

METAL GLAZE FILM FIXED RESISTORS

Features

- Small in dimension and broad range in high resistance
- Metal glaze resistor elements provide high stable performance against environmental conditions and overload
- Excellent in absorption of electric shock (Pulse, Surge voltage)



Ordering Procedure: (Ex.: MGR 1W, +/-5%, 470KΩ, T/B-1000, Non - Flame)

M	G	R	F	1	W	J	0	4	7	4	A	1	8
Resistor Type: MGR = Metal Glaze Film Fixed Resistors							Resistance Value: - E-24 series: the 1st digit is "0", the 2nd & 3rd digits are for the significant figures of the resistance and the 4th indicate the number of zeros. "J" ~ 0.1, "K" ~ 0.01 Ex. 4.7Ω ~ 47J, 4.7KΩ ~ 472 - E-96 series: The 1st to 3rd digits are significant figures of resistance and the fourth one denotes number of zeros. Ex. 1.33 KΩ = 1331						
Special Feature: 0 = UL Epoxy F = UL Non Flame		Wattage: W4=1/4W, W2=1/2W, 1W=1W, 2W=2W					Tolerance: F = ±1%, G = ±2%, J = ±5%	Packing Type: A = Tape/Box T = Tape/Reel B = Bulk/Box P = Tape/Box of PT-26 product					
* More explanation on part no, please see details on pages 79-80.													
Performance Specifications													
Packing Qty: 1 = 1,000 PCS 2 = 2,000 PCS 4 = 4,000 PCS 5 = 5,000 PCS A = 500 PCS 0 = for Bulk/Box packing													

* More explanation on part no, please see details on pages 79-80.

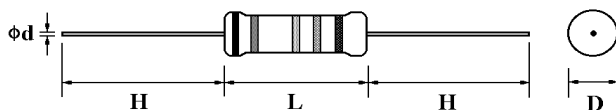
Performance Specifications

Temperature coefficient	≤ ±200PPM/°C
Short-time overload	ΔR/R ≤ ±(1.0% + 0.05Ω), with no evidence of mechanical damage.
Dielectric withstanding voltage	No evidence of flashover, mechanical damage, arcing or insulation breakdown.
Pulse overload	ΔR/R ≤ ±(2.0% + 0.05Ω), with no evidence of mechanical damage.
Terminal strength	No evidence of mechanical damage.
Resistance to soldering heat	ΔR/R ≤ ±(1.0% + 0.05Ω), with no evidence of mechanical damage.
Solderability	Min. 95% coverage
Resistance to solvent	No deterioration of protective coating and markings.
Temperature cycling	ΔR/R ≤ ±(1.0% + 0.05Ω), with no evidence of mechanical damage.
Load life in humidity	ΔR/R ≤ ±(5.0% + 0.05Ω), with no evidence of mechanical damage.
Load life	ΔR/R ≤ ±(5.0% + 0.05Ω), with no evidence of mechanical damage.
Surge withstanding voltage	ΔR/R ≤ ±(20.0% + 0.05Ω), with no evidence of mechanical damage.

*More details, please see pages 77-78.

METAL GLAZE FILM FIXED RESISTORS

Dimension (mm)



- 5 color code band for $\pm 5\%$ tolerance and last band Black color for identification
- Standard 5 color code band for $\pm 1\%$ tolerance

Part No.	Style	Power Rating at 70°C	Dimension (mm)			
			D Max.	L Max.	d ± 0.05	H ± 3
MGRFW4	MGR -25	1/4W (0.25 W)	2.7	7.0	0.54	28
MGRFW2	MGR -50	1/2W (0.5 W)	3.8	10.0	0.54	28
MGRF1W	MGR -100	1 W	5.2	13.0	0.75	28
MGRF2W	MGR -200	2 W	6.0	17.0	0.75	28

Rating

Style	Max. Working Voltage	Max. Overload Voltage	Dielectric Withstanding Voltage	Surge Withstanding Voltage	Resistance Range
MGR -25	1,600 V	2,000 V	500 V	100K Ω ~ 33M Ω : 3,000 V	$\pm 1\%$: 100K Ω ~ 1M Ω $\pm 5\%$: 1K Ω ~ 33M Ω
MGR -50	3,500 V	4,000 V	700 V	100K Ω ~ 360K Ω : 5,000 V 361K Ω ~ 1M Ω : 7,000 V 1.1M Ω ~ 33M Ω : 10,000 V	$\pm 1\%$: 100K Ω ~ 1M Ω $\pm 5\%$: 1K Ω ~ 33M Ω
MGR -100	3,500 V	4,000 V	1,000 V	100K Ω ~ 33M Ω : 10,000 V	$\pm 1\%$: 100K Ω ~ 1M Ω $\pm 5\%$: 1K Ω ~ 33M Ω
MGR -200	3,500 V	4,000 V	1,000 V	100K Ω ~ 33M Ω : 10,000 V	$\pm 1\%$: 100K Ω ~ 1M Ω $\pm 5\%$: 1K Ω ~ 33M Ω

Derating Curve

