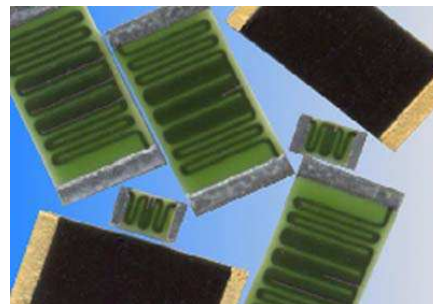


- Features:**
- Absolute voltage ratings up to 40,000 volts
  - Ohmic values to 50G
  - Available with wire bondable terminations
  - Tight tolerances to 0.1%
  - Utilizes fine film resistor deposition technology
  - Superior pulse handling capabilities
  - Low TCR to 25 ppm/°C
  - Low VCR to 1 ppm/volt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

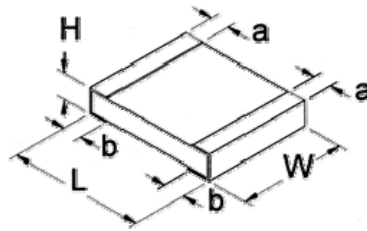


Electrical Specifications												
Type / Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage (1)	Absolute Maximum Voltage (2)	Resistane Temperature Coefficient	Ohmic Range (Ω) and Tolerance							
					0.1%	0.25%	0.5%	1%	2%	5%	10%	20%
HVC0603	0.06W	400V	5KV	± 50 ppm/°C	-	-	10K - 10M	10K - 100M	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 - 100M	10K - 1G	10K - 1G	10K - 1G	10K - 1G
				± 200 ppm/°C			10K - 10M	10K - 1G	10K - 1G	10K - 1G	10K - 10G	10K - 50G
				± 300 ppm/°C			10K - 10M	10K - 1G	10K - 1G	10K - 1G	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	
				± 100 ppm/°C	10K - 10M	10K - 100M	10K - 500M	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	
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	
				± 100 ppm/°C	10K - 10M	10K - 100M	10K - 500M	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	
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	
				± 100 ppm/°C	10K - 100M	10K - 500M	10K - 1G	10K - 10G	10K - 10G	10K - 10G	100K - 50G	
				± 200 ppm/°C	10K - 100M	10K - 500M	10K - 1G	10K - 10G	10K - 10G	10K - 10G	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	
				± 100 ppm/°C	10K - 100M	10K - 500M	10K - 1G	10K - 10G	10K - 10G	10K - 10G	100K - 50G	
				± 200 ppm/°C	10K - 100M	10K - 500M	10K - 1G	10K - 10G	10K - 10G	10K - 10G	100K - 50G	
				± 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.

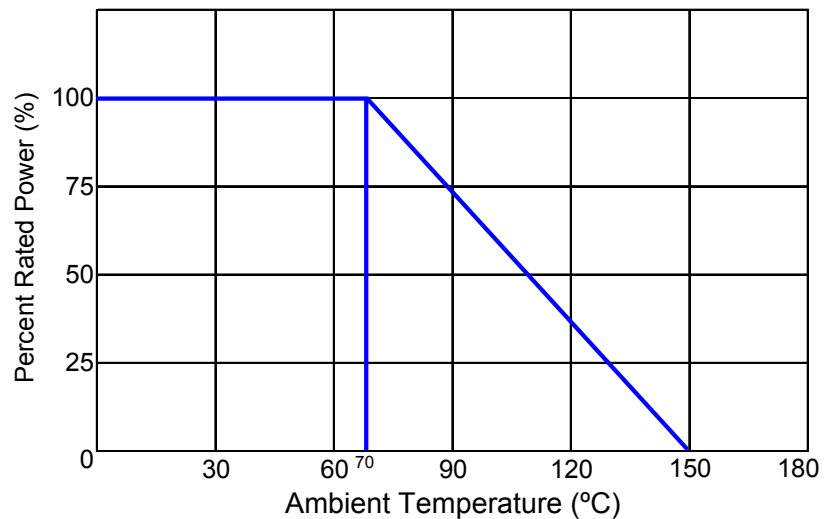
(2) To achieve, the terminals must be properly isolated from each other with appropriate potting material.

