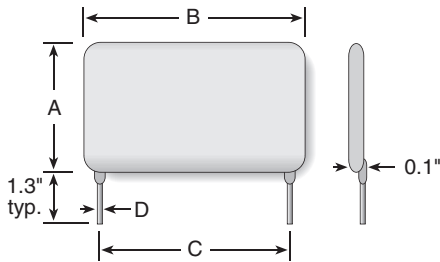


Slim-Mox Resistors

Precision Thick Film Planar Resistors



Ohmite's family of thick film resistor products has been expanded with a quality line of High Voltage and Precision products. The Slim-Mox style resistors provide a stable performance for a wide range of resistance values, with voltage ratings up to 25KV. Low temperature coefficients are also available for high stability circuit applications. The planar package saves space over traditional high voltage resistors, with flexible termination schemes for easy handling.

FEATURES

- High dielectric & low outgassing epoxy coating
- Low resistor noise
- Non inductive
- RoHS compliant

APPLICATIONS

- HV power supplies
- Medical instrumentation
- Current pulse limiters
- Ionization chambers

SPECIFICATIONS

Material

Resistor: Thick film on Alumina

Electrical

Resistance Range:

100 Ohms to 5,000M

Power Rating: 0.25W to 5.5W

Voltage Rating: 1.5KV to 25KV

Tolerance: 0.5% to 20%

Operating Temperature:

-55°C to +110°C

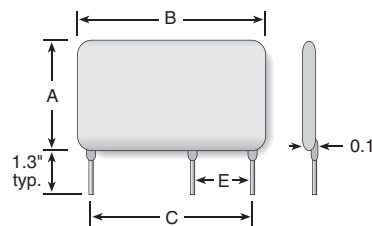
Temperature Coefficient: 25PPM (0°-85°C) available

Ohmite Series	Resistance Range (Ohms)	Power @25°C	Voltage Rating	A max. (in/mm)	B max. (in/mm)	C ±0.025 (in/mm)	D ±0.002 (in/mm)
SLIM-MOX100	100Ω to 500M	0.25W	1.5KV	0.30" / 7.62	0.30" / 7.62	0.10" / 2.54	0.025" / 0.635
SLIM-MOX101	100Ω to 1,000M	0.50W	2.0KV	0.34" / 8.64	0.33" / 8.38	0.20" / 5.08	0.025" / 0.635
SLIM-MOX102	200Ω to 5,000M	1.00W	5.0KV	0.34" / 8.64	0.58" / 14.73	0.40" / 10.16	0.032" / 0.813
SLIM-MOX103	250Ω to 5,000M	1.25W	7.5KV	0.34" / 8.64	0.83" / 21.08	0.60" / 15.24	0.032" / 0.813
SLIM-MOX104	500Ω to 5,000M	1.50W	10.0KV	0.34" / 8.64	1.08" / 27.43	0.90" / 22.86	0.032" / 0.813
SLIM-MOX106	750Ω to 5,000M	2.00W	15.0KV	0.34" / 8.64	1.58" / 40.13	1.40" / 35.56	0.032" / 0.813
SLIM-MOX108	1K to 5,000M	2.50W	20.0KV	0.34" / 8.64	2.08" / 52.83	1.90" / 48.26	0.032" / 0.813
SLIM-MOX202	500Ω to 5,000M	1.50W	5.0KV	0.59" / 14.99	0.58" / 14.73	0.40" / 10.16	0.032" / 0.813
SLIM-MOX204	1K to 5,000M	2.00W	10.0KV	0.59" / 14.99	1.08" / 27.43	0.90" / 22.86	0.032" / 0.813
SLIM-MOX206	2K to 5,000M	2.50W	15.0KV	0.59" / 14.99	1.58" / 40.13	1.40" / 35.56	0.032" / 0.813
SLIM-MOX208	2K to 5,000M	3.00W	20.0KV	0.59" / 14.99	2.08" / 52.83	1.90" / 48.26	0.032" / 0.813
SLIM-MOX210	3K to 5,000M	3.50W	25.0KV	0.59" / 14.99	2.58" / 65.53	2.40" / 60.96	0.032" / 0.813
SLIM-MOX306	3K to 5,000M	3.50W	15.0KV	0.84" / 21.34	1.58" / 40.13	1.40" / 35.56	0.032" / 0.813
SLIM-MOX308	4K to 5,000M	4.00W	20.0KV	0.84" / 21.34	2.08" / 52.83	1.90" / 48.26	0.032" / 0.813
SLIM-MOX310	5K to 5,000M	4.50W	25.0KV	0.84" / 21.34	2.58" / 65.53	2.40" / 60.96	0.032" / 0.813
SLIM-MOX404	3K to 5,000M	3.00W	10.0KV	1.09" / 27.69	1.08" / 27.43	0.90" / 22.86	0.032" / 0.813
SLIM-MOX408	5K to 5,000M	5.00W	20.0KV	1.09" / 27.69	2.08" / 52.83	1.90" / 48.26	0.032" / 0.813
SLIM-MOX410	5K to 5,000M	5.50W	25.0KV	1.09" / 27.69	2.58" / 65.53	2.40" / 60.96	0.032" / 0.813

