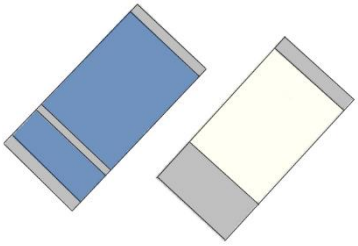
Features:

- Ultra-high stability
- Very low noise
- Voltage ratings to 4 kV
- Ratio tolerances to 1%
- TCR to 25 ppm/ºC
- RoHS compliant, REACH compliant, and halogen free

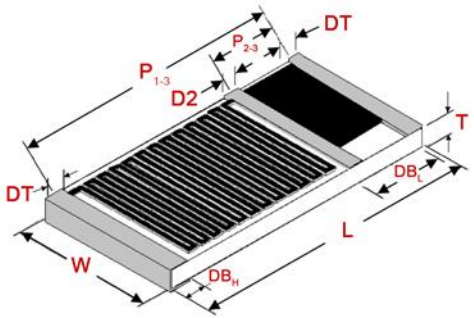


Electrical Specifications

Type/Code	Voltage Rating(*)	Power	TCR Tracking	Ratio	Ohmic Range (Ω) and Tolerance
					1%, 2%, 5%, 10%, 20%
HVCD3512	2000 V	100 mW	± 25 ppm/ºC ± 50 ppm/ºC	100 : 1 1000 : 1	40M - 10G
HVCD4020	3000 V				90M - 10G
HVCD5020	4000 V				160M - 10G

(*) Voltage is wattage limited

Mechanical Specifications



Type/Code	L Body Length	W Body Width	T Thickness (max.)	DT	D2	DB_H	DB_L	P_{1-3}	P_{2-3}	Unit
HVCD3512	0.350 +0.01/-0.005	0.125 ± 0.005	0.030	0.020 ± 0.010	0.020 ± 0.010	0.020 ± 0.010	0.065 ± 0.010	0.330 ± 0.010	0.085 ± 0.010	inches
	8.89 +0.25/-0.13	3.18 ± 0.13	0.76	0.51 ± 0.25	0.51 ± 0.25	0.51 ± 0.25	1.65 ± 0.25	8.38 ± 0.25	2.16 ± 0.25	mm
HVCD4020	0.400 +0.01/-0.005	0.200 ± 0.005	0.030	0.025 ± 0.010	0.020 ± 0.010	0.025 ± 0.010	0.070 ± 0.010	0.375 ± 0.010	0.095 ± 0.010	inches
	10.16 +0.25/-0.13	5.08 ± 0.13	0.76	0.64 ± 0.25	0.51 ± 0.25	0.64 ± 0.25	1.78 ± 0.25	9.53 ± 0.25	2.41 ± 0.25	mm
HVCD5020	0.500 +0.01/-0.005	0.200 ± 0.005	0.030	0.025 ± 0.010	0.020 ± 0.010	0.025 ± 0.010	0.070 ± 0.010	0.475 ± 0.010	0.120 ± 0.010	inches
	12.70 +0.25/-0.13	5.08 ± 0.13	0.76	0.64 ± 0.25	0.51 ± 0.25	0.64 ± 0.25	1.78 ± 0.25	12.07 ± 0.25	3.05 ± 0.25	mm

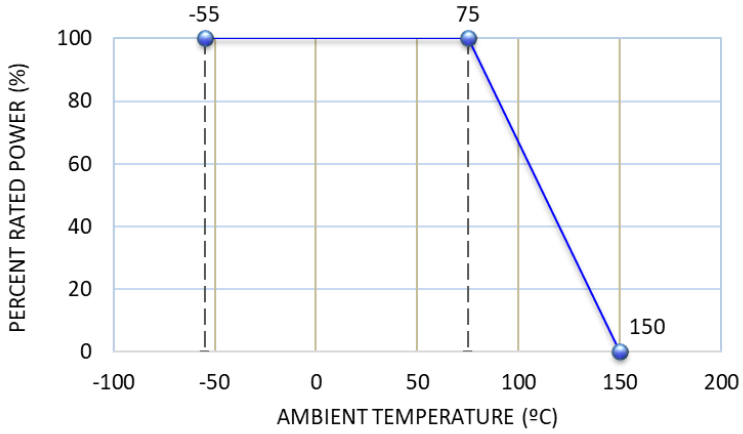
Performance Characteristics

Test	Maximum ΔR
Short Time Overload	0.1%
Load Life	0.1%
Thermal Shock	0.1%
Resistance to Soldering Heat	0.05%
Parameter	**Typical**
Operating Temperature	-55 to 150°C
TCR Tracking	Measured from 25 to 75°C
Resistance Value	Measured at 100 VDC

Material Construction

Resistive Element	Thick Film
Substrate	96% Alumina
Encapsulation	Epoxy
Termination	Tin over nickel barrier or lead solder over nickel barrier

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)
HVCD	High Voltage Chip Divider	SMD	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

H	V	C	D	3	5	1	2	F	C	C	A	1	0	0	M

Product Series

Code	Description
HVCD	High Voltage Chip Divider

Size

Code	mW
3512	100
4020	100
5020	100

Tolerance

Code	Tol
F	1%
G	2%
J	5%
K	10%
L	20%

Packaging

Code	Description	Quantity
C	7" Reel Plastic Tape	250

TCR

Code	ppm
C	50
E	25

Resistance Ratio

Code	Ratio
A	1000 : 1
B	100 : 1
C	Other

Resistance Value

Four characters with the multiplier used as the decimal holder.

40 Mohm = 40M0
100 Mohm = 100M
1 Gohm = 1G00