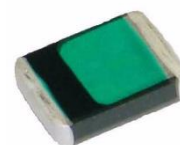


### Description:

The DV Series is a line of surface mount varistors designed to protect electronic equipment against high voltage surges in the medium voltage region. They offer excellent energy absorption due to improved energy volume distribution and power dissipation. Compared to other medium voltage SMD varistors, DV Series have a very low profile construction.

DV varistors are designed exclusively for surface mounting and are available in two model sizes. These transient voltage suppressors cover operating voltages from 11V to 300V ( $V_{rms}$ ) featuring maximum surge currents from 100A to 1200A.



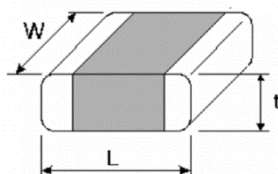
### Features:

- AC operating voltage ( $V_{rms}$ ) from 11V to 300V
- DC operating voltage ( $V_{dc}$ ) from 14V to 385V
- Insensitive to water cleaning procedures and to humidity according to the climate category 55/125/56
- +125°C continuous operating temperature
- Low profile dimensions and weight savings on printed circuit board
- 2 model sizes 3225 and 4032
- Lead-free component
- Ultra-low inductance, leadless chip guarantees the fastest response time to transient surges
- Broad range of current and energy handling capability
- No plastic coating guarantees excellent flammability rating
- RoHS compliant, REACH compliant, lead free, and halogen free

### General Technical Data

Climatic Category	55 / 125 / 56
Operating Temperature	-55°C to +125°C
Storage Temperature Range	-55°C to +150°C
Threshold Voltage Temperature Coefficient	$\leq 0.05\% / ^\circ\text{C}$
Response Time	< 5 ns
Ag/Pd Terminations	Recommended and suitable for Pb-containing soldering
Nickel Barrier Terminations	Recommended and suitable for Pb-containing and Pb-free soldering

### Device Ratings and Dimensions

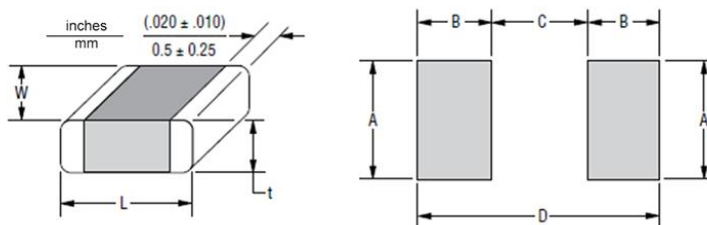


Part Number	$V_{RMS}$ (volts)	$V_{DC}$ (volts)	$V_B$ (volts)	$V_C$ (volts)	$I_C$ (8/20 $\mu\text{Sec}$ ) (amps)	$W_{MAX}$ (10/1000 $\mu\text{Sec}$ ) (joules)	$P_{MAX}$ (watts)	$I_{MAX}$ (8/20 $\mu\text{Sec}$ ) (amps)	$C_{TYP}$ (@ 1 kHz) (pF)	L (mm)	W (mm)	t (mm)
DV11K3225T	11	14	18	36	2.5	0.6	0.01	100	2500	8.0	6.3	1.4
DV11K4032T	11	14	18	36	5.0	1.1	0.02	250	4300	10.0	8.0	1.4
DV14K3225T	14	18	22	43	2.5	0.7	0.01	100	2200	8.0	6.3	1.6
DV14K4032T	14	18	22	43	5.0	1.3	0.02	250	3500	10.0	8.0	1.6
DV17K3225T	17	22	27	53	2.5	0.9	0.01	100	1750	8.0	6.3	1.8
DV17K4032T	17	22	27	53	5.0	1.6	0.02	250	3000	10.0	8.0	1.8
DV20K3225T	20	26	33	65	2.5	1.1	0.01	100	1650	8.0	6.3	1.8
DV20K4032T	20	26	33	65	5.0	2.0	0.02	250	2300	10.0	8.0	1.8

