HVS Series

High Voltage / High Temperature
Thick Film Chip Resistors



- **Resistances from 100k to 10T Ohms**
- **Power Rating 0.05 to 1.5 Watt**
- **Resistance Tolerances to ± 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**

RoHS compliant

SPECIFICATIONS

Type		0805	1206	1210	2010	2512	4020
Power Rating - P_{70} (W @ 70°C)		0.125	0.25	0.35	0.5	1.0	1.5
Working Voltage (VAC)	Trimmed	200	600	1000	1500	2000	4000
	Untrimmed	600	1000	1200	2000	3000	6000
Resistance Range (Ω)							
100k - 100M		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 <5ppm/V
>100M - 1G		2% to 20% 50 / 100 / 250 <250ppm/V	2% to 20% 50 / 100 / 250 <100ppm/V	1% to 10% 25 / 50 / 100 <50ppm/V		1% to 10% 25 / 50 / 100 <25ppm/V	1% to 10% 25 / 50 / 100 <10ppm/V
>1G - 10G		5% to 20% 100 / 250 <500ppm/V	5% to 20% 100 / 250 <250ppm/V	2% to 20% 50 / 100 <100ppm/V		2% to 20% 50 / 100 <100ppm/V	2% to 20% 50 / 100 <25ppm/V
>10G - 100G		10% to 30% 500 / 1000 <1000ppm/V	10% to 30% 500 / 1000 <1000ppm/V	5% to 20% 500 / 1000 <500ppm/V		5% to 20% 100 / 250 <250ppm/V	5% to 20% 100 / 250 <100ppm/V
>100G - 1T		-	10% to 30% 1000 / 2000 <2000ppm/V	10% to 30% 500 / 1000 <1000ppm/V		5% to 20% 250 / 500 <500ppm/V	5% to 20% 250 / 500 <250ppm/V
>1T - 10T		-	-	-		10% to 30% 500 / 1000 <1000ppm/V	10% to 30% 250 / 500 <1000ppm/V

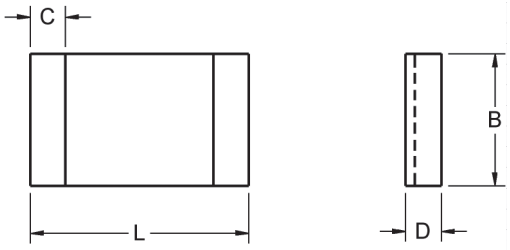
[1] W @ 70 °C / 0W @ 155 °C

Riedon Inc. 300 Cypress Avenue Alhambra CA 91801 ☎ (626) 284-9901 🖷 (626) 284-1704
www.riedon.com

HVS Series

High Voltage / High Temperature
Thick Film Chip Resistors

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 Cetegory	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%



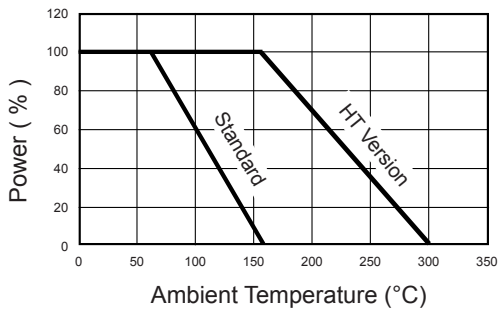
Type	Dimensions			
	L	B	D	C
HVS 0805	0.080 +0.006 / -0.002 [2.0 +0.15 / -0.05]	0.050 +0.006 / -0.002 [1.25 +0.15 / -0.05]	0.016 +0.006 / -0.002 [0.4 +0.15 / -0.05]	0.012 +0.008 / -0.004 [0.3 +0.2 / -0.1]
HVS 1206	0.126 +0.006 / -0.002 [3.2 +0.15 / -0.05]	0.060 +0.008 / -0.002 [1.5 +0.2 / -0.05]	0.016 +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

Power Derating Curve



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)

Riedon Inc. 300 Cypress Avenue Alhambra CA 91801 ☎ (626) 284-9901 🖷 (626) 284-1704
www.riedon.com

12/10