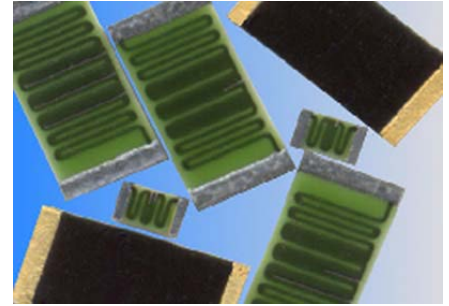


- Features:**
- Absolute voltage ratings up to 40,000 volts
 - Ohmic values to 50G
 - Available with wire bondable terminations
 - Tight tolerances to 0.1%
 - Utilizes fine film resistor deposition technology
 - Superior pulse handling capabilities
 - Low TCR to 25 ppm/°C
 - Low VCR to 1 ppm/volt
 - Very low noise
 - Ultra high stability
 - Custom sizes available
 - Lower values may be available (contact factory)
 - Standard HVC parts are unmarked
 - RoHS compliant / lead-free

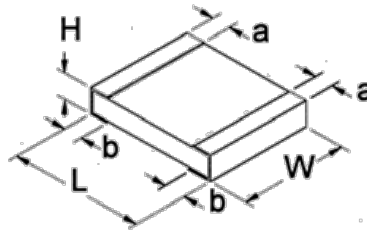


Electrical Specifications												
Type / Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage (1)	Absolute Maximum Voltage (2)	Resistane Temperature Coefficient	Ohmic Range (Ω) and Tolerance							
					0.1%	0.25%	0.5%	1%	2%	5%	10%	20%
HVC0603	0.06W	400V	5KV	± 50 ppm/°C	-	-	10K - 10M	10K - 100M	10K - 500M	10K - 500M	10K - 500M	10K - 500M
				± 100 ppm/°C			10K - 10M	10K - 500M	10K - 1G	10K - 1G	10K - 10G	10K - 10G
				± 200 ppm/°C			10K - 10M	10K - 500M	10K - 1G	10K - 1G	10K - 10G	10K - 50G
				± 300 ppm/°C			10K - 10M	10K - 500M	10K - 1G	10K - 1G	10K - 10G	10K - 50G
HVC0805	0.2W	600V	10KV	± 50 ppm/°C	-	-	10K - 10M	10K - 500M	10K - 500M	10K - 500M	10K - 500M	10K - 500M
				± 100 ppm/°C			10K - 10M	10K - 1G	10K - 1G	10K - 1G	10K - 1G	10K - 1G
				± 200 ppm/°C			10K - 10M	10K - 1G	10K - 1G	10K - 10G	10K - 10G	10K - 50G
				± 300 ppm/°C			10K - 10M	10K - 1G	10K - 1G	10K - 10G	10K - 10G	10K - 50G
HVC1206	0.33	1200V	15KV	± 25 ppm/°C	1M - 10M	1M - 100M	1M - 100M	1M - 100M	1M - 100M	1M - 100M	1M - 100M	1M - 100M
				± 50 ppm/°C	100K - 10M	100K - 100M	100K - 500M	100K - 500M	100K - 500M	100K - 500M	100K - 500M	100K - 500M
				± 100 ppm/°C	10K - 10M	10K - 100M	10K - 500M	10K - 1G	10K - 1G	10K - 1G	10K - 1G	10K - 1G
				± 200 ppm/°C	10K - 10M	10K - 100M	10K - 500M	10K - 1G	10K - 10G	10K - 10G	10K - 10G	10K - 10G
HVC2010	1W	1,700V	20KV	± 25 ppm/°C	1M - 10M	1M - 100M	1M - 100M	1M - 100M	1M - 100M	1M - 100M	1M - 100M	1M - 100M
				± 50 ppm/°C	100K - 10M	100K - 100M	100K - 500M	100K - 500M	100K - 500M	100K - 500M	100K - 500M	100K - 500M
				± 100 ppm/°C	10K - 10M	10K - 100M	10K - 500M	10K - 1G	10K - 1G	10K - 1G	10K - 1G	10K - 1G
				± 200 ppm/°C	10K - 10M	10K - 100M	10K - 500M	10K - 1G	10K - 10G	10K - 10G	10K - 10G	10K - 10G
HVC2512	2W	2,500V	25KV	± 25 ppm/°C	1M - 100M	1M - 500M	1M - 500M	1M - 500M	1M - 500M	1M - 500M	1M - 500M	1M - 500M
				± 50 ppm/°C	100K - 100M	100K - 500M	100K - 1G	100K - 1G	100K - 1G	100K - 1G	100K - 1G	100K - 1G
				± 100 ppm/°C	10K - 100M	10K - 500M	10K - 1G	10K - 10G	10K - 10G	10K - 10G	100K - 50G	100K - 50G
				± 200 ppm/°C	10K - 100M	10K - 500M	10K - 1G	10K - 10G	10K - 10G	10K - 10G	100K - 50G	100K - 50G
HVC3512	3W	3,500V	40KV	± 25 ppm/°C	1M - 100M	1M - 500M	1M - 500M	1M - 500M	1M - 500M	1M - 500M	1M - 500M	1M - 500M
				± 50 ppm/°C	100K - 100M	100K - 500M	100K - 1G	100K - 1G	100K - 1G	100K - 1G	100K - 1G	100K - 1G
				± 100 ppm/°C	10K - 100M	10K - 500M	10K - 1G	10K - 10G	10K - 10G	10K - 10G	100K - 50G	100K - 50G
				± 200 ppm/°C	10K - 100M	10K - 500M	10K - 1G	10K - 10G	10K - 10G	10K - 10G	100K - 50G	100K - 50G
HVC3512	3W	3,500V	40KV	± 300 ppm/°C	10K - 100M	10K - 500M	10K - 1G	10K - 10G	10K - 10G	10K - 10G	100K - 50G	100K - 50G

