

东莞市奥力特电子科技有限公司	编号	HSG- R -01
	版本	A
金属氧化膜电阻器 METAL OXIDE FILM RESISTORS	页次	第 1 页 共 6 页

承 认 书

客户名称:

产品品名:

金属氧化膜电阻器

规格描述:

MOF3W 8.2R ±5% 系列承认

客户料号:

备 注:

送样日期:

2022-09-08

制造厂商:

核准 Approval	确认 Check By	审核 Prepared By

客户承认:

核准 Approval	确认 Check By	审核 Prepared By

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1. General Instruction

General Specifications

Normal Type	MO-0204	MO -0207	MO -0410	MO -0414	MO -0617	MO -0718	MO -0925
Rated Power	1/8W	1/4W	1/2W	1W	2W	3W	5W

Mini Type	MO -0207S	MO -0410S	MO -0414S	MO -0617S	MO -0718S	MO -0925S	
Rated Power	1/4WS	1/2WS	1WS	2WS	3WS	5WS	

Standard Dimensions (mm)

Body Length (L)	3.5 ± 1.0	6.5 ± 1.0	9.0 ± 1.0	11 ± 1.0	15 ± 1	17 ± 1	24 ± 1
Body Diameter (D)	1.7 ± 1.0	2.3 ± 1.0	3.2 ± 1.0	4.5 ± 1.0	5.0 ± 0.5	6 ± 0.5	8 ± 1
Lead Length (H) ± 2	27±2.0	26±2.0	25±2.0	30±2.0	33±2.0	33±2.0	38±2.0
Lead Diameter (d) ± 0.05	0.40±0.05	0.40±0.05	0.50±0.05	0.65±0.05	0.70±0.05	0.70±0.05	0.75±0.05

Electrical Specification

Din Size	0204	0207	0410	0414	0617	0718	0925
Maximum Working Voltage (V)	250	250	350	350	350	500	600
Maximum Overload Voltage (V)	500	500	700	700	700	1000	1000
Resistance Range (±2%(G))	10Ω-1MΩ	10Ω-100KΩ	10Ω-100KΩ	10Ω-100KΩ	10Ω-100KΩ	10Ω-100KΩ	10Ω-100KΩ
(±5%(J))	1Ω-22MΩ	0.2Ω-1MΩ	0.2Ω-1MΩ	0.2Ω-1MΩ	0.2Ω-1MΩ	0.2Ω-1MΩ	0.2Ω-1MΩ

* Lesser of \sqrt{PR} or maximum working voltage.

☞ Operating Temperature. Range: -55°C~ +155°C.

☞ S=Miniature Type. For Example:0207S the body size of 1/8W but with rated power of 1/4W.

☞ The taping dimension other than the standard is also available as per our taping specifications.

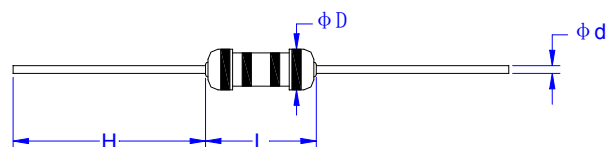
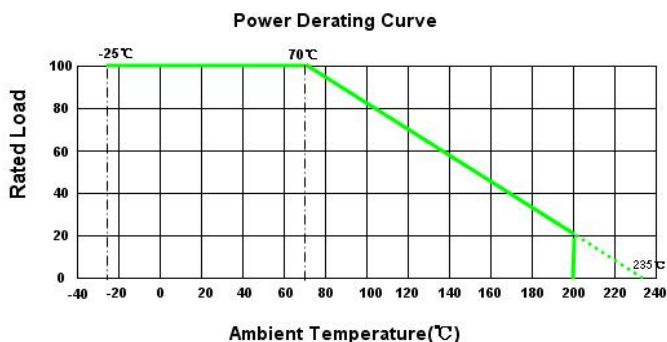
☞ The resistance range of lower than 0.2Ω and / or the tolerance is lower than 2% are also available on special request.

☞ Color of Body: Normal type is Grey and Mini type is Pink.

☞ Packaging: Taped / Box and Bulk.

☞ Forming: P / M / MB / MK / F / FK1 / FK2 & FKK .

