Slim-Mox

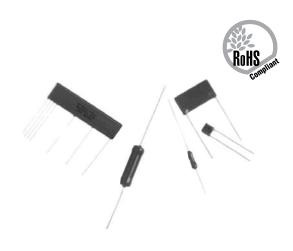
Precision Thick Film Planar

APPLICATIONS

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

FEATURES

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



SERIES SPECIFICATIONSMax.Capac-
formance for a wide range of resistance
values, with voltage ratings up to 25K.
Low temperature coefficients are avail-
able for high stability circuit applications.Resistance
Range (0hms)Power
@25°COperating
Voltage(pf)Low temperature coefficients are avail-
able for high stability circuit applications.(10003 100Ω to 500M0.50W2.0KV1.00(10103 100Ω to 5,000M0.50W2.0KV1.00(10203 200Ω to 5,000M1.00W5.0KV0.90

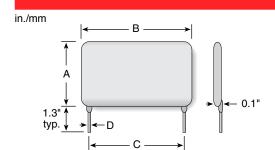
resistors.

SERI	ES SPECIF	ICAII		
Ohmite Series	Resistance Range (Ohms)	Power @25°C	Max. Operating Voltage	Capac- itance (pf)
SLIM-MOX10003	100Ω to $500M$	0.25W	1.5KV	1.00
SLIM-MOX10103	100Ω to $1,000M$	0.50W	2.0KV	1.00
SLIM-MOX10203	200Ω to 5,000M	1.00W	5.0KV	0.90
SLIM-MOX10303	250Ω to 5,000M	1.25W	7.5KV	0.75
SLIM-MOX10403	500Ω to $5,000M$	1.50W	10.0KV	0.70
SLIM-MOX10603	750Ωto 5,000M	2.00W	15.0KV	0.65
SLIM-MOX10803	1K to 5,000M	2.50W	20.0KV	0.60
SLIM-MOX20203	500Ω to $5,000M$	1.50W	5.0KV	1.10
SLIM-MOX20403	1K to 5,000M	2.00W	10.0KV	0.80
SLIM-MOX20603	2K to 5,000M	2.50W	15.0KV	0.75
SLIM-MOX20803	2K to 5,000M	3.00W	20.0KV	0.65
SLIM-MOX21003	3K to 5,000M	3.50W	25.0KV	0.60
SLIM-MOX30603	3K to 5,000M	3.50W	15.0KV	0.75
SLIM-MOX30803	4K to 5,000M	4.00W	20.0KV	0.50
SLIM-MOX31003	5K to 5,000M	4.50W	25.0KV	0.40
SLIM-MOX40403	3K to 5,000M	3.00W	10.0KV	1.00
SLIM-MOX40803	5K to 5,000M	5.00W	20.0KV	0.80
SLIM-MOX41003	5K to 5,000M	5.50W	25.0KV	0.50

Contact Ohmite for custom configurations. *Maximum voltage and power rating determined by Ohm's law: $P=V^2/R$

-	Λ		100	ics.

Resistor Element	Thick film on Alumina
Coating	Epoxy or Silicone
Terminals	RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu
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%; not all tolerances available in all values
Operating Temperature	-55°C to +110°C
Temperature Coefficient	See table



DIMENSI	

Series	Power @25°C	A max.	B max.	C ±0.025	D ±0.002
SLIM-MOX10003	0.25W	0.30" / 7.62	0.30" / 7.62	0.10" / 2.54	0.025" / 0.635
SLIM-MOX10103	0.50W	0.34" / 8.64	0.33" / 8.38	0.20" / 5.08	0.025" / 0.635
SLIM-MOX10203	1.00W	0.34" / 8.64	0.58" / 14.73	0.40" / 10.16	0.032" / 0.813
SLIM-MOX10303	1.25W	0.34" / 8.64	0.83" / 21.08	0.60" / 15.24	0.032" / 0.813
SLIM-MOX10403	1.50W	0.34" / 8.64	1.08" / 27.43	0.90" / 22.86	0.032" / 0.813
SLIM-MOX10603	2.00W	0.34" / 8.64	1.58" / 40.13	1.40" / 35.56	0.032" / 0.813
SLIM-MOX10803	2.50W	0.34" / 8.64	2.08" / 52.83	1.90" / 48.26	0.032" / 0.813
SLIM-MOX20203	1.50W	0.59" / 14.99	0.58" / 14.73	0.40" / 10.16	0.032" / 0.813
SLIM-MOX20403	2.00W	0.59" / 14.99	1.08" / 27.43	0.90" / 22.86	0.032" / 0.813
SLIM-MOX20603	2.50W	0.59" / 14.99	1.58" / 40.13	1.40" / 35.56	0.032" / 0.813
SLIM-MOX20803	3.00W	0.59" / 14.99	2.08" / 52.83	1.90" / 48.26	0.032" / 0.813
SLIM-MOX21003	3.50W	0.59" / 14.99	2.58" / 65.53	2.40" / 60.96	0.032" / 0.813
SLIM-MOX30603	3.50W	0.84" / 21.34	1.58" / 40.13	1.40" / 35.56	0.032" / 0.813
SLIM-MOX30803	4.00W	0.84" / 21.34	2.08" / 52.83	1.90" / 48.26	0.032" / 0.813
SLIM-MOX31003	4.50W	0.84" / 21.34	2.58" / 65.53	2.40" / 60.96	0.032" / 0.813
SLIM-MOX40403	3.00W	1.09" / 27.69	1.08" / 27.43	0.90" / 22.86	0.032" / 0.813
SLIM-MOX40803	5.00W	1.09" / 27.69	2.08" / 52.83	1.90" / 48.26	0.032" / 0.813
SLIM-MOX41003	5.50W	1.09" / 27.69	2.58" / 65.53	2.40" / 60.96	0.032" / 0.813