(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.

Note: Other case sizes and tolerances are available.



Mechanical Specifications

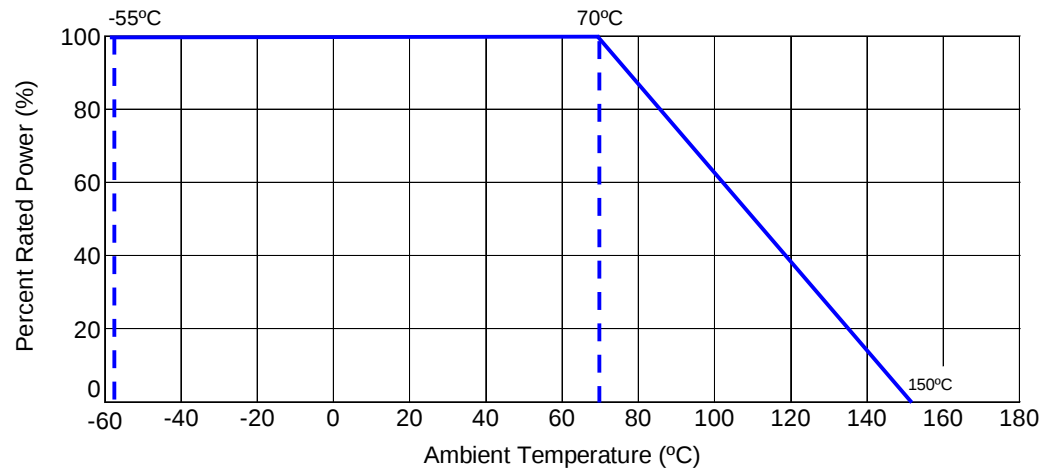
Type / Code	L Body Length	W Body Width	H Body Height (Max.)	a Top Termination	b Bottom Termination	Unit
HVC0603	0.063 + 0.01 / -0.005 1.60 + 0.25 / -0.13	0.031 ± 0.005 0.79 ± 0.13	0.020 0.51	0.010 ± 0.005 0.25 ± 0.13	0.012 ± 0.008 0.30 ± 0.20	inches mm
HVC0805	0.079 + 0.01 / -0.005 2.01 + 0.25 / -0.13	0.050 ± 0.005 1.27 ± 0.13	0.025 0.64	0.010 ± 0.005 0.25 ± 0.13	0.013 ± 0.008 0.33 ± 0.20	inches mm
HVC1206	0.126 + 0.01 / -0.005 3.20 + 0.25 / -0.13	0.063 ± 0.005 1.60 ± 0.13	0.030 0.76	0.010 ± 0.005 0.25 ± 0.13	0.020 ± 0.010 0.51 ± 0.25	inches mm
HVC2010	0.200 + 0.01 / -0.005 5.08 + 0.25 / -0.13	0.100 ± 0.005 2.54 ± 0.13	0.030 0.76	0.018 ± 0.010 0.46 ± 0.25	0.020 ± 0.010 0.51 ± 0.25	inches mm
HVC2512	0.250 + 0.01 / -0.005 6.35 + 0.25 / -0.13	0.125 ± 0.005 3.18 ± 0.13	0.030 0.76	0.020 ± 0.010 0.51 ± 0.25	0.024 ± 0.010 0.61 ± 0.25	inches mm
HVC3512	0.350 + 0.01 / -0.005 8.89 + 0.25 / -0.13	0.125 ± 0.005 3.18 ± 0.13	0.030 0.76	0.020 ± 0.010 0.51 ± 0.25	0.024 ± 0.010 0.61 ± 0.25	inches mm

