



Features

- Wide range of operating voltages from 5 Vrms to 1000 Vrms (6 Vdc to 1465 Vdc)
- Fast response time of less than 25ns, instantly clamping of transient over-voltage
- Capable to handle high surge current
- High energy protection capability
- Low clamping voltages for efficient surge behavior
- Low capacitance values, ideal for digital switching circuit protection
- High insulation resistance, preventing electric arcing to adjacent components or circuits

Application

- Transistors, diodes, integrated circuits (IC), thyristors or Triac semiconductor protection
- Surge protection for consumer electronics
- Surge protection for industrial appliances
- Surge protection for electronic home appliances, gas or petroleum operated appliances
- Relay and electromagnetic surge absorption.



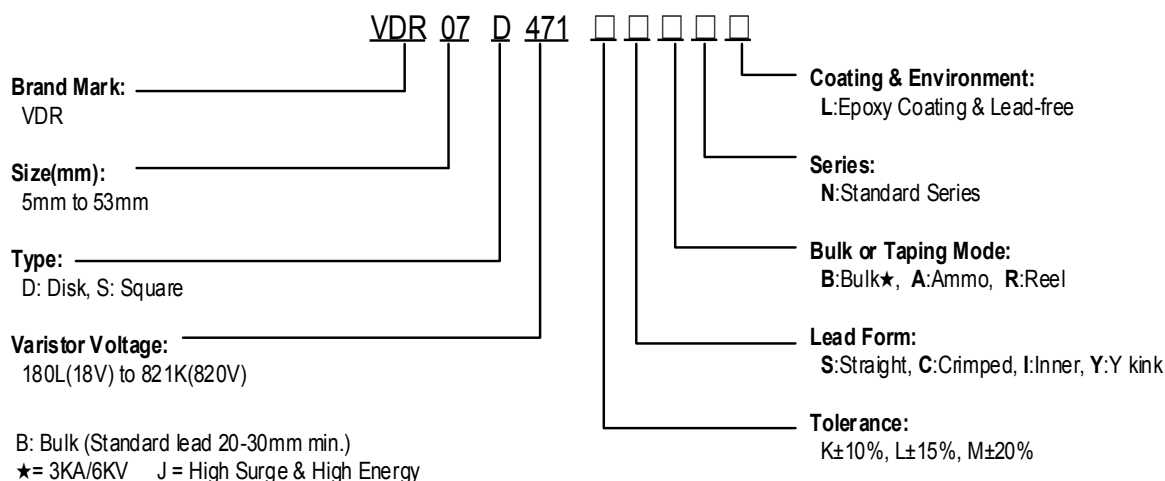
General Characteristics

- Operating Temperature: -40° C ~ +85° C
- Storage Temperature: -40° C ~ +125° C
- Working Surface Temperature: +115° C
- Insulation Resistance: > 100 MΩ
- Coating (Epoxy Resin): Flame-Retardant to UL94V-0

Material

- Coating: Epoxy Resin
- Lead Wires: Copper
- Electrode: Silver
- Disc: Zinc Oxide

Part Numbering System



Ordering Information

Series	Amp code	Packaging Code	Qty
07D			



Electrical Characteristics

Part No.	Maximum Allowable Voltage		Energy 10/1000µS		Withstanding Surge Current 8/20µS				Rated Power (W)	Varistor Voltage AT 1mA (V)	Max Clamping Voltage AT 2.5A (V)	Capacitance 1KHz pF
	ACrms (V)	DC (V)	Standard (J)	High Surge (J)	Standard (A)		High Surge(A)					
					1 TIME	2 TIME	1 TIME	2 TIME				
07D180L	10	14	2.1	2.4	1200	600	1750	1250	0.25	18(15-21)	38	1400
07D220K	14	18	2.4	2.8	1200	600	1750	1250	0.25	22(20-24)	43	1150
07D270K	17	22	2.8	3.0	1200	600	1750	1250	0.25	27(24-30)	53	930
07D330K	20	26	3.5	4	1200	600	1750	1250	0.25	33(30-36)	65	760
07D390K	25	31	4.2	4.6	1200	600	1750	1250	0.25	39(35-43)	77	640
07D470K	30	38	5.0	5.2	1200	600	1750	1250	0.25	47(42-52)	93	530
07D560K	35	45	6.2	6.5	1200	600	1750	1250	0.25	56(50-62)	110	450
07D680K	40	56	7.2	7.5	1200	600	1750	1250	0.25	68(61-75)	135	370

