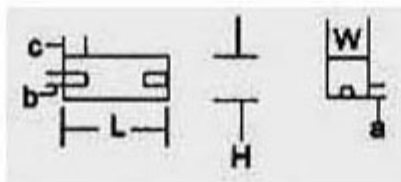


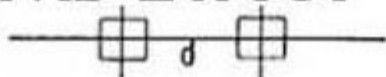
HVS2 .25W Ultra Precision Wire Wound 2-tab Resistor Surface Mounted Design (SMD)



Electrical & Physical Specifications:

H-Height:	6.35mm (.250")
L-Length:	9.78mm (.385")
W-Width:	5.72mm (.225")
Tab Dimensions:	a=.125"; b=.112"; c=.100"; d=.310"
Resistance Range:	.1Ω to 150KΩ
Max Watts @ 1% Tol:	.25
Max Volts @ 1% Tol:	150

PAD LAYOUT



HVS 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:

100Ω & higher values: 0 ± 5 ppm/°C.

For values below 100Ω: 0 ± 15 ppm/°C.

Special:

100Ω & higher: 0 ± 1 ppm/°C. matching to 0 ± 5 ppm/°C.

Please specify temperature span of operation. The TCR is calculated between +25°C. & +100°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°C. Derated to zero power @ +145°C., See figure #1 shown below.

STABILITY

To $\pm 0.001\%/yr.$ @ +25°C. with no Load.

REDUCTION OF THERMAL EMF USING COPPER TERMINALS:

Less than ± 3 microvolts/°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

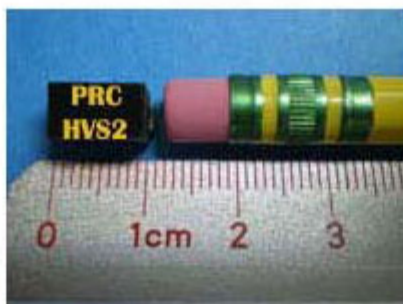
Features a stress free base coat as well as an epoxy casing that is resistant to solder heat & solvents.

MARKING

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

TAPE & REEL

Have your parts delivered to you already taped & reeled by specifying Tape & Reel when placing your order. For detailed information on all the individual specifications for the tape & reel delivery option, click the [Tape & Reel Chart](#)



Type HVS 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.

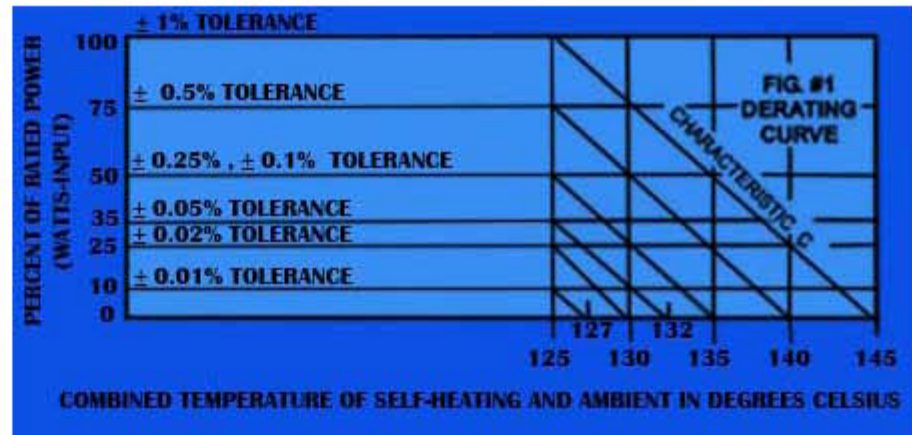
For $\pm 1/4\%$ (0.25%) resistance tolerance apply up to 50% of rated power to +125 Degrees Celsius. derated to zero @ +135 Degrees Celsius.

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.

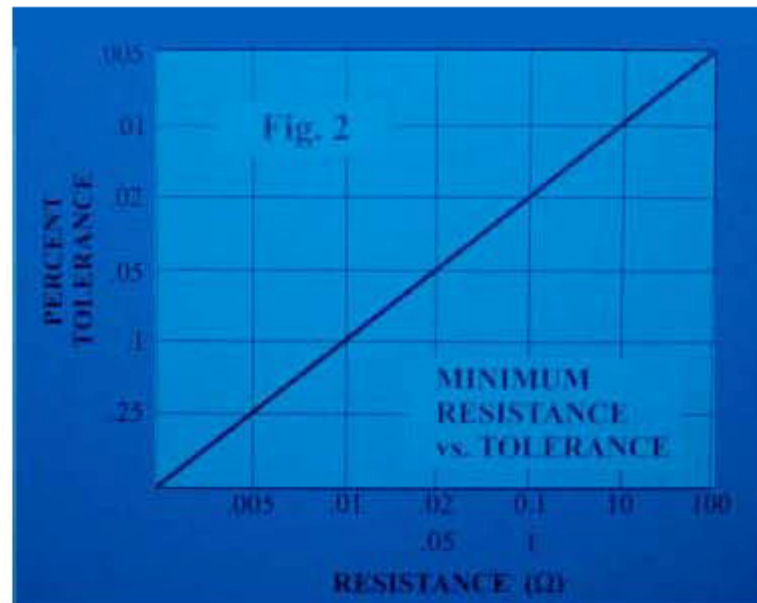
For $\pm 1/20\%$ (0.05%) resistance tolerance apply up to 35% of rated power to +125 Degrees Celsius. derated to zero @ +132 Degrees Celsius.

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

Detailed Images



Derating Curve



Minimum Resistance vs. Tolerance

Details

SKU	HVS2
Type	SMD (2-Tab)
Length	9.78mm (.385")
Width	5.72mm (.225")
Tab Dimensions	a= .125" b= .112" c= .100" d= .310"
Height	6.35mm (.250")
TCR Char. Temperature	0±5ppm (Std.) ... to 0±1ppm /°C, -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