



玻璃釉高壓高阻值電阻  
Resistance: 1G ~ 10G ohm

MGHO Series  
Metal Glaze Resistor (High Ohm)

◆ SCOPE:

This specification is available for Metal Glaze Resistor manufactured by Mayloon.  
The resistor is manufactured highly quality-controlled process and guaranteed high reliability.

◆ STANDARD MEASURING CONDITIONS

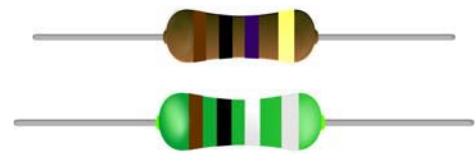
Temperature 20±2°C, Humidity 65±5%.  
Being on about the judgment, measurements can be made within the following  
Temperature 5 ~ 35°C, Humidity 45 ~ 85%.

◆ ORDERING

Example: MGHO0207TJ1G

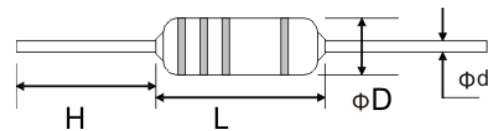
Type	Power	Package	Tolerance	Resistance
MGHO0204	1/8W	T = T/Box	H = ±3%	104 = 100KΩ
MGHO0207	1/4W	B = Bulk	J = ±5%	105 = 1MΩ
MGHO0410	1/2W	R = Reel	K = ±10%	106 = 10MΩ
MGHO0516	2W			107 = 100MΩ
				1G = 1GΩ

◆ Figure: Body Color



◆ EXTERNAL DIMENSIONS

Type	Power	Dimensions (mm)			
		L	ΦD	Φd	H
MGHO0204	1/8W	3.3±0.5	1.8±0.5	0.45±0.03	28±2.0
MGHO0207	1/4W	6.3±0.5	2.5±0.5	0.55±0.03	28±2.0
MGHO0410	1/2W	9.0.0±0.5	3.2±0.5	0.65±0.03	26±2.0
MGHO0516	2W	15.5±1.0	5.0±0.5	0.78±0.03	32±2.0



\* The type designation shall be in the following form and as specified.

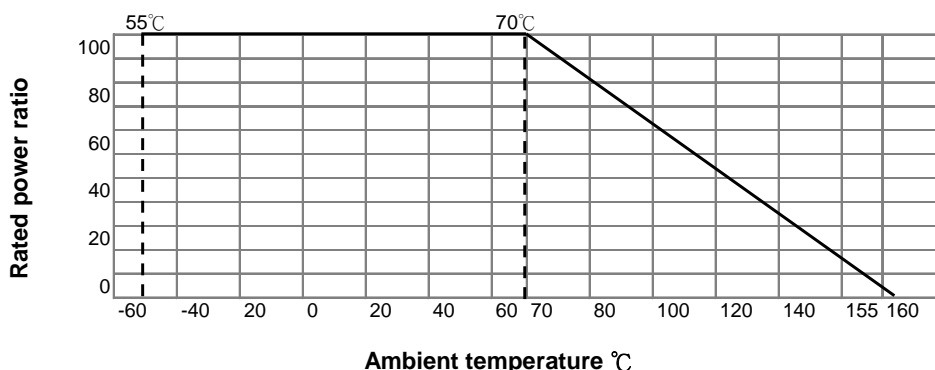
◆ RATED POWER

Type	Power	Maximum Voltage		Dielectric withstanding Vol		Resistance (Ω)		Operating temperature Range
		Working	Overload	Silicon	Epoxy	Standard	High ohm	
MGHO0204	1/8W	DC500V	1000V	300V	400V	100K~910M	1G ~ 10G	-55°C ~ 155°C
MGHO0207	1/4W	DC1600V	DC2000V	400V	500V	100K~910M	1G ~ 10G	
		DC1800V	AC1500V					
MGHO0410	1/2W	DC2000V	2500V	500V	700V	100K~910M	1G ~ 10G	
MGHO0516	2W	DC3500V	4000V	700V	1200V	100K~910M	1G ~ 10G	
T.C.R:	±200ppm/°C, ±100ppm/°C. ±50ppm/°C.							
Tolerance:	F: ±1% E24, J: ±5% E24, K: ±10% E12. >1G ( ±10%) E12.							
Operating Temperature Range:	-55°C ~ 155°C Rating ambient Temp. ±70°C							

\* Rated power is maximum power which can continuously loaded at specified ambient temper mined 70°C, however when the ambient temperatures exceeds 70°C, rated power should be determined from the dating curve of Fig 1.

\* Silicon Resin: Brown (Flame-Proof), Epoxy Resin: Light Blue.

