

Metal Oxide Resistors - MOF/MOF-S Series

FEATURES

- Power rating: 1/4W to 5W at 70°C
- Superior electrical performance-commonly used in application with high endurance demands.
- Standard tolerance: $\pm 5\%$ (consult factory for 1%)
- Standard range: 10R-1M in E24 series
- Color band marking, gray body color
- Flameproof coating
- Mini size available (As MOF-S type)
- Operating temperature : -55°C ~+200°C

MATERIAL

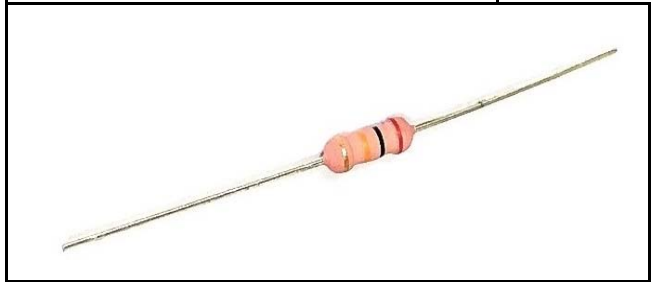
- Element: deposited oxide film
- Core: high purity ceramic Al_2O_3
- Termination: standard solder-plated copper lead
- Coating: gray (pink is available in Mini-size by request) silicone