Performance Characteristics

Test	Test Method	Acceptable Parameter
Load Life	MIL-STD-202G Method 108A Test Condition D	$\Delta R = 2\%$
Temperature Cycle (Thermal Shock)	MIL-STD-202G Method 107G Test Condition A	$\Delta R = 0.02\%$
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

Power Derating Curve:



How to Order

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
H	V	C	B	2	5	1	2	F	K	C	1	0	M	0

Product Series		Size	Power	Tolerance		Packaging				TCR		Resistance Value
HVCB	Solderable wraparound (100% matte tin)	0603	0.06W	Code	Tol	Code	Description	Size	Quantity	Code	ppm	Four characters with the multiplier used as the decimal holder. 10 Kohm = 10K0 1 Mohm = 1M00 10 Gohm = 10G0
HVCG	Wire bondable (gold)	0805	0.2W	B	0.1%	T	7" Reel - Paper Tape	0603, 0805	5,000	E	25	
HVCS	Solderable single surface (Sn/Pb)	1206	0.33W	C	0.25%		7" Reel - Plastic Tape	1206, 2010	4,000	C	50	
HVCZ	Solderable single surface (100% matte tin)	2010	1W	D	0.5%	K	7" Reel - Paper Tape	0603, 0805, 1206	1,000	D	100	
		2512	2W	F	1%		7" Reel - Paper Tape	2010, 2512, 3512		L	200	
		3512	3W	G	2%	D	7" Reel - Paper Tape	0603, 0805, 1206	500	M	300	
				J	5%		7" Reel - Plastic Tape	2010, 2512, 3512				
				K	10%	B	Bulk	All Sizes	1,000			
				M	20%							

Legacy Part Number (before January 3, 2011):

SEI Type & Termination		Size	TCR	Nominal Resistance	Tolerance	Packaging			
HVCB		1206	T2	100M	5%	R			
Code	Termination		TCR		Tol	SEI Types	Pkg Qty	Description	Code
HVCB	Solderable wraparound 100% matte tin		T0 = 200ppm		± 0.1%	0603, 0805	5,000	7" Reel - Paper Tape	R
HVCG	Wire bondable (gold)		T1 = 100ppm		± 0.25%	1206, 2010	4,000	7" Reel - Plastic Tape	R
			T2 = 50ppm		± 0.5%	2512	2,000	7" Reel - Plastic Tape	
HVCS	Solderable single surface (Sn/Pb)		T9 = 25ppm		± 1%	0603, 0805, 1206	1,000	7" Reel - Paper Tape	I
					± 2%	2010, 2512, 3512		7" Reel - Plastic Tape	
					± 5%	0603, 0805, 1206	500	7" Reel - Paper Tape	D
HVCZ	Solderable single surface 100% matte tin				± 10%	2010, 2512, 3512		7" Reel - Plastic Tape	
					± 20%	All Types	1,000	Bulk	A