

# Precision High-Voltage Divider

## Series MTX 2000

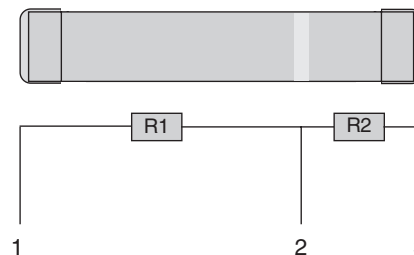
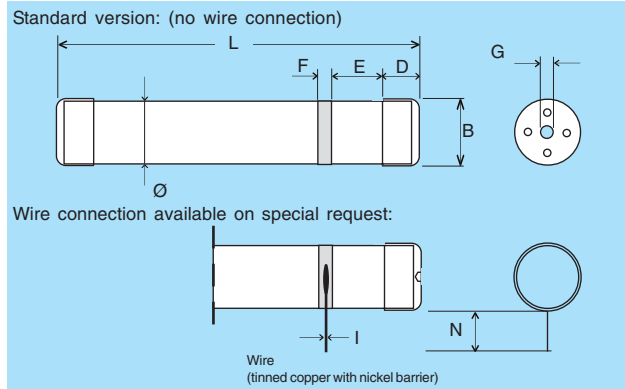
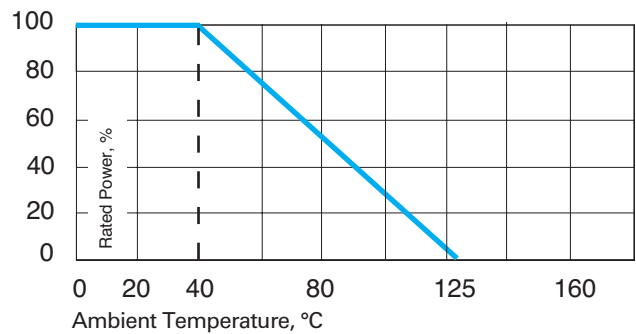
High-Power/High-Voltage Dividers up to 50 W

The MTX 2000 series consists of high-quality, high-precision, high-power, high-voltage dividers for use in sophisticated resistor networks. These custom designs support a wide range of resistance values, tight voltage ratios, close tolerances and low TCRs.

For use in oil or potted applications, EBG recommends polyimide coating instead of silicone conformal coating. Please ask for details!

### Specifications

- Resistance tolerance:  $\pm 0.1\%$  to  $\pm 1\%$
- Ratio tolerance: 0.1% to 1%
- Temperature coefficient:  $\pm 25$  ppm/ $^{\circ}\text{C}$  to  $\pm 50$  ppm/ $^{\circ}\text{C}$ . Specified TCR granted at  $+85^{\circ}\text{C}$  related to room temperature of  $+25^{\circ}\text{C}$ ! (others upon special request!)
- Ratio temperature coefficient: 10 ppm/ $^{\circ}\text{C}$  to 15 ppm/ $^{\circ}\text{C}$
- Load life:  $\Delta R/R$  0.15% max., 1,000 hours at rated power
- Dielectric strength:  $> 1,000$  V (25 $^{\circ}\text{C}$ , 75% relative humidity)
- Thermal shock:  $\Delta R/R$  0.2% max.
- Moisture resistance:  $\Delta R/R$  0.25% max.
- Operating temperature:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$
- Encapsulation: silicone conformal, polyimide coating
- Lead material: caps, nickel-plated
- Max. torque: 2Nm for M4, 4Nm for M8
- Standard storage conditions: 0 to  $85^{\circ}\text{C}$  at 80% RH max. for min. 12 months. For different conditions please contact your local EBG representative!



$$\text{Ratio} = \frac{R1+R2}{R2}$$

### Specifications

Dimensions (mm)

Type	L	B	Ø	D	E	F	G	I	N
2000.23	156 ± 2	14.5 ± 0.2	13.5 ± 0.5	10 ± 0.2	8.5 ± 0.2	5 ± 0.5	M4	1.0 ± 0.1	30.0 ± 1
2000.105	308 ± 2.5	31.8 ± 0.3	30.5 ± 0.5	18 ± 0.2	40 ± 2	7 ± 0.5	M8	1.0 ± 0.1	30.0 ± 1

	TK abs.	50 ppm / $^{\circ}\text{C}$		25 ppm / $^{\circ}\text{C}$		15 ppm / $^{\circ}\text{C}$	
		Tol. abs	1% - 0.25%	1% - 0.1%	1% - 0.1%		
	TK Ratio	25 ppm / $^{\circ}\text{C}$		15 ppm / $^{\circ}\text{C}$		15 / 10 ppm / $^{\circ}\text{C}$	
	Tol. Ratio	0.5% - 0.25%		0.5% - 0.1%		0.5% - 0.1%	
2000.23	$P_{\text{watt}} 40^{\circ}\text{C}$	10	40	R1 + R2 Ratio	2 M - 2 G 1 : 1000 - 1:20 000	20 M - 1 G 1 : 1000 - 1:20 000	20 M - 500 M 1 : 1000 - 1 : 10 000
2000.105	$U$ kVDC	50	80	R1 + R2 Ratio	20 M - 3 G 1 : 1000 - 1:20 000	20 M - 2 G 1 : 1000 - 1:20 000	20 M - 1 G 1 : 1000 - 1 : 10 000

The above spec. sheet features our standard products. For further options, please contact our local EBG representative or contact us directly. For updated information, please visit our website!