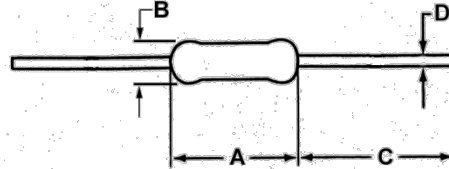


- Features:
- High voltage capability from 1600 to 7000 volts
  - Inexpensive high voltage leaded resistor solution
  - High resistance values up to 1G
  - Tolerances as low as 1%; TCRs as low as 50PPM/°C
  - Flameproof coating (brown) standard; epoxy coating (blue) available



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		
MG14	0.25W	1600V	400V	500V	±100 ppm/°C	1K - 1G
MG12	0.5W	3500V	500V	700V		
MG1	1W	4500V	500V	1000V		
MG2	2W	7000V	700V	1200V		
MGM12	0.5W	1700V	400V	500V		
MGM1	1W	4000V	500V	700V		
MGM2	2W	5000V	500V	1000V		
MGM3	3W	7000V	700V	1200V		

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

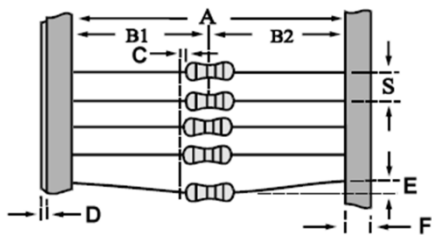
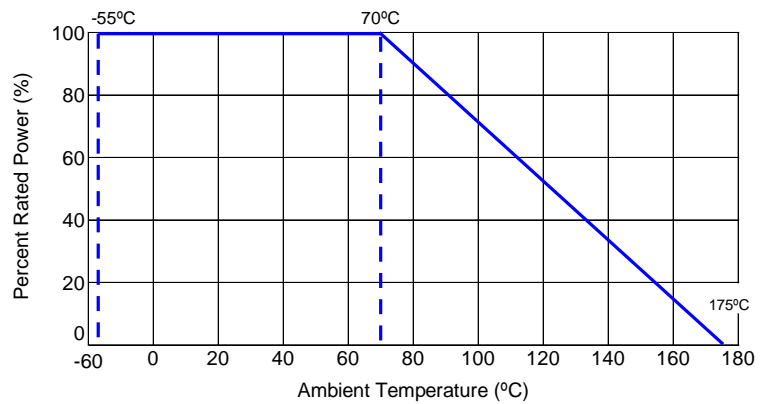


Mechanical Specifications					
Type / Code	A Body Length	B Body Diameter	C Lead Length (Bulk)	D Lead Diameter	Unit
MG14	0.248 ± 0.020	0.091 ± 0.012	1.102 ± 0.079	0.022 ± 0.001	inches
	6.30 ± 0.50	2.30 ± 0.30	28.00 ± 2.00	0.55 ± 0.03	mm
MG12	0.354 ± 0.020	0.126 ± 0.020	1.024 ± 0.079	0.026 ± 0.001	inches
	9.00 ± 0.50	3.20 ± 0.50	26.00 ± 2.00	0.65 ± 0.03	mm
MG1	0.453 ± 0.039	0.157 ± 0.020	0.945 ± 0.079	0.031 ± 0.001	inches
	11.50 ± 1.00	4.00 ± 0.50	24.00 ± 2.00	0.78 ± 0.03	mm
MG2	0.610 ± 0.039	0.197 ± 0.020	1.260 ± 0.079	0.031 ± 0.001	inches
	15.50 ± 1.00	5.00 ± 0.50	32.00 ± 2.00	0.78 ± 0.03	mm
MGM12	0.248 ± 0.020	0.091 ± 0.012	1.102 ± 0.079	0.022 ± 0.001	inches
	6.30 ± 0.50	2.30 ± 0.30	28.00 ± 2.00	0.55 ± 0.03	mm
MGM1	0.354 ± 0.020	0.157 ± 0.020	1.024 ± 0.079	0.026 ± 0.001	inches
	9.00 ± 0.50	4.00 ± 0.50	26.00 ± 2.00	0.65 ± 0.03	mm
MGM2	0.453 ± 0.039	0.177 ± 0.020	1.378 ± 0.079	0.031 ± 0.001	inches
	11.50 ± 1.00	4.50 ± 0.50	35.00 ± 2.00	0.78 ± 0.03	mm
MGM3	0.610 ± 0.039	0.197 ± 0.020	1.260 ± 0.079	0.031 ± 0.001	inches
	15.50 ± 1.00	5.00 ± 0.50	32.00 ± 2.00	0.78 ± 0.03	mm

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)

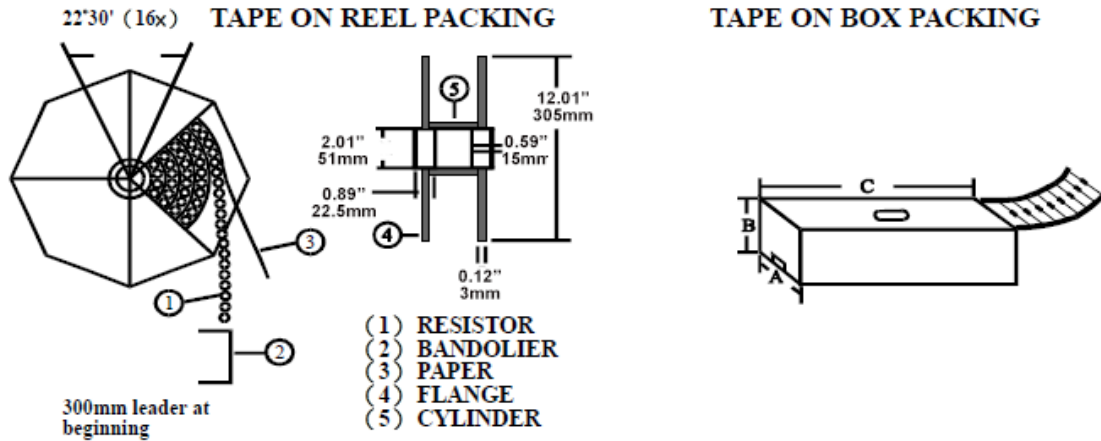
Operating Temperature Range: -55°C to +175°C