Call factory for custom configurations.

Slim-Mox Resistor Dividers

Precision Thick Film Voltage Dividers



Multiple taps are provided on the Slim-Mox RD resistors for use in advanced circuit designs. Tight ratio tolerances make these resistors ideal for precision applications requiring consistent performance.

FEATURES

- Custom configurations are available. Contact your Tech. Sales Rep with your specifications
- RoHS compliant

SPECIFICATIONS

Material

Resistor: Thick film on Alumina

Electrical

Ratio tolerances: 0.5% to 5%

Temp. coefficient tracking:

TCR tracking to 10ppm and VCR tracking to 1ppm

A complete description of the SLIM-MOX Divider is required. EXAMPLE:

R_T = 500MΩ 5%

R₁ = 499.5MΩ 5%

R₂ = 500KΩ 1%

Ratio = R_T / R₂ = 1,000: 1, 1%

To specify Slim-Mox Dividers, please see our website at:

www.ohmite.com/dividers

Ohmite Series	Resistance Range (Ohms)	Power @25°C	Voltage Rating	Maximum Ratio	C ±.025	E ±.025
SLIM-MOX103RD	1M to 5,000M	0.75W	5.0KV	5,000 : 1	0.60" / 15.24	0.20" / 5.08
SLIM-MOX104RD	1M to 5,000M	1.00W	10.0KV	5,000 : 1	0.90" / 22.86	0.20" / 5.08
SLIM-MOX106RD	1M to 5,000M	1.50W	12.0KV	5,000 : 1	1.40" / 35.56	0.20" / 5.08
SLIM-MOX108RD	1M to 5,000M	2.00W	15.0KV	5,000 : 1	0.90" / 22.86	0.60" / 15.24
SLIM-MOX204RD	1M to 5,000M	1.50W	10.0KV	5,000 : 1	0.90" / 22.86	0.20" / 5.08
SLIM-MOX206RD	1M to 5,000M	2.00W	12.0KV	5,000 : 1	1.40" / 35.56	0.20" / 5.08
SLIM-MOX208RD	1M to 5,000M	2.50W	20.0KV	5,000 : 1	1.90" / 48.26	0.40" / 10.16
SLIM-MOX210RD	1M to 5,000M	3.00W	25.0KV	5,000 : 1	2.40" / 60.96	0.20" / 5.08
SLIM-MOX306RD	1M to 5,000M	3.00W	12.0KV	5,000 : 1	1.40" / 35.56	0.30" / 7.62
SLIM-MOX308RD	1M to 5,000M	3.50W	20.0KV	5,000 : 1	1.90" / 48.26	0.30" / 7.62
SLIM-MOX310RD	1M to 5,000M	4.00W	25.0KV	5,000 : 1	2.40" / 60.96	0.20" / 5.08
SLIM-MOX408RD	1M to 5,000M	4.50W	20.0KV	5,000 : 1	1.90" / 48.26	0.30" / 7.62
SLIM-MOX410RD	1M to 5,000M	5.00W	25.0KV	5,000 : 1	2.40" / 60.96	0.20" / 5.08

Call factory for custom configurations.

