

HVR Series

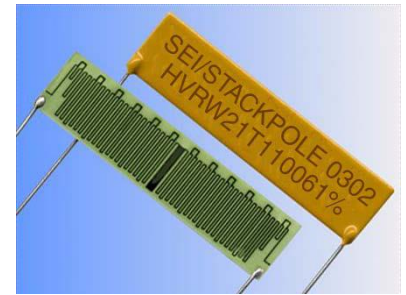
High Voltage Radial Leaded Plate Resistor

Stackpole Electronics, Inc.

Resistive Product Solutions

Features:

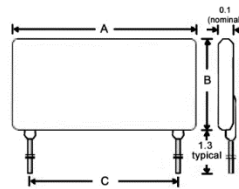
- Ohmic values available up to 50G
- Voltage ratings to 40K volts
- Ultra-high stability
- Tight tolerances to 0.1%
- Low VCR to 0.05 ppm/volt
- Very low noise
- Custom solutions available
- RoHS compliant, REACH compliant, and halogen free



Electrical Specifications

Case Size	Power Rating (W) @ 75°C	Maximum Voltage Rating (KV)	TCR (ppm/°C)	Ohmic Range (Ω) and Tolerance				
				0.1%	0.25%	0.5%	1%	2%, 5%, 10%, 20%
HVR(W)39	0.5	2	±25 ±50 ±100 ±200	1M - 100M 100K - 100M 100K - 100M 100K - 100M	1M - 100M 100K - 100M 100K - 100M 100K - 100M	1M - 100M 100K - 1G 100K - 10G 100K - 10G	1M - 100M 100K - 1G 100K - 10G 100M - 50G	1M - 100M 100K - 1G 100K - 50G 100M - 50G
HVR(W)29	0.5	4	±25 ±50 ±100 ±200	1M - 100M 100K - 100M 100K - 100M 100K - 100M	1M - 100M 100K - 100M 100K - 100M 100K - 100M	1M - 100M 100K - 1G 100K - 10G 100K - 10G	1M - 100M 100K - 1G 100K - 10G 100M - 50G	1M - 100M 100K - 1G 100K - 50G 100M - 50G
HVR(W)21	1	10	±25 ±50 ±100 ±200	1M - 100M 100K - 100M 100K - 100M 100K - 100M	1M - 500M 100K - 500M 100K - 500M 100K - 100M	1M - 500M 100K - 10G 100K - 10G 100M - 10G	1M - 500M 100K - 10G 100K - 50G 100M - 50G	1M - 500M 100K - 10G 100K - 50G 100M - 50G
HVR(W)42	2	20	±25 ±50 ±100 ±200	1M - 100M 100K - 100M 100K - 100M 100K - 100M	1M - 500M 100K - 500M 100K - 500M 100K - 100M	1M - 500M 100K - 10G 100K - 10G 100M - 10G	1M - 500M 100K - 10G 100K - 50G 100M - 50G	1M - 500M 100K - 10G 100K - 50G 100M - 50G
HVR(W)43	3	30	±25 ±50 ±100 ±200	1M - 100M 100K - 100M 100K - 100M 100K - 100M	1M - 500M 100K - 500M 100K - 500M 100K - 100M	1M - 500M 100K - 10G 100K - 10G 100M - 10G	1M - 500M 100K - 10G 100K - 50G 100M - 50G	1M - 500M 100K - 10G 100K - 50G 100M - 50G
HVR(W)56	6	40	±25 ±50 ±100 ±200	1M - 100M 100K - 100M 100K - 100M 100K - 100M	1M - 500M 100K - 500M 100K - 500M 100K - 100M	1M - 500M 100K - 10G 100K - 10G 100M - 10G	1M - 500M 100K - 10G 100K - 50G 100M - 50G	1M - 500M 100K - 10G 100K - 50G 100M - 50G