**Power Derating Curve:**



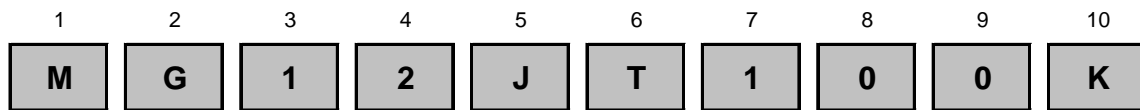
Packaging Specifications								
Type / Code	A	B1/B2	C	D	E	F	S	Unit
MG14	2.047 + 0.039 /-0.00	0.047	0.031 max.	0.020 max.	0.047 max.	0.236 ± 0.020	0.197	inches
	52.00 + 1.00 /-0.00	1.20	0.80 max.	0.50 max.	1.20 max.	6.00 ± 0.50	5.00	mm
MG12	2.047 + 0.039 /-0.00	0.047	0.031 max.	0.020 max.	0.047 max.	0.236 ± 0.020	0.197	inches
	52.00 + 1.00 /-0.00	1.20	0.80 max.	0.50 max.	1.20 max.	6.00 ± 0.50	5.00	mm
MG1	2.874 + 0.039 /-0.00	0.059	0.031 max.	0.020 max.	0.047 max.	0.236 ± 0.020	0.197	inches
	73.00 + 1.00 /-0.00	1.50	0.80 max.	0.50 max.	1.20 max.	6.00 ± 0.50	5.00	mm
MG2	2.874 + 0.039 /-0.00	0.059	0.031 max.	0.020 max.	0.047 max.	0.236 ± 0.020	0.394	inches
	73.00 + 1.00 /-0.00	1.50	0.80 max.	0.50 max.	1.20 max.	6.00 ± 0.50	10.00	mm
MGM12	2.047 + 0.039 /-0.00	0.047	0.031 max.	0.020 max.	0.047 max.	0.236 ± 0.020	0.197	inches
	52.00 + 1.00 /-0.00	1.20	0.80 max.	0.50 max.	1.20 max.	6.00 ± 0.50	5.00	mm
MGM1	2.047 + 0.039 /-0.00	0.047	0.031 max.	0.020 max.	0.047 max.	0.236 ± 0.020	0.197	inches
	52.00 + 1.00 /-0.00	1.20	0.80 max.	0.50 max.	1.20 max.	6.00 ± 0.50	5.00	mm
MGM2	2.874 + 0.039 /-0.00	0.059	0.031 max.	0.020 max.	0.047 max.	0.236 ± 0.020	0.197	inches
	73.00 + 1.00 /-0.00	1.50	0.80 max.	0.50 max.	1.20 max.	6.00 ± 0.50	5.00	mm
MGM3	2.874 + 0.039 /-0.00	0.059	0.031 max.	0.020 max.	0.047 max.	0.236 ± 0.020	0.394	inches
	73.00 + 1.00 /-0.00	1.50	0.80 max.	0.50 max.	1.20 max.	6.00 ± 0.50	10.00	mm

Max. deviation of spacing: 1mm per 10 spacing.



Tape on Reel/Tape on Box Specifications								
Type / Code	Tape on Reel		Tape on Box			Unit	Quantity per Reel	Quantity per Box
	Across Flange (A)		W (A)	H (B)	L (C)			
MG14	2.835		3.150	2.953	10.394	inches	5000	5000
	72.00		80.00	75.00	264.00	mm		
MG12	2.835		3.150	1.811	10.394	inches	3000	1000
	72.00		80.00	46.00	264.00	mm		
MG1	2.835		3.150	2.953	10.394	inches	2000	1000
	72.00		80.00	75.00	264.00	mm		
MG2	3.740		4.055	3.780	10.433	inches	1000	1000
	95.00		103.00	96.00	265.00	mm		
MGM12	2.835		3.150	4.134	10.394	inches	5000	5000
	72.00		80.00	105.00	264.00	mm		
MGM1	2.835		3.150	1.811	10.394	inches	3000	1000
	72.00		80.00	46.00	264.00	mm		
MGM2	3.740		4.055	3.228	10.433	inches	2000	1000
	95.00		103.00	82.00	265.00	mm		
MGM3	3.740		4.055	3.780	10.433	inches	1000	1000
	95.00		103.00	96.00	265.00	mm		

**How to Order**



Product Series		Size	Power Rating	Tolerance			Packaging				Resistance Value
MG	Standard Size	14	0.25W	Code	Tol	Value	T	Tape and Reel	Size	Quantity	Four characters with the multiplier used as the decimal holder. 1 Kohm = 1K00 1 Mohm = 1M00 1 Gohm = 1G00
	Silicone Coating	12	0.5W	F	1%	E24			MG14, MGM12	5,000	
MGM	Mini Size	1	1W	J	5%		A	Ammo	MG1, MGM2	2,000	
	Silicone Coating	2	2W	K	10%	MG2, MGM3			1,000		
MGE	Standard Size	3	3W			B	Bulk	MG14, MGM12	5,000		
MGME	Epoxy Coating							MG1, MG12, MG2	1,000		
	Mini Size							MGM1, MGM2, MGM3	1,000		
	Epoxy Coating							all sizes	1,000		