

SINLOON®

不燃性氧化膜金屬電阻器

MOR Series

Resistance Range : 1R ~ 510KΩ

Metal Oxide Film Resistor - MOR Series

◆ FEATURES

- ◆ High power-to-size ratio for significant space savings.
- ◆ Excellent long-term stability.
- ◆ Complete flameproof construction.
- ◆ High surge/overload capability.
- ◆ Wide resistance range : 1Ω ~ 180K Ω.
- ◆ Standard tolerance : ±5% , ± 2%

Figure



◆ INTRODUCTION

These Metal Oxide Resistors offer excellent performance in applications where stability and uniformity of characteristics are desired. They provide lower cost alternatives to Charbon Composition Resistors and General Purpose Metal Films. Metal Oxide also can replace many low power General Purpose Wirewound applications, saving both money and time, with shorter delivery cycles.

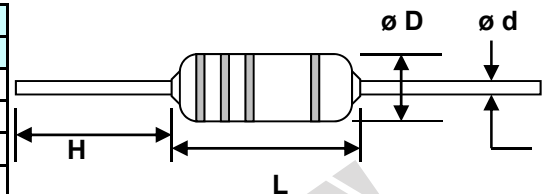
◆ ORDERING PROCEDURE:

Example: MOR050G102JT B

Power:	Type:	T.C.R./°C	Resistance	Tolerance	Package
1/4W	MOR025	K=±150ppm	109 = 1Ω	G = ±2%	TB = T/Box.
1/2W	MOR050	F=±250ppm	100 = 10Ω	J = ±5%	B = Bulk
1W	MOR100	G=±350ppm	101 = 100Ω	K = ±10%	
2W	MOR200	H=±400ppm	102 = 1KΩ		
3W	MOR300	I=±500ppm	103 = 10KΩ		
5W	MOR500	J=±600ppm	104 = 100KΩ		

◆ DIMENSION (mm)

Power:	STYLE	Dimension (mm)			
		L	ΦD	H	Φd
1/4W	MOR025	6.0±0.2	2.3±0.3	28±2	0.5±0.02
1/2W	MOR050	9.5±0.5	3.2±0.5	26±2	0.6±0.02
1W	MOR100	11.0±0.5	4.5±0.5	35±2	0.7±0.02
2W	MOR200	15±0.5	5.0±0.5	32±2	0.8±0.02
3W	MOR300	17±0.5	6.0±0.5	32±2	0.8±0.02
5W	MOR500	25±1	8.0±0.5	35±3	0.8±0.02



◆ RATED POWER

Type	Power 70°C	Maximum Voltage		Dielectric withstanding	Max.intermittence	Res. E96 Range(Ω)	T.C.R. ppm/°C
		Working	Overload	Voltage (AC)	Overload Voltage		
MOR025	1/4W	250V	400V	300V	400V	1R ~510K	±350
MOR050	1/2W	350V	700V	350V	700V	1R ~510K	±350
MOR100	1W	350V	700V	350V	1000V	1R ~510K	±350
MOR200	2W	350V	700V	500V	1000V	1R ~510K	±350
MOR300	3W	500V	1000V	1000V	1000V	1R ~510K	±350
MOR500	5W	500V	1000V	1000V	1000V	1R ~510K	±350
Operating temperature Range:		-55°C ~ 155°C					

* Rated power is maximum power which can continuously loaded at specified ambient temerrmined 70°C, however when the ambient temperure exveeds 70°C, rated power should be determined from the derating curve of Fig 1.

■ Value Range for standard resistance, below over this resistance on request.

► From the specification of data sheet choose one of our Ship topics, and then select an FAQ to read.
If you have a question which is not in this section, please contact us.

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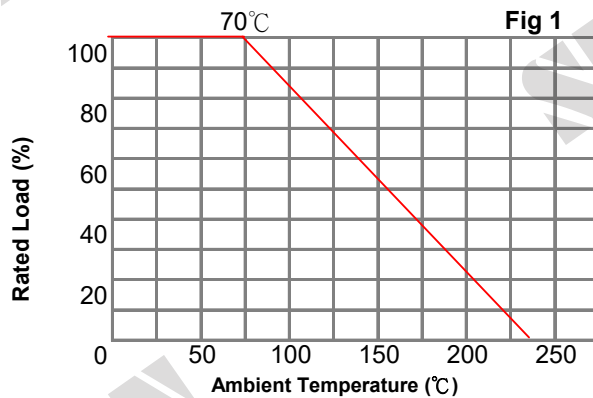
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◆ ENVIRONMENTAL CHARACTERISTICS

