

# Mini-Mox

## 0.25 Watt and 0.5 Watt Precision Thick Film Axial Terminal High Voltage/High Resistance



### FEATURES

- RoHS compliant
- Wide resistance ranges
- 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 1%, the Mini-Mox resistor works well in precision circuits.

### SPECIFICATIONS

#### Material

**Resistor:** Metal Oxide

**Coating:** Epoxy

**Core:** Alumina

**Terminals:** Solder-coated axial.  
RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu

#### Electrical

**Resistance Range:**

100K to 1,500MΩ

**Power Rating:** 0.25W to 0.5W

**Voltage Rating:** 500V to 1,000V

**Tolerance:** 0.1% to 20%

**Operating Temperature:**

-55°C to +155°C

**Max. Overload Voltage:**

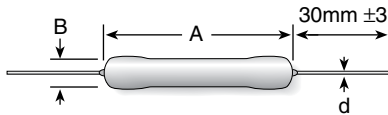
1,000V (MOX200)

1,500V (MOX300)

**Max. Pulse Voltage:**

1,500V (MOX200)

3,000V (MOX300)



Ohmite Series	Resistance Range (Ohms)	Power @25°C	Voltage Rating	Available Tolerances*	A ±0.5mm (in/mm)	B ±0.5mm (in/mm)	d ±0.05mm (in/mm)
MOX200	100K to 1,500M	0.25W	500V	0.1% to 20%	0.26" / 6.5	0.09" / 2.2	0.02" / 0.6
MOX300	100K to 2,500M	0.50W	1,000V	0.1% to 20%	0.35" / 9	0.13" / 3.3	0.03" / 0.65

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

### STANDARD TEMP. COEFFICIENT OF RESISTANCE

Series	100 PPM/°C	200 PPM/°C	300 PPM/°C
MOX200	100K-100MΩ	101M-1000MΩ	1001M-1500MΩ
MOX300	100K-100MΩ	101M-1000MΩ	1001M-2500MΩ

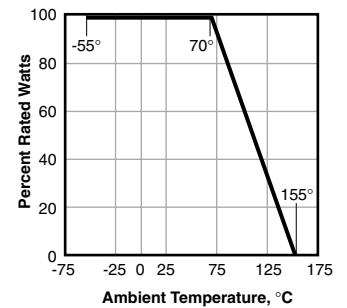
### AVAILABLE TOLERANCES

Tolerance	Maximum Value Available MOX200	Maximum Value Available MOX300
0.10%	10MΩ	10MΩ
0.25%	20MΩ	20MΩ
0.50%	30MΩ	30MΩ
1%-20%	1500MΩ	2500MΩ

### PERFORMANCE DATA

Characteristic	Test Method	Specification
Short time overload	Rated Power x2.5, 5 sec.	±0.5% max.
Resistance to soldering heat	260°C ±5°C, 10 ±1 sec.	±0.5% max.
Temperature cycling	-55°C/+155°C, 5 cycles	±0.5% max.
Withstanding voltage	500 VDC, 60 ±10 sec.	±0.5% max.
Insulation resistance	500 VDC	10,000MΩ or more
Moisture resistance	40°C ±2°C, 90-95%RH, 1000 hr.	±1.5% max.
Load life	70°C ±3°C, 1000 hr.	±2% max.

### DERATING



### ORDERING INFORMATION

RoHS Compliant | Tape and reel 2500 qty./reel std.

MOX200001003FER

<p><b>Mini Mox Series</b> MOX-20000 or MOX-30000</p>	<p><b>Ohms</b> 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</p>	<p><b>Tolerance</b> B = 0.10% G = 2% C = 0.25% J = 5% D = 0.5% K = 10% F = 1% M = 15% P = 20%</p>
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### TAPE AND REEL