Mechanical Specifications



Size	A	B	C	Unit
HVR(W)39	0.300 ± 0.080 7.62 ± 2.03	0.400 ± 0.030 10.16 ± 0.76	0.200 5.08	inches mm
HVR(W)29	0.500 ± 0.080 12.70 ± 2.03	0.375 ± 0.030 9.53 ± 0.76	0.400 10.16	inches mm
HVR(W)21	1.000 ± 0.080 25.40 ± 2.03	0.375 ± 0.030 9.53 ± 0.76	0.900 22.86	inches mm
HVR(W)42	2.000 ± 0.080 50.80 ± 2.03	0.500 ± 0.030 12.70 ± 0.76	1.900 48.26	inches mm
HVR(W)43	3.000 ± 0.080 76.20 ± 2.03	0.500 ± 0.030 12.70 ± 0.76	2.900 73.66	inches mm
HVR(W)56	4.000 ± 0.080 101.60 ± 2.03	0.750 ± 0.030 19.05 ± 0.76	3.900 99.06	inches mm

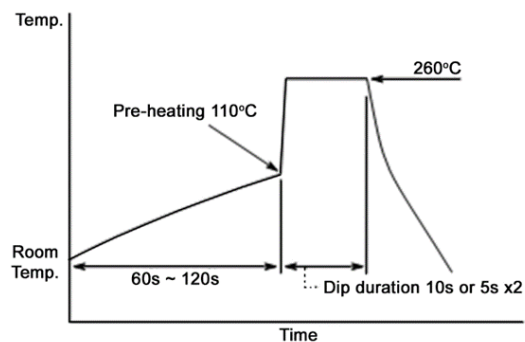
Recommended Soldering Condition

Flow Soldering:

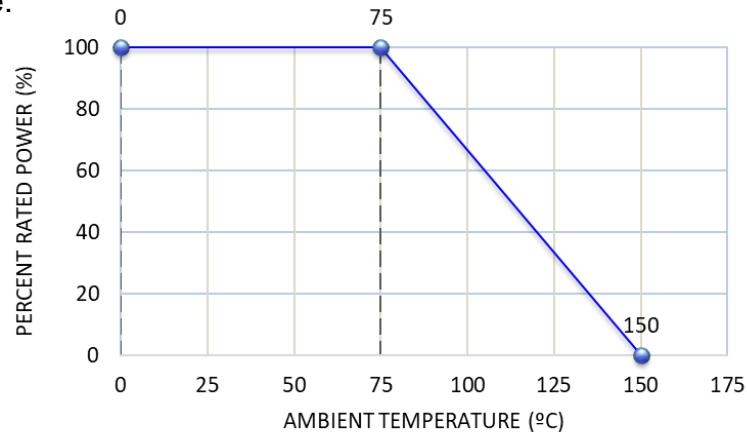
- Pre-heating: 110°C MAX
- Peak temperature/duration: 260°C within 10 seconds (1st, 2nd wave total)
- Temperature profile (see chart on the right)

Iron Soldering:

- 380°C, 5 seconds, once/terminal



Power Derating Curve:



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)
HVR	High Voltage Radial Leaded Plate Resistor	Radial Special	YES ⁽¹⁾	100% Matte Sn	Always	Always

Note (1): RoHS Compliant by means of exemption 7c-l.

"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

Product Series		Lead Style		Power Rating		Tolerance		TCR		Resistance Value	
Code	Description	Code	Description	Code	W	Code	Tol	Code	ppm	Four characters with the multiplier used as the decimal holder.	
HVR	High Voltage Radial Leaded Plate Resistor	W	100% matte Sn lead	39	0.5	B	0.1%	E	25	30 Mohm = 30M0	
				29	0.5	C	0.25%	C	50	100 Mohm = 100M	
				21	1	D	0.5%	D	100	2 Gohm = 2G00	
				42	2	F	1%	L	200		
				43	3	G	2%				
				56	6	J	5%				
						K	10%				
						M	20%				