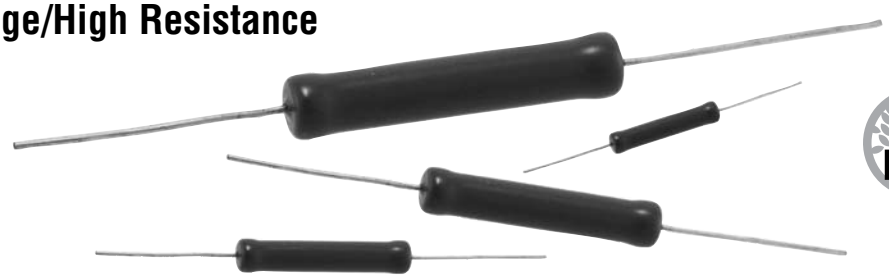
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Maxi-Mox

Precision Thick Film Axial Terminal
High Voltage/High Resistance



Maxi-Mox resistors are also versatile. Suitable for industrial applications requiring still more power for high voltage switching, industrial control, and high voltage current limiting.

FEATURES

- Wide resistance ranges
- Voltage rating to 50KV
- Power rating to 12.5 watts
- Silicone or epoxy coating
- Non-inductive available

APPLICATIONS

- HV power supplies
- Power distribution
- Medical instrumentation
- Avionics

SERIES SPECIFICATIONS

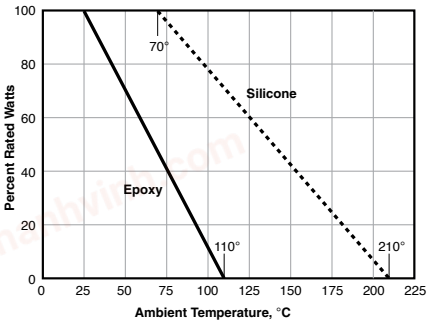
Ohmite Series	Resistance Range (Ω)	Power @70°C	Voltage Rating	Available Tolerances*	Capacitance (pf)
• High-temperature (silicone coated)					
MOX-1-12	250Ω to 300,000M	2.5W	10.0KV	1% to 20%	0.75
MOX-2-12	500Ω to 700,000M	5.0W	20.0KV	1% to 20%	0.60
MOX-3-12	750Ω to 1,000,000M	7.5W	30.0KV	1% to 20%	0.50
MOX-4-12	1K to 1,000,000M	10.0W	40.0KV	1% to 20%	0.40
MOX-5-12	1.25K to 1,000,000M	12.5W	50.0KV	1% to 20%	0.30
• Standard (epoxy coated)		**@25°C**			
MOX-1-13	250Ω to 300,000M	2.0W	10.0KV	0.1% to 20%	0.75
MOX-2-13	500Ω to 700,000M	3.0W	20.0KV	0.1% to 20%	0.60
MOX-3-13	750Ω to 1,000,000M	4.0W	30.0KV	0.1% to 20%	0.50
MOX-4-13	1K to 1,000,000M	5.0W	40.0KV	0.1% to 20%	0.40
MOX-5-13	1.25K to 1,000,000M	6.0W	50.0KV	0.1% to 20%	0.30

*Some tolerances are not available over the entire resistance range.

CHARACTERISTICS

Core	Alumina
Resistor	Thick Film
Terminal	RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu
Resistance Range	250Ω to 1 Teraohm
Power Rating	2.0W to 12.5W
Voltage Rating	10KV to 50KV
Tolerance	0.5% to 20%; not all tolerances available in all values
Operating Temperature	-55°C to +210°C
Temperature Coefficient	25ppm/°C 0° to 85°C available

DERATING



(continued)

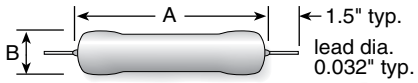
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Maxi-Mox