Slim-Mox Divider Rolls Precision Thick Film Voltage

Multiple taps are provided on the Slim-Mox RD 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 Ohmite with your specifications
- RoHS compliant

SERIES SPECIFICATIONS

Ohmite Series	Power @25°C	Operating Voltage	
SLIM-MOX103RD	0.75W	5.0KV	
SLIM-MOX104RD	1.00W	10.0KV	
SLIM-MOX106RD	1.50W	12.0KV	
SLIM-MOX108RD	2.00W	15.0KV	
SLIM-MOX204RD	1.50W	10.0KV	
SLIM-MOX206RD	2.00W	12.0KV	
SLIM-MOX208RD	2.50W	20.0KV	
SLIM-MOX210RD	3.00W	25.0KV	
SLIM-MOX306RD	3.00W	12.0KV	
SLIM-MOX308RD	3.50W	20.0KV	
SLIM-MOX310RD	4.00W	25.0KV	
SLIM-MOX408RD	4.50W	20.0KV	
SLIM-MOX410RD	5.00W	25.0KV	

Contact Ohmite for custom configurations.

CHARACTERISTICS

Resistance range 1M to 5,000M ohms

Max. Ratio 5000:1

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

 $R_T = 500M\Omega 5\%$ $R_1 = 499.5M\Omega 5\%$

 $R_1 = 499.5 M \Omega 2.5 \%$ $R_2 = 500 K \Omega 1\%$

Ratio = R_T / R_2 = 1,000: 1, 1% To specify Slim-Mox Dividers, please see our website at:

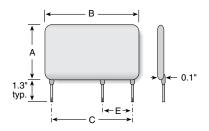
www.ohmite.com/dividers

Resistor element	t Thick film on Alumina	
Ratio tolerances	0.5% to 5%	
Temperature	TCR tracking to 10ppm and VCR track-	

Coefficient Tracking ing to 1ppm

DIMENSIONS

in. ±.025 /mm



Series	C	E
SLIM-MOX103RD	0.60"/ 15.24	0.20"/ 5.08
SLIM-MOX104RD	0.90"/ 22.86	0.20"/ 5.08
SLIM-MOX106RD	1.40"/ 35.56	0.20"/ 5.08
SLIM-MOX108RD	1.90"/ 48.26	0.60"/ 15.24
SLIM-MOX204RD	0.90"/ 22.86	0.20"/ 5.08
SLIM-MOX206RD	1.40"/ 35.56	0.20"/ 5.08
SLIM-MOX208RD	1.90"/ 48.26	0.40"/ 10.16
SLIM-MOX210RD	2.40"/ 60.96	0.20"/ 5.08
SLIM-MOX306RD	1.40"/ 35.56	0.30"/ 7.62
SLIM-MOX308RD	1.90"/ 48.26	0.30"/ 7.62
SLIM-MOX310RD	2.40"/ 60.96	0.20"/ 5.08
SLIM-MOX408RD	1.90"/ 48.26	0.30"/ 7.62
SLIM-MOX410RD	2.40"/ 60.96	0.20"/ 5.08



Slim-Mox HT

High Temperature Thick Film Precision

The Slim-Mox HT provides a higher power rating for high ambient temperature environments. Appropriate for mounting near heat generating components. The Slim-Mox HT is finished with a rugged silicone coating suitable for most environments.

