

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.



Maxi-Mox Resistors

Precision Thick Film Axial Lead High Voltage/High Resistance Resistors

FEATURES

- Wide resistance ranges
- Voltage rating to 30.0KV
- Power rating to 12.5 watts
- Silicone or epoxy coating

APPLICATIONS

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

SPECIFICATIONS

Material

Core: Alumina

Resistor: Thick Film

Electrical

Resistance Range:

1K to 1 Teraohm

Power Rating: 2.0W to 12.5W

Voltage Rating: 10KV to 50KV

Tolerance: 0.1% to 20%

Operating Temperature:

-55°C to +220°C

Ohmite Series	Resistance Range (Ohms)	Power @25°C	Voltage Rating	Available Tolerances*	A ± 0.015" (in/mm)	B max. (in/mm)
• High-temperature (silicone coated)						
MOX-1-12	250 ohms to 300,000M	2.5W	10.0KV	1% to 20%	1.120" / 28.45	0.310" / 7.87
MOX-2-12	500 ohms to 700,000M	5.0W	20.0KV	1% to 20%	2.120" / 53.85	0.310" / 7.87
MOX-3-12	750 ohms to 1,000,000M	7.5W	30.0KV	1% to 20%	3.120" / 79.24	0.310" / 7.87
MOX-4-12	1K to 1,000,000M	10.0W	40.0KV	1% to 20%	4.120" / 104.65	0.310" / 7.87
MOX-5-12	1.25K to 1,000,000M	12.5W	50.0KV	1% to 20%	5.120" / 130.05	0.310" / 7.87

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

• Standard (epoxy coated)

MOX-1-13	250 ohms to 300,000M	2.0W	10.0KV	0.1% to 20%	1.140" / 28.96	0.345" / 8.76
MOX-2-13	500 ohms to 700,000M	3.0W	20.0KV	0.1% to 20%	2.140" / 54.36	0.345" / 8.76
MOX-3-13	750 ohms to 1,000,000M	4.0W	30.0KV	0.1% to 20%	3.140" / 79.76	0.345" / 8.76
MOX-4-13	1K to 1,000,000M	5.0W	40.0KV	0.1% to 20%	4.140" / 105.16	0.345" / 8.76
MOX-5-13	1.25K to 1,000,000M	6.0W	50.0KV	0.1% to 20%	5.140" / 130.56	0.345" / 8.76

TEMPERATURE/VOLTAGE COEFFICIENTS OF RESISTANCE

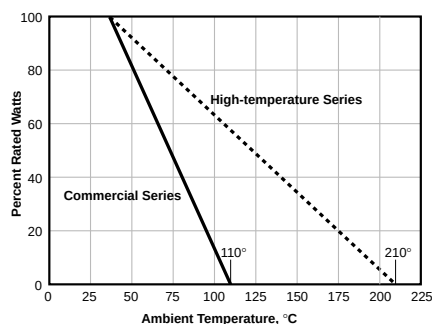
Resistor Series	Temp. Coeff. of Resistance 50 PPM/°C	Temp. Coeff. of Resistance 100 PPM/°C	Voltage Coeff. of Resistance* < 2PPM/Volt	Voltage Coeff. of Resistance* < 5PPM/Volt
MOX-1	1K-450 Meg	451 Meg-30,000 Meg	250Ω-1,000 Meg	1,001 Meg-100,000 Meg
MOX-2	1K-1,000 Meg	1,001 Meg-60,000 Meg	500Ω-2,600 Meg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

*For tighter VC's please contact factory.

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

DERATING



ORDERING INFORMATION

Style 1,2,3,4,5,8		Coating 2 = Black silicone 3 = Epoxy 6 = No coating
MOX	1	3
Maxi Mox Series		Lead 1 = 0.032"
Ohms First 3 digits are significant; 4th digit is multiplier (# of zeroes to follow). Examples: 10R2 = 10.2 ohms 1000 = 100 ohms 1503 = 150,000 ohms		Tolerance D = 0.5% F = 1% G = 2% J = 5% K = 10% M = 15% P = 20%