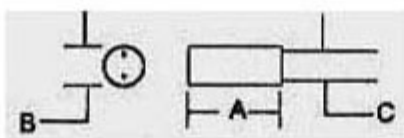




RX255N .25W Ultra Precision Wire Wound Printed Circuit Resistor



Electrical & Physical Specifications:

- A-Length:** 7.92mm (.312")
- B-Diameter:** 6.35mm (.250")
- C-Lead Dimensions:** .025" dia. x 1.0" long
- Lead Spacing:** .200"

RX Series Engineering Attributes:

RESISTANCE & TOLERANCES

You can select any Ohmic value or decimal part of an Ohm with tolerances to $\pm 0.005\%$. 10 Ω minimum resistance for $\pm 0.01\%$ tolerance. See figure #2 shown below.

TCR CHARACTERISTIC

Standard:

100 Ω & higher values: 0 ± 5 ppm/ $^{\circ}\text{C}$.

For values below 100 Ω : 0 ± 15 ppm/ $^{\circ}\text{C}$.

Special:

100 Ω & higher: 0 ± 1 ppm/ $^{\circ}\text{C}$, matching to 0 ± 5 ppm/ $^{\circ}\text{C}$.

Please specify temperature span of operation. The TCR is calculated between +25 $^{\circ}\text{C}$. & +100 $^{\circ}\text{C}$.

POWER VS. AMBIENT TEMPERATURE

All Ultra Precision Resistors are designed for full load based upon $\pm 1\%$ resistance tolerance providing the ambient temperature (+) plus the rise in temperature due to self-heating, does not exceed +125 $^{\circ}\text{C}$. Derated to zero power @ +145 $^{\circ}\text{C}$., See figure #1 shown below.

STABILITY

To $\pm 0.001\%$ /yr. @ +25 $^{\circ}\text{C}$. with no Load.

REDUCTION OF THERMAL EMF USING COPPER TERMINALS:

Less than ± 3 microvolts/ $^{\circ}\text{C}$. emitted.

INDUCTANCE

Standard parts in this series are inductively wound. Non-inductive balanced reverse pi windings are available, simply add suffix letter "N" to the part # when placing your order.

PROTECTIVE SEAL

Features a stress free base coat as well as an epoxy casing that is resistant to solder heat & solvents.

MARKING

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

Type RX Derating Table*

For $\pm 1\%$ resistance tolerance apply up to 100% of rated power to +125 Degrees Celsius. derated to zero @ +145 Degrees Celsius.

For $\pm 1/2\%$ (0.5%) resistance tolerance apply up to 75% of rated power to +125 Degrees Celsius. derated to zero @ +140 Degrees Celsius.

For $\pm 1/4\%$ (0.25%) resistance tolerance apply up to 50% of rated power to +125 Degrees Celsius.

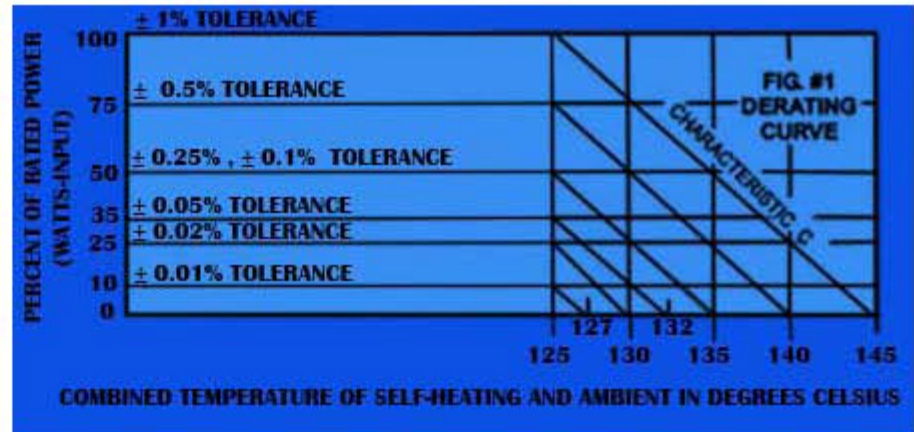
derated to zero @ +135 Degrees Celsius.

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

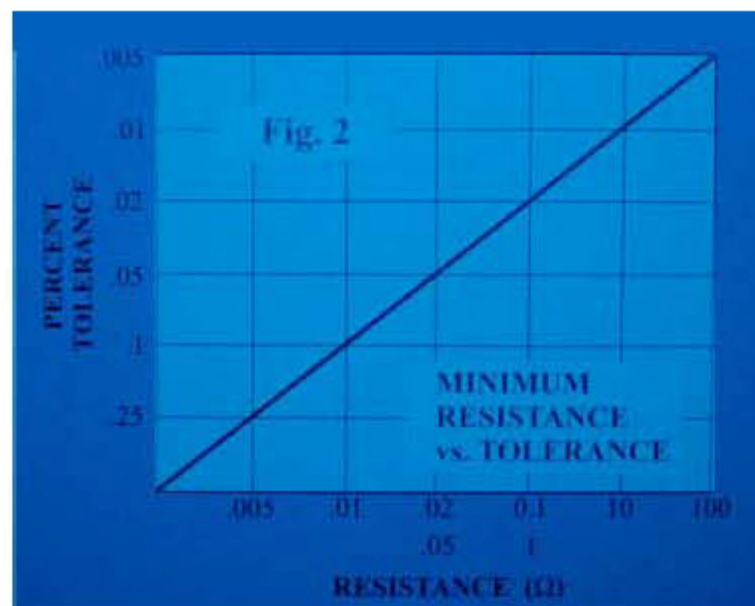
For $\pm 1/20\%$ (0.05%) resistance tolerance apply up to 35% of rated power to +125 Degrees Celsius. derated to zero @ +132 Degrees Celsius.

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

Detailed Images



Derating Curve



Minimum Resistance vs. Tolerance

Details

SKU	RX255N
Type	Printed Circuit
Length	7.92mm (.312")
Lead Dimensions	.025" dia. x 1.0" long; spacing: 0.200"
Diameter	6.35mm (.250")
TCR Char.	0 \pm 5ppm (Std.) ... to 0 \pm 1ppm /°C.
Temperature	-65°C. to +125°C.
Resistance	from .1 Ω to 150K Ω
Tolerance	\pm .01% (std.) ... from \pm 1% to \pm .005%
Stability	to \pm .001% per year @25°C
Max Watts	.25
Max Volts	100
Lead Free	Yes