

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.

SERIES SPECIFICATIONS

Ohmite Series	Resistance Range (Ohms)	Power @25°C	Voltage Rating	Available Tolerances*
MOX200	500K to 1,500M	0.25W	500V	0.1% to 20%
MOX300	500K to 2,500M	0.50W	1,000V	0.1% to 20%

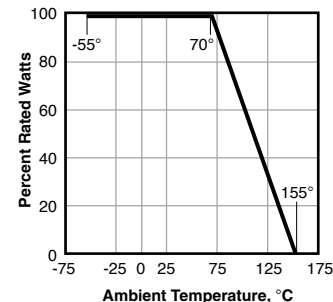
*Some tolerances are not available over the entire resistance range.

CHARACTERISTICS

Resistor	Metal Oxide		
Coating	Epoxy		
Core	Alumina		
Terminals	Solder-coated axial. RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu		
Resistance Range	500K to 1,500MΩ		
Power Rating	0.25W to 0.5W		
Voltage Rating	500V to 1,000V		
Tolerance	0.1% to 20%		
	Tolerance	Maximum Value Available	
		MOX200	MOX300
	0.10%	10MΩ	10MΩ
	0.25%	10MΩ	10MΩ
	0.50%	10MΩ	10MΩ
	1%-20%	1500MΩ	2500MΩ
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)		
Temp. Coeff. of Resistance	Series	100 PPM/°C	200 PPM/°C 300 PPM/°C
	MOX200	500K-100MΩ	101M-1000MΩ 1001M-1500MΩ
	MOX300	500K-100MΩ	101M-1000MΩ 1001M-2500MΩ

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



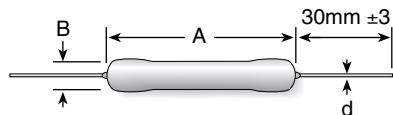
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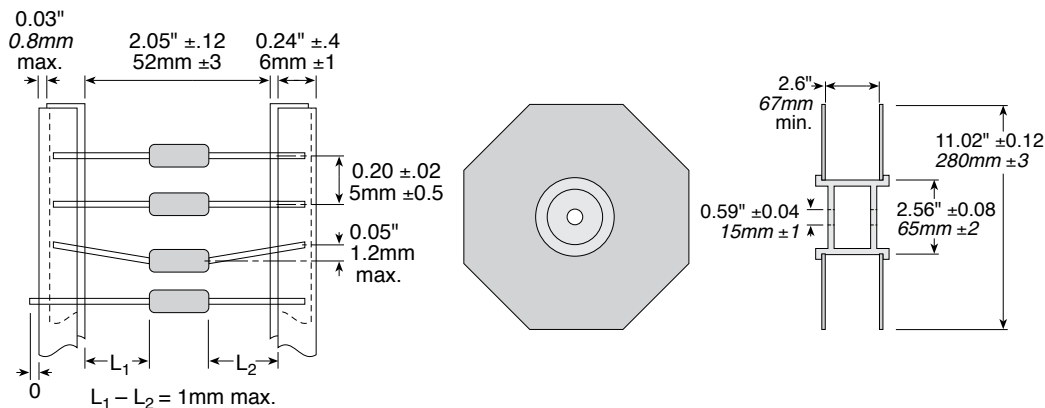
DIMENSIONS

(mm)



Series	Power Rating	A max. (in/mm)	B ±0.5mm (in/mm)	d ±0.05mm (in/mm)
MOX200	0.25W	0.26" / 6.5	0.09" / 2.2	0.024" / 0.6
MOX300	0.50W	0.35" / 9	0.13" / 3.3	0.025" / 0.65

Tape and reel



HOW TO ORDER

		RoHS Compliant	Tape and reel 2500 qty./reel std.
MOX200001003FER			
Mini Mox Series MOX-20000 or MOX-30000	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 B = 0.10% G = 2% C = 0.25% J = 5% D = 0.5% K = 10% F = 1% M = 15% P = 20%	