The Slim-Mox HT resistors allow that extra needed power in high ambient environments, when needed to operate near heat generating components, or under slightly heavier loads. Also made with thick film on Alumina technology, the Slim-Mox HT is finished with a rugged silicone coating suitable for most environments.

FEATURES

- Outstanding voltage coefficient
- High temperature silicone coating
- Low resistor noise
- Noninductive
- Custom configurations are available. Contact your Tech. Sales Rep with your specifications
- RoHS compliant

APPLICATIONS

- HV power supplies
- Medical instrumentation
- Current pulse limiters
- Ionization chambers

SPECIFICATIONS

Material

Resistor: Thick film on Alumina

Electrical

Resistance Range:

100Ω to 5,000M

Power Rating: 0.25W to 9.0W

Voltage Rating: 1.5KV to 25KV

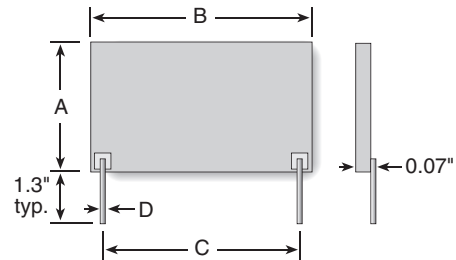
Tolerance: 0.5% to 20%

Operating Temperature:

-55°C to +180°C

Slim-Mox HT Resistors

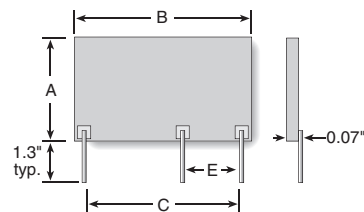
High Temperature Thick Film Precision Resistor



Ohmite Series	Resistance Range (Ohms)	Power @25°C	Voltage Rating	A max. (in/mm)	B max. (in/mm)	C ±0.025 (in/mm)	D ±0.002 (in/mm)
SLIM-MOX100	100Ω to 500M	0.40W	1.5KV	0.20" / 5.08	0.20" / 5.08	0.10" / 2.54	0.025" / 0.635
SLIM-MOX101	100Ω to 1,000M	0.75W	2.0KV	0.25" / 6.35	0.25" / 6.35	0.20" / 5.08	0.025" / 0.635
SLIM-MOX102	200Ω to 5,000M	1.50W	5.0KV	0.25" / 6.35	0.50" / 12.70	0.40" / 10.16	0.032" / 0.813
SLIM-MOX103	250Ω to 5,000M	2.00W	7.5KV	0.25" / 6.35	0.75" / 19.05	0.60" / 15.24	0.032" / 0.813
SLIM-MOX104	500Ω to 5,000M	2.50W	10.0KV	0.25" / 6.35	1.00" / 25.40	0.90" / 22.86	0.032" / 0.813
SLIM-MOX106	750Ω to 5,000M	3.25W	15.0KV	0.25" / 6.35	1.50" / 38.10	1.40" / 35.56	0.032" / 0.813
SLIM-MOX108	1K to 5,000M	4.25W	20.0KV	0.25" / 6.35	2.00" / 50.80	1.90" / 48.26	0.032" / 0.813
SLIM-MOX202	500Ω to 5,000M	2.50W	5.0KV	0.50" / 12.70	0.50" / 12.70	0.40" / 10.16	0.032" / 0.813
SLIM-MOX204	1K to 5,000M	3.25W	10.0KV	0.50" / 12.70	1.00" / 38.10	0.90" / 22.86	0.032" / 0.813
SLIM-MOX206	2K to 5,000M	4.25W	15.0KV	0.50" / 12.70	1.50" / 38.10	1.40" / 35.56	0.032" / 0.813
SLIM-MOX208	2K to 5,000M	5.00W	20.0KV	0.50" / 12.70	2.00" / 50.80	1.90" / 48.26	0.032" / 0.813
SLIM-MOX210	3K to 5,000M	5.75W	25.0KV	0.50" / 12.70	2.50" / 63.50	2.40" / 60.96	0.032" / 0.813
SLIM-MOX306	3K to 5,000M	5.50W	15.0KV	0.75" / 19.05	1.50" / 38.10	1.40" / 35.56	0.032" / 0.813
SLIM-MOX308	4K to 5,000M	6.75W	20.0KV	0.75" / 19.05	2.00" / 50.80	1.90" / 48.26	0.032" / 0.813
SLIM-MOX310	5K to 5,000M	7.50W	25.0KV	0.75" / 19.05	2.50" / 63.50	2.40" / 60.96	0.032" / 0.813
SLIM-MOX404	3K to 5,000M	5.00W	10.0KV	1.00" / 25.40	1.00" / 25.40	0.90" / 22.86	0.032" / 0.813
SLIM-MOX408	5K to 5,000M	8.25W	20.0KV	1.00" / 25.40	2.00" / 50.80	1.90" / 48.26	0.032" / 0.813
SLIM-MOX410	5K to 5,000M	9.00W	25.0KV	1.00" / 25.40	2.50" / 63.50	2.40" / 60.96	0.032" / 0.813