SERIES SPECIFICATIONS

Ohmite Series	Resistance Range (Ohms)	Power @25°C	Voltage Rating
SLIM-MOX10002	100Ω to $500M$	0.40W	1.5KV
SLIM-MOX10102	100Ω to 1,000M	0.75W	2.0KV
SLIM-MOX10202	200Ω to 5,000M	1.50W	5.0KV
SLIM-MOX10302	250 Ω to 5,000M	2.00W	7.5KV
SLIM-MOX10402	500Ω to 5,000M	2.50W	10.0KV
SLIM-MOX10602	750Ω to 5,000M	3.25W	15.0KV
SLIM-MOX10802	1K to 5,000M	4.25W	20.0KV
SLIM-MOX20202	500Ω to 5,000M	2.50W	5.0KV
SLIM-MOX20402	1K to 5,000M	3.25W	10.0KV
SLIM-MOX20602	2K to 5,000M	4.25W	15.0KV
SLIM-MOX20802	2K to 5,000M	5.00W	20.0KV
SLIM-MOX21002	3K to 5,000M	5.75W	25.0KV
SLIM-MOX30602	3K to 5,000M	5.50W	15.0KV
SLIM-MOX30802	4K to 5,000M	6.75W	20.0KV
SLIM-MOX31002	5K to 5,000M	7.50W	25.0KV
SLIM-MOX40402	3K to 5,000M	5.00W	10.0KV
SLIM-MOX40802	5K to 5,000M	8.25W	20.0KV
SLIM-MOX41002	5K to 5,000M	9.00W	25.0KV

Contact Ohmite for custom configurations.

APPLICATIONS

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

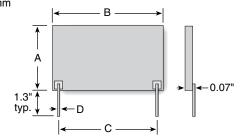
FEATURES

- Outstanding voltage coefficient
- High temperature silicone coating
- Low resistor noise
- Noninductive
- Custom configurations are available.
 Contact Ohmite with your specifications
- RoHS compliant
- Radial Terminals

CHARACTERISTICS

Resistor Element	Thick film on Alumina
Coating	Silicone
Resistance Range	100Ω to 5,000M
Power Rating	0.25W to 9.0W
Voltage Rating	1.5KV to 25KV
Tolerance	0.5% to 20%; not all tolerances available in all values
Operating Temperature	-55°C to +180°C

in. /mm



DIMENSIONS

Series	Power @25°C	A max.	B max.	C ±0.025	D ±0.002
SLIM-MOX10002	0.40W	0.20" / 5.08	0.20" / 5.08	0.10" / 2.54	0.025" / 0.635
SLIM-MOX10102	0.75W	0.25" / 6.35	0.25" / 6.35	0.20" / 5.08	0.025" / 0.635
SLIM-MOX10202	1.50W	0.25" / 6.35	0.50" / 12.70	0.40" / 10.16	0.032" / 0.813
SLIM-MOX10302	2.00W	0.25" / 6.35	0.75" / 19.05	0.60" / 15.24	0.032" / 0.813
SLIM-MOX10402	2.50W	0.25" / 6.35	1.00" / 25.40	0.90" / 22.86	0.032" / 0.813
SLIM-MOX10602	3.25W	0.25" / 6.35	1.50" / 38.10	1.40" / 35.56	0.032" / 0.813
SLIM-MOX10802	4.25W	0.25" / 6.35	2.00" / 50.80	1.90" / 48.26	0.032" / 0.813
SLIM-MOX20202	2.50W	0.50" / 12.70	0.50" / 12.70	0.40" / 10.16	0.032" / 0.813
SLIM-MOX20402	3.25W	0.50" / 12.70	1.00" / 38.10	0.90" / 22.86	0.032" / 0.813
SLIM-MOX20602	4.25W	0.50" / 12.70	1.50" / 38.10	1.40" / 35.56	0.032" / 0.813
SLIM-MOX20802	5.00W	0.50" / 12.70	2.00" / 50.80	1.90" / 48.26	0.032" / 0.813
SLIM-MOX21002	5.75W	0.50" / 12.70	2.50" / 63.50	2.40" / 60.96	0.032" / 0.813
SLIM-MOX30602	5.50W	0.75" / 19.05	1.50" / 38.10	1.40" / 35.56	0.032" / 0.813
SLIM-MOX30802	6.75W	0.75" / 19.05	2.00" / 50.80	1.90" / 48.26	0.032" / 0.813
SLIM-MOX31002	7.50W	0.75" / 19.05	2.50" / 63.50	2.40" / 60.96	0.032" / 0.813
SLIM-MOX40402	5.00W	1.00" / 25.40	1.00" / 25.40	0.90" / 22.86	0.032" / 0.813
SLIM-MOX40802	8.25W	1.00" / 25.40	2.00" / 50.80	1.90" / 48.26	0.032" / 0.813
SLIM-MOX41002	9.00W	1.00" / 25.40	2.50" / 63.50	2.40" / 60.96	0.032" / 0.813

Slim-Mox HT Divider

High Temperature Thick Film Voltage Divider

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.

