

TX175 .33W Wire Wound High Precision Axial Resistor

TX175



Electrical & Physical Specifications:

A-Length:	11.61mm (.457")
B-Diameter:	4.83mm (.190")
Lead Dimensions:	.028" dia. X 1.500" long
Max Watts @ 1% Tol:	.33
Max Volts @ 1% Tol.:	330
Temperature Range:	-55°C. to +85°C
Resistance (Ω):	.1 Min. to 350K 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 ±1ppm/°C.**, please refer to the [Ultra Precision HR Series](#) to satisfy your specifications.

-For **higher TCRs to ±6000ppm/°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 ±¼% (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	TX175
Type	Axial-Lead
Length	11.61mm (.457")
Lead Dimensions	.028" dia. X 1.500" long
Diameter	4.83mm (.190")
TCR Char. Temperature	to $0 \pm 10 \text{ppm}/^\circ\text{C}$. (between +25°C. and +100°C.) -55°C. to +85°C
Resistance	.1 Ω to 350K Ω
Tolerance	to $\pm .05\%$
Stability	to $\pm .005\%/yr.$ at +25°C
Max Watts	.33
Max Volts	330
Lead Free	Yes