

HIGH RESISTANCE METAL (GLAZE) RESISTORS

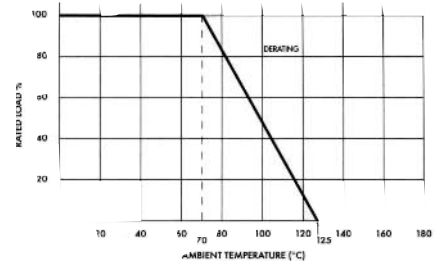


GMR

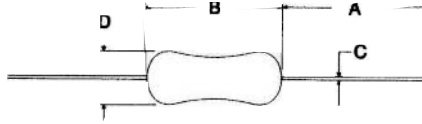
GMR 1/6, 1/4, 1/2, 1, 2

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 ³
500M	500X10 ⁶
1000M	1000X10 ⁶
10,000M	10,000X10 ⁶

TR

Packaging	
Code	Description
B	Bulk
TR	Tape & Reel