FEATURES

- High Temperature Operation
- RoHS compliant
- Radial Terminals

SERIES SPECIFICATIONS

Ohmite Series	Power @25°C	Operating Voltage
SLIM-MOX103RD	1.25W	5.0KV
SLIM-MOX104RD	1.50W	10.0KV
SLIM-MOX106RD	2.50W	12.0KV
SLIM-MOX108RD	3.25W	15.0KV
SLIM-MOX204RD	2.50W	10.0KV
SLIM-MOX206RD	3.25W	12.0KV
SLIM-MOX208RD	4.25W	20.0KV
SLIM-MOX210RD	5.00W	25.0KV
SLIM-MOX306RD	4.50W	12.0KV
SLIM-MOX308RD	5.00W	20.0KV
SLIM-MOX310RD	5.75W	25.0KV
SLIM-MOX408RD	6.75W	20.0KV
SLIM-MOX410RD	7.50W	25.0KV

Contact Ohmite for custom configurations.

CHARACTERISTICS

Resistance range 1M to 5,000M ohms

Max. Ratio 5000:1

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

 $R_T = 500M\Omega 5\%$

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

Ratio = $R_T / R_2 = 1,000$: 1, 1% To specify Slim-Mox Dividers, please see our website at:

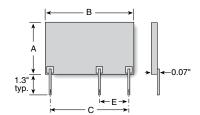
www.ohmite.com/dividers

Resistor element	Thick film on Alumina
Ratio tolerances	0.5% to 5%

Temperature TCR tracking to 10ppm and VCR track-Coefficient Tracking ing to 1ppm

DIMENSIONS

in. ±0.025 /mm



Series	Power Rating	C	E
SLIM-MOX103RD	1.25W	0.60" / 15.24	0.20" / 5.08
SLIM-MOX104RD	1.50W	0.90" / 22.86	0.20" / 5.08
SLIM-MOX106RD	2.50W	1.40" / 35.56	0.20" / 5.08
SLIM-MOX108RD	3.25W	0.90" / 22.86	0.60" / 15.24
SLIM-MOX204RD	2.50W	0.90" / 22.86	0.20" / 5.08
SLIM-MOX206RD	3.25W	1.40" / 35.56	0.20" / 5.08
SLIM-MOX208RD	4.25W	1.90" / 48.26	0.40" / 10.16
SLIM-MOX210RD	5.00W	2.40" / 60.96	0.20" / 5.08
SLIM-MOX306RD	4.50W	1.40" / 35.56	0.30" / 7.62
SLIM-MOX308RD	5.00W	1.90" / 48.26	0.30" / 7.62
SLIM-MOX310RD	5.75W	2.40" / 60.96	0.20" / 5.08
SLIM-MOX408RD	6.75W	1.90" / 48.26	0.30" / 7.62
SLIM-MOX410RD	7.50W	2.40" / 60.96	0.20" / 5.08

(continued)





All products

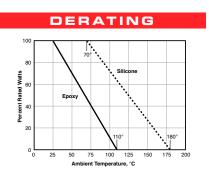
TEMPERATURE/VOLTAGE COEFFICIENTS OF RESISTANCE

Temp. Coeff. of Resistance*						
Resistor Series	0°C-85°C	85°C-125°C		Voltage Coeff. of Resistance**		
Hesisior Series	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 SLIM-MOX106	500 to 2,500M 750 to 5.000M	500Ω to 450M 750Ω to 675M	451M to 5,000M	500Ω to 1,100M	1,101M to 5,000M	
SLIM-MOX108	1K to 2.500M	1K to 375M	676M to 5,000M 376M to 5,000M	750Ω to 1,600M 1K to 940M	1,601M to 5,000M 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 2,000M	2.601M to 5.000M	
SLIM-MOX3001D 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 SLIM-MOX410RD	1M to 5,000M	1M to 1,600M	1,601M to 5,000M	1M to 4,000M	4,001M to 5,000M	
SLIIVI-IVIOX4 TURD	1M to 5,000M	1M to 1,200M	1,201M to 5,000M	1M to 3,000M	3,001M to 5,000M	

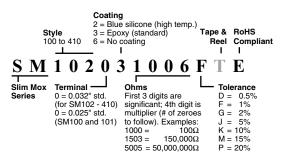
^{*}TCR of 25ppm for temperature range of 0°C-85°C. TCR of 50ppm and 100ppm for -55°C to 125°C. Consult factory for TCR values operating higher than 125°C

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

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	±.020%		
Power Conditioning	MIL-R-49462A, Par 4.8	±0.50%		
Solderability	MIL-STD-202, Method 208F	>95% Coverage		



ORDERING INFORMATION



Not all tolerances available in all values. To specify Slim-Mox Dividers, please see our website at:

www.ohmite.com/dividers