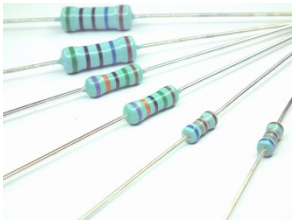
Features:

- High resistance for high voltage circuits
- High voltage handling in small package size
- Metal film technology
- More economical than comparable high voltage resistors
- VCR less than 20 ppm/V
- RoHS compliant and halogen free

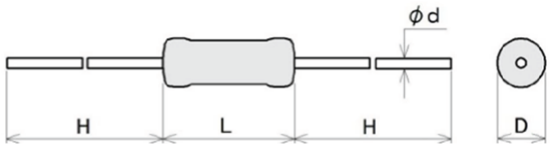


Electrical Specifications

Type / Code	Power Rating (W)	Maximum Working Voltage (V)	TCR (ppm/ºC)	Ohmic Range (Ω) and Tolerance		
				1%	5%	10%
HVA05	0.5	3500	± 200	1M - 500M		
HVA08	0.8	7000		1M - 500M	1M - 1G	
HVA12	1.2	8000		1M - 500M	1M - 1G	

Rated voltage = $\sqrt{\text{Power Rating x Nominal Resistance}}$ or Maximum Working voltage, whichever is lower.

Mechanical Specifications



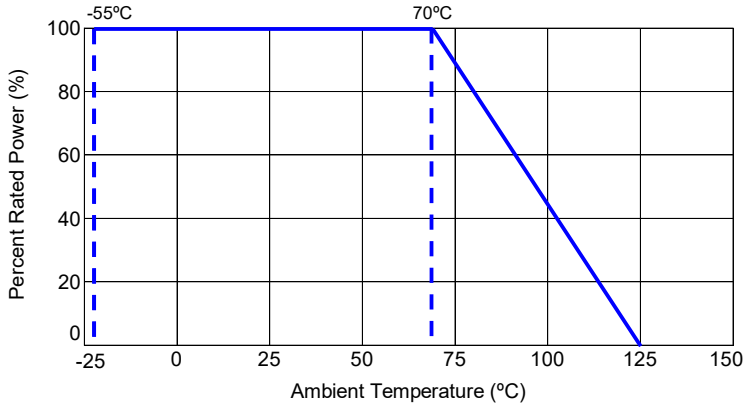
Type / Code	Weight (mg)	L Body Length	D Body Diameter	d Lead Diameter	H Lead Length (bulk)	Unit
HVA05	210	0.236 ± 0.008 6.00 ± 0.20	0.098 ± 0.020 2.50 ± 0.50	0.022 ± 0.020 0.55 ± 0.50	1.102 ± 0.118 28.00 ± 3.00	inches mm
HVA08	330	0.335 ± 0.039 8.50 ± 1.00	0.118 ± 0.020 3.00 ± 0.50	0.022 ± 0.020 0.55 ± 0.50	1.102 ± 0.118 28.00 ± 3.00	inches mm
HVA12	570	0.433 ± 0.039 11.00 ± 1.00	0.157 ± 0.020 4.00 ± 0.50	0.022 ± 0.020 0.55 ± 0.50	1.102 ± 0.118 28.00 ± 3.00	inches mm

Performance Characteristics

Item	Specification	Test Condition and Method
Temperature Coefficient of Resistance (ppm/ºC)	±200 ppm/ºC	25°C ~ 125°C
Rapid Change of Temperature	±1%	-25°C (30 minutes) / +125°C (30 minutes) - 5 cycles
Damp Heat (steady state)	±5%	40 ± 2 °C 93 ± 3% R.H. 0.1 x Rated Voltage 90 minutes ON, 30 minutes OFF - 1000 hours
Endurance (at 70°C)	±5%	Room temperature. Rated Voltage 90 minutes ON, 30 minutes OFF - 1000 hours
Resistance to Soldering Heat	±1%	260 ± 5°C, 10 ± 1 seconds

Reference standards: JIS-C5201-1, IEC60115-1
Operating temperature range is -25ºC to +125ºC

Power Derating Curve:



Recommended Solder Profile

This information is intended as a reference for solder profiles for Stackpole resistive components. These profiles should be compatible with most soldering processes. These are only recommendations. Actual numbers will depend on board density, geometry, packages used, etc., especially those cells labeled with "*".

