

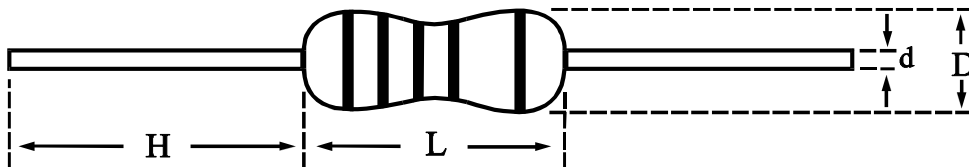
## MGL series Metal Glazed Resistors

### ◆ Features

- » Higher working voltage
- » High pulse loading capability
- » Resistance to high Temp/humidity
- » Highly stable performance and highly reliable

### ◆ Power Ratings Dimensions

- » Body Color :Silicone Resin is Brown (Flame-Proof), Epoxy Resin is Light Blue(Standard)



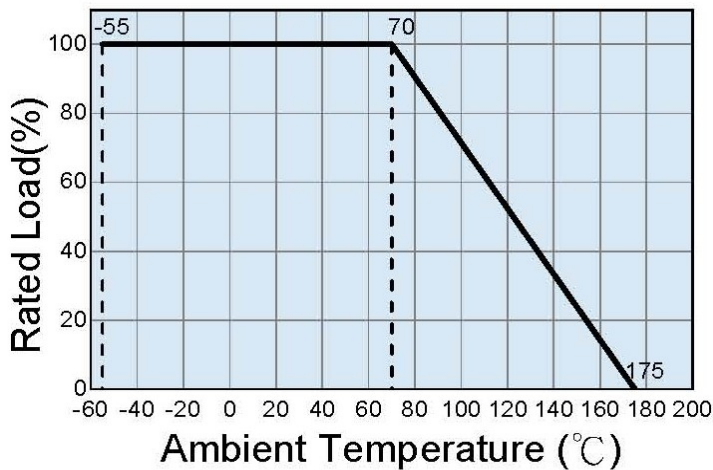
STYLE	DIMENSION (mm)				VALUE RANGE
	L	∅D	H	∅d	
1/4W 1/2WS	6.3±0.5	2.3±0.3	28±2	0.55±0.03	1K-500M
1/2W 1WS	9.0±0.5	3.2±0.5	26±2	0.65±0.03	
1W 2WS	11.5±1.0	4.5±0.5	35±2	0.78±0.03	
2W 3WS	15.5±1.0	5.0±0.5	32±2	0.78±0.03	
3W 5WS	17.5±1.0	6.0±0.5	35±2	0.78±0.03	



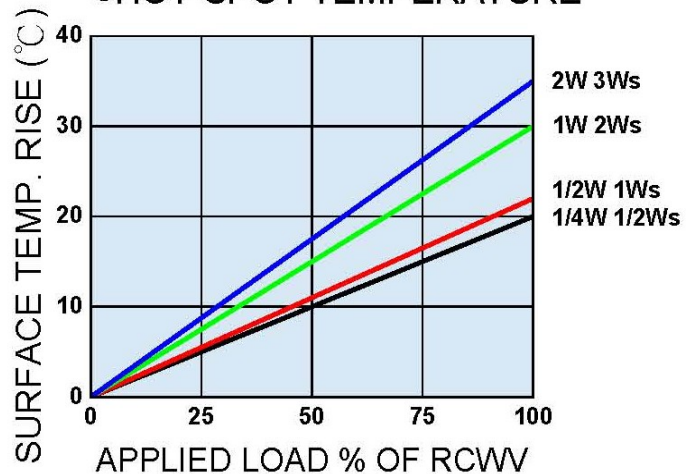
◆ Part Number

MGL	25	J	10M	T	
Type	Watt	Tolerance	R value	Packing	TCR
MGL=Standard MGLS=Miniature	1/4W = 25	K = ± 10%	51K=51K ohm	T = Taped	Blank:standard
MGLC=Flame-Proof	1/2W = 50	J = ± 5%	2M2=2.2M ohm	B = Bulk	E:100ppm
MGLCS=Flame-Proof Miniature	1W = 100	G = ± 2%			
	2W= 200	F = ± 1%			
	3W=300	D = ±0.5%			
	5W=500	C = ±0.25%			

●POWER GRAPH



●HOT-SPOT TEMPERATURE



### ◆ Electrical Characteristics

Power Rating	MAX. WORKING VOL	MAX. OVERLOAD VOL	Dielectric Withstanding VOL.		RESISTANCE TOLERANCE	T.C.R	Measured
			Silicone Resin (MGLC)	Epoxy Resin (MGL)			
1/4W	DC1600V	DC2000V	400V	500V	R > 500M K (±10%) E12 R ≤ 500M K (±10%) E12 J (±5%) E24 F (±1%) E24 100K ≤ R ≤ 33M (±0.5%) E24	Standard: 100K ≤ R ≤ 10M ±200PPM/°C R > 10M ±500PPM/°C Special : ±100PPM/°C ±50PPM/°C	DC 100 volts 100K ≤ R < 1M DC 1000 volts 1M ≤ R
	AC1150V	AC1500V					
1/2WS	DC1700V	2500V	400V	500V			
1/2W	DC3500V	4000V	500V	700V			
1WS	DC4000V	4500V	500V	700V			
1W	DC4500V	5000V	500V	1000V			
2WS	DC5000V	10000V	500V	1000V			
2W	DC7000V	14000V	700V	1200V			
3WS	DC10000V	14000V	700V	1200V			
3W	DC12000V	16000V	1000V	1200V			
5WS	DC13000V	18000V	1000V	1200V			

Operating Temperature Range -55°C ~ +175°C

Rated continuous Working Voltage (RCWV) =  $\sqrt{POWER RATING * RESISTANCE VALUE}$

Value range for standard resistance, below or over this resistance on request.

### ◆ Environmental Characteristics

TEST ITEMS	Test Methods	SPECIFICATIONS
Short time overload	Rated Voltage X 2.5 or Max. overload Vol., whichever is lower, for 5sec.	± ( 1.0% + 0.05Ω )
Moisture resistance	40°C ± 2°C, 90%~95%RH, 1000h 90 min 【ON】 30 min 【OFF】	± ( 5.0% + 0.05Ω )
Load life	1000hours at rated voltage, 70°C 90 min 【ON】 30 min 【OFF】	± ( 3.0% + 0.05Ω )
Insulation resistance	500±50V DC During 1 min V-Block method	±10,000MΩ Over
Dielectric withstanding voltage	In V-Block for 60 seconds	By Type
Resistance to soldering heat	260°C ± 5°C, 10s ± 1s or 350°C ± 10°C, 3.5s ± 0.5s	± ( 1.0% + 0.05Ω )
Terminal strength	Direct load for 10 sec. In the direction off the terminal leads.	Tensile: ≥ 2.5kg
Intermittent overload	4 times RCWV for 10000cycles (1sec.on · 25secs.off)	±(1%+0.05Ω)