☞ Standard: JIS-C-5202



ISO9001:2015

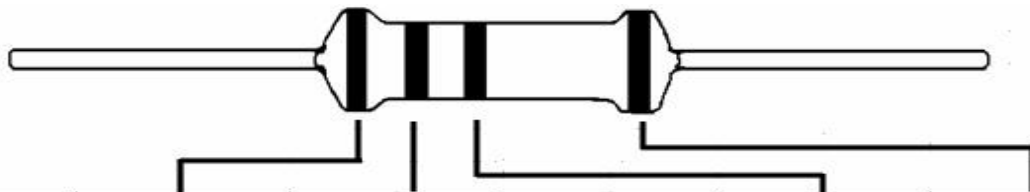
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2. Performance Specifications

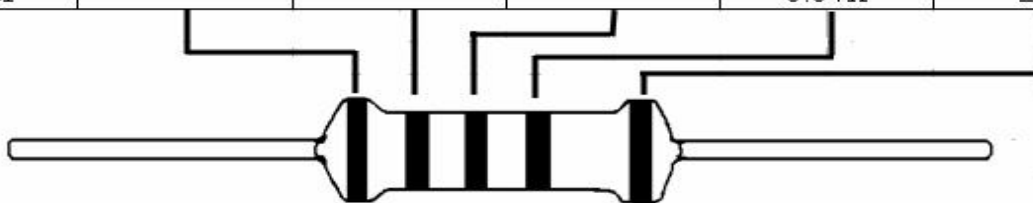
Characteristics	Standard	Test Methods		
1. Resistance Temperature Coefficient (PPM/°C)	±350PPM/°C	Natural resistance change per temperature degree centigrade. $\frac{R2 - R1}{R1(T2 - T1)} \times 10^6 \text{ (PPM/°C)}$ R1: Resistance value at reference temperature. (T1) R2: Resistance value at reference temperature. (T2) T1: Room Temperature T2 : T1 ±100°C		
2. Dielectric Withstanding Voltage	No evidence of flashover, mechanical damage or arcing or, insulation break down.	Resistors shall be subjected to an approximately sinusoidal test potential (as below) 60Hz applied between both terminals connected together and a 90° V-Block extending beyond the end of the resistor.		
		Resistor Wattage	DC Volts	
		1/8W (1/4WS) 1/4W (1/2WS) 1/2W 1W,2W Above	150 350 600	
3. Solderability	90% Covered min.	The terminal lead shall be dipped into molten solder s at 3.2 to 4.8mm from the body of resistor. The temp. and time as below: a. 235±5°C for 2±0.5 seconds b. 270±10°C for 2±0.5 seconds		
4. Resistance to Soldering	No evidence of mechanical damage △ R/R ±5%	The terminal of the resistor is dipped into the molten solder of 350±10°C for 3±0.5 seconds. Then put the resistor in the room temperature. For min.3 hours.		
5. Humidity Load Life	±5% Max./1000Hours	Resistance change after 1000 hours (1.5 hours on 0.5 hours off)at rated continuous working voltage in a humidity chamber controlled at 40 ± 2 °C and 90~95% relative humidity .		
6. Load Life	±5% Max./1000Hours	Permanent resistance change after 1000 hours operating at rated continuous working voltage with a duly cycle of 1.5 hours on 0.5 hours off at 70 ± 2°C ambient .		
7. Temperature Cycling	△ R/R at ± 1% Max. No evidence of mechanical damage.	Resistance change after continuous five cycles for duty cycle as specified below.		
		Step	Temperature	Time
		1	-30°C	30 Minutes
		2	+25°C	10~15 Minutes
		3	+85°C	30 Minutes
4	+25°C	10~15 Minutes		

Characteristics	Standard	Test Methods
8. Short Time Overload	Δ R/R at $\pm 1\%$ Max. with no evidence of arcing burning, or charring	Permanent resistance change after the application of a potential of 2.5 times rated continuous working voltage for 5 seconds at room temperature.
9. Terminal Strength	No evidence of mechanical damage or loosening terminals	Direct load resistance to 2.5kg direct load 30 \pm 5 seconds twist test, for axial leads unit only. Terminal lead shall be bent through at a right angle at a point of 6.35mm from the body edge of resistor and shall be rotated through at a right angle about the original axis of the bent terminal in alternating direction for a total 3 rotations.

