MGM2	0.453 ± 0.039	0.177 ± 0.02	1.378 ± 0.079	0.031 ± 0.012	inches
	11.5 ± 1.0	4.5 ± 0.5	35.0 ± 2.0	0.78 ± 0.03	mm
MGM3	0.61 ± 0.039	0.197 ± 0.02	1.260 ± 0.079	0.031 ± 0.012	inches
	15.5 ± 1.0	5.0 ± 0.5	32.0 ± 2.0	0.78 ± 0.03	mm

Power Derating Curve:



**How to Order**

1 2 3 4 5 6 7 8 9 10



Product Series		Size	Power Rating	Tolerance		Packaging			Resistance Value	
				Code	Tol	Code	Description	Size	Quantity	
MG	EIA Standard - Silicone Coating	14	0.25W	F	1%	T	tape and reel	MG14, MGM12	5,000	Four characters with the multiplier used as the decimal holder.  10 Kohm = 10K0 1 Mohm = 1M00 200 Mohm = 200M
MGM	Mini - Silicone coating	1	1W	J	5%			MG12, MGM1	3,000	
MGE	EIA Standard - Epoxy Coating	2	2W	K	10%			MG1, MGM2	2,000	
MGME	Mini - Epoxy Coating	3	3W					MG2, MGM3	1,000	
						A	ammo	MG14, MGM12	5,000	
								MG1, MG12, MG2	1,000	
								MGM1, MGM2, MGM3		
						B	bulk	all sizes	1,000	

Legacy Part Number (before January 3, 2011):

SEI Type		Code	Nominal Resistance	Tolerance		Packaging			
MG		1/2	100K	5%		R			
Type	Description	Code		Tol	Values	Type	Qty	Description	Code
MG	EIA Standard - Silicone	1/4		1%	E24	All	1,000	Bulk	A
MGM	Mini - Silicone coating	1/2		5%	E24	MG1, MG12, MG2, MGM1, MGM2, MGM3	1,000	Ammo	T
MGE	EIA Standard - Epoxy	1		10%	E24	MG14, MGM12	5,000	Reel	R
MGME	Mini - Epoxy Coating	2				MG2, MGM3	1,000		
		3				MG1, MGM2	2,000		
						MG12, MGM1	2,500 3,000		
						MG14, MGM12	5,000		