

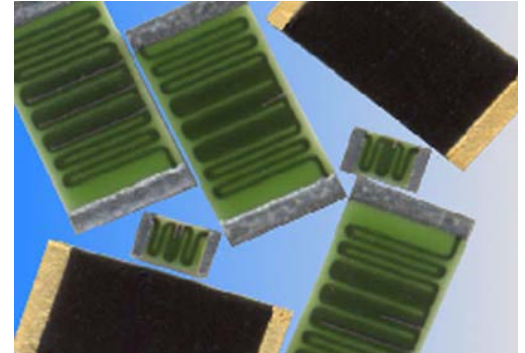
HVC Series

High Voltage Thick Film Chip Resistors

Stackpole Electronics, Inc.

Resistive Product Solutions

- Features:
- ✓ Absolute voltage ratings up to 25,000 volts
 - ✓ Ohmic values to 10G; higher values possible
 - ✓ Available with wire bondable terminations
 - ✓ Tight tolerances to 0.5%
 - ✓ Utilizes fine film resistor deposition technology
 - ✓ Superior pulse handling capabilities
 - ✓ Low TCR to 25 ppm/°C
 - ✓ Low VCR to 1 ppm/volt
 - ✓ Very low noise
 - ✓ Ultra high stability
 - ✓ Custom sizes available
 - ✓ RoHS compliant / lead-free

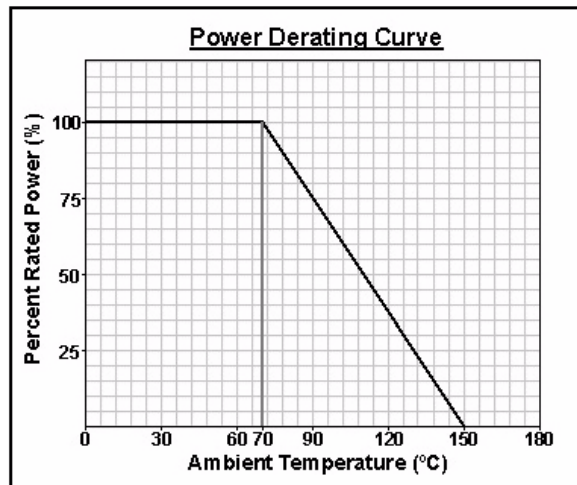
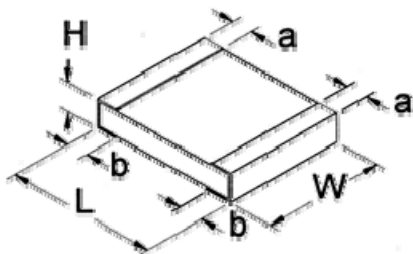


Electrical Specifications									
Type	Package Type	Power Rating (Watts) @ 70°C ^③	Maximum Working Voltage ^①	Absolute Maximum Voltage ^②	Resistance Temperature Coefficient	Ohmic Range and Tolerance			
						0.5%	1%	5%	10%
HVC 0603	0603	0.100W	400V	5KV	± 25 ppm/°C ± 50 ppm/°C ± 100 ppm/°C ± 200 ppm/°C	-	100K - 1M 100K - 250M 10K - 250M 1K - 1G	100K - 1M 100K - 250M 10K - 250M 1K - 1G	100K - 1M 100K - 250M 10K - 250M 1K - 10G
HVC 0805	0805	0.125W	600V	10KV	± 50 ppm/°C ± 100 ppm/°C ± 200 ppm/°C	-	100K - 250M 10K - 250M 1K - 1G	100K - 250M 10K - 250M 1K - 1G	100K - 250M 10K - 250M 1K - 10G
HVC 1206	1206	0.250W	1,200V	15KV	± 25 ppm/°C ± 50 ppm/°C ± 100 ppm/°C ± 200 ppm/°C	100K - 1M 100K - 250M 10K - 250M 1K - 250M	100K - 1M 100K - 250M 10K - 250M 1K - 1G	100K - 1M 100K - 250M 10K - 250M 1K - 1G	100K - 1M 100K - 250M 10K - 250M 1K - 10G
HVC 2010	2010	0.750W	1,700V	20KV	± 25 ppm/°C ± 50 ppm/°C ± 100 ppm/°C ± 200 ppm/°C	100K - 1M 100K - 250M 10K - 250M 10K - 250M	100K - 1M 100K - 250M 10K - 250M 10K - 1G	100K - 1M 100K - 250M 10K - 250M 10K - 1G	100K - 1M 100K - 250M 10K - 250M 1K - 10G
HVC 2512	2512	1.000W	2,500V	25KV	± 25 ppm/°C ± 50 ppm/°C ± 100 ppm/°C ± 200 ppm/°C	100K - 1M 100K - 250M 10K - 250M 10K - 250M	100K - 1M 100K - 250M 10K - 250M 10K - 1G	100K - 1M 100K - 250M 10K - 250M 10K - 1G	100K - 1M 100K - 250M 10K - 250M 10K - 10G