Call factory for custom configurations.

Slim-Mox HT RD resistor dividers complete the Slim-Mox family with the high temperature divider configuration. These resistors are useful wherever multiple voltage drops are needed in a circuit. Designed to customer specifications, the Slim-Mox HT RD resistor utilizes our thick film on alumina technology to offer flexible termination schemes.



Slim-Mox HT Dividers

High Temperature Thick Film Voltage Divider

A complete description of the SLIM-MOX Divider is required. EXAMPLE:

$R_T = 500\Omega$ 5%
 $R_1 = 499.5M\Omega$ 5%
 $R_2 = 500K\Omega$ 1%

Ratio = $R_T / R_2 = 1,000:1$, 1%

To specify Slim-Mox Dividers, please see our website at:

www.ohmite.com/dividers

FEATURES

- High Temperature Operation
- RoHS compliant

SPECIFICATIONS

Material

Resistor: Thick film on Alumina

Electrical

• **Ratio tolerances:** 0.5% to 5%

• **Temp. coefficient tracking:** TCR tracking to 10ppm and VCR tracking to 1ppm

• Custom ratios and lead configurations are available. Contact your Tech. Sales Rep with your specification.

Ohmite Series	Resistance Range (Ohms)	Power @25°C	Voltage Rating	Maximum Ratio	C ±0.025 (in/mm)	E ±0.025 (in/mm)
SLIM-MOX103RD	1M to 5,000M	1.25W	5.0KV	5,000 : 1	0.60" / 15.24	0.20" / 5.08
SLIM-MOX104RD	1M to 5,000M	1.50W	10.0KV	5,000 : 1	0.90" / 22.86	0.20" / 5.08
SLIM-MOX106RD	1M to 5,000M	2.50W	12.0KV	5,000 : 1	1.40" / 35.56	0.20" / 5.08
SLIM-MOX108RD	1M to 5,000M	3.25W	15.0KV	5,000 : 1	0.90" / 22.86	0.60" / 15.24
SLIM-MOX204RD	1M to 5,000M	2.50W	10.0KV	5,000 : 1	0.90" / 22.86	0.20" / 5.08
SLIM-MOX206RD	1M to 5,000M	3.25W	12.0KV	5,000 : 1	1.40" / 35.56	0.20" / 5.08
SLIM-MOX208RD	1M to 5,000M	4.25W	20.0KV	5,000 : 1	1.90" / 48.26	0.40" / 10.16
SLIM-MOX210RD	1M to 5,000M	5.00W	25.0KV	5,000 : 1	2.40" / 60.96	0.20" / 5.08
SLIM-MOX306RD	1M to 5,000M	4.50W	12.0KV	5,000 : 1	1.40" / 35.56	0.30" / 7.62
SLIM-MOX308RD	1M to 5,000M	5.00W	20.0KV	5,000 : 1	1.90" / 48.26	0.30" / 7.62
SLIM-MOX310RD	1M to 5,000M	5.75W	25.0KV	5,000 : 1	2.40" / 60.96	0.20" / 5.08
SLIM-MOX408RD	1M to 5,000M	6.75W	20.0KV	5,000 : 1	1.90" / 48.26	0.30" / 7.62
SLIM-MOX410RD	1M to 5,000M	7.50W	25.0KV	5,000 : 1	2.40" / 60.96	0.20" / 5.08

