

# 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 SPECIFICATIONS

Ohmite Series	Resistance Range (Ohms)	Power @25°C	Max. Operating Voltage	Capacitance (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	750Ω to 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

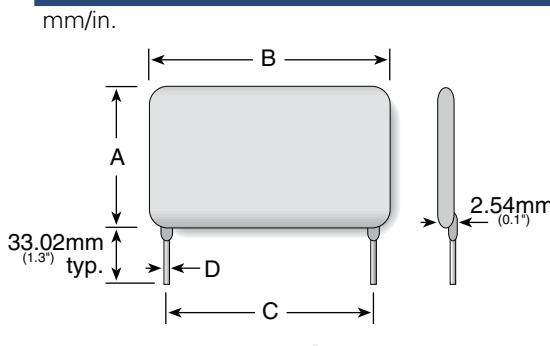
Contact Ohmite for custom configurations. \*Maximum voltage and power rating determined by Ohm's law:  $P=V^2/R$

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.

### CARACTERISTICS

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

### DIMENSIONS



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

# Slim-Mox Divider

## 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.

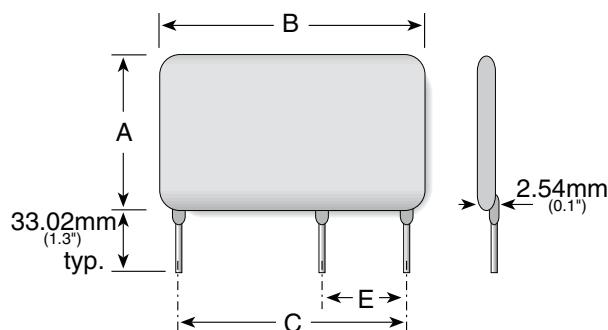
### FEATURES

- Custom configurations are available. Contact Ohmite with your specifications
- RoHS compliant

### DIMENSIONS

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

mm±.635



### CHARACTERISTICS

Resistance range	1M to 5,000M ohms
Resistance ratio	100:1 - 5000 : 1 To specify dividers outside this range, please see our website at: <a href="https://www.ohmite.com/custom-resistor-divider/">https://www.ohmite.com/custom-resistor-divider/</a>
	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 = $R_T / R_2 = 1,000: 1, 1\%$
Resistor element	Thick film on Alumina
Ratio tolerances	0.5% to 5%
Temperature Coefficient Tracking	TCR tracking to 10ppm and VCR tracking to 1ppm

### SERIES SPECIFICATION

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.

# 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	250Ω 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

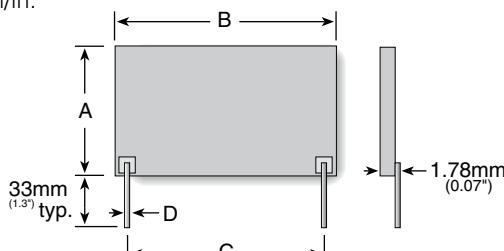
- Outstanding voltage coefficient
- High temperature silicone coating
- Low resistor noise
- Noninductive
- Custom configurations are available. Contact Ohmite with your specifications
- RoHS compliant
- Radial Terminals

### 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

### DIMENSIONS

mm/in.



Series	Power@25°C	A max.	B max.	C ±0.635	D ±0.0508
SLIM-MOX10002	0.40W	5.08/0.20"	5.08/0.20"	2.54/0.10"	0.635/0.025"
SLIM-MOX10102	0.75W	6.35/0.25"	6.35/0.25"	5.08/0.20"	0.635/0.025"
SLIM-MOX10202	1.50W	6.35/0.25"	12.70/0.50"	10.16/0.40"	0.813/0.032"
SLIM-MOX10302	2.00W	6.35/0.25"	19.05/0.75"	15.24/0.60"	0.813/0.032"
SLIM-MOX10402	2.50W	6.35/0.25"	25.40/1.00"	22.86/0.90"	0.813/0.032"
SLIM-MOX10602	3.25W	6.35/0.25"	38.10/1.50"	35.56/1.40"	0.813/0.032"
SLIM-MOX10802	4.25W	6.35/0.25"	50.80/2.00"	48.26/1.90"	0.813/0.032"
SLIM-MOX20202	2.50W	12.70/0.50"	12.70/0.50"	10.16/0.40"	0.813/0.032"
SLIM-MOX20402	3.25W	12.70/0.50"	25.40/1.00"	22.86/0.90"	0.813/0.032"
SLIM-MOX20602	4.25W	12.70/0.50"	38.10/1.50"	35.56/1.40"	0.813/0.032"
SLIM-MOX20802	5.00W	12.70/0.50"	50.80/2.00"	48.26/1.90"	0.813/0.032"
SLIM-MOX21002	5.75W	12.70/0.50"	63.50/2.50"	60.96/2.40"	0.813/0.032"
SLIM-MOX30602	5.50W	19.05/0.75"	38.10/1.50"	35.56/1.40"	0.813/0.032"
SLIM-MOX30802	6.75W	19.05/0.75"	50.80/2.00"	48.26/1.90"	0.813/0.032"
SLIM-MOX31002	7.50W	19.05/0.75"	63.50/2.50"	60.96/2.40"	0.813/0.032"
SLIM-MOX40402	5.00W	25.40/1.00"	25.40/1.00"	22.86/0.90"	0.813/0.032"
SLIM-MOX40802	8.25W	25.40/1.00"	50.80/2.00"	48.26/1.90"	0.813/0.032"
SLIM-MOX41002	9.00W	25.40/1.00"	63.50/2.50"	60.96/2.40"	0.813/0.032"