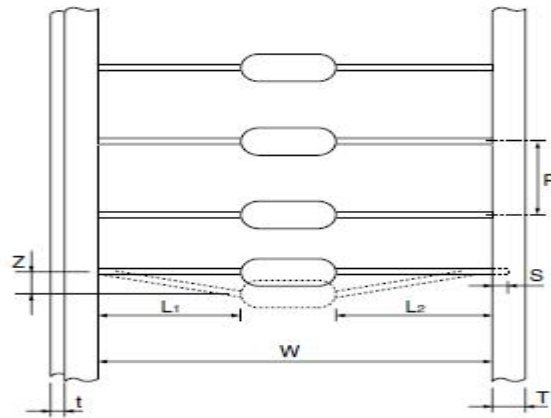
3. Marking



Color	第一道	第二道	第三道	次方	误差
Black	0	0	0	10^0	
Brown	1	1	1	10^1	$\pm 1\%$ (F)
Red	2	2	2	10^2	$\pm 2\%$ (G)
Orange	3	3	3	10^3	
Yellow	4	4	4	10^4	
Green	5	5	5	10^5	$\pm 0.5\%$ (D)
Blue	6	6	6	10^6	$\pm 0.25\%$ (C)
Violet	7	7	7		$\pm 0.10\%$ (B)
Grey	8	8	8		$\pm 0.05\%$ (A)
White	9	9	9	0.001 Ω	
Gold				0.1 Ω	$\pm 5\%$ (J)
Silver				0.01 Ω	$\pm 10\%$ (K)



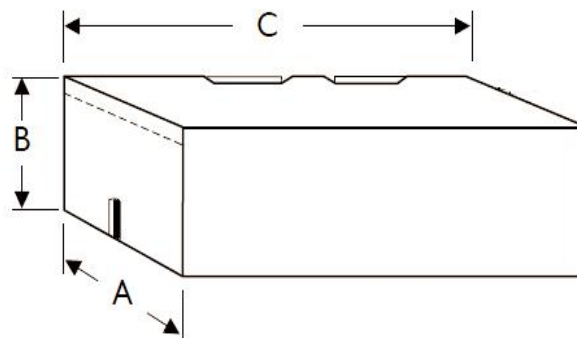
4. Taping Dimension



Type	W±1.0	P±0.5	T±0.5	L1-L2	S	t	Z
T63	63	5	6	1.0 Max	3.2 Min	0.8 Max	1.2 Max

5.Packing

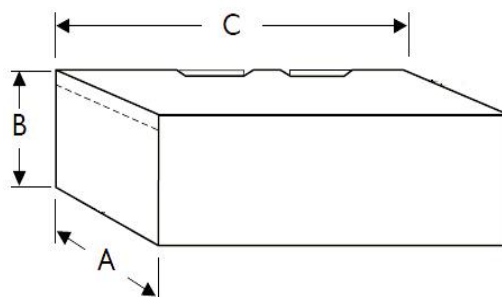
Taping Type:



Unit:mm/pcs

Type	Watts	A	B	C	Q'ty
T63	1W/2WS	86	80	255	1000
	2W/3WS	86	90	255	1000

Bulk Type:



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Unit:mm

Watts	A	B	C
1/8W,1/4W,1/2W	125	75	243
1W,2W,3W,5W	50	100	255

6.Part Number

MO - 0414 - J - - I
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 1 - 2 - 3 - 4 - 5

1. Type	MO = Metal Oxide Film Resistor MOC = Metal Oxide Film Resistor and Lead Wire used Tinned copper Wire
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2. Power/Size	Type	0204	0207s	0207	0410S	0410	0925
	Power	1/8W	1/4WS	1/4W	1/2WS	1/2W	5W

3. Tolerance	Code	G	J
	%	±2%	±5%

4. Value	E24	R15	1R5	150	151	152	153	154	155	156
	Value	0.15Ω	1.5Ω	15Ω	150Ω	1.5KΩ	15KΩ	150KΩ	1.5MΩ	15MΩ

5. Shape	Code	T	P	M	MB	MK	F	FK1	FK2	FKK
	Type	Taping	P Type	M forming	MB forming	MK forming	F forming	FK1 forming	FK2 forming	FKK forming

ISO9001:2015