Call factory for custom configurations.

Slim-Mox Resistors

Temperature/Voltage Coefficients of Resistance Performance Characteristics Temperature Derating

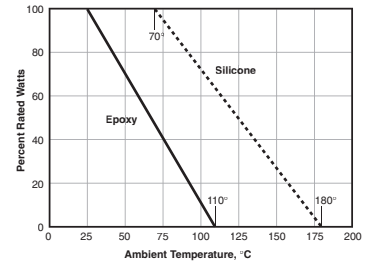
TEMPERATURE/VOLTAGE COEFFICIENTS OF RESISTANCE

Resistor Series	Temp. Coeff. of Resistance*			Voltage Coeff. of Resistance**	
	25 PPM/°C	50 PPM/°C	100 PPM/°C	< 2PPM/Volt	< 5PPM/Volt
SLIM-MOX100	100 to 300M	100Ω to 50M	51M to 500M	100Ω to 140M	141M to 500M
SLIM-MOX101	100 to 800M	100Ω to 100M	101M to 1,000M	100Ω to 270M	271M to 1,000M
SLIM-MOX102	200 to 1,500M	200Ω to 250M	251M to 5,000M	200Ω to 640M	641M to 5,000M
SLIM-MOX103	250 to 800M	250Ω to 440M	441M to 5,000M	250Ω to 1,100M	1,101M to 5,000M
SLIM-MOX104	500 to 2,500M	500Ω to 450M	451M to 5,000M	500Ω to 1,100M	1,101M to 5,000M
SLIM-MOX106	750 to 5,000M	750Ω to 675M	676M to 5,000M	750Ω to 1,600M	1,601M to 5,000M
SLIM-MOX108	1K to 2,500M	1K to 375M	376M to 5,000M	1K to 940M	941M to 5,000M
SLIM-MOX202	500 to 1,500M	500Ω to 200M	201M to 5,000M	500Ω to 520M	521M to 5,000M
SLIM-MOX204	1K to 1,750M	1K to 375M	376M to 5,000M	1K to 950M	951M to 5,000M
SLIM-MOX206	2K to 4,500M	2K to 600M	601M to 5,000M	2K to 1,500M	1,501M to 5,000M
SLIM-MOX208	2K to 5,000M	2K to 1,000M	1,001M to 5,000M	2K to 2,500M	2,501M to 5,000M
SLIM-MOX210	3K to 5,000M	3K to 1,000M	1,001M to 5,000M	3K to 2,600M	2,601M to 5,000M
SLIM-MOX306	3K to 5,000M	3K to 1,000M	1,001M to 5,000M	3K to 2,600M	2,601M to 5,000M
SLIM-MOX308	4K to 5,000M	4K to 1,200M	1,201M to 5,000M	4K to 3,000M	3,001M to 5,000M
SLIM-MOX310	5K to 5,000M	5K to 1,500M	1,501M to 5,000M	5K to 4,000M	4,001M to 5,000M
SLIM-MOX404	3K to 5,000M	3K to 1,100M	1,101M to 5,000M	3K to 2,800M	2,801M to 5,000M
SLIM-MOX408	5K to 5,000M	5K to 1,250M	1,251M to 5,000M	5K to 3,000M	3,001M to 5,000M
SLIM-MOX410	5K to 5,000M	5K to 1,200M	1,201M to 5,000M	5K to 3,000M	3,001M to 5,000M
SLIM-MOX103RD	1M to 800M	1M to 70M	71M to 5,000M	1M to 185M	186M to 5,000M
SLIM-MOX104RD	1M to 2,500M	1M to 275M	276M to 5,000M	1M to 720M	721M to 5,000M
SLIM-MOX106RD	1M to 5,000M	1M to 250M	251M to 5,000M	1M to 640M	641M to 5,000M
SLIM-MOX108RD	1M to 2,500M	1M to 350M	351M to 5,000M	1M to 875M	876M to 5,000M
SLIM-MOX204RD	1M to 1,750M	1M to 300M	301M to 5,000M	1M to 750M	751M to 5,000M
SLIM-MOX206RD	1M to 4,500M	1M to 1,750M	1,751M to 5,000M	1M to 4,500M	4,501M to 5,000M
SLIM-MOX208RD	1M to 5,000M	1M to 625M	626M to 5,000M	1M to 1,550M	1,551M to 5,000M
SLIM-MOX210RD	1M to 5,000M	1M to 950M	951M to 5,000M	1M to 2,400M	2,401M to 5,000M
SLIM-MOX306RD	1M to 5,000M	1M to 800M	801M to 5,000M	1M to 2,000M	2,001M to 5,000M
SLIM-MOX308RD	1M to 5,000M	1M to 1,200M	1,201M to 5,000M	1M to 2,600M	2,601M to 5,000M
SLIM-MOX310RD	1M to 5,000M	1M to 1,000M	1,001M to 5,000M	1M to 3,900M	3,901M to 5,000M
SLIM-MOX408RD	1M to 5,000M	1M to 1,600M	1,601M to 5,000M	1M to 4,000M	4,001M to 5,000M
SLIM-MOX410RD	1M to 5,000M	1M to 1,200M	1,201M to 5,000M	1M to 3,000M	3,001M to 5,000M

