

Mox800 Series

High power and high voltage non-inductive



Ohmite offers the Mox 800 series to meet the requirements of power ratings up to 40 Watts while at the same time offering voltage ratings up to 6,000 Volts. These thick film resistors cover a wide resistance range and operation up to 275°C in axial lead construction.

To accomplish this objective of high stability, high value, high voltage and high power in the Mox 800 series, Ohmite employs a special variation of its thick film formulations. These films are annealed on special ceramic bodies at temperatures above 1400°F / 800°C and become an inherent part of the surface of the ceramic, resulting in their superior performance characteristics. As a result of Ohmite's unique non-inductive patented process, these resistors are ideally suited for high frequency applications.

FEATURES

- Non-inductive Performance
- Full power and voltage ratings (derating not required)
- Very high resistance values (see table) up to 30MΩ

SERIES SPECIFICATIONS

Ohmite Series	Wattage	Max. Voltage	Resistance Range (Ω)
MOX-810	4.00	800	0.1Ω-15MΩ
MOX-820	6.00	2,000	0.1Ω-15MΩ
MOX-830	8.00	4,500	0.1Ω-20MΩ
MOX-830 F*	10.00	4,500	1Ω-10MΩ
MOX-840	10.00	4,500	0.1Ω-20MΩ
MOX-850	12.50	6,000	0.1Ω-30MΩ
MOX-850 F*	15.00	6,000	1Ω-30MΩ
MOX-860	40.00	6,000	1Ω-100KΩ

*F: forced cooling

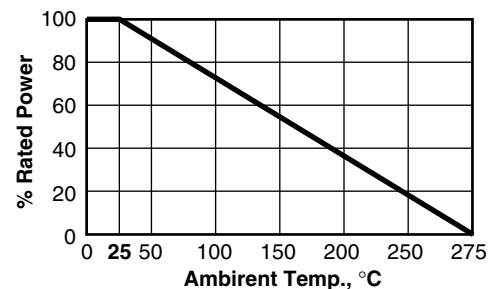
Resistor in free air position, air flow >1.5m/sec. at ≤25°C ambient temperature

Resistor in case, air flow >2m/sec. at ≤25°C ambient temperature

CHARACTERISTICS

Resistance Tolerance	±1% std. to ±10%
Temperature Coefficient	for 10W and above 50ppm/°C. TC referenced to 25°C, DR taken at - 15°C and +105°C.
Dielectric Strength	1,000 V DC
Insulation Resistance	10GΩ, min.
Overload/Overvoltage	5 times rated power with applied voltage not to exceed 1.5 times maximum continuous operating voltage for 5 seconds. DR 0.5% max. or 0.5W max., whichever is greater. (not valid for MOX-860)
Load Life	1,000 hours at rated power, DR 0.5% max. or 0.5W max., whichever is greater.
Thermal Shock	MIL-Std-202, Method 107, Cond. C, DR 0.5% max. or 0.5W max., whichever is greater.
Max. Operating Temp.	+275°C
Encapsulation	Silicone Conformal
Lead Material	O.F.H.C. Copper, tin plated

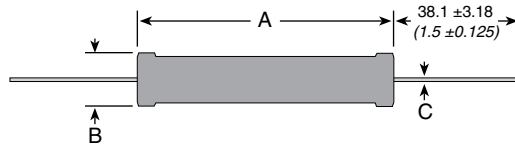
DERATING



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DIMENSIONS



	A	B	C
MOX-810	0.795"/20.20mm	0.323"/8.20mm	0.040"/1.00mm
MOX-820	1.059"/26.90mm	0.323"/8.20mm	0.040"/1.00mm
MOX-830	1.3"/33.00mm	0.323"/8.20mm	0.040"/1.00mm
MOX-840	1.555"/39.50mm	0.323"/8.20mm	0.040"/1.00mm
MOX-850	2.051"/52.10mm	0.323"/8.20mm	0.040"/1.00mm
MOX-860	5.83"/148.0mm	0.63"/16.0mm	

ORDERING INFORMATION

	Standard coating	RoHS Compliant
M O X - 8 1 0 2 1 0 0 6 F E		
Part series	Ohms	Tolerance
	First 3 digits are significant; 4th digit is multiplier (# of zeroes to follow). Examples: 1000 = 1000Ω 1503 = 150,000Ω 5005 = 50,000,000Ω	F = 1% (std.) H = 3% J = 5% K = 10%