◆ POWER DATING CURVE

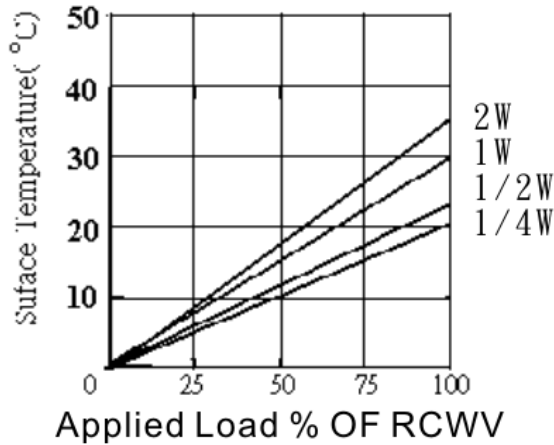


MAYLOON ELECTRONIC CO., LTD.,

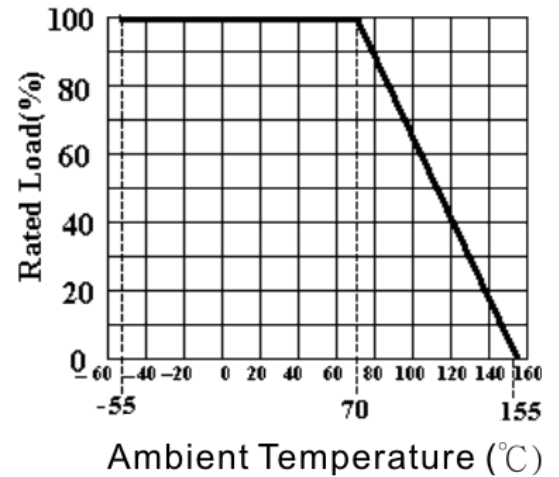
◆ PERFORMANCE SPECIFICATIONS

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
Dielectric withstanding voltage	In V-Block for 60 seconds	1/4W 400V 1W 800V 1/2W 500V 2W 2000V
Resistance to soldering	260°C ± 5°C, 10s ± 1s or 350°C ± 10°C, 3.5s ± 0.5s	± ( 1.0% + 0.05Ω )
Temperature cycling		± ( 1.0% + 0.05Ω )
Terminal strength	Direct load for 10 sec. In the direction off the terminal leads.	Tensile: ≥ 2.5kg
Anti-surge characteristics	R ≥ 100KR: 8KV/10nF	Rmax. ± 10%
	R < 100KR: 10KV/10nF	No damage
	2.5sec on/off 10 Cycle	
Intermittent overload	4 times RCWV for 10000 cycles ( 1 sec on, 25 sec off)	±(1%+-0.5Ω)

表面溫度上升曲線 surface temp.rise

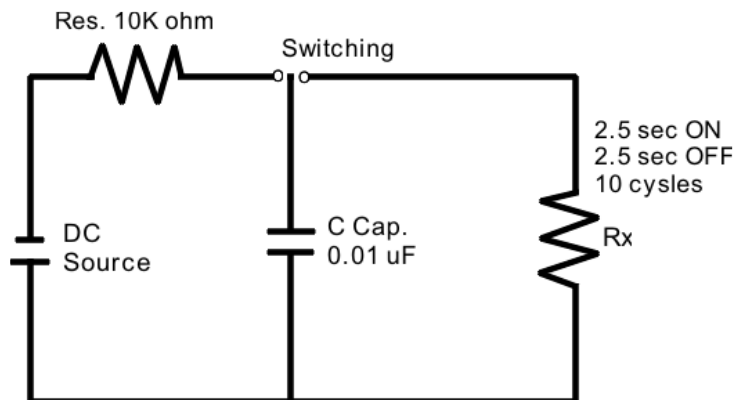


POWER GRAPH



◆ High Voltage Surge Test

10 discharges from a 10nf capacitor charged to Vmax :12 discharges/min  
no evidence of flash over , mechanical damage , arching or , insulation breakdown.



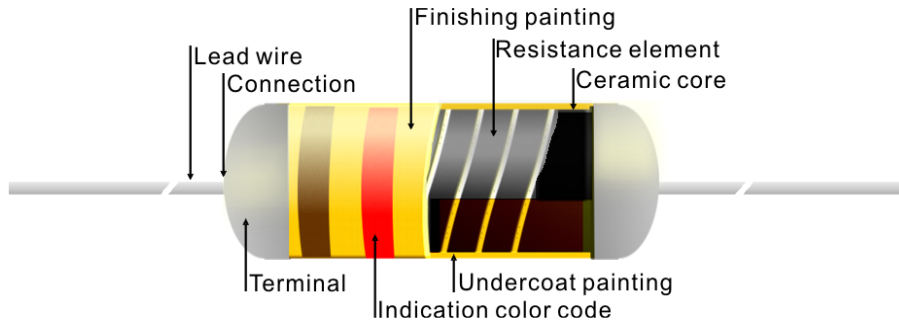


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Resistance: 1G ~ 10G ohm

MGHO Series  
Metal Glaze Resistor (High Ohm)

◆ STRUCTURE DIAGRAM

The construction of resistor (MGHO Series) shall be Figure.



Item	Material
Ceramic Core	High alumina ceramic is used
Resistance element	The resistor element shall consist of metal glaze film.
Terminal	Tinned iron cap.
Connection	The lead wire, Which is elated with solder, shall be mounted to the caps by welding process.
Lead Wire	Soldered or tinned annealed copper wire.
Undercoat Painting	Electric insulation varnish.
Finishing painting	Epoxy resin is used.
Induction	Color code.

◆ Painting Resistor body color

(1)	MGHO series		Epoxy Resin: Green (Flame-Proof)
(2)			Silicon Resin: Brown (Flame-Proof)

◆ PACKAGE:

Type	Power	Form	Dimensions (mm)			Quantity
			W	H	L	
MGHO0204	1/8W	T52	80	75	264	5000 pcs
MGHO0207	1/4W	T52	80	105	264	5000 pcs
MGHO0410	1/2W	T52	80	46	264	1000 pcs
MGHO0414	1W	T73	103	82	264	1000 pcs
MGHO0516	2W	T73	103	82	264	1000 pcs