# Slim-Mox HD 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

### CHARACTERISTICS

<b>Resistance range</b>	1M to 5,000M ohms
<b>Resistance ratio</b>	100:1 - 5000 : 1
	To specify dividers outside this range, please see our website at: <a href="https://www.ohmite.com/custom-resistor-divider/">https://www.ohmite.com/custom-resistor-divider/</a>
	A complete description of the SLIM-MOX Divider is required. EXAMPLE: R <sub>1</sub> = 500MΩ 5% R <sub>1</sub> = 499.5MΩ 5% R <sub>2</sub> = 500KΩ 1% Ratio = R <sub>1</sub> /R <sub>2</sub> = 1,000: 1, 1%
<b>Resistor element</b>	Thick film on Alumina
<b>Ratio tolerances</b>	0.5% to 5%
<b>Temperature Coefficient Tracking</b>	TCR tracking to 10ppm and VCR tracking to 1ppm

### 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

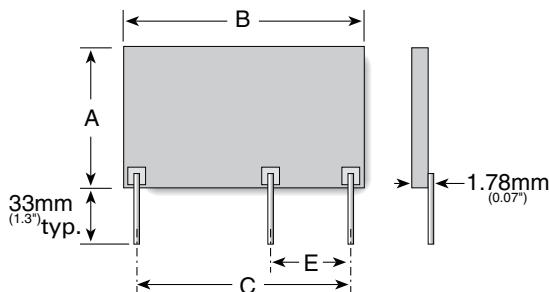
Contact Ohmite for custom configurations.

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

<https://www.ohmite.com/custom-resistor-divider/>

### DIMENSIONS

mm ±0.635/in.



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

(continued)

### TEMPERATURE/VOLTAGE COEFFICIENTS OF RESISTANCE

Resistor Series	Temp. Coeff. of Resistance*				
	0°C-85°C			85°C-125°C	
	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

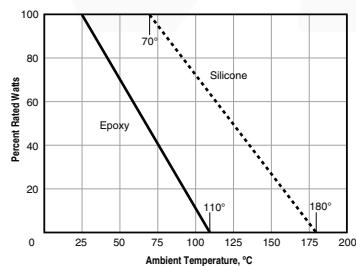
\* Consult factory for TCR values operating higher than 125°C

\*\*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	±0.020%
Power Conditioning	MIL-R-49462A, Par 4.8	±0.50%
Solderability	MIL-STD-202, Method 208F	>95% Coverage

### DERATING



### ORDERING INFORMATION

Style 100 to 410	Coating		Tape & Reel Compliant
	2 = Blue silicone (high temp.)	3 = Epoxy (standard)	
	6 = No coating		
S M 1 0 2 0 3 1 0 0 6 F T E			
Slim Mox Series	Terminal	Ohms	Tolerance
0 = 0.032" std. (for SM102 - 410)	First 3 digits are significant; 4th digit is multiplier (# of zeroes to follow). Examples: 1000 = 100 Ω 1503 = 150,000 Ω 5005 = 50,000,000Ω	D = 0.5% F = 1% G = 2% J = 5% K = 10% M = 15% P = 20%	

Tape and Reel is not available for all styles, please contact Ohmite beforehand

Not all tolerance available in all values.  
To specify Slim-Mox Dividers, please see our website at:  
<https://www.ohmite.com/custom-resistor-divider/>