*Epoxy: -55° to 110°C; Silicone: -55° to 210°C; 25 PPM/°C: 0° to 85°C

**VC's of <2PPM/Volt are available. Call factory with your requirement.

DERATING



PERFORMANCE DATA

Characteristic	Test Method	Specification
Humidity	MIL-STD-202, Method 103B, Condition B	±0.25%
Dielectric Withstanding Voltage	MIL-STD-202, Method 301, 750V	±0.25%
Insulation Resistance	MIL-STD-202, Method 302, Condition A or B	>10,000M or greater dry
Thermal Shock	MIL-STD-202, Method 107G, Condition B, B-1, or F	±0.20%
Load Life	MIL-STD-202, Method 108A, Condition D	±1.0%
Resistance to Solvents	MIL-STD-202, Method 215G	No degradation of coating or marking
Terminal Strength	MIL-STD-202, Method 211A, Condition A or B	±0.25%
Shock (Specified Pulse)	MIL-STD-202, Method 213B, Condition I	±0.25%
Vibration, High Frequency	MIL-STD-202, Method 204D, Condition D	±0.20%
Power Conditioning	MIL-R-49462A, Par 4.8	±0.50%
Solderability	MIL-STD-202, Method 208F	>95% Coverage

ORDERING INFORMATION

Coating
2 = Blue silicone (high temp.)
3 = Epoxy (standard)
6 = No coating

Style
100 to 410

S M 1 0 2 0 3 1 0 0 6 F

Slim Mox Series Lead Ohms Tolerance

0 = 0.032" std. 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

D = 0.5%
F = 1%
G = 2%
J = 5%
K = 10%
M = 15%
P = 20%

To specify Slim-Mox Dividers, please see our website at:
www.ohmite.com/dividers