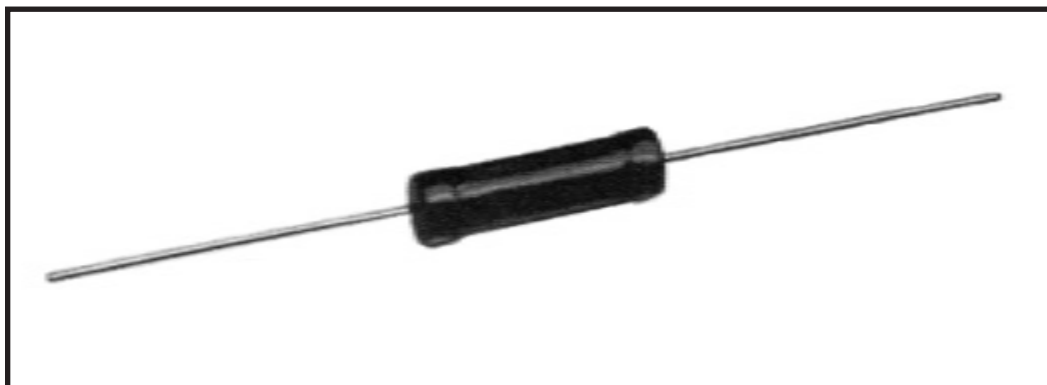




# CODECO CORPORATION OF VERMONT

## Series: HV High Voltage Flameproof Metal Oxide Resistors

The VPR HV series are axial lead, silicone coated semi-precision resistors. The resistive element is a high temperature fired cermet film deposited on a 96% alumina ceramic core. The caps are pressed onto the resistive element, then tin plated copper-weld leads are welded to the caps. The body of the resistor is conformally covered with an exceptionally high temperature silicone coating insuring a flameproof product. This coating is specially formulated to withstand chloroethanes and other degreasing type chemicals. Modern production equipment allow competitive pricing and superior quality. All HV series parts are RoHS compliant.

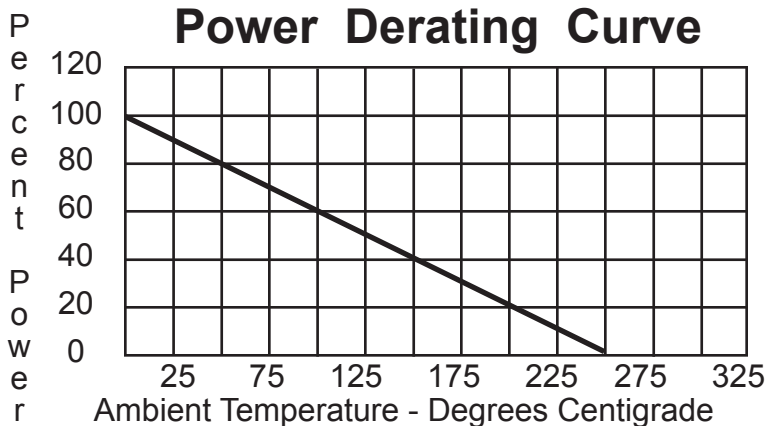


Tolerances of the HW series range through all the standard groupings from 10% down to 1%. Our standard temperature coefficients are  $\pm 200$ PPM, however, TCs of  $\pm 100$ PPM and  $\pm 50$ ppm are also available.

### Environmental Performance

Test	Max. $\Delta R$
Short Time Overload	$< \pm 0.20\%$
Moisture Resistance	$< \pm 0.50\%$
Shock	$< \pm 0.20\%$
Vibration	$< \pm 0.20\%$
Temperature Cycling	$< \pm 0.50\%$
Load Life	$< \pm 1.50\%$
Dielectric Voltage	$< \pm 0.15\%$
Soldering Effect	$< \pm 0.10\%$

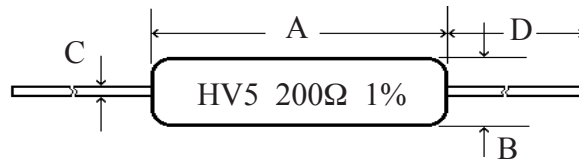
### Power Derating Curve





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VPR Type	Power @ 70°C (Watts)	Voltage		Dimensions, inches (mm)				Resistance Range $\Omega$
		Std.	Over-load	A	B	C	D	
HV2	1/8	300	500	0.134 (3.4)	0.067(1.7)	0.020 (0.50)	1.1 (28)	1M - 500M
HV3	1/4	500	750	0.256 (6.5)	0.098 (2.5)	0.024 (0.60)	1.1 (28)	1M - 4G
HV4	1/2	1,000	1,500	0.382 (9.7)	0.134(3.4)	0.024(0.60)	1.1(28)	1M - 4G
HV5A	1	1,500	2,000	0.472 (12.0)	0.158 (4.0)	0.028(0.70)	1.5(38)	1M - 3G
HV5	1	2,000	4,000	0.571(14.5)	0.216(5.5)	0.031(0.80)	1.5(38)	1M - 5G
HV6	2	5,000	7,500	1.060(27)	0.275(7.0)	0.031(0.80)	1.5(38)	1M - 5G
HV7	3	10KV	15KV	1.730(44)	0.275(7.0)	0.031(0.80)	1.5(38)	1M - 10G
HV8	4	15KV	20KV	2.05(52)	0.335(8.5)	0.040(1.0)	1.5(38)	1M - 10G



**General:** The HV series high voltage resistors represent the most advanced technology in the industry. Our thick film technology results in superior temperature coefficients and long-term stability, as well as insensitivity to voltage overloads and surges. The exceptional performance of this series provides new opportunities for design engineers to obtain the utmost in long term reliability, especially in demanding applications.

**Increased Voltage:** All power ratings and maximum working voltages are for continuous duty, based on pre-conditioning levels as part of the standard production process. Extended ratings of up to 50% higher are available with special processing.

**Matched Sets:** Codeco has the capability to match sets for both tolerance and TC. Resistive matching is available to 0.01% and TC matching is available down to  $\pm 10\text{PPM}/^\circ\text{C}$

**Packaging:** All sizes are available packaged in bulk, tape and ammo pack or tape and reel.

**Insulation Resistance:**  $10^{11}$  ohm minimum

**MIL Specs:** These parts are designed not only to meet, but exceed MIL-R-10509.