

# HVR Series

High Voltage / Thick Film Leaded Resistors



- Resistances from 1M to 10TOhms
- Power Rating 1 to 3Watts
- Resistance Tolerances to  $\pm 0.25\%$
- TCR's to  $\pm 25\text{ppm}/^\circ\text{C}$
- Non-Magnetic
- High Value Thick Film Resistance Element

## SPECIFICATIONS

Type	HVR 25	HVR 30	HVR 40	HVR 50
<b>Power Rating ( W )<sup>1</sup></b>	1.0	1.0	1.2	3.0
<b>Working Voltage ( VAC )</b>	15KV	10KV	20KV	30KV
<b>Resistance Range</b> Parts are not labeled ( $\Omega$ )	Tolerances Available ( % ) Temperature Coefficients Available ( $\pm \text{ppm}/^\circ\text{C}$ ) <sup>2</sup> Voltage Coefficient ( $\text{ppm} / \text{V}$ ) <sup>3</sup> Typical Values			
<b>1M - 100M</b>	0.25% to 10% 25 / 50 / 100 1ppm/V	0.25% to 10% 25 / 50 / 100 2ppm/V	0.25% to 10% 25 / 50 / 100 1ppm/V	0.25% to 10% 25 / 50 / 100 1ppm/V
<b>&gt;100M - 1G</b>	1% to 20% 50 / 100 / 250 2ppm/V	1% to 20% 50 / 100 / 250 5ppm/V	1% to 20% 50 / 100 / 250 2ppm/V	1% to 20% 25 / 50 / 100 1ppm/V
<b>&gt;1G - 100G</b>	5% to 30% 250 / 500 10ppm/V	5% to 30% 250 / 500 20ppm/V	5% to 30% 250 / 500 10ppm/V	5% to 30% 100 / 250 5ppm/V
<b>&gt;100G - 1T</b>	5% to 30% 500 / 1000 50ppm/V	5% to 30% 500 / 1000 100ppm/V	5% to 30% 500 / 1000 50ppm/V	5% to 30% 250 / 500 25ppm/V
<b>&gt;1T - 10T</b>	-	-	-	10% to 30% 500 / 1000 100ppm/V

<sup>1</sup>W @ 70 °C / 0W @ 125 °C | <sup>2</sup>25 / 50 PPM : +25°C to +85°C | <sup>3</sup> measured between 10 and 100V

## Ordering Information

Part Description: Part Type - Resistance - Tolerance - TCR

Example: HVR30 10GOhm 10% 250ppm

(Note: if no TCR is specified, the highest value will be supplied. Individual parts are not labeled.)

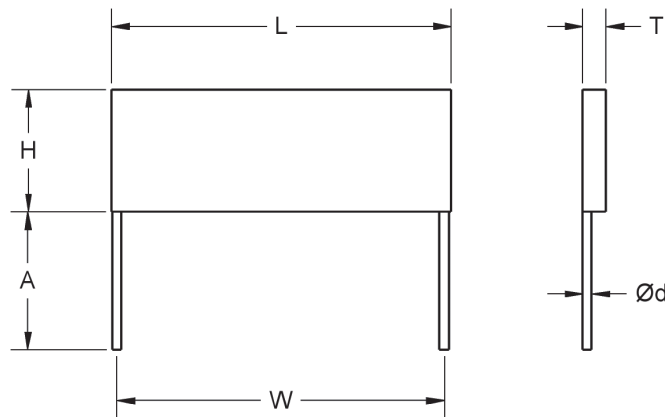
# HVR Series

High Voltage / Thick Film Leaded Resistors



## SPECIFICATIONS (continued)

Specification	Value	
Temperature Range	-55°C to +125°C	
Climactic Category	55 / 125 / 56	
Long Term Stability	Max $\Delta R$	
	$\leq 10 \text{ G}\Omega$	$> 10 \text{ G}\Omega$
Storage 125°C / 1000h	$\pm 1\%$	$\pm 2\%$
Maximum Voltage / 1000h	$\pm 1\%$	$\pm 2\%$



Type	Dimensions					
	L $\pm 0.020$ [ $\pm 0.5$ ]	H $\pm 0.020$ [ $\pm 0.5$ ]	T $\pm 0.020$ [ $\pm 0.5$ ]	W $\pm 0.020$ [ $\pm 0.5$ ]	A $\pm 0.020$ [ $\pm 0.5$ ]	d $\pm 0.002$ [ $\pm 0.05$ ]
HVR 25	0.99 [ 25.0 ]	0.35 [ 9.0 ]	0.055 [ 1.4 ]	0.90 [ 22.9 ]	0.79 [ 20 ]	0.016 [ 0.4 ]
HVR 30	0.787 [ 30.0 ]	0.236 [ 6.0 ]	0.055 [ 1.4 ]	1.083 [ 27.5 ]	0.79 [ 20 ]	0.016 [ 0.4 ]
HVR 40	1.574 [ 40.0 ]	0.236 [ 6.0 ]	0.055 [ 1.4 ]	1.488 [ 37.8 ]	0.79 [ 20 ]	0.016 [ 0.4 ]
HVR 50	1.968 [ 50.0 ]	0.492 [ 12.5 ]	0.055 [ 1.4 ]	1.882 [ 47.8 ]	0.79 [ 20 ]	0.016 [ 0.4 ]

Note: Do not use Acetone or Methylene Chloride for cleaning as they destroy coating. Parts are supplied unmarked.

Power Derating Curve

