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METEL OXIDE FILM RESISTOR (MOF)

1. Applicable Scope

Applicable Scope :This type standard specification is for use in consumer electronics , computer . telecommunication equipments....etc .

2. Part Number

It is composed by Type , Rated Wattage , Terminal Form , Character , Nominal Resistance and Tolerance .e.g.

MOF	W	P(M)	T (+-350PPM/℃)	Ω	J(±5%)
Type	Rate Wattage	Terminal Form	Characteristic	Nominal Resistance	Tolerance

2-1 Type

Metal Oxide Resistor is called " MOF " .

2-2 Rated Wattage

Show by " W", such as 1/4W, 1/2WS...5W.

2-3 Terminal For

Upon the shape of terminal , it has P form ,M form , and F form .

2-4 Characteristic

According with EIAJ-RC-2645 or MIL-R-11804.

2-5 Nominal Resistance

Ω 、 KΩ are its unit which is in accordance with JIS-C6402 (E-96 series)

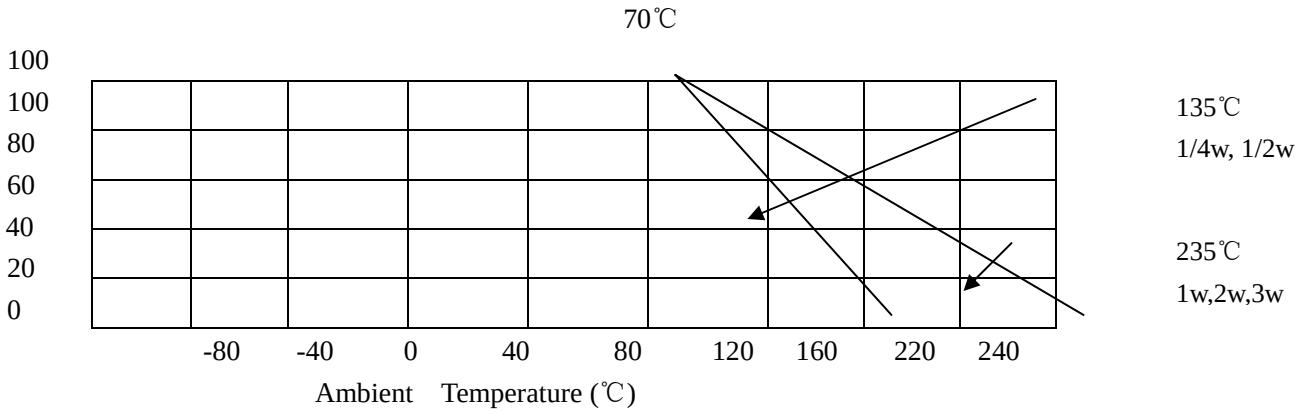
2-6 Tolerance

It is measured by Bridge-method at room temperature

F±1% G±2% J±5% K±10%.

3 Rated Power

Rated power is the value of Max load voltage specified at the ambient temperature of 70℃ and shall meet the functions of electrical and mechanical performance .When the ambient temp surpasses above mentioned temperature , the value declines as following :



It is calculated as the following formula E= √ P*R

However , in case the voltage calculated exceeds the maximum load voltage , such the maximum load . Voltage shall be regarded as its voltage , means whichever less.

E=Rated Continuous Working Voltage (V)

P =Rated Power (W)

R=Nominal Resistance Value (Ω)

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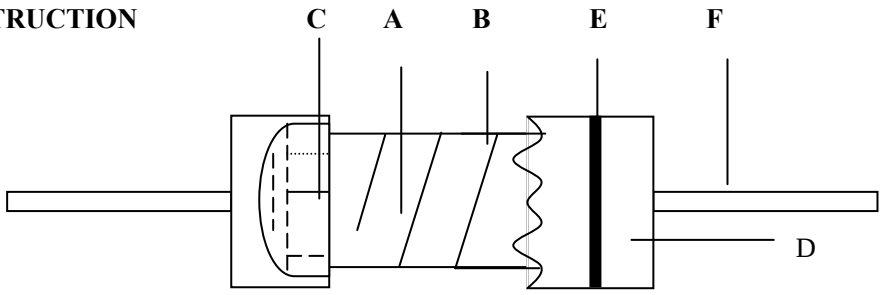
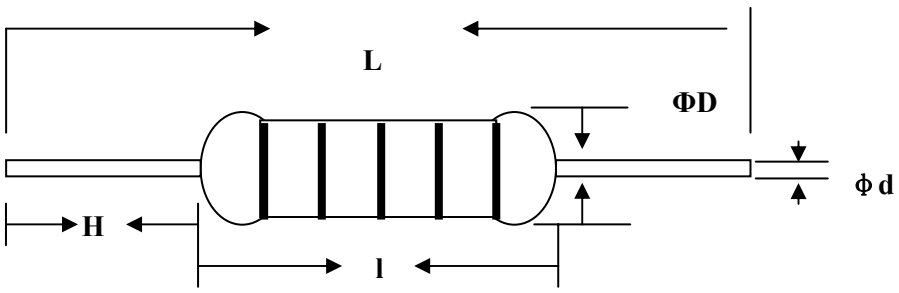
4. CONSTRUCTION