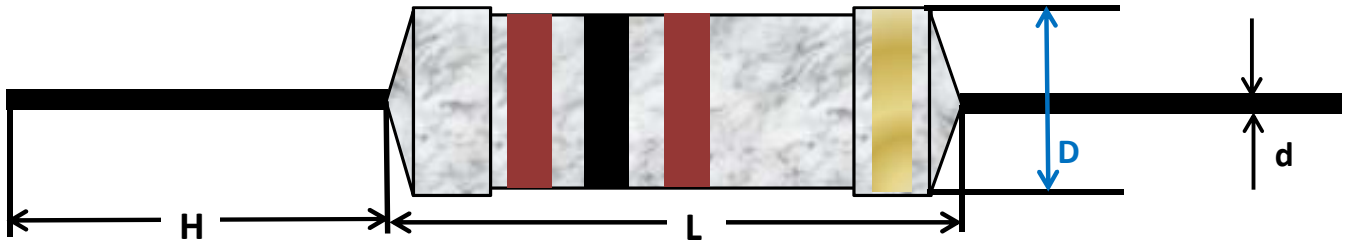
STANDARD-Gray silicone



By request - Pink silicone , Mini-size only



GENERAL SPECIFICATION



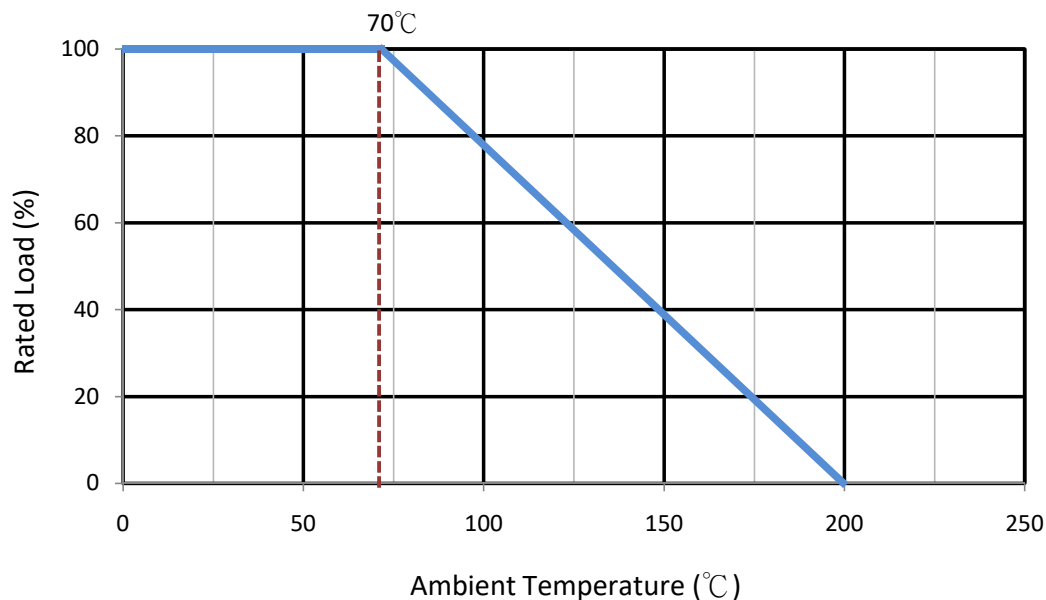
TYPE	DIMENSION (mm)				POWER RATING	MAXIMUM VOLTAGE		RESISTANCE RANGE $\pm 5\%$
	L	D	H	$d \pm 0.05$		WORKING	OVERLOAD	
MOF1/8W-1/4WS	3.2 ± 0.2	1.6 ± 0.2	27 ± 3.0	0.45	1/8W-1/4W	200V	400V	$0\Omega \sim 1M\Omega$
MOF1/4W-1/2WS	6.0 ± 1.0	2.3 ± 0.5	27 ± 2.0	0.56	1/4W-1/2W	250V	500V	$0\Omega \sim 1M\Omega$
MOF1/2W-1WS	9.0 ± 1.0	3.0 ± 0.5	26 ± 2.0	0.59	1/2W-1W	350V	700V	$0\Omega \sim 1M\Omega$
MOF1W-2WS	11.0 ± 2.0	4.0 ± 1.0	35 ± 3.0	0.80	1W-2W	500V	1000V	$0\Omega \sim 1M\Omega$
MOF2W-3WS	15.0 ± 2.0	5.0 ± 1.0	35 ± 3.0	0.80	2W-3W	500V	1000V	$0\Omega \sim 1M\Omega$
MOF 3W-5WS	17.0 ± 2.0	6.0 ± 1.0	34 ± 3.0	0.80	3W-5W	500V	1000V	$0\Omega \sim 1M\Omega$
MOF 5W	24.0 ± 2.0	8.0 ± 1.0	35 ± 2.0	0.80	5W	750V	1000V	$1\Omega \sim 1M\Omega$

* Maximum Working Voltage determined by $E = \sqrt{PxR}$, where E should not exceed value listed in column above

