

Precision High-Voltage Divider

Series MTX 2000

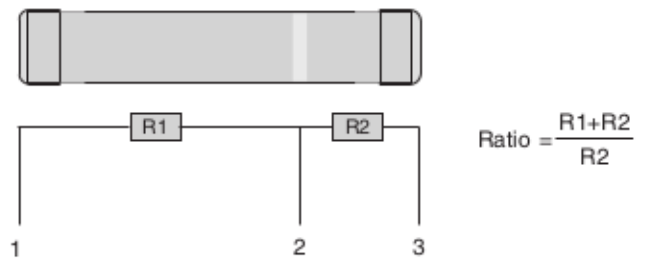
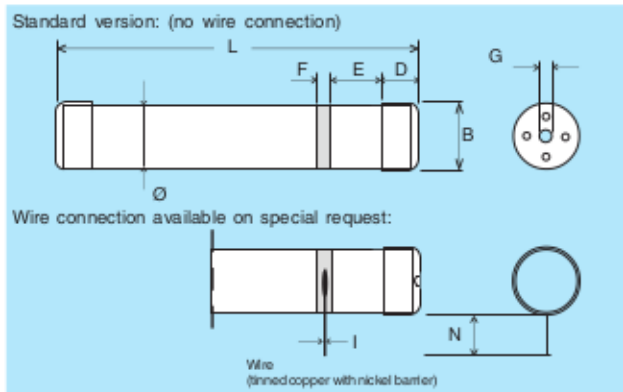
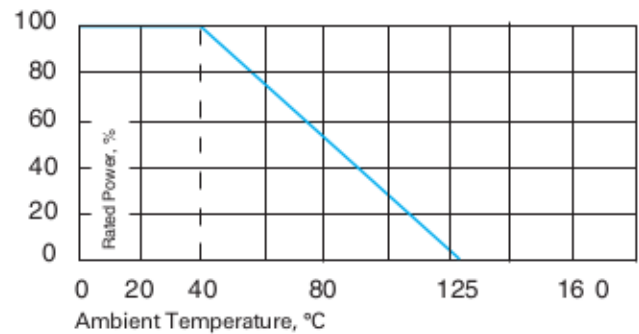
High-Power/High-Voltage Dividers up to 50 W

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 lowTCRs.

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: ± 25 ppm/ $^{\circ}\text{C}$ to ± 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: $> 1,000\text{ V}$ (25°C , 75% relative humidity)
- Thermal shock: $\Delta R/R$ 0.2% max.
- Moisture resistance: $\Delta R/R$ 0.25% max.
- Operating temperature: -55°C to $+125^{\circ}\text{C}$
- Encapsulation: silicone conformal, polyimide coating
- Lead material: caps, nickel-plated
- Max. torque: 2Nm for M4, 4Nm for M8



Specifications

Dimensions (mm)

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

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