A: CERAMIC CORE (HIGH CONDUCTIVITY)
B: METEL OXIDE FILM (HIGH STABILITY)
C : END CAP(HIGH RELIABILITY FITTING BY ORIGINAL CAPPRESSING METHOD)
D : EPOXY RESIN(INSULATIVE LACQUER. SOLVEN-PROOF)
E: COLOR CODE(PER MIL＆EIA STANDARDS PERMANENT
F LEAD WIRE (CP WIRE)

Power Rate	MAX Working Voltage	Max Overload Voltage	Dimensions					Value rage
			L	I	D	H	d±0.05	
1/4W	250V	500V	60	6.5±1.0	2.3±0.3	28±2.0	0.45	10Ω~100K
1/2w	350V	700V	60	9.5±1.0	3.2±0.5	26±2.0	0.50	0.1Ω~100K
1WS	350V	700V	60	9.5±1.0	3.2±0.5	26±2.0	0.50	
1W. 2WS	500V	1000V	60	11.5±1.0	4.5±1.0	25±2.0	0.70	
2W. 3WS	500V	1000V	60	15.5±1.0	5.0±1.0	23±2.0	0.70	
3W	500V	1000V	94	17.5±1.0	6.0±1.0	38±2.0	0.70	
5W	500V	1000V	94	24.5±1.0	8.0±1.0	35±2.0	0.70	



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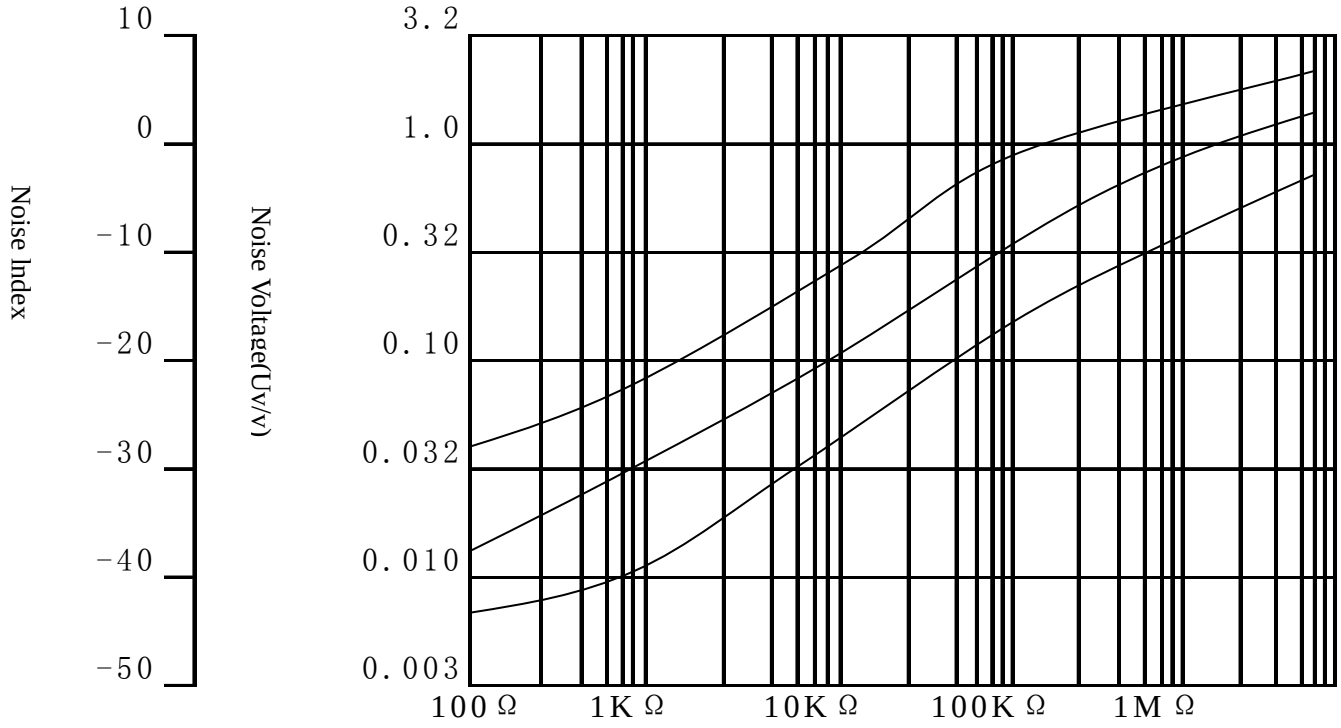
6. CHARCTERISTICS

