

# Metal Glaze Resistors - MG Series

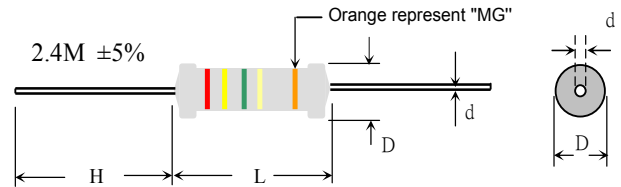
## FEATURES

- Power rating: 1/4W to 2W at 70°C
- Superior performance against environmental condition and overload
- Flameproof body coating
- Standard tolerance: ±5%, (±1% available)
- Standard value: 100K-33Meg in E24 series
- Color band marking, but yellow and grey color are used to substitute gold and silver because of high voltage properties in metal lacquer
- Identify "MG" by the fifth Orange color band

## MATERIAL

- Element: super glaze glazed film
- Core: high purity ceramic Al<sub>2</sub>O<sub>3</sub>
- Termination: standard solder-plated cooper lead
- Body Coating: silicone, grey color

## DIMENSION



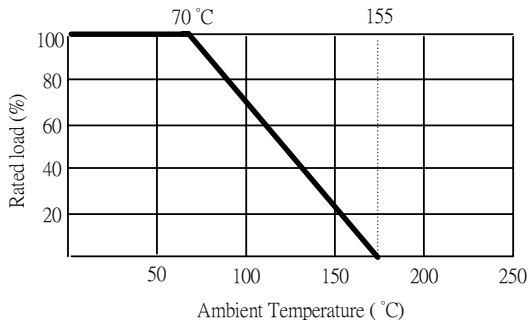
## GENERAL SPECIFICATION

TYPE	DIMENSION (mm)				POWER RATING	MAXIMUM VOLTAGE		RESISTANCE RANGE ±5%
	L	D	H	d ± 0.05		WORKING *	OVERLOAD **	
MG025	6.0±0.5	2.3±0.3	28 ±1.0	0.60	1/4W	1000V	1500V	100K Ω ~ 33M Ω
MG050	9.0±0.5	3.0±0.5	28 ±1.0	0.70	1/2W	1000V	1500V	100K Ω ~ 33M Ω
MG100	11±1.0	4.0±0.5	35 ±3.0	0.80	1W	1000V	1500V	100K Ω ~ 33M Ω
MG200	15±1.0	5.0±0.5	35 ±3.0	0.80	2W	1000V	1500V	100K Ω ~ 33M Ω

★ Maximum working voltage (E) determined by  $E = \sqrt{P \times R}$ , but  $\leq$  the value listed in above column.

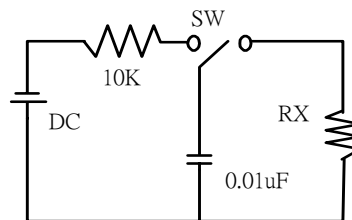
★★ Maximum overload voltage determined by  $2.5 \times E$ , but  $\leq$  the value listed in above column.

## DERATING CURVE



## SURGE WITHSTANDING VOLTAGE

Discharge circuit



Pulse Load 10KV max.

2.5 seconds "ON"  
2.5 seconds "OFF"  
10 cycles

## CHARACTERISTIC

Operating temperature	-55°C ~ +155°C
Temperature Coefficient	±200ppm max.
Insulation Resistance	1000MΩ Min.
Load Life (1000 hours)	<±1.5% typical, (±5% in humidity)
Shorttime Overload	±0.5% Max.
Temperature Cycling	±1.0% Max.
Effect of Soldering	±1.0% Max.
Pulse withstanding	±20% Max.

\* Total maximum resistance change is  $\Delta R + 0.01R$

## HOW TO ORDER :

<u>MG025</u>	<u>F</u>	<u>TB</u>	<u>10R</u>
↓	↓	↓	↓
Type/Power	Tol.	Package	Resistance
MG025	F=±1%	B=Bulk	10R = 10Ω
MG050	G=±2%	TB=Tape/box	1K2 = 1.2KΩ
MG100	J=±5%	TR=Tape/reel	1M = 1MΩ
MG200			

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