

Mox700 Series

High Precision Metal Film Axial Leaded Resistor



FEATURES

- Very tight tolerance down to $\pm 0.02\%$ available
- Extremely low TCR down to $\pm 5\text{PPM}/$
- High precision
- Excellent stability



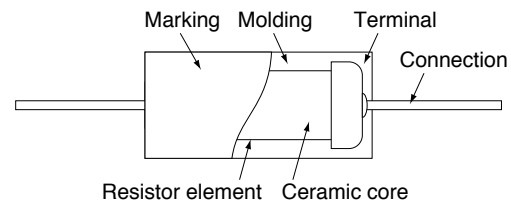
APPLICATIONS

- Precision equipment
- Measurement equipment
- Audio amplifiers
- Dispensing systems
- Imaging equipment

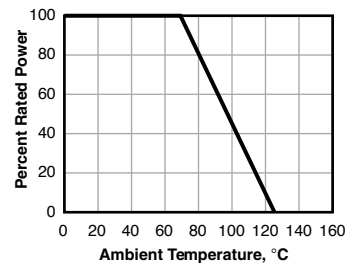
CHARACTERISTICS

Power Rating	0.25 watts @70°C
Operating Temp. Range	-55 ~ +125°C
Max. Operating Voltage	250V
Max. Overload Voltage	500V
Resistance Range	10Ω -1M
Resistance Tolerance	$\pm 0.02\%$, $\pm 0.05\%$, $\pm 0.1\%$, $\pm 1\%$
TCR	10Ω - 500K: ± 5 10Ω - 1M: ± 10 , ± 15 , ± 25
Storage	15~28°C; Humidity < 80%RH
Rated continuous working voltage	$\sqrt{(P \cdot R)}$ or max. operating voltage, whichever is lower
Overload Voltage	$2.5 \cdot \sqrt{(P \cdot R)}$ or max. overload voltage, whichever is lower
Packaging	50 pc packs; tape and reel optional

Construction



Derating



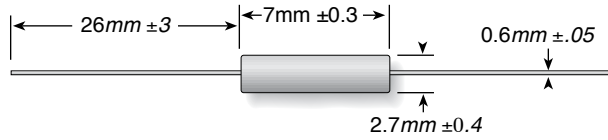
PERFORMANCE

Item	Requirement	Test Method
TCR	As Spec.	Resistance value at room temperature and room temperature+60°C
Short Time Overload	$\pm(0.05\%+0.05\Omega)$	JIS-C-5201-1 5.5; RCWV*2.5 or Max. overload voltage whichever is lower for 5 seconds
Insulation Resistance	>1,000M	MIL-STD-202F Method 302 Apply 500VDC for 1 minute
Endurance	$\pm(0.2\%+0.05\Omega)$	MIL-STD-202F Method 108A; 70 $\pm 2^\circ\text{C}$, RCWV for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
Damp Heat with Load	$\pm(0.2\%+0.05\Omega)$	MIL-STD-202F Method 103B; 40 $\pm 2^\circ\text{C}$, 90~95% R.H., RCWV for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
Solderability	95% min. Coverage	MIL-STD-202F Method 208H; 245 $\pm 5^\circ\text{C}$ for 5 seconds
Res. to Soldering Heat	$\pm(0.05\%+0.01\Omega)$	350 $\pm 10^\circ\text{C}$ for 3 seconds or 260 $\pm 5^\circ\text{C}$ for 10 seconds
Terminal Strength	Tensile $\geq 2.5\text{kg}$	Tensile strength: for 10 sec.; Torsional strength: Rotated through 360°, 5 rotations.
Pulse Overload	$\pm(0.1\%+0.01\Omega)$	JIS-C-5201-1 5.8; 4 times RCWV for 10000 cycles with 1second "ON" and 25 seconds "OFF"
Temperature Cycle	$\pm(0.05\%+0.05\Omega)$	-25°C (30min)/+85°C (30min), 5 cycles
Resistance to Solvent	No deterioration of coatings and markings	JIS-C-5201-1 6.9; Trichroethane for 3 min. with ultrasonic

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DIMENSIONS



ORDERING INFORMATION

MOX70031000BYER				
Resistor Series	Coating	Ohms	TCR	Tape & Reel <i>optional</i>
	3 = molded epoxy	First 3 digits are significant; 4th digit is multiplier (# of zeros to follow). examples: 1000 = 100Ω 1503 = 150,000Ω 5005 = 50,000,000Ω	Y = 10ppm/°C Z = 5ppm/°C	
			Tolerance A = 0.05% B = 0.1%	RoHS compliant

Standard Part Numbers

MOX70031000BYE	MOX70031002AZE
MOX70031200BZE	MOX70031002AYE
MOX70032500BZE	MOX70031002BYE
MOX70035000BYE	MOX70031002BZE
MOX70037500BZE	MOX70032002BZE
	MOX70034002BYE
MOX70031001BZE	
MOX70031001BYE	MOX70031003BZE
MOX70031801BYE	MOX70031003BYE
MOX70032001BYE	MOX70032003BZE
MOX70032501BYE	MOX70032003BYE
MOX70034001BYE	
MOX70034991AYE	MOX70031004BYE
MOX70034991BYE	
MOX70034991AZE	
MOX70035761AZE	

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