

# Mini-Mox

## Precision Thick Film Axial Terminal High Voltage/High Resistance



### FEATURES

- Wide resistance ranges
- Silicone or epoxy coating
- Metal oxide resistive element

### APPLICATIONS

- Avionics
- Medical electronics
- High gain feedback applications
- Current pulse limiters
- Vacuum and space application

The Mini-Mox resistor is very versatile, covering a wide resistance range as well as a wide range of operating voltages. Provided with tolerances down to 0.5%, the Mini-Mox resistor works well in precision circuits.

### SERIES SPECIFICATIONS

Ohmite Series	Resistance Range (Ohms)	Power	Voltage Rating	Available Tolerances*	Capacitance (pf)
<b>• High-temperature (silicone coated)</b>		<b>@70°C</b>			
MOX-400-22	500Ω to 300,000M	0.35W	2,500V	1% to 20%	1.00
MOX-750-22	750Ω to 600,000M	0.70W	5,000V	1% to 20%	0.75
MOX1125-22	1K to 1,000,000M	1.40W	7,500V	1% to 20%	0.25
<b>• Standard (epoxy coated)</b>		<b>@25°C</b>			
MOX-400-23	500Ω to 300,000M	0.75W	2,500V	0.5% to 20%	1.00
MOX-750-23	1K to 600,000M	1.00W	5,000V	0.5% to 20%	0.75
MOX1125-23	1K to 1,000,000M	1.50W	7,500V	0.5% to 20%	0.25

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

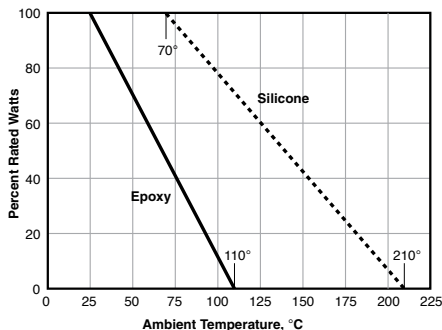
### CHARACTERISTICS

<b>Resistor</b>	Metal Oxide
<b>Coating</b>	Silicone or Epoxy
<b>Core</b>	Alumina
<b>Terminals</b>	Solder-coated axial. RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu
<b>Resistance Range</b>	500Ω to 1 Teraohm
<b>Power Rating</b>	0.35W to 1.5W
<b>Voltage Rating</b>	2500V to 7.5KV
<b>Tolerance</b>	0.5% to 20%; not all tolerances available in all values
<b>Operating Temperature</b>	-55°C to +220°C
<b>Temp. Coefficient</b>	25ppm/°C 0° to 85°C available

### Performance Data

Characteristic	Test Method	Specification
<b>Humidity</b>	MIL-STD-202, Method 103B, Condition B	±0.25%
<b>Dielectric Withstanding Voltage</b>	MIL-STD-202, Method 301, 750V	±0.25%
<b>Insulation Resistance</b>	MIL-STD-202, Method 302, Condition A or B	>10,000M or greater dry
<b>Thermal Shock</b>	MIL-STD-202, Method 107G, Condition B, B-1, or F	±0.20%
<b>Load Life</b>	MIL-STD-202, Method 108A, Condition D	±2.0%
<b>Resistance to Solvents</b>	MIL-STD-202, Method 215G	Acceptable for the Standard Series Only
<b>Terminal Strength</b>	MIL-STD-202, Method 211A, Condition A or B	±0.25%
<b>Shock (Specified Pulse)</b>	MIL-STD-202, Method 213B, Condition I	±0.25%
<b>Vibration, High Frequency</b>	MIL-STD-202, Method 204D, Condition D	±0.20%
<b>Power Conditioning</b>	MIL-R-49462A, Par 4.8	±0.50%
<b>Solderability</b>	MIL-STD-202, Method 208F	>95% Coverage

### Derating



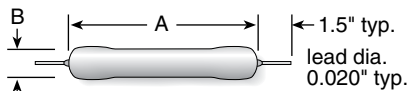
(continued)

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### DIMENSIONS

(in./mm)



Series	Power	A max.	B max.
<b>• High-temperature (silicone coated) @70°C</b>			
MOX-400-22	0.35W	0.510" / 12.95	0.140" / 3.56
MOX-750-22	0.70W	0.820" / 20.83	0.140" / 3.56
MOX1125-22	1.40W	1.210" / 30.73	0.140" / 3.56
<b>• Standard (epoxy coated) @25°C</b>			
MOX-400-23	0.75W	0.580" / 14.78	0.165" / 4.19
MOX-750-23	1.00W	0.880" / 22.35	0.165" / 4.19
MOX1125-23	1.50W	1.270" / 32.26	0.165" / 4.19

### HOW TO ORDER

**MOX 1125 23 1006 F E**

**Style**  
 200, 300, 400, 750, 1125

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

**E = RoHS Compliant**

**Mini Mox Series**  
 0 = MOX-200 or 300;  
 MOX-200 Z or 300 Z = 50ppm  
 2 = 0.020"  
 7 = 0.032"

**Terminal**

**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%

Not all tolerances available in all values.