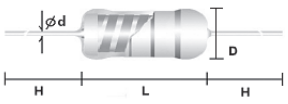
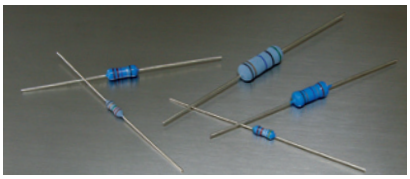
Metal Glaze Film Fixed Resistors

RoHS Compliant

Feature

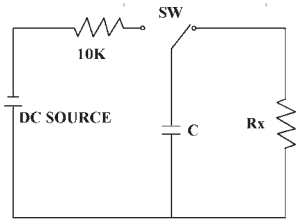
- Provide high stable performance against environmental conditions and overload voltage
- Wide resistance range
- Low temperature coefficient



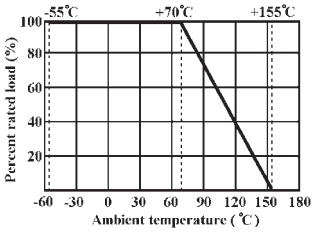


- 5 band color code for ±5% tolerance, and last band Black color for identification
- Standard 5 band color code for ±1% tolerance

Surge Withstanding Voltage



Derating Curve



Normal Size: the discharge cycle is repeated in this circuit: 2.5 seconds "ON", 2.5 seconds "OFF", 50 cycles, C=0.001uF
Small Size: the discharge cycle is repeated in this circuit: 2.5 seconds "ON", 2.5 seconds "OFF", 10 cycles, C=0.01uF
The applied DC source voltage is shown as below table.

Metal Glaze Film Fixed Resistor

Part No.	Type	Power Rating at 70°C	Dimension (mm) Dmax	Lmax	d +0.02 -0.05	H±3	Max. Working Voltage	Max. Overload Voltage	Dielectronic withstanding Voltage	Surge withstanding voltage	Resistance Value
Nomal Size											
MGR 0W4	MGR 25	1/4W	2.7	7	0.6	28	500V	700V	500V	100K-100M: 10000V	1K-100M (±5%,±10%) 100K-1M(±1%)
MGR 0W2	MGR 50	1/2W	3.8	10	0.6	28	700V	1000V	700V		
MGR 01W	MGR-100	1W	5.2	13	0.7	28	1000V	1400V	1000V		
MGR 02W	MGR-200	2W	6	17	0.8	28	1000V	1400V	1000V		
MGR 03W	MGR-300	3W	7	19	0.8	28	1000V	1400V	1000V		
Small size and Ultra small size											
MGR0U2	MGR-50-SS	1/2W	2.7	7	0.6	28	500V	700V	500V	100K-1M:3000V 1M1-6M2:4000V ≥6M8: 6000V	1K-33M (±5%,±10%)
MGR0S2	MGR-50-S	1/2W	3.3	9.5	0.6	28	500V	700V	500V	100K-1M:3000V 1M1-6M2:4000V ≥6M8: 8000V	100K-1M (±1%)
MGR01U	MGR-100-SS	1W	3.8	10	0.6	28	700V	1000V	700V	100K-1M:4000V 1M1-6M2:5000V ≥6M8: 8000V	1K-33M (±5%,±10%) 100K-1M (±1%)
MGR01S	MGR-100-S	1W	4.7	11	0.6	28	700V	1000V	700V		
MGR02U	MGR-200-SS	2W	4.7	13	0.7	28	1000V	1400V	1400V	100K-1M:5000V 1M1-6M2:6000V ≥6M8: 9000V	
MGR02S	MGR-200-S	2W	5.2	13	0.7	28	1000V	1400V	1000V		
MGR03U	MGR-300-SS	3W	5.2	13	0.8	28	1000V	1400V	1000V	100K-1M:5000V 1M1-6M2:6000V ≥6M8: 9000V	
MGR03S	MGR-300-S	3W	6	17	0.8	28	1000V	1400V	1000V	100K-1M:8000V 1M1-6M2:9000V ≥6M8:10000V	

Performance Specifications

Temperature coefficient	≤± 200PPM/°C
Short-time overload	ΔR/R ≤ ±(1%+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%+0.05Ω), with no evidence of mechanical damage.
Terminal strength	No evidence of mechanical damage.
Resistance to soldering heat	ΔR/R ≤ ±(1%+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%+0.05Ω), with no evidence of mechanical damage.
Load life in humidity	ΔR/R ≤ ±(5%+0.05Ω), with no evidence of mechanical damage.
Load life	ΔR/R ≤ ±(5%+0.05Ω), with no evidence of mechanical damage.

Ordering Procedure (Example: MGR 1W 5% 27MΩ T/B-1000)

M G R 0 1 W J 0 2 7 6 A 1 0

Product Type:
MGR = Metal Glaze Film Fixed Resistors

Wattage:
W4 = 1/4W
S2 = 1/2W-S
W2 = 1/2W
1U = 1W-SS
1S = 1W-S
1W = 1W
2U = 2W-SS
2S = 2W-S
2W = 2W
3U = 3W-SS
3S = 3W-S
3W = 3W

Special Features:
0 = Standard product

Tolerance:
F = ±1%
J = ±5%

Resistance Value:
E-24 series:
The 1st digit will be "0"; the 2nd & 3rd digits are for the significant figures of the resistance and the 4th digit indicate the numbers of zeros following

Packing Type:
A=Tape/Box
T=Tape/Reel
B=Bulk/Box
P=Tape/Box of PT-26 product

Packing Quantity:
1=1,000pcs
2=2,000pcs
3=3,000pcs
4=4,000pcs
5=5,000pcs
A = 500pcs
B = 2,500pcs
0 = for Bulk/Box packing

Additional Information:
0 = NIL