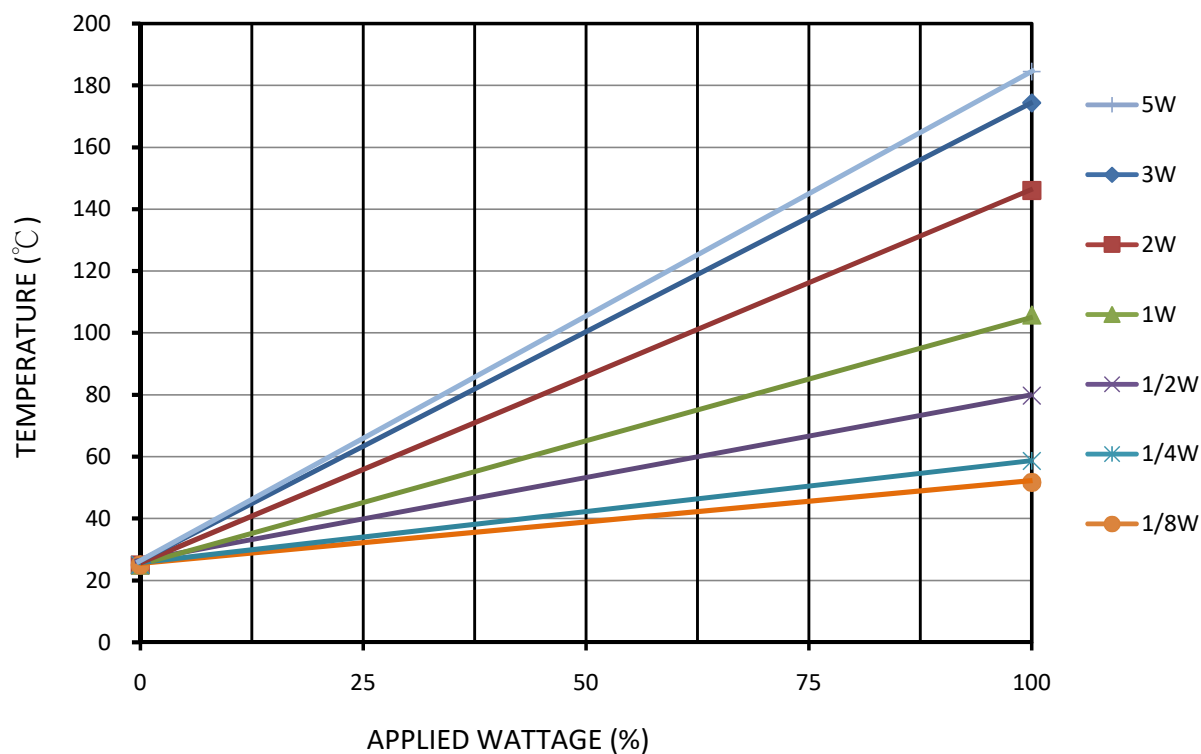
Maximum Overload Voltage equals to $2.5xE$, but should not exceed value listed in column above

** Resistance 10R~10K beyond is metal film, consult factory for resistance not included

DERATING CURVE



SURFACE TEMPERATURE



CHARACTERISTIC

TEST	TEST METHOD		APPRAISE
Temperature Coefficient	IEC 60115-1 4.8	-55℃~155℃	±200ppm max.
Load Life (1000 hours)	IEC 60115-1 4.25	70±2℃ at RCWV for 1000 hours (1.5 Hr. on , 0.5 Hr. off)	<±1% typical, ±3% max
Shorttime Overload	IEC 60115-1 4.13	2.5 times rated power for 5 sec.	±0.5% Max.
Temperature Cycling	IEC 60115-1 4.19	-55℃ → room temp. → +155℃ → room temp. (5 cycles)	±1.0% Max.
Moisture Resistance	IEC 60115-1 4.24	40±2℃ , 90-95% RH for 56 days , with 0.1 times RCWV	±1.0% Max.
Insulation Resistance	IEC 60115-1 4.6	in V-block for 60sec. , test voltage by type	100MΩ Min.
Effect of Soldering	IEC 60115-1 4.18	260±3℃ for 10±1 sec. immersed to point 3±0.5mm from the body	±0.5% Max.

* Total maximum resistance change is $\Delta R \pm 0.01R$

HOW TO ORDER :

<u>SERIES</u>	<u>WATTAGE</u>	<u>RESISTANCE</u>	<u>TOLERANCE</u>	<u>PACKAGE</u>
MOF	1/4W 1/2WS : 3W 5W	0R1=0.1Ω 10R=10Ω 1K=1KΩ	5%	T=TAPING BOX R=TAPING REEL B=BULK

PACKAGE STANDARD PACKAGE QUANTITY :

TYPE	T=TAPING BOX	R=TAPING REEL	B=BULK
1/8W-1/4WS	5000	5000	1000 pcs/bag , 10kpcs/box
1/4W-1/2WS	5000	5000	1000 pcs/bag , 10kpcs/box
1/2W-1WS	2000	2500	500 pcs/bag , 5kpcs/box
1W-2WS	1000	2000	500 pcs/bag , 2kpcs/box
2W-3WS	1000	1000	500 pcs/bag , 1kpcs/box
3W-5WS	500	1000	500 pcs/bag , 1kpcs/box
5W	250	500	