ITEM	SPECIFICATIONS	TEST METHODS（JIS C5202）
DC RESISTANCE	ALLOWED UNDER R RATE TOLERANCE	5．1 10±1（mm） 10±1（mm） 
T、C、R	±350PPM/℃	5．2 TEST TERMS25℃/125℃
SHORT TIME OVERLOAD	Within±（1%+0.05Ω）	5．5 PERMANENT RESISTANCE CHANGE AFTER THE APPLICATION OF APOTENTAL OF 2.5 TIME RCWV FOR 5 SECONDS
INSULATION RESISTANCE	Over 1000MΩ	5.6 PUT THE TEST ITEM INTO VBLOCK,DC 500V VOLTAGE 1MIN
INTERMITTENCE OVERLOAD VOLTAGE	Within ±（1%+0.05Ω）	5.8 RESISTANCE CHANGE AFTER 1SECOND ON , 25 SECOND OFF 10000 CYCLES AT 4 TIMES RCMV
TENSILE STRENGTH	THE END OF LEAD WIRES ARENT LOOSE	6.1 2.5kg,30SEC
TORQUE STRENGTH		6.1 90^0 Bend , 5 TIMES
BENT STRENGTH		6.1 0.25KG ,90^0 bend , 2 times

ITEM	SPECIFICATIONS	TEST METHODS(JIS C5202
RESISTANCE OF VIBRATION	Within ±（1%+0.05Ω） THE END OF LEAD WIRES ARENT LOOSE	6.3 VIBRATION RANGE 10-55HZ FULL EXTENT1.5mm,VDBRATION TO X、Y、Z AXIS FOR 2 HR
RESISTANCE TO SOLDERING HEAT	Within ±（1%+0.05Ω）	6．4 350±10℃ 3±1（SEC）
ADHESION OF SOLDERABLLITY	95% SURFACE OF TERMINAL COVERED BY SOLDER	6．5 230±5℃ 5±1（SEC）
RESISTANCE OF	NO ABNORMALITY IN	6．9 SOLVENT APPOINTED BY JIS SOAK FOR 3MINS，THEN WIPE WITH

SOLVENT	**APPEARANCE，EASY IDENTIFICATION**	**LINT AT ONCE**
TEMPERATURE CYCING	**±（1%+0.05Ω）**	**7．1 -55℃/+88℃，5CYCLING**
LOAD LIFE IN HUMIDITY	**±（5%+0.05Ω）**	**7．9 RESISTANCE CHANGE AFTER 1000HOURS (1.5HRS ON, 0.5HRS OFF) AT RCWV IN A HUMIDITY CHAMBER CONTROLLED AT 40 ℃,AND 90-95%RELATIVE HUMIDITY**

7. NOISE



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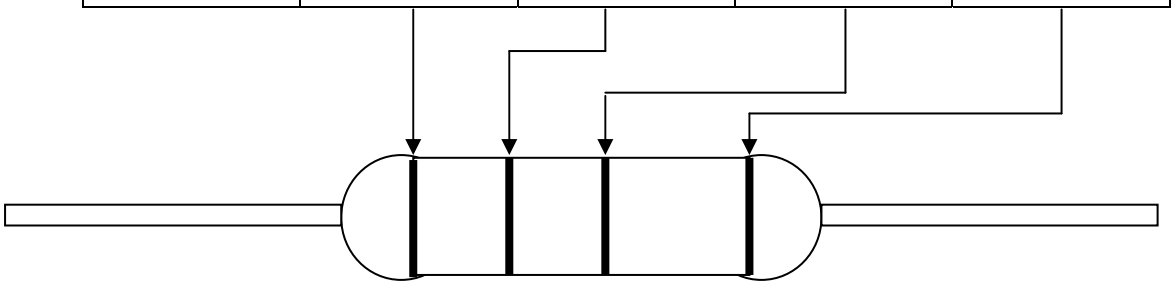
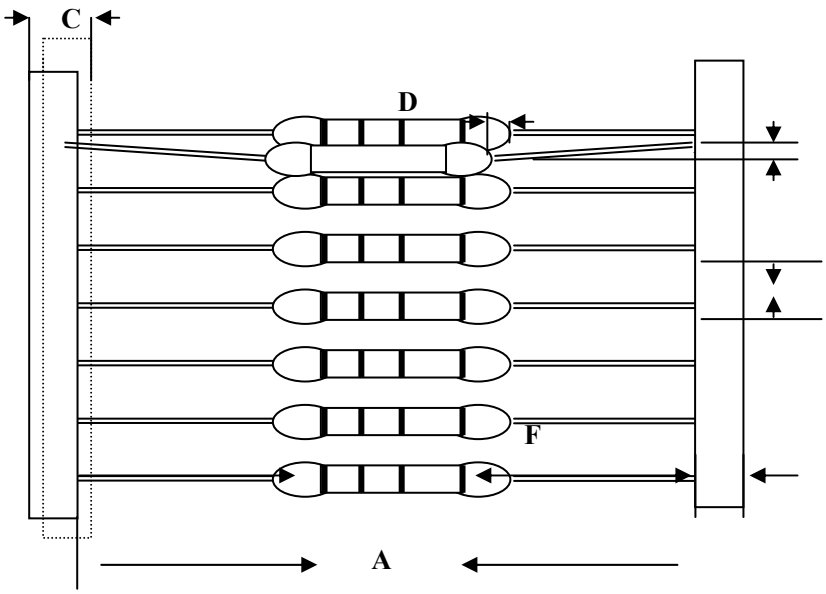
8. Color Coding

