

# HIGH RESISTANCE METAL (GLAZE) RESISTORS

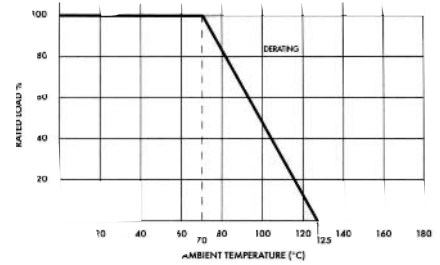


GMR

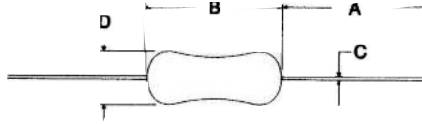
GMR 1/6, 1/4, 1/2, 1, 2

LEADFREE  
RoHS Compliant

## DERATING CURVE



- High Resistance Values
- Tighter Tolerance & T.C. available
- Temperature Coefficient of  $\pm 100\text{ppm}/^\circ\text{C}$
- E96 values for 1%
- E24 values for 5%
- Pulse voltage is under standard waveform of  $1 \times 40\mu\text{s}$
- Tape & Reel packaging per RS-296



PERFORMANCE CHARACTERISTICS (Tested per MIL-R-22684 Rev. C)					
ELECTRICAL	GMR 1/6	GMR 1/4	GMR 1/2	GMR 1	GMR 2
Power Rating (watts)	1/6 @ 70°C	1/4 @ 70°C	1/2 @ 70°C	1 @ 70°C	2 @ 70°C
Derated to 0 Load at	125°C	125°C	125°C	125°C	125°C
Maximum Working Voltage	300V	500V	1000V	2000V	3000V
Operating Temperature Range	-30°C~+125°C	-30°C~+125°C	-30°C~+125°C	-30°C~+125°C	-30°C~+125°C
Resistance Range	100K - 500M	100K - 1000M	100K - 10,000M	100K - 10,000M	100K - 10,000M
Tolerance	$\pm 1\%$ & $\pm 5\%$	$\pm 1\%$ & $\pm 5\%$	$\pm 1\%$ & $\pm 5\%$	$\pm 1\%$ & $\pm 5\%$	$\pm 1\%$ & $\pm 5\%$
Maximum Pulse Voltage	1000V	1250V	2500V	5000V	7500V
Insulation Resistance, Dry	10,000 meg min.	10,000 meg min.	10,000 meg min.	10,000 meg min.	10,000 meg min.

ENVIRONMENTAL (Operating Temperature Range: -30°C~+125°C)					
Moisture Resistance	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$
Thermal Shock	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$
Load Life @ 70°C - 1,000 hrs.	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$
Resistance to Soldering Heat	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$
Short Time Overload	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$

DIMENSIONS						Inches (mm)
Feature	GMR 1/6	GMR 1/4	GMR 1/2	GMR 1	GMR 2	
A - Lead Length (typ.)	1.18 $\pm$ .12 (30.0 $\pm$ 3.0)	1.18 $\pm$ .12 (30.0 $\pm$ 3.0)	1.18 $\pm$ .12 (30.0 $\pm$ 3.0)	1.18 $\pm$ .12 (30.0 $\pm$ 3.0)	1.50 $\pm$ .12 (38.0 $\pm$ 3.0)	
B - Body Length	.13 $\pm$ .01 (3.3 $\pm$ 0.2)	.25 $\pm$ .02 (6.3 $\pm$ 0.5)	.35 $\pm$ .02 (9.0 $\pm$ 0.5)	.43 $\pm$ .04 (11.0 $\pm$ 1.0)	.59 $\pm$ .04 (15.0 $\pm$ 1.0)	
C - Lead Diameter	.020 $\pm$ .002 (0.50 $\pm$ 0.05)	.024 $\pm$ .002 (0.60 $\pm$ 0.05)	.024 $\pm$ .002 (0.60 $\pm$ 0.05)	.031 $\pm$ .002 (0.80 $\pm$ 0.05)	.031 $\pm$ .002 (0.80 $\pm$ 0.05)	
D - Body Diameter	.07 $\pm$ .01 (1.7 $\pm$ 0.2)	.09 $\pm$ .02 (2.3 $\pm$ 0.5)	.14 $\pm$ .02 (3.5 $\pm$ 0.5)	.16 $\pm$ .02 (4.0 $\pm$ 0.5)	.24 $\pm$ .04 (6.0 $\pm$ 1.0)	

## Part Numbering system

GMR

Type
GMR

1/6

Rated Power
1/6W ↓ 2W

5%

Resistance tolerance
$\pm 1\%$
$\pm 5\%$

100K

Nominal Resistance	
Code	Description
100K	100X10 <sup>3</sup>
500M	500X10 <sup>6</sup>
1000M	1000X10 <sup>6</sup>
10,000M	10,000X10 <sup>6</sup>

TR

Packaging	
Code	Description
B	Bulk
TR	Tape & Reel