100% Matte Tin / RoHS Compliant Terminations

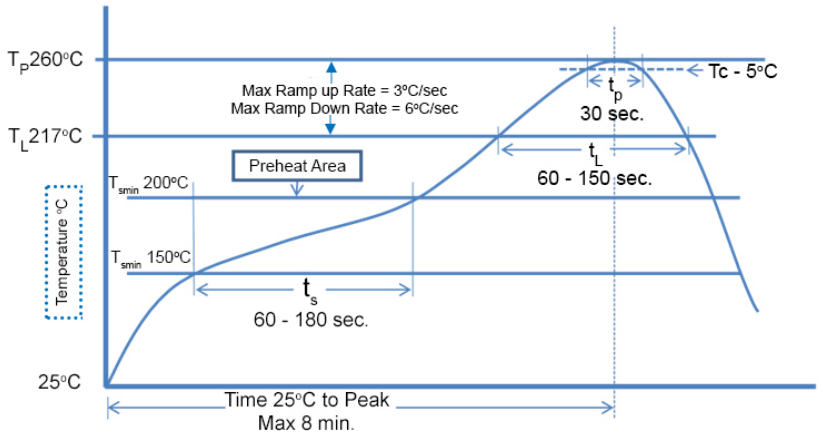
Soldering iron recommended temperatures: 330°C to 350°C with minimum duration.
Maximum number of reflow cycles: 3.

Wave Soldering			
Description	Maximum	Recommended	Minimum
Preheat Time	80 seconds	70 seconds	60 seconds
Temperature Diff.	140°C	120°C	100°C
Solder Temp.	260°C	250°C	240°C
Dwell Time at Max.	10 seconds	5 seconds	*
Ramp DN (°C/sec)	N/A	N/A	N/A

Temperature Diff. = Defference between final preheat stage and soldering stage.

Convection IR Reflow			
Description	Maximum	Recommended	Minimum
Ramp Up (°C/sec)	3°C/sec	2°C/sec	*
Dwell Time > 217°C	150 seconds	90 seconds	60 seconds
Solder Temp.	260°C	245°C	*
Dwell Time at Max.	30 seconds	15 seconds	10 seconds
Ramp DN (°C/sec)	6°C/sec	3°C/sec	*

Recommended Lead Free Resistor Reflow Profile



RoHS Compliance

Stackpole Electronics has joined the worldwide effort to reduce the amount of lead in electronic components and to meet the various regulatory requirements now prevalent, such as the European Union's directive regarding "Restrictions on Hazardous Substances" (RoHS 3). As part of this ongoing program, we periodically update this document with the status regarding the availability of our compliant components. All our standard part numbers are compliant to EU Directive 2011/65/EU of the European Parliament as amended by directive (EU) 2015/863/EU as regards the list of restricted substances.

RoHS Compliance Status

Standard Product Series	Description	Package / Termination Type	Standard Series RoHS Compliant	Lead-Free Termination Composition	Lead-Free Mfg. Effective Date (Std Product Series)	Lead-Free Effective Date Code (YY/WW)
HVA	High Voltage Axial Leaded Resistor	Axial	YES (1)	100% Matte Sn	Always	Always

Note (1): RoHS compliant by means of exemption 7c-I.

"Conflict Metals" Commitment

We at Stackpole Electronics, Inc. are joined with our industry in opposing the use of metals mined in the "conflict region" of the eastern Democratic Republic of the Congo (DRC) in our products. Recognizing that the supply chain for metals used in the electronics industry is very complex, we work closely with our own suppliers to verify to the extent possible that the materials and products we supply do not contain metals sourced from this conflict region. As such, we are in compliance with the requirements of Dodd-Frank Act regarding Conflict Minerals.

Compliance to "REACH"

We certify that all passive components supplied by Stackpole Electronics, Inc. are SVHC (Substances of Very High Concern) free and compliant with the requirements of EU Directive 1907/2006/EC, "The Registration, Evaluation, Authorization and Restriction of Chemicals", otherwise referred to as REACH. Contact us for complete list of REACH Substance Candidate List.

Environmental Policy

It is the policy of Stackpole Electronics, Inc. (SEI) to protect the environment in all localities in which we operate. We continually strive to improve our effect on the environment. We observe all applicable laws and regulations regarding the protection of our environment and all requests related to the environment to which we have agreed. We are committed to the prevention of all forms of pollution.

How to Order

1	2	3	4	5	6	7	8	9	10	11
H	V	A	0	5	F	B	1	M	0	0

Product Series	
HVA	High Voltage Axial Leaded Resistor

Size	
Code	W
05	0.5
08	0.8
12	1.2

Tolerance		
Code	Tol	Value
F	1%	E24
J	5%	
K	10%	

Packaging			
Code	Description	Size	Quantity
A	Ammo	05, 08	2000
		12	1000
B	Bulk	all sizes	1000

Resistance Value
Four characters with the multiplier used as the decimal holder.
1 Mohm = 1M00 50 Mohm = 50M0 1 Gohm = 1G00