Color	1sh significant	2nd significant	Multiplier	Tolerance
Silver			0.01	±10%(K)
Golden			0.1	±5%(J)
Black	0	0	1	
Brown	1	1	10	±1%(F)
Red	2	2	100	±2%(G)
Orange	3	3	1K	
Yellow	4	4	10K	
Green	5	5	100K	±0.5%(D)
Blue	6	6	1M	±0.25%(C)
Purple	7	7	10M	±0.1%(B)
Gray	8	8		
White	9	9		



9-

Type size



ITEM	T-52
A	52+1
B	5±0.5
C	5±1
D	Max0.8
E	Max1.2
F	6±1

Unit: mm

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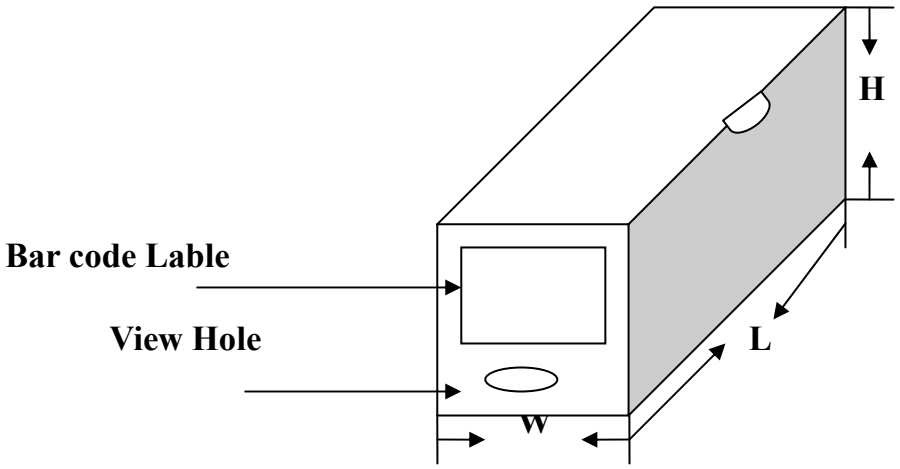
10. PACKING

10-1 Taping Type



	Wattage	L(mm)	W(mm)	H(mm)	Q'ty Pcs/box
T-52	1/4W,1/2WS	260	80	100	5000 Pcs
	1/2W,1WS	260	80	85	2000 Pcs
	1W,2WS	260	80	85	1000 Pcs
	2W,3WS	260	80	85	1000 Pcs
T-84	3W,5WS	270	110	92	500 Pcs
	5W	270	110	92	250 Pcs

Tolerance : ±5mm

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12 Note :

1-IN THE HIGH HUMIDLTY SITUATION, IT WILL MAKE THE SOLDERABILITY WORST. PLEASE PRESERVE THE RESISTORS IN 40℃,70RH BELOW

2-PLEASE DO NOT OPEN THE MINI PACKAGE WHEN YOU PRERVE IT

3- WHEN IN THE HIGH TEMPERATURE SITUATION, PLEASE ACCORD TO THE PICTURE OF "POWER,DERATING CURVE"REDUCE THE USE OF POWER RATING

4- SHOULD AVOID THE CONNECTOR OF RESTANCE REPLACED BY LARGE VOLTAGE AND POWER

5-DUE TO ITS SPECIAL MATERIAL OF PAINT,YOU MUST BE CAREFUL TO ITS WEAK APPEARANCE

6-AFTER CLEANING THE BODY, IT WILL MAKE THE FILM WEAKER.BUT IF YOU LET IT NATURE DRY WITHOUT TOUCHING OR PAINTING ANYTHING, THE RESISTORS WILL RECOVER ITS STRENGTH BY 20MINUTES

7. THE RESISTORS ARE REQUESTED NOT TO PLACE BY THE OTHER HEATING ACCESSOR WHICH WILL OBSRUCT THEIR HEAT DISSIPATI

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