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 + 0.010 / -0.005	0.031 ± 0.005	0.02	0.010 ± 0.005	0.012 ± 0.008	inches
	1.60 + 0.25 / -0.13	0.79 ± 0.13	0.51	0.25 ± 0.13	0.30 ± 0.20	mm
HVC0805	0.079 + 0.010 / -0.005	0.05 ± 0.005	0.03	0.010 ± 0.005	0.013 ± 0.008	inches
	2.01 + 0.25 / -0.13	1.27 ± 0.13	0.64	0.25 ± 0.13	0.33 ± 0.20	mm
HVC1206	0.126 + 0.010 / -0.005	0.063 ± 0.005	0.03	0.010 ± 0.005	0.02 ± 0.01	inches
	3.20 + 0.25 / -0.13	1.60 ± 0.13	0.76	0.25 ± 0.13	0.51 ± 0.25	mm
HVC2010	0.200 + 0.010 / -0.005	0.1 ± 0.005	0.03	0.018 ± 0.010	0.02 ± 0.01	inches
	5.08 + 0.25 / -0.13	2.54 ± 0.13	0.76	0.46 ± 0.25	0.51 ± 0.25	mm
HVC2512	0.250 + 0.010 / -0.005	0.125 ± 0.005	0.03	0.020 ± 0.010	0.024 ± 0.01	inches
	6.35 + 0.25 / -0.13	3.18 ± 0.13	0.76	0.51 ± 0.25	0.61 ± 0.25	mm
HVC3512	0.350 + 0.010 / -0.005	0.125 ± 0.005	0.03	0.020 ± 0.010	0.024 ± 0.01	inches
	8.89 + 0.25 / -0.13	3.18 ± 0.13	0.76	0.51 ± 0.25	0.61 ± 0.25	mm

Power Derating Curve:



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

### 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						
			Code	Tol	Code	Description	Size	Quantity	Code		ppm					
HVCB	0603	0.06W	B	0.1%	T	7" Reel - Paper Tape	0603, 0805	5,000	E	25	Four characters with the multiplier used as the decimal holder. 10 Kohm = 10K0 1 Mohm = 1M00 10 Gohm = 10G0					
						7" Reel - Plastic Tape	1206, 2010	4,000	C	50						
HVCG	1206	0.33W	C	0.25%	K	7" Reel - Paper Tape	0603, 0805, 1206	1,000	L	200						
						7" Reel - Plastic Tape	2010, 2512, 3512									
HVCS	2010	1W	D	0.5%	D	7" Reel - Paper Tape	0603, 0805, 1206	500	M	300						
						7" Reel - Plastic Tape	2010, 2512, 3512									
HVCZ	2512	2W	F	1%	B	Bulk	All Sizes	1,000								
						3512	3W	G	2%	J		5%				
													K	10%		
															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 T1 = 100ppm		± 0.1%	0603, 0805	5,000	7" Reel - Paper Tape	R	
HVCG	Wire bondable (gold)	T2 = 50ppm T9 = 25ppm		± 0.25%	1206, 2010	4,000	7" Reel - Plastic Tape	R	
HVCS	Solderable single surface (Sn/Pb)			± 0.5%	2512	2,000	7" Reel - Plastic Tape		
				± 1%	0603, 0805, 1206	1,000	7" Reel - Paper Tape	I	
HVCZ	Solderable single surface 100% matte tin			± 2%	2010, 2512, 3512		500	7" Reel - Plastic Tape	
				± 5%	0603, 0805, 1206	7" Reel - Paper Tape		D	
				± 10%	2010, 2512, 3512	7" Reel - Plastic Tape			
				± 20%	All Types	1,000	Bulk	A	