

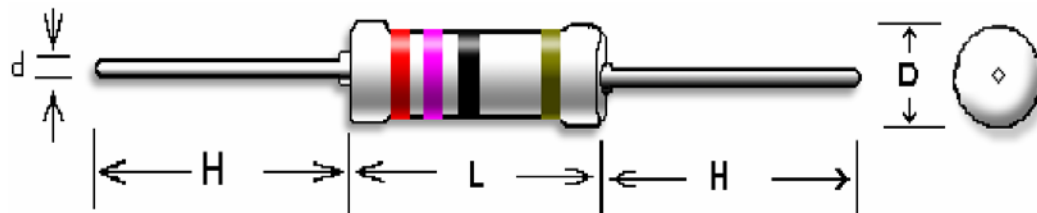
# MO- Metal Oxide Film Fixed Resistor

## Specifications Per

- IEC-115-4
- MIL-11804
- DIN-44603

## Features

- Flameproof Multi-layer Coating Meets UL-94V-0
- Flameproof Feature Meets Overload Test UL-1412
- Solvent Resistant
- Special Tin Plated Electrolytic Copper Lead Wire



## Dimensions:

Type No.	Body Length (L, mm)	Body Diameter (D, mm)	Lead Wire Length (H, mm)	Lead Wire Diameter (d, mm)	Net Weight Per 1000Pcs
MO050	8.8±1.0	3.2±0.2	28±3.0	0.6±0.03	340 Grams
MO100	11.0±1.0	4.0±0.5	28±3.0	0.7±0.03	500 Grams
MO200	13.5±1.0	5.0±0.5	30±3.0	0.8±0.03	1050 Grams
MO300	15.5±1.0	5.5±0.5	30±3.0	0.8±0.03	1200 Grams
MO400	19.0±1.0	6.0±0.5	30±3.0	0.8±0.03	1620 Grams
MO500	19.0±1.0	8.0±0.5	30±3.0	0.8±0.03	3100 Grams
MO600	24.0±1.0	8.0±0.5	30±3.0	0.8±0.03	3700 Grams
MO700	31.5±1.0	8.0±0.5	30±3.0	0.8±0.03	4000 Grams
MO1000	52.5±1.5	8.0±0.5	39±3.0	0.8±0.03	6900 Grams

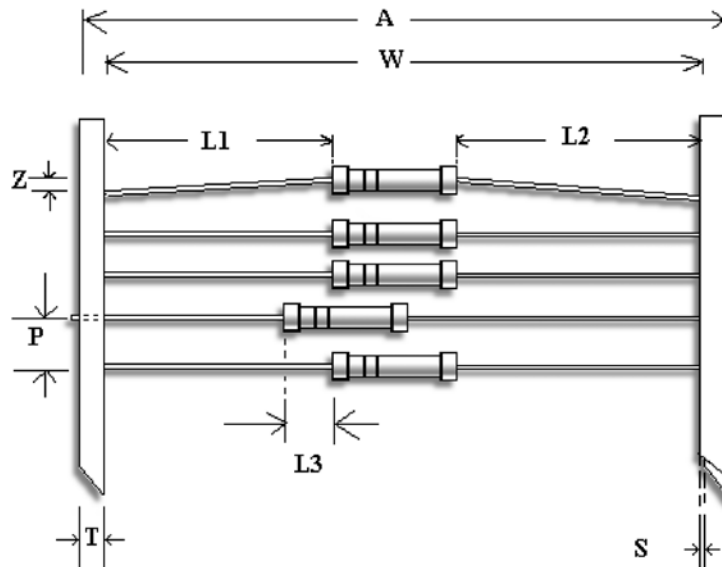
## General Specifications:

Type No.	Power Rating At 70°C	Max. Working Voltage	Max. Overload Voltage	Min. Resistance	Max. Resistance	Resistance Tolerance	Standard Resistance Values
MO050	0.5W	350V	600V	0.1Ω	120K	±5%	E-24
MO100	1W	350V	600V	0.1Ω	120K	±5%	E-24
MO200	2W	350V	700V	0.1Ω	150K	±5%	E-24
MO300	3W	350V	700V	0.1Ω	150K	±5%	E-24
MO400	4W	450V	800V	0.1Ω	180K	±5%	E-24
MO500	5W	500V	1000V	0.1Ω	200K	±5%	E-24
MO600	6W	500V	1000V	0.1Ω	220K	±5%	E-24
MO700	7W	600V	1200V	0.22Ω	220K	±5%	E-24
MO1000	10W	1000V	2000V	0.33Ω	330K	±5%	E-24

