

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



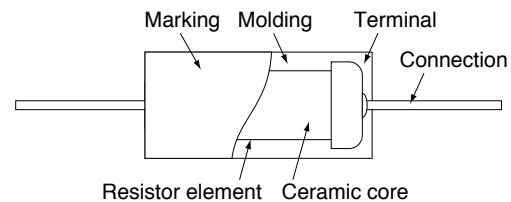
APPLICATIONS

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

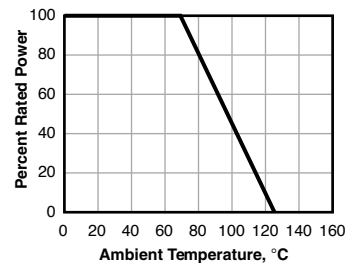
CHARACTERISTICS

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



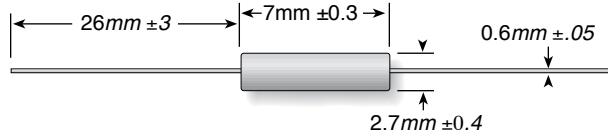
PERFORMANCE

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

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

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	