### Device Ratings and Dimensions

Part Number	V <sub>RMS</sub> (volts)	V <sub>DC</sub> (volts)	V <sub>B</sub> (volts)	V <sub>C</sub> (volts)	I <sub>C</sub> (8/20 µSec) (amps)	W <sub>MAX</sub> (10/1000 µSec) (joules)	P <sub>MAX</sub> (watts)	I <sub>MAX</sub> (8/20 µSec) (amps)	C <sub>TYP</sub> (@ 1 kHz) (pF)	L (mm)	W (mm)	t (mm)
DV25K3225T	25	31	39	77	2.5	1.2	0.01	100	1500	8.0	6.3	2.0
DV25K4032T	25	31	39	77	5.0	2.4	0.02	250	1900	10.0	8.0	2.0
DV30K3225T	30	38	47	93	2.5	1.5	0.01	100	1000	8.0	6.3	2.0
DV30K4032T	30	38	47	93	5.0	2.8	0.02	250	1600	10.0	8.0	2.0
DV35K3225T	35	45	56	110	2.5	1.8	0.01	100	800	8.0	6.3	2.0
DV35K4032T	35	45	56	110	5.0	3.4	0.02	250	1400	10.0	8.0	2.0
DV40K3225T	40	56	68	135	2.5	2.2	0.01	100	700	8.0	6.3	2.0
DV40K4032T	40	56	68	135	5.0	4.1	0.02	250	1200	10.0	8.0	2.0
DV50K3225T	50	65	82	135	5.0	2.5	0.10	400	400	8.2	6.3	2.0
DV50K4032T	50	65	82	135	10.0	6.5	0.25	1,200	580	10.0	8.0	2.0
DV60K3225T	60	85	100	165	5.0	3.0	0.10	400	300	8.2	6.3	2.0
DV60K4032T	60	85	100	165	10.0	7.0	0.25	1,200	530	10.0	8.0	2.0
DV75K3225T	75	100	120	200	5.0	4.0	0.10	400	240	8.2	6.3	2.0
DV75K4032T	75	100	120	200	10.0	9.0	0.25	1,200	480	10.0	8.0	2.0
DV95K3225T	95	125	150	250	5.0	6.0	0.10	400	210	8.2	6.3	2.0
DV95K4032T	95	125	150	250	10.0	11.0	0.25	1,200	310	10.0	8.0	2.0
DV115K3225T	115	150	180	300	5.0	6.5	0.10	400	200	8.2	6.3	2.0
DV115K4032T	115	150	180	300	10.0	13.0	0.25	1,200	270	10.0	8.0	2.0
DV130K3225T	130	170	205	340	5.0	7.0	0.10	400	190	8.2	6.3	2.0
DV130K4032T	130	170	205	340	10.0	15.0	0.25	1,200	250	10.0	8.0	2.0
DV140K3225T	140	180	220	360	5.0	7.5	0.10	400	180	8.2	6.3	2.0
DV140K4032T	140	180	220	360	10.0	18.0	0.25	1,200	240	10.0	8.0	2.0
DV150K3225T	150	200	240	395	5.0	9.0	0.10	400	150	8.2	6.3	2.0
DV150K4032T	150	200	240	395	10.0	18.5	0.25	1,200	220	10.0	8.0	2.0
DV175K3225T	175	225	270	455	5.0	9.5	0.10	400	130	8.2	6.3	2.0
DV175K4032T	175	225	270	455	10.0	21.0	0.25	1,200	200	10.0	8.0	2.0
DV230K3225T	230	300	360	595	5.0	10.0	0.10	400	110	8.2	6.3	2.0
DV230K4032T	230	300	360	595	10.0	23.0	0.25	1,200	170	10.0	8.0	2.0
DV250K3225T	250	320	390	650	5.0	11.0	0.10	400	100	8.2	6.3	2.0
DV250K4032T	250	320	390	650	10.0	25.0	0.25	1,200	160	10.0	8.0	2.0
DV275K3225T	275	350	430	710	5.0	13.0	0.10	400	90	8.2	6.3	2.0
DV275K4032T	275	350	430	710	10.0	29.0	0.25	1,200	150	10.0	8.0	2.0
DV300K3225T	300	385	470	775	5.0	15.0	0.10	400	85	8.2	6.3	2.0
DV300K4032T	300	385	470	775	10.0	30.0	0.25	1,200	140	10.0	8.0	2.0

### Recommended Pad Layout



Size	L	W	t(Max.)	A	B	C	D	Unit
3225	0.315 ± 0.020	0.248 ± 0.016	0.079	0.268	0.059	0.256	0.374	inches
	8.00 ± 0.50	6.30 ± 0.40	2.00	6.80	1.50	6.50	9.50	mm
4032	0.394 ± 0.020	0.315 ± 0.016	0.079	0.268	0.059	0.343	0.461	inches
	10.00 ± 0.50	8.00 ± 0.40	2.00	6.80	1.50	8.70	11.70	mm

### 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)
DV	Low and Medium Voltage SMD Varistor	SMD	YES	Ag/Pd	Always	Always

### "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

D	V	2	0	K	4	0	3	2	T	N		
Product Series		Voltage Range		Tolerance		Size	Packaging			Termination		
Code	Description	Code	Vrms	Code	Tol	Code	Code	Description	Size	Quantity	Code	Description
DV	Low & Medium Voltage SMD Varistor	11 to 300	11 to 300	K	10%	3225	T	13" Plastic Reel	330mm	2000	(blank)	Ag/Pd Termination
						4032					N	Nickel Barrier Termination