



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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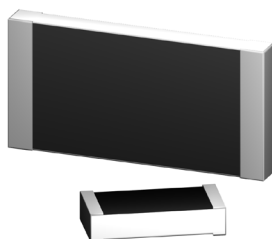
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HVS Series

High Voltage / High Temperature
Thick Film Chip Resistors



- Resistances from 100k to 10T Ohms
- Power Rating 0.125 to 1.5 Watt
- Resistance Tolerances to $\pm 0.25\%$
- TCR's to ± 25 ppm/K
- Non-Magnetic (contact PtAg)
- High Value Thick Film Resistance Element
- Sizes: 0805 / 1206 / 1210 / 2010 / 2512 / 4020
- Special HT Version to 300°C



SPECIFICATIONS

Type	0805	1206	1210	2010	2512	4020	
Power Rating - P₇₀ (W @ 70°C)	0.125	0.25	0.35	0.5	1.0	1.5	
Working Voltage (VAC)	Trimmed	200	600	800	1500	2000	4000
	Untrimmed ($\geq 5\%$)	400	1000	1200	2000	3000	6000
Resistance Range (Ω)	Tolerances Available (%) Temperature Coefficients Available (\pm ppm/°C) Voltage Coefficients Available (ppm / V)						
100k - 100M	0.5% to 10% 25 / 50 / 100 100ppm/V	0.5% to 10% 25 / 50 / 100 50ppm/V	0.5% to 10% 25 / 50 / 100 50ppm/V	0.5% to 10% 25 / 50 / 100 25ppm/V	0.5% to 10% 25 / 50 / 100 10ppm/V	0.25% to 10% 25 / 50 / 100 10ppm/V	
>100M - 1G	2% to 20% 50 / 100 / 250 250ppm/V	2% to 20% 50 / 100 / 250 100ppm/V	1% to 20% 25 / 50 / 100 50ppm/V	1% to 20% 25 / 50 / 100 50ppm/V	1% to 20% 25 / 50 / 100 25ppm/V	0.5% to 20% 25 / 50 / 100 10ppm/V	
>1G - 10G	5% to 20% 100 / 250 / 500 500ppm/V	5% to 20% 50 / 100 / 250 250ppm/V	2% to 20% 25 / 50 / 100 100ppm/V	2% to 20% 25 / 50 / 100 100ppm/V	2% to 20% 25 / 50 / 100 50ppm/V	1% to 20% 25 / 50 / 100 10ppm/V	
>10G - 100G	10% to 30% 2000 2000ppm/V	10% to 30% 250 / 500 / 1000 1000ppm/V	5% to 30% 250 / 500 / 1000 500ppm/V	5% to 20% 100 / 250 / 500 500ppm/V	5% to 30% 100 / 250 100ppm/V	2% to 30% 100 / 250 50ppm/V	
>100G - 1T	20% to 30% 3000 5000ppm/V	10% to 30% 1000 / 2000 2000ppm/V	5% to 30% 1000 / 2000 1000ppm/V	5% to 30% 500 / 1000 1000ppm/V	5% to 30% 250 / 500 500ppm/V	5% to 30% 250 / 500 250ppm/V	
>1T - 10T	-	20% to 30% TCR / VCR on request	20% to 30% TCR / VCR on request	20% to 30% TCR / VCR on request	10% to 30% TCR / VCR on request	10% to 30% TCR / VCR on request	

1) Solder pads must have sufficient heat conduction

2) TCR in ppm/K; +25°C to +125°C; TCR below standard TCR (highest value) and values >100G; +25°C to +85°C

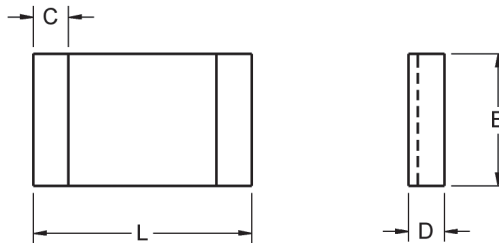
3) VCR: typical values, all negative, not for all TCR values available

HVS Series

High Voltage / High Temperature
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Specification	Value		
Temperature Range	-55°C to +155°C (Standard) -55°C to +300°C (HT Version, TCR valid +25°C to +125°C)		
Climactic Category	55 / 155 / 56		
Solderability	250°C / 3s (up to 6 month after shipment resp. at storage in Nitrogen)		
Max. Soldering Temperature	260°C / 10s		
Long Term Stability	Max ΔR		
	<1 GΩ	1 GΩ - 10 GΩ	>10 GΩ
Load Life 70°C / 1000h / P ₇₀	±0.25%	±0.5%	±1%
Storage 125°C / 1000h	±0.5%	±1%	±2%
Maximum Voltage / 1000h	±0.5%	±1%	±2%



Type	Dimensions			
	L	B	D	C
HVS 0805	0.080 +0.006 / -0.002 [2.0 +0.15 / -0.05]	0.050 +0.006 / -0.002 [1.25 +0.15 / -0.05]	0.016 +0.006 / -0.002 [0.4 +0.15 / -0.05]	0.012 +0.008 / -0.004 [0.3 +0.2 / -0.1]
HVS 1206	0.126 +0.006 / -0.002 [3.2 +0.15 / -0.05]	0.060 +0.008 / -0.002 [1.5 +0.2 / -0.05]	0.016 +0.006 / -0.002 [0.4 +0.15 / -0.05]	0.012 +0.008 / -0.004 [0.3 +0.2 / -0.1]
HVS 1210	0.126 +0.006 / -0.002 [3.2 +0.15 / -0.05]	0.098 +0.008 / -0.002 [2.5 +0.2 / -0.05]	0.020 +0.006 / -0.002 [0.5 +0.15 / -0.05]	0.032 ±0.008 [0.8 ±0.2]
HVS 2010	0.20 +0.008 / -0.002 [5.1 +0.2 / -0.05]	0.098 +0.008 / -0.002 [2.5 +0.2 / -0.05]	0.024 +0.006 / -0.002 [0.6 +0.15 / -0.05]	0.05 ±0.008 [1.2 ±0.2]
HVS 2512	0.250 +0.006 / -0.002 [6.3 +0.15 / -0.05]	0.138 +0.008 / -0.002 [3.5 +0.2 / -0.05]	0.024 +0.006 / -0.002 [0.6 +0.15 / -0.05]	0.035 ±0.008 [0.9 ±0.2]
HVS 4020	0.40 +0.006 / -0.002 [10.20 +0.15 / -0.05]	0.20 +0.008 / -0.002 [5.1 +0.2 / -0.05]	0.024 +0.006 / -0.002 [0.6 +0.15 / -0.05]	0.035 ±0.008 [0.9 ±0.2]

Packaging:

Bulk or Tape & Reel per IEC 286-3 / EIA 481-1-A

Tape width 8mm / Reel Diameter 180 or 330mm
Minimum quantity Bulk / 100 pieces per value
Minimum quantity Tape & Reel / 1000 pieces per value

Ordering Information

Part Number - Resistance - Tolerance - TCR - Packaging

Example: HVS 2512 10GOhms 10% 50ppm Tape

(Note: if no TCR is specified, the highest value will be supplied)

Power Derating Curve

