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 value, tight voltage ratios, close tolerances and low TCRs.

## Features

- up to 80 kV operating voltage
- up to 50 W operating power
- Non-Inductive design
- ROHS compliant



## Technical Specifications

| Resistance value | see model specifications below |
| :---: | :---: |
| Resistance tolerance | see model specifications below |
| Temperature coefficient | see model specifications below |
| Max. operating temperature | $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$ |
| Dielectric strength | $>1,000 \mathrm{~V}\left(25^{\circ} \mathrm{C}, 75 \%\right.$ relative humidity) |
| Load life | $\Delta \mathrm{R} / \mathrm{R} 0.15$ \% max., 1,000 hours at rated power |
| Moisture resistance | $\Delta R / R 0.25$ \% max. |
| Thermal shock | $\Delta R / R 0.2$ \% max. |
| Encapsulation | standard coating: silicone conformal we recommend $2 x$ polyimide coating for use in oil and potted applications (ask for details) |
| Lead material | caps, nickel-plated |
| Torque | 1.8 Nm to 2 Nm for M4, 3.8 Nm to 4 Nm for M8 |
| Connection | standard version having no wire tap connection. Pre soldered wire connection available on special request |
| Weight | depending on model no. (ask for details) |




## Dimensions in mm

| Model no. | L | B | $\boldsymbol{\varnothing}$ | D | E | F | G | I | N |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0 0 0 . 2 3}$ | $156 \pm 2$ | $14.5 \pm 0.2$ | $13.5 \pm 0.5$ | $10 \pm 0.2$ | $8.5 \pm 0.2$ | $5 \pm 0.5$ | $M 4$ | $1.0 \pm 0.1$ | $30.0 \pm 1$ |
| $\mathbf{2 0 0 0 . 1 0 5}$ | $308 \pm 2.5$ | $31.8 \pm 0.3$ | $30.5 \pm 0.5$ | $18 \pm 0.2$ | $40 \pm 2$ | $7 \pm 0.5$ | $M 8$ | $1.0 \pm 0.1$ | $30.0 \pm 1$ |

## Model Specifications

| Model no. | $\begin{gathered} \mathrm{P} \\ \text { Wattage } \\ 40^{\circ} \mathrm{C} \end{gathered}$ | Voltage <br> kV DC | TCR ratio | $25 \mathrm{ppm} /{ }^{\circ} \mathrm{C}$ | $15 \mathrm{ppm} /{ }^{\circ} \mathrm{C}$ | $15 / 10 \mathrm{ppm} /{ }^{\circ} \mathrm{C}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Tolerance ratio | 0.5 \% - 0.25\% | 0.5 \% - 0.1\% | 0.5 \% - 0.1 \% |
| 2000.23 | 10 | 40 | R1 + R2 Ratio | $\begin{gathered} 2 \mathrm{M} \Omega-2 \mathrm{G} \Omega \\ 1: 1000-1: 20000 \end{gathered}$ | $\begin{gathered} 20 \mathrm{M} \Omega-1 \mathrm{G} \Omega \\ 1: 1000-1: 20000 \end{gathered}$ | $\begin{aligned} & 20 \mathrm{M} \Omega-500 \mathrm{M} \Omega \\ & 1: 1000-1: 10000 \end{aligned}$ |
| 2000.105 | 50 | 80 | R1 + R2 Ratio | $\begin{gathered} 20 \mathrm{M} \Omega-3 \mathrm{G} \Omega \\ 1: 1000-1: 20000 \end{gathered}$ | $\begin{gathered} 20 \mathrm{M} \Omega-2 \mathrm{G} \Omega \\ 1: 1000-1: 20000 \end{gathered}$ | $\begin{gathered} 20 \mathrm{M} \Omega-1 \mathrm{G} \Omega \\ 1: 1000-1: 10000 \end{gathered}$ |

## How to make an order

Model no._Ohmic Value_abs. \& ratio Tolerance_abs. \& ratio TCR_ratio

## For example:

MTX 2000.105 500M abs. tol. 2\% abs. TCR 25ppm, ratio tol. 1\%, ratio TCR 15ppm, 10.000:1


