

SX158 .5W Wire Wound High Precision Axial Resistor



SX158

Electrical & Physical Specifications:

A-Length:	16.38mm (.645")
B-Diameter:	4.47mm (.176")
Lead Dimensions:	.028" dia. X 1.500" long
Max Watts @ 1% Tol:	.5
Max Volts @ 1% Tol:	500
Temperature Range:	-55°C. to +125°C
Resistance (Ω):	.1 Min to 600K Max



SX Series Engineering Attributes:

RESISTANCE & TOLERANCES

You can select any Ohmic value or decimal part of an Ohm 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 specific TCRs to $\pm 6000 \text{ppm}/^\circ\text{C}$., please refer to the Compensator Series to satisfy your specifications.

POWER VS. AMBIENT TEMPERATURE

All SX High Precision 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 +125°C. Derated to zero power @ +125°C. Refer to Derating Table shown 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 COATING SEAL

Stress free solvent resistant silicone/epoxy seal.

MARKING (Identification)

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

INDUCTANCE

Standard SX series resistors are inductively wound. Non-inductive windings are available, simply add suffix letter "N" in the part name.

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

Type SX Derating Table:*

For ±1% resistance tolerance apply up to 100% of rated power to +125°C. derated to zero power at 145°C.

For ±½% (0.5%) resistance tolerance apply up to 75% of rated power to +125°C. derated to zero power at 140°C.

For $\pm 1/4\%$ (0.25%) resistance tolerance apply up to 50% of rated power to +125°C. derated to zero power at 135°C.

For $\pm 1/10\%$ (0.1%) resistance tolerance apply up to 50% of rated power to +125°C. derated to zero power at 135°C.

For $\pm 1/20\%$ (0.05%) resistance tolerance apply up to 35% of rated power to +125°C. derated to zero power at 132°C.

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

Details

SKU	SX158
Type	Axial-Lead
Length	16.38mm (.645")
Lead Dimensions	.028" dia. X 1.500" long
Diameter	4.47mm (.176")
TCR Char. Temperature	to $0 \pm 10 \text{ppm}/^\circ\text{C}$ (between +25°C. and +100°C.) -55°C. to +125°C
Resistance	.1Ω to 600KΩ
Tolerance	to $\pm .05\%$
Stability	to $\pm .005\%/yr.$ at +25°C
Max Watts	.5
Max Volts	500
Lead Free	Yes