

# HVI Series

0402 0603 0805 1206 2010 2512

## Thick Film Wraparound High Voltage Surface Mount Chip Resistors

### Features

- High rated continuous working voltage
- High stability thick film resistor element
- 96% Al<sub>2</sub>O<sub>3</sub> substrate material
- Nickel barrier layer terminals provide excellent solder leach resistance
- Trimmed to EIA standard values
- Tolerances to ± 1%
- Passivated resistor element
- Available in bulk or on tape and reel



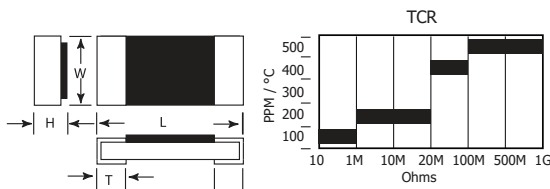
Thick Film

Part Number	Length	Width	Height	Terminal	Rated Power†	Max RCW Voltage*	Max Overload Voltage
HVI-0402	0.039 ± .002	0.020 ± .002	0.015 max.	0.008 ± .004	62.5 mW	100V	200V
HVI-0603	0.063 ± .004	0.032 ± .004	0.015 max.	0.012 ± .008	100 mW	200V	400V
HVI-0805	0.080 ± .004	0.049 ± .004	0.025 max.	0.016 ± .008	125 mW	400V	800V
HVI-1206	0.122 ± .004	0.061 ± .004	0.025 max.	0.020 ± .008	250 mW	500V	1kV
HVI-2010	0.201 ± .008	0.101 ± .009	0.026 max.	0.020 ± .012	500 mW	2kV	3kV
HVI-2512	0.252 ± .008	0.122 ± .006	0.026 max.	0.028 ± .016	1 W	3kV	4kV

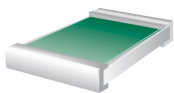
\*Operating Voltage=  $\sqrt{P \cdot R}$  or maximum operating voltage above, whichever is lower.

†Rated at 70°C Free air temperature

### Dimensional Outline



### Terminal Style



Full Wraparound Terminals with 100% Matte Tin Finish over Nickel Barrier Layer

Item	Specification	
	1% Tolerance	5% Tolerance
Short Time Overload	± (1% + 0.05Ω) Max.	± (2% + 0.05Ω) Max.
Solder Heat Resistance	± (0.5% + 0.05Ω) Max.	± (1% + 0.05Ω) Max.
Temperature Cycle	± (0.5% + 0.05Ω) Max.	± (1% + 0.05Ω) Max.
Load life	± (2% + 0.10Ω) Max.	± (3% + 0.10Ω) Max.
Operating Temperature:	-55°C to 155°C	
Solderability	95% minimum coverage	
Terminal Strength:	± (1% + 0.05Ω) Max.	

### Ordering Information

Example: 2 kV, 2010, 40MΩ, 5% Resistor

HVI - 2010 - 4005 J

**Form Factor**

0402	1206
0603	2010
0805	2512

**Tolerance**

F = 1% K = 10%  
J = 5%

### Resistance Value

The first three digits are significant values. The fourth is the number of zeroes following. The R indicates a decimal point when resistance value is less than 100Ω.

### Resistance Ranges

PN	1%	5%	10%
HVI-0402	39k to 10MΩ	39k to 100MΩ	N/A
HVI-0603	56k to 10MΩ	56k to 100MΩ	N/A
HVI-0805	100k to 10MΩ	100k to 100MΩ	N/A
HVI-1206	100k to 10MΩ	100k to 100MΩ	N/A
HVI-2010	51k to 20MΩ	51k to 470MΩ	510MΩ to 1GΩ
HVI-2512	30k to 20MΩ	30k to 470MΩ	510MΩ to 1GΩ

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