1. The continuous maximum voltage applied cannot exceed the maximum power rating and is ohmic value dependent.
2. To achieve, the terminals must be properly isolated from each other with appropriate potting material.
3. Contact factory for higher power ratings: 0805: 0.2W 1206:0.33W 2010: 1W 2512: 2W

Note: Other case sizes and tolerances are available.

How to Order									
SEI Type & Termination		Size	TCR	Nominal Resistance	Tolerance	Packaging			
HVCB		1206	T2	100M	5%	R			
Code	Termination	TCR		Tolerance		SEI Types	Pkg Qty	Description	Code
G	Wire bondable (gold)	T0 = 200ppm		± 0.5%		0603, 0805, 1206	5,000	7" reel - Paper	R
S	Solderable single surface	T1 = 100ppm		± 1%			10,000	10" reel - Paper	G
B	100% matte tin	T2 = 50ppm		± 5%			1,000	Bulk	A
Z	Solderable single surface matte tin	T9 = 25ppm		± 10%		2010, 2512	4,000	7" reel - Emboss	R
						2512	1,000	7" reel - Paper	I



Mechanical Specifications						
Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Units
HVC 0603	0.063 + 0.01/-0.005 1.6 + 0.25/-0.13	0.031 ± 0.005 0.8 ± 0.13	0.02 0.5	0.01 + 0.01/-0.005 0.25 + 0.25/-0.13	0.01 + 0.01/-0.005 0.25 + 0.25/-0.13	inches mm
HVC 0805	0.079 + 0.01/-0.005 2 + 0.25/-0.13	0.05 ± 0.005 1.25 ± 0.13	0.025 0.64	0.01 + 0.01/-0.005 0.25 + 0.25/-0.13	0.01 + 0.01/-0.005 0.25 + 0.25/-0.13	inches mm
HVC 1206	0.126 + 0.01/-0.005 3.2 + 0.25/-0.13	0.061 ± 0.007 1.5 ± 0.18	0.03 0.76	0.015 + 0.01/-0.005 0.38 + 0.25/-0.13	0.015 + 0.01/-0.005 0.38 + 0.25/-0.13	inches mm
HVC 2010	0.2 + 0.01/-0.005 5.08 + 0.25/-0.13	0.1 ± 0.005 2.54 ± 0.13	0.03 0.76	0.02 + 0.01/-0.005 0.51 + 0.25/-0.13	0.02 + 0.01/-0.005 0.51 + 0.25/-0.13	inches mm
HVC 2512	0.25 + 0.01/-0.005 6.35 + 0.25/-0.13	0.125 ± 0.005 3.18 ± 0.13	0.03 0.76	0.02 + 0.01/-0.005 0.51 + 0.25/-0.13	0.02 + 0.01/-0.005 0.51 + 0.25/-0.13	inches mm

Performance Characteristics		
Test	Test Method	Acceptable Parameter
Load Life	MIL-STD-202G Method 108A Test Condition D	ΔR = 2%
Temperature Cycle (Thermal Shock)	MIL-STD-202G Method 107G Test Condition A	ΔR = 0.02%
Resistance to Soldering Heat	IPC/EIA J-STD-002A Paragraph 4.2.4	IPC/EIA J-STD-002A Paragraph 4.2.4.4
Solderability	IPC/EIA J-STD-002A Paragraph 4.2.2	IPC/EIA J-STD-002A Paragraph 4.2.2.4.2
Short Time Overload	MIL-PRF-55342H Pg. 32, Paragraph 4.8.6	MIL-PRF-55342H Pg 11, Paragraph 3.12

Operating Temperature Range: -55°C to +150°C