

## SX3712 1.5W Wire Wound High Precision Axial Resistor

### Electrical & Physical Specifications:

<b>A-Length:</b>	22.73mm (8.95")
<b>B-Diameter:</b>	11.10mm (.437")
<b>Lead Dimensions:</b>	.032" dia. X 1.500" long
<b>Max Watts @ 1% Tol:</b>	1.5
<b>Max Volts @ 1% Tol:</b>	1000
<b>Temperature Range:</b>	-55°C. to +125°C
<b>Resistance (Ω):</b>	.25 Min to 2.5 MEG 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 ±¼% (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	SX3712
Type	Axial-Lead
Length	22.73mm (8.95")
Lead Dimensions	.032" dia. X 1.500" long
Diameter	11.10mm (.437")
TCR Char.	to $0 \pm 10$ ppm/°C. (between +25°C. and +100°C.)
Temperature	-55°C. to +125°C
Resistance	.25Ω to 2.5MegΩ
Tolerance	to $\pm .05\%$
Stability	to $\pm .005\%/yr.$ at +25°C
Max Watts	1.5
Max Volts	1000
Lead Free	Yes