Series MTX 1000 up to 32 kV operating voltage

RESISTORS

A Miba Group Company

Ø 0.8 (0.032)

160

R1+R2

R2

The MTX 1000 series is used for advanced resistor networks where high precision is demanded. Custom designed precision voltage dividers support a wide range of resistance value, voltage ratio, close tolerances, low temperature coefficients and voltage ratings as well as liberty for mechanical dimensions.

Features

- up to 32 kV operating voltage
- Absolute / ratio tolerance range ±0.1 % to ±1 %
- Ohmic value and ratios per customer requirements
- Non-Inductive design
- ROHS compliant



Technical Specifications

Resistance value	customer specified	80		
Resistance tolerance	absolute tolerance: ±0.1 % to ±1 % ratio tolerance: ±0.1 % to ±1 % depending on ohmic value			
Temperature coefficient	absolute TCR: ±50 ppm/°C to ±15 ppm/°C ratio TCR: ±15 ppm/°C to ±5 ppm/°C depending on ohmic value			
Ratios	standard ratios: 100:1, 1000:1, 10000:1 (others on special request)	0 20 40 80 125 Ambient Temperature, °C		
Max. operating temperature	-55°C to +125°C			
Dielectric strength	> 1,000 V (25°C, 75 % relative humidity)	R1 R2		
Insulation resistance	> 10,000 MΩ (500 V, 25°C, 75 % relative humidity)	$\begin{vmatrix} & & \\ 1 & & 2 & 3 \end{vmatrix}$ Ratio =		
Overload	Δ R/R 0.25 % max. 1.5x Pnom, 5 sec. (do not exceed 1.5x V max.)			
Load life	$\Delta R/R$ 0.15 % max., 1,000 hours at rated power			
Moisture resistance	ΔR/R 0.25 % max.			
Thermal shock	ΔR/R 0.2 % max.	MTX 1000		
Encapsulation	standard silicone conformal (U) or glass coating (G) we recommend 2xpolyimide coating for use in oil and potted applications (ask for details)			
Lead material	tinned copper	L D		
Weight	depending on model no. (ask for details)			

Model Specifications

Model no.	P Wattage	V Voltage kV DC	Dimensions in mm				
			L	В	С	D	E
1000.2	0.5	8*	26	8	9.1	22.9	5.08
1000.3	1.2	15*	38.5	13	14.2	35.6	7.62
1000.4	1.8	24*	51.5	15.5	16.6	48.3	10.16
1000.5	2.4	32*	77.5	15.5	16.6	73.4	10.16

* for glass coating and 2xpolyimide coating, when used in open air, please use max. voltage x 0.6 (standard ratings valid when parts used in clean air)

How to make an order

Model no._Ohmic Value_abs. & ratio Tolerance_ abs. & ratio TCR_ratio _coating

For example:

MTX 1000.2 20M abs. Tol 0.25%, abs. TCR 25ppm, ratio Tol. 0.1%, ratio TCR 15ppm, 1000:1 U