

## TX177 .5W Wire Wound High Precision Axial Resistor



# TX177



### Electrical & Physical Specifications:

<b>A-Length:</b>	14.78mm (.582")
<b>B-Diameter:</b>	4.83mm (.190")
<b>Lead Dimensions:</b>	.028" dia. X 1.500" long
<b>Max Watts @ 1% Tol:</b>	.5
<b>Max Volts @ 1% Tol.:</b>	500
<b>Temperature Range:</b>	-55°C. to +85°C
<b>Resistance (Ω):</b>	.1 Min. to 540K Max.

### TX Series Engineering Attributes:

#### **RESISTANCE & TOLERANCES**

You can select any Ohmic value from .01Ω to 6MΩ (MegaOhm or MEG) with tolerances to ±.05%. For closer resistance tolerances refer to the [Ultra Precision HR Series](#)

#### **TCR CHARACTERISTIC**

Standard:  $0 \pm 10 \text{ppm}/^\circ\text{C}$ . for 100Ω & higher.

Standard:  $0 \pm 15 \text{ppm}/^\circ\text{C}$ . for values below 100Ω

\*TCR is calculated between +25°C. & +100°C.

-For lower specific TCRs to  $\pm 1 \text{ppm}/^\circ\text{C}$ ., please refer to the [Ultra Precision HR Series](#) to satisfy your specifications.

-For higher TCRs to  $\pm 6000 \text{ppm}/^\circ\text{C}$ ., please refer to the [Compensator Series](#) to satisfy your specifications.

#### **POWER VS. AMBIENT TEMPERATURE**

All TX resistors are designed for full load based upon ±1% resistance tolerance providing the ambient temp (+) the rise in temp. due to self-heating, does not exceed +85°C. Refer to derating table below.

#### **STABILITY VS. TIME**

To ±.005%/yr. @ 25°C. with no load.

#### **REDUCTION OF THERMAL EMF USING COPPER TERMINALS:**

Less than ±3 microvolts/°C. emitted.

#### **PROTECTIVE SEAL**

Commercial plastic conforming coating.

#### **MARKING (Identification)**

PRC stamp, part type & name, Ω value & tolerance, physical size permitting.

#### **INDUCTANCE**

Std. TX resistors are inductively wound. Non-inductive windings are available, add suffix letter "N" in the part name.

**\*Please specify the ambient temperature span of your operation when placing your order.**

#### **Type TX Derating Table:\***

For ±1% resistance tolerance apply up to 100% of rated power to +85 Degrees Celsius.

For ±½% (0.5%) resistance tolerance apply up to 75% of rated power to +85 Degrees Celsius.

For  $\pm 1/4\%$  (0.25%) resistance tolerance apply up to 50% of rated power to +85 Degrees Celsius.

For  $\pm 1/10\%$  (0.1%) resistance tolerance apply up to 50% of rated power to +85 Degrees Celsius.

For  $\pm 1/20\%$  (0.05%) resistance tolerance apply up to 35% of rated power to +85 Degrees Celsius.

\* Percent of Rated Power vs. Combined Temp. of Self- Heating and Ambient (in °C).

## Details

SKU	TX177
Type	Axial-Lead
Length	14.78mm (.582")
Lead Dimensions	.028" dia. X 1.500" long
Diameter	4.83mm (.190")
TCR Char.	to $0 \pm 10 \text{ppm}/^\circ\text{C}$ (between +25°C. and +100°C.)
Temperature	-55°C. to +85°C
Resistance	.1 $\Omega$ to 540K $\Omega$
Tolerance	to $\pm .05\%$
Stability	to $\pm .005\%/yr.$ at +25°C
Max Watts	.5
Max Volts	500
Lead Free	Yes