

High Voltage Resistors

High voltage resistors are used in multitude of applications. They are used in high voltage power supplies and medical instruments as well as ionization chambers and avionics. Ohmite high voltage resistors use thick film technology which lends itself to high values and good temperature coefficients. Ohmite offers many different high voltage series resistors to accommodate multiple applications.

Mini MOX 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 0.1%, this resistor works well in precision circuits.

FEATURES: Wide resistance ranges
Silicone or epoxy coating
Metal oxide resistive element
Voltage rating to 7.5KV



Maxi MOX These resistors are equally as versatile. Suitable for industrial applications requiring still more power for high voltage switching, industrial control and high voltage current limiting.

FEATURES: Wide resistance ranges
Silicone or epoxy coating
Power rating to 12.5W
Voltage rating to 50KV



Super MOX High voltage SuperMOX resistors have been developed to meet the precision temperature stability requirements of high accuracy and high voltage systems. Super MOX combines a proprietary non-inductive system resistance and design to achieve a low temperature coefficient, low voltage coefficients, high stability and increase high operating voltages.

FEATURES: Multiple TCR values
Gold plated terminals
Non-inductive element design
Voltage rating to 90KV



Power MOX The heavy duty construction of the Power MOX series make them durable in most high voltage industrial applications. This product is well known for its high voltage ratings, very high ohmic values and resistor divider options. Terminations can be selected to adapt to most mounting schemes.

FEATURES: Wide resistance range
Multiple termination options
Resistor divider options
Voltage rating to 60KV



RX-1M These Hi-Meg resistors are designed for use in electrometer circuits where a high order of performance is required. They achieve a high degree of accuracy and stability and operate at this high performance level for an extended period of time. Being vacuum sealed in a glass envelope, these Hi-Megs are suitable for ultra high vacuum applications.

FEATURES: Glass sealed hermetic resistors
Improved temperature stability
Improved voltage stability
No outgassing



Slim MOX Ohmite's Slim MOX provides stable performance for a wide range of resistance values with voltage ratings up to 25K. Low Temperature coefficients are available for high stability circuit applications. The space saving planar package offers an alternative to traditional high voltage resistors.

FEATURES: High dielectric and low outgassing epoxy
Non-inductive
Radial terminals
Voltage rating to 25KV



Mini Macro Chip This series has a thick film on alumina construction with wrap around terminals. Industry standard sizes are available as small as 0603. Good tolerances and TCR values make this series a good choice in many applications.

FEATURES: Smaller package sizes
Low cost
Wrap around terminals
Voltage rating to 800V



HVF Ohmite's high voltage flip chip series incorporates a high accuracy screen printing technology to achieve high voltage capability in a stable, SMD chip resistor package. The HVF series offers unmatched performance in comparison to standard chip resistors. Its unique design provides lower voltage and temperature coefficients, tighter tolerances, better stability, higher resistance values and higher voltage ratings.

FEATURES: Industry standard sizes
Operating temperature 55 C to 200 C
Automatic insertion
Voltage rating to 3KV



Macro Chip These resistors bring precision high voltage capabilities to surface mount applications. Designed with thick film on an alumina substrate technology, the resistors can be provided in precision tolerances, high voltage ratings and high resistance values. The Macro Chip series was designed to have a low profile.

FEATURES: Non-inductive design (less than 50Nh)
J-bend terminals in Pd Ag
Shock & Vibration resistant
Voltage rating to 10KV



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Axial	Wattage Range	Resistance Range (Ohms)	Maximum Voltage	TCR (ppm/°C)	VCR (ppm/volt)
Mini MOX - E	0.25 - 0.50	100K - 1500M	1KV	100 - 300	N/A
Mini MOX	0.35 - 1.5	500 - 1Tera	7.5KV	25 - 100	2.0 - 5.0
Maxi MOX	2.0 - 12.5	250 - 1Tera	50KV	25 - 100	2.0 - 5.0
Power MOX	25 - 75	20K - 1Tera	60KV	25 - 50	N/A
RX-1M	0.5	1M - 10Tera	1KV	50	N/A
Slim MOX	0.25 - 5.5	100 - 500M	25KV	25 - 100	2.0 - 5.0
Super MOX	3.8 - 20	1K - 50000M	90KV	10 - 100	0.04 - 0.75

SMD	Wattage Range	Resistance Range (Ohms)	Maximum Voltage	TCR (ppm/°C)	VCR (ppm/volt)
HVF	0.3 - 1.0	1K - 10000M	3KV	100	0.8 - 40
Mini Macro Chip	0.1 - 1.0	47 - 51M	800V	100 - 200	N/A
Macro Chip	0.75 - 3.25	100 - 5000M	10KV	50 - 100	N/A

All values not available in all wattage ranges
See data sheet for full specifications

HIGH VOLTAGE