Precision Thick Film Axial Terminal
High Voltage/High Resistance

DIMENSIONS

Ohmite Series	Power	A max. (in/mm)	B max. (in/mm)
• High-temperature (silicone coated)			
MOX-1-12	2.5W	1.120” / 28.45	0.310” / 7.87
MOX-2-12	5.0W	2.120” / 53.85	0.310” / 7.87
MOX-3-12	7.5W	3.120” / 79.24	0.310” / 7.87
MOX-4-12	10.0W	4.120” / 104.65	0.310” / 7.87
MOX-5-12	12.5W	5.120” / 130.05	0.310” / 7.87
• Standard (epoxy coated)			
MOX-1-13	2.0W	1.140” / 28.96	0.345” / 8.76
MOX-2-13	3.0W	2.140” / 54.36	0.345” / 8.76
MOX-3-13	4.0W	3.140” / 79.76	0.345” / 8.76
MOX-4-13	5.0W	4.140” / 105.16	0.345” / 8.76
MOX-5-13	6.0W	5.140” / 130.56	0.345” / 8.76



PERFORMANCE DATA

Characteristic	Test Method	Specification
Humidity	MIL-STD-202, Method 103B, Condition B	±0.25%
Dielectric Withstanding Voltage	MIL-STD-202, Method 301, 750V	±0.25%
Insulation Resistance	MIL-STD-202, Method 302, Condition A or B	>10,000 M or greater dry
Thermal Shock	MIL-STD-202, Method 107G, Condition B, B-1, or F	±0.20%
Load Life	MIL-STD-202, Method 108A, Condition D	±1.0%
Resistance to Solvents	MIL-STD-202, Method 215G	Acceptable for High Reliability Series only
Terminal Strength	MIL-STD-202, Method 211A, Condition A or B	±0.25%
Shock (Specified Pulse)	MIL-STD-202, Method 213B, Condition I	±0.25%
Vibration High Frequency	MIL-STD-202, Method 204D, Condition D	±0.20%
Power Conditioning	MIL-R-49462A, Par 4.8	±0.50%
Solderability	MIL-STD-202, Method 208F	>95% Coverage

TEMP. AND VOLTAGE COEFFICIENTS OF RESISTANCE

	Temp. Coeff. of Resistance*			Voltage Coeff. of Resistance**	
Resistor Series	25 PPM/°C	50 PPM/°C	100 PPM/°C	< 2PPM/Volt	< 5PPM/Volt
MOX-1	1K-99M	100M-450M	451M-30,000M	250Ω-1,000M	1,001M-100,000M
MOX-2	1K-199M	200M-1,000M	1,001M-60,000M	500Ω-2,600M	2,601M-200,000M
MOX-3	1K-299M	300M-1,500M	1,501M-90,000M	750Ω-4,000M	4,001M-300,000M
MOX-4	1K-399M	400M-2,000M	2,001M-120,000M	1K-5,300M	5,301M-400,000M
MOX-5	1K-499M	500M-2,500M	2,501M-150,000M	1.25K-6,700M	6,701M-500,000M

*TCR of 25ppm for temperature range of 0°C-85°C. TCR of 50ppm and 100ppm for -55°C to 125°C. Consult factory for TCR values operating higher than 125°C
**For tighter VCs please contact Ohmite.

ORDERING INFORMATION

Coating
2 = Black silicone
3 = Epoxy
6 = No coating

Non-inductive *optional*

RoHS Compliant

M O X - 1 N - 1 3 1 0 0 6 F E

- **Maxi Mox Series**
- **Style** 1,2,3,4,5,8
- **Terminal** 1 = 0.032"
- **Ohms** First 3 digits are significant; 4th digit is multiplier (# of zeroes to follow). Examples: 1000 = 100Ω, 1503 = 150,000Ω, 5005 = 50,000,000Ω
- **Tolerance** D = 0.5%, F = 1%, G = 2%, J = 5%, K = 10%, M = 15%, P = 20%

Not all tolerances available in all values.