*Special sizes, values, and specifications not listed available on special order.*

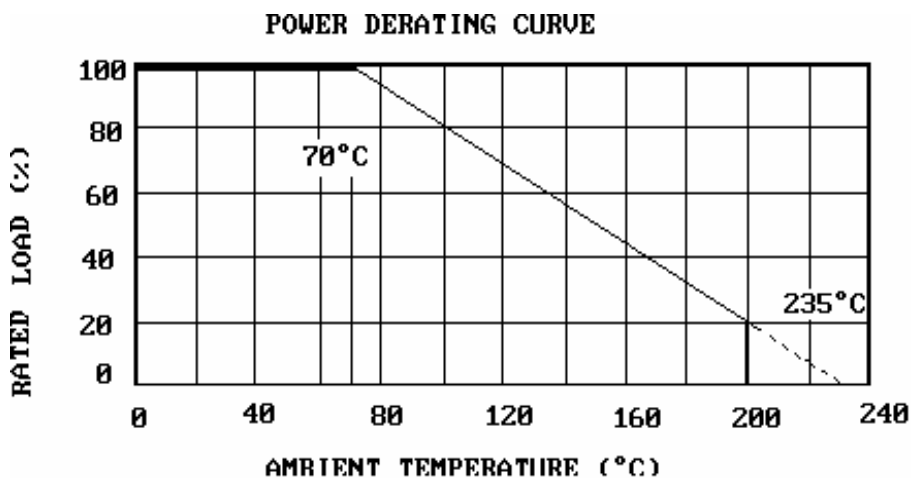
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Taping Specifications:



Unit (mm)

Type No.	A (Max.)	L1-L2 (Max.)	L3 (Max.)	P ±0.5	S (Max.)	T ±0.5	W ±1.5	Z (Max.)
MO050	65	±1.0	0.5	5.0	0.8	6.0	52.5	1.2
MO100	65	±1.0	0.5	5.0	0.8	6.0	52.5	1.2
MO200	76	±1.5	1.0	10.0	0.8	6.0	63.5	1.2
MO300	76	±1.5	1.0	10.0	0.8	6.0	63.5	1.2
MO400	76	±1.5	1.0	10.0	0.8	6.0	63.5	1.2
MO500	76	±1.5	1.0	10.0	0.8	6.0	63.5	1.2
MO600	97	±1.5	1.0	10.0	0.8	6.0	83.0	1.2
MO700	97	±1.5	1.0	10.0	0.8	6.0	83.0	1.2
MO1000	Available only in bulk package.							



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## Performance Summary:

Characteristics	Limits
Dielectric Withstanding Voltage, VAC or DC	MO050: 350 MO100 / MO200: 600 MO300 to MO1000: 1000
Temperature Coefficient, PPM / °C	±300
Operating Temperature Range, °C	-55~+200
Insulation Resistance, MΩ	10 <sup>4</sup>
Voltage Coefficient, PPM / V	25

## Performance Specifications

Test Characteristics	Test Conditions	Limits
Short Time Over Load	IEC 60115-1 4.13 5 seconds 2.5x rated voltage (not over max. overload voltage)	±(1%+0.05R)
Load Life In Humidity	IEC 60115-1 4.24 56 days at 40°C and 93% relative humidity	±5%
Load Life 1,000 hours	IEC 60115-1 4.25.1 Rated load 1.5 hours ON, 0.5 hours OFF, at 70°C	±5%
Resistance To Soldering Heat	IEC 60115-1 4.18 10 seconds at 260°C solder bath temperature	±(1%+0.05R)
Solderability	MIL-STD-202 Method 208 Solder area covered after 230±5°C/5±0.5 seconds w/ flux applied	90% Min.
Vibration	MIL-STD-202 Method 204 Six hours in each parallel and axial direction w/ a simple harmonic motion having an amplitude of 1.52mm and 10 to 20,000 Hz.	±(1%+0.05R)
Terminal Endurance	IEC 60115-1 4.25.3 1000 hours at 125°C without load	±(1%+0.05R)
Thermal Shock	IEC 60115-1 4.19 -55°C 30minutes, +125°C 30minutes, 5 cycles	±(2%+0.05R)

## Ordering Information

Type	Tolerance	Resistance Value	Packaging	Special Request (Optional)
MO100 MO200	J (5%)	10K	B TR	LV (Low value)

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