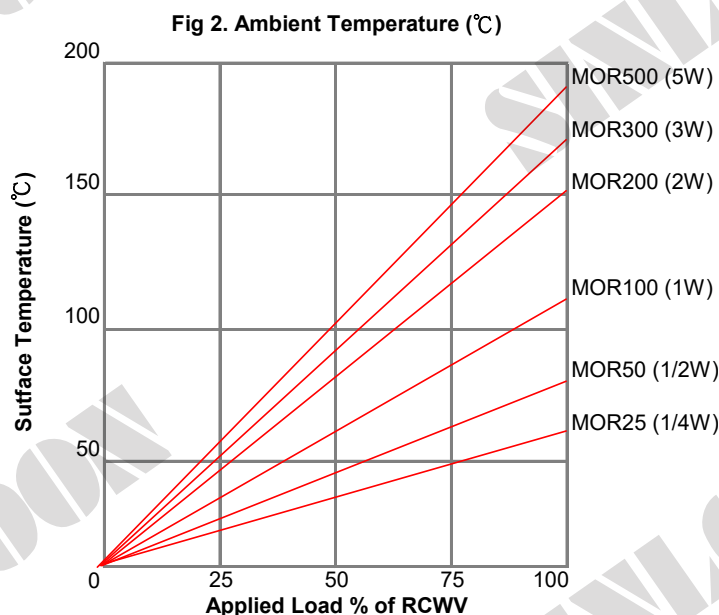
PERFORMANCE TEST	TEST METHOD	APPRAISE
Short Time Overload	JIS-C-5202 5.5 : 2.5 times RCWV for 5 seconds	±(0.75%+0.05)Ω
Dielectric Withstanding V.	JIS-C-5202 5.7 : in V-Block for 60 seconds	By Type
Temperature Coefficient	JIS-C-5202 5.2 : -55°C ~+155°C	By Type
Insulation Resistance	JIS-C-5202 5.6 : in V-Block	≥ 1000 MΩ
Solderability	JIS-C-5202 6.5 : 230°C for 5±0.5 seconds	95% min. coverage
Resistance to Solvent	JIS-C-5202 6.9 : Trichroethane for 1 min. with ultrasonic	no deterioration
Terminal Strength	Direct load for 10 sec. In the direction of the terminal leads	≥ 2.5KG/24.5N
Pulse Overload	JIS-C-5202 5.8 : 4 time RCWV 10000 cycles(1 sec.on, 25 sec.off)	±(2%+0.05)Ω
Load Life in Humidity	JIS-C-5202 7.9 : 40±2°C, 90~95% RH at RCWV for 1000 hrs (1.5hrs. on, 0.5 hrs. off)	±(3%+0.05)Ω
Load Life	JIS-C-5202 7.10 : 70°C at RCWV for 1000hrs (1.5hrs.on, 0.5hrs.off)	±(3%+0.05)Ω
Temperature Cycling		±(1%+0.05)Ω
Soldering Heat		±(1%+0.05)Ω

■ Rated continuous Working Voltage (RCWV) = $\sqrt{\text{POWER.RATING} \cdot \text{RESISTANCE.VALUE}}$

◆ POWER GRAPH



◆ HOT-SPOT TEMPERATURE



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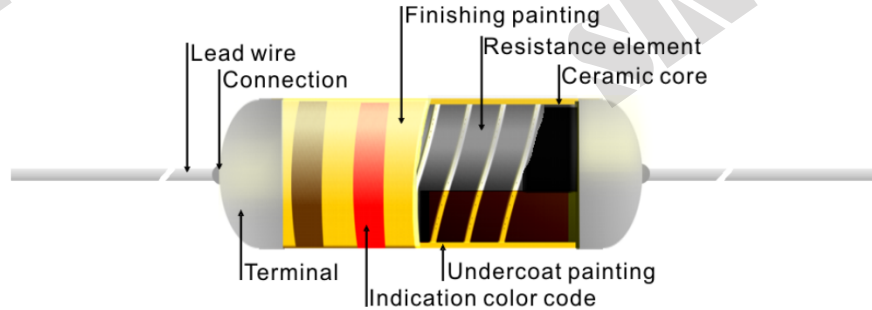
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◆ STRUCTURE DIAGRAM

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



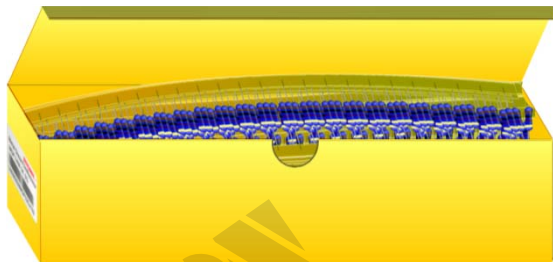
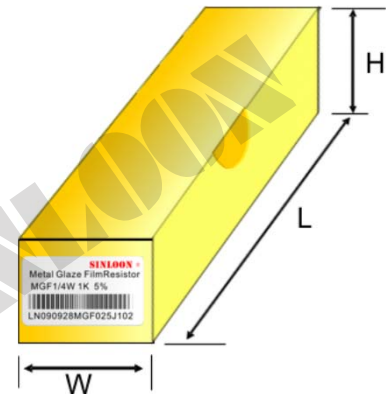
Item	Material
Ceramic Core	High alumina ceramic is used
Resistance element	The resistor element shall consist of metal glaze film.
Terminal	Tinned iron cap.
Connection	The lead wire, which is plated with solder, shall be mounted to the caps by welding process.
Lead Wire	Soldered or tinned annealed copper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

◆ Painting Resistor body color

(1)	Normal size	
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◆ PACKAGE:

STYLE		Dimensions (mm)			Quantity
Normal	Power	L	W	H	
MOR025	1/4W	264	80	75	5,000
MOR050	1/2W	264	80	105	5,000
MOR100	1W	264	80	35	1,000
MOR200	2W	264	80	46	1,000
MOR300	3W	265	103	82	1,000
MOR500	5W				500



※ 美隆電子產品規格特性參數的改變或更新, 不會另行通知。

※ Mayloon characteristic parameters of electronic product specification changes or updates without prior notice.