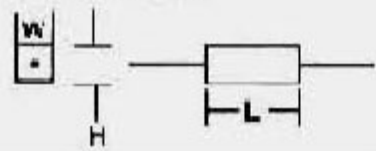


HVA2 .25W Ultra Precision Wire Wound Rectangular Body Axial Lead Resistor

TYPE HVA



Electrical & Physical Specifications:

H-Height:	6.35mm (.250")
L-Length:	9.78mm (.385")
W-Width:	5.72mm (.225")
Lead Dimensions:	.025" x 1" long min

HVA Series Engineering Attributes:

RESISTANCE & TOLERANCES

You can select any Ohmic value or decimal part of an Ohm with tolerances to $\pm 0.005\%$, 10Ω 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 ± 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

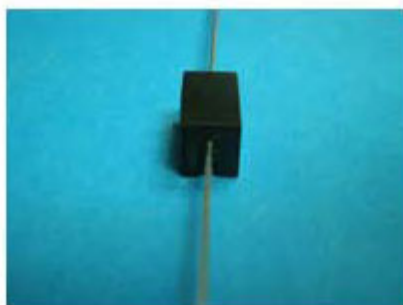
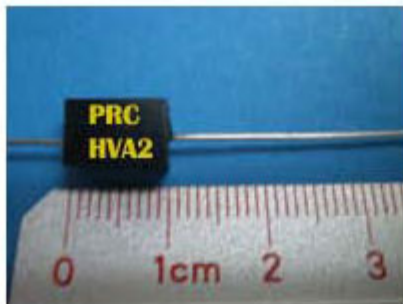
Standard parts in this series are inductively wound. Non-inductive balanced reverse pi windings are available, simply add suffix letter "N" to the part # when placing your order.

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 HVA Derating Table*

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

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

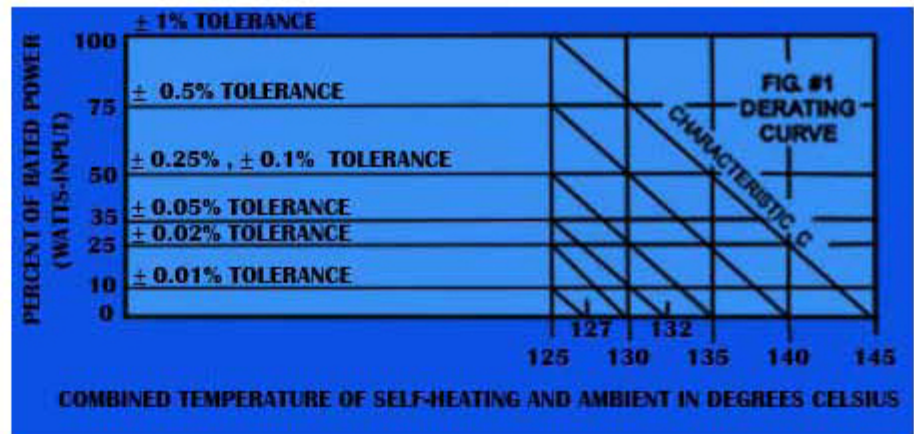
For $\pm 1/4\%$ (0.25%) resistance tolerance apply up to 50% of rated power to $+125$ Degrees Celsius, derated to zero power @ $+135$ Degrees Celsius.

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

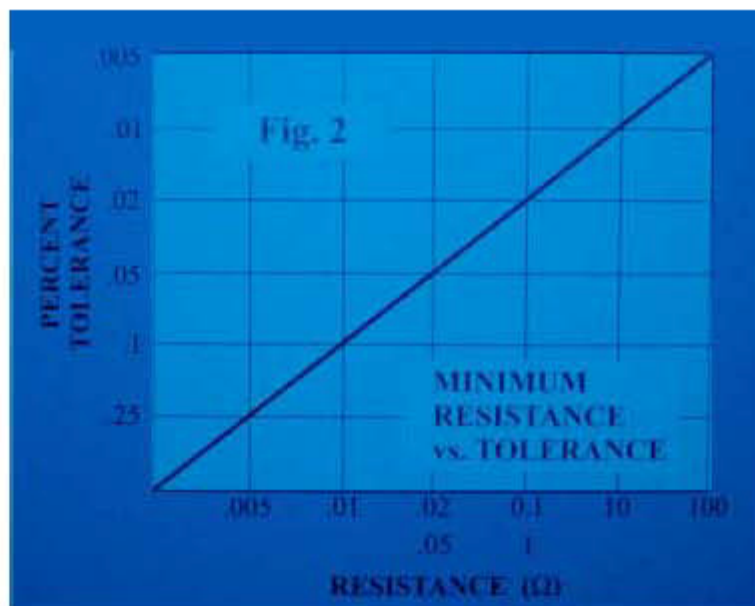
For $\pm 1/20\%$ (0.05%) resistance tolerance apply up to 35% of rated power to +125 Degrees Celsius, derated to zero power @ +132 Degrees Celsius.

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

Detailed Images



Derating Information



Minimum Resistance vs. Tolerance

Details

SKU	HVA2
Type	Rect. Axial
Length	9.78mm (.385")
Width	5.72mm (.225")
Lead Dimensions	.025" x 1" long min
Height	6.35mm (.250")
TCR Char.	0±5ppm (Std.) ... to 0±1ppm /°C.
Temperature	-65°C. to +125°C.
Resistance	.1Ω to 150KΩ
Tolerance	±.01% (std.) ... from ±1% to ±.005%
Stability	to ±.001% per year
Max Watts	.25
Max Volts	150
Lead Free	Yes