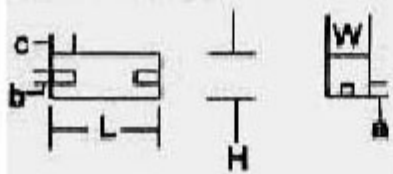
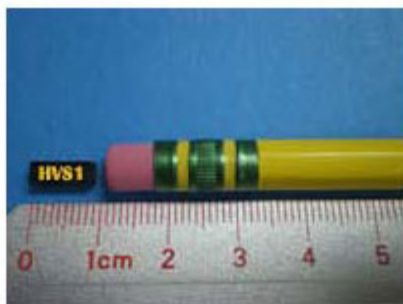
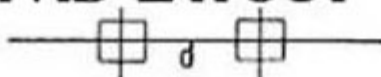


HVS1 .2W Ultra Precision Wire Wound 2-Tab Resistor Surface Mounted Design (SMD)

TYPE HVS



PAD LAYOUT



Electrical & Physical Specifications:

H-Height:	3.30mm (.130")
L-Length:	9.14mm (.360")
W-Width:	3.18mm (.125")
Tab dimensions:	a=.075"; b=.075"; c=.100"; d=.260"
Resistance Range:	.1Ω to 75KΩ
Max Watts @ 1% Tol:	.2
Max Volts @ 1% Tol:	100

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: $0 \pm 5 \text{ ppm}/^\circ\text{C}$.

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

Special:

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

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 $\pm 3 \text{ microvolts}/^\circ\text{C}$, 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.

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.

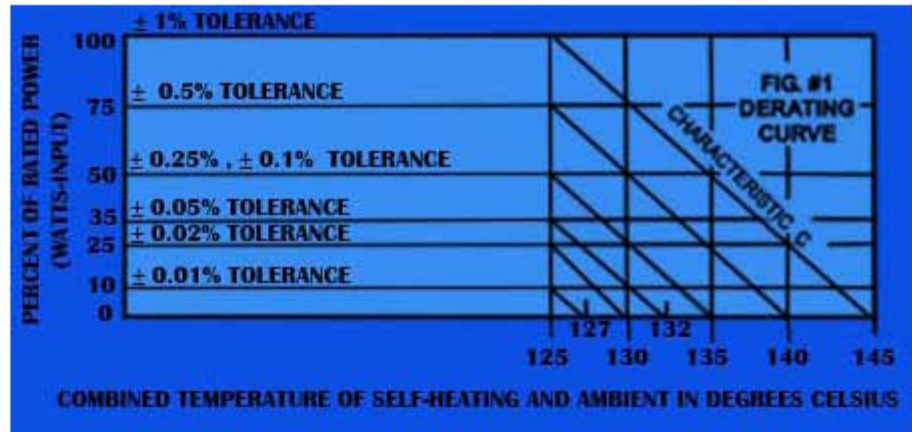
For $\pm 1/4\%$ (0.25%) resistance tolerance apply up to 50% of rated power to +125 Degrees Celsius. derated to zero @ +135 Degrees Celsius.

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	HVS1
Type	SMD (2-Tab)
Length	9.14mm (.360")
Width	3.18mm (.125")
Tab Dimensions	a= .075" b= .075" c= .100" d: .260"
Height	3.30mm (.130")
TCR Char.	0 \pm 5ppm (Std.) ... to 0 \pm 1ppm /°C.
Temperature	-65°C. to +125°C.
Resistance	.1 Ω to 75K Ω
Tolerance	\pm .01% (std.) ... from \pm 1% to \pm .005%
Stability	to \pm .001% per year
Max Watts	.2
Max Volts	100
Lead Free	Yes