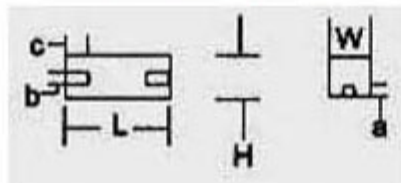


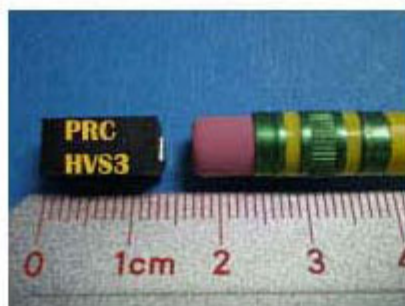
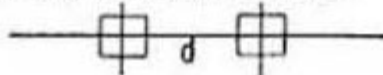
HVS3 .5W Ultra Precision Wire Wound 2-Tab Resistor Surface Mounted Design (SMD)



Electrical & Physical Specifications:

H-Height:	6.35mm (.250")
L-Length:	12.7mm (.500")
W-Width:	6.35mm (.250")
Tab dimensions:	a=.100" b=.112" c=.100" d=.425"
Resistance Range:	.1Ω to 350KΩ
Max Watts @ 1% Tol:	.5
Max Volts @ 1% Tol:	250

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 ± 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.

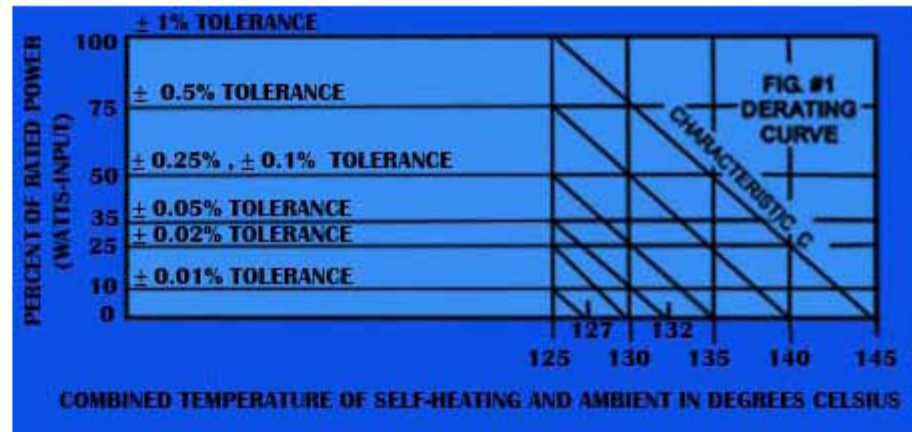
For $\pm 1/4\%$ (0.25%) resistance tolerance apply up to 50% of rated power to +125 Degrees Celsius. derated to zero @ +135 Degrees Celsius.

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.

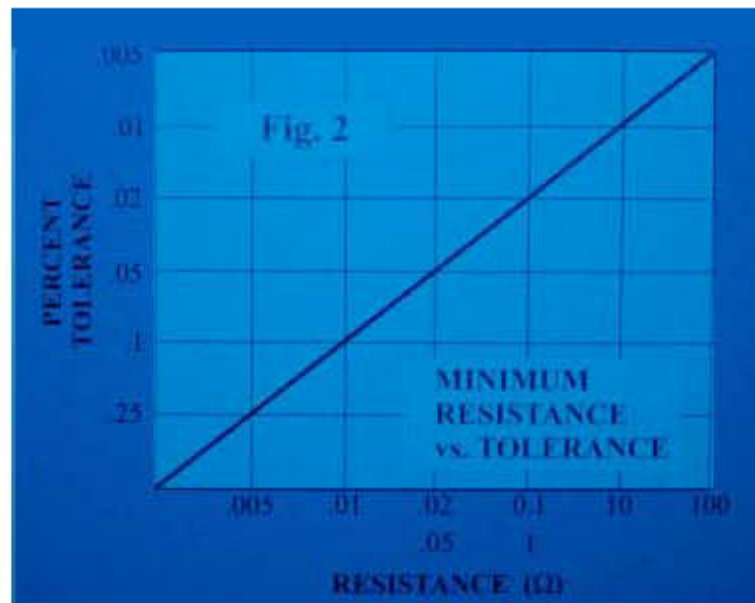
For $\pm 1/20\%$ (0.05%) resistance tolerance apply up to 35% of rated power to +125 Degrees Celsius. derated to zero @ +132 Degrees Celsius.

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

Detailed Images



Derating Information



Minimum Resistance vs. Tolerance

Details

SKU	HVS3
Type	SMD (2-Tab)
Length	12.7mm (.500")
Width	6.35mm (.250")
Tab Dimensions	a=.100" b=.112" c=.100" d=.425"
Height	6.35mm (.250")
TCR Char.	0 \pm 5ppm (Std.) ... to 0 \pm 1ppm /°C.
Temperature	-65°C. to +125°C.
Resistance	.1 Ω to 350K Ω
Tolerance	\pm .01% (std.) ... from \pm 1% to \pm .005%
Stability	to \pm .001% per year
Max Watts	.5
Max Volts	250
Lead Free	Yes