Part No.	Maximum Allowable Voltage		Energy 10/1000µS		Withstanding Surge Current 8/20µS				Rated Power (W)	Varistor Voltage AT 1mA (V)	Max Clamping Voltage AT 10A (V)	Capacitance 1KHz pF
	ACrms (V)	DC (V)	Standard (J)	High Surge (J)	Standard (A)		High Surge(A)					
					1 TIME	2 TIME	1 TIME	2 TIME				
07D820K	50	65	2.6	3.8	400	200	800	600	0.1	82(74-90)	135	300
07D101K	60	85	2.8	4.0	400	200	800	600	0.1	100(90-110)	165	250
07D121K	75	100	4.2	5.0	400	200	800	600	0.1	120(108-132)	200	210
07D151K	95	125	4.2	7.0	400	200	800	600	0.1	150(135-165)	250	165
07D181K	115	150	5.6	8.0	400	200	800	600	0.1	180(162-198)	300	140
07D201K	130	170	7.7	8.7	400	200	800	600	0.1	200(185-225)	330	125
07D221K	140	180	8.8	9.0	400	200	800	600	0.1	220(198-242)	360	110
07D241K	150	200	9.8	11.0	400	200	800	600	0.1	240(216-264)	395	110
07D271K	175	225	10.5	13.0	400	200	800	600	0.1	270(243-297)	455	95
07D301K	190	250	11.8	14.0	400	200	800	600	0.1	300(270-330)	505	85
07D331K	210	275	14.0	14.5	400	200	800	600	0.1	330(297-363)	550	75
07D361K	230	300	14.0	16.0	400	200	800	600	0.1	360(324-396)	595	70
07D391K	250	320	15.4	17.0	400	200	800	600	0.1	390(351-429)	650	65
07D431K	275	350	16.8	20.0	400	200	800	600	0.1	430(387-473)	710	60
07D471K	300	385	18.2	20.8	400	200	800	600	0.1	470(423-517)	775	55
07D511K	320	415	19.6	21.0	400	200	800	600	0.1	510(459-561)	845	50
07D561K	350	460	19.6	23.0	400	200	800	600	0.1	560(504-616)	920	45
07D621K	385	505	21.0	25.0	400	200	800	600	0.1	620(558-682)	1025	40
07D681K	420	560	21.0	29.0	400	200	800	600	0.1	680(612-748)	1120	35
07D751K	460	615	22.4	32.0	400	200	800	600	0.1	750(675-825)	1240	30

07D Series Metal-Oxide Varistor



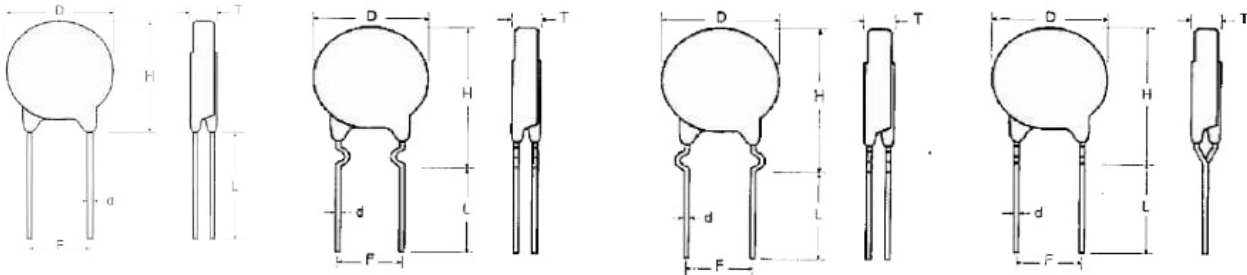
Product Dimensions (mm)

S Type (Straight Lead)

I Type (Inner Crimped Lead)

C Type (Out Crimped Lead)

Y Lead Type (Y Kink Lead)



Part No.	D Max.	H Max.		L min.	F ±0.8	d ±0.05	T Max.
		SB	CB/IB/YB				
07D101K	9.0	11.0	14.0	20.0	5.0	0.6	4.3
07D121K	9.0	11.0	14.0	20.0	5.0	0.6	4.5
07D151K	9.0	11.0	14.0	20.0	5.0	0.6	4.8
07D180L	9.0	11.0	14.0	20.0	5.0	0.6	3.8
07D181K	9.0	11.0	14.0	20.0	5.0	0.6	4.1
07D201K	9.0	11.0	14.0	20.0	5.0	0.6	4.1
07D220K	9.0	11.0	14.0	20.0	5.0	0.6	3.8
07D221K	9.0	11.0	14.0	20.0	5.0	0.6	4.2
07D241K	9.0	11.0	14.0	20.0	5.0	0.6	4.3
07D270K	9.0	11.0	14.0	20.0	5.0	0.6	3.9
07D271K	9.0	11.0	14.0	20.0	5.0	0.6	4.5
07D301K	9.0	11.0	14.0	20.0	5.0	0.6	4.7
07D330K	9.0	11.0	14.0	20.0	5.0	0.6	3.9
07D331K	9.0	11.0	14.0	20.0	5.0	0.6	4.8
07D361K	9.0	11.0	14.0	20.0	5.0	0.6	5.0
07D390K	9.0	11.0	14.0	20.0	5.0	0.6	4.1
07D391K	9.0	11.0	14.0	20.0	5.0	0.6	5.1
07D431K	9.0	11.0	14.0	20.0	5.0	0.6	5.3
07D470K	9.0	11.0	14.0	20.0	5.0	0.6	4.1
07D471K	9.0	11.0	14.0	20.0	5.0	0.6	5.6
07D511K	9.0	11.0	14.0	20.0	5.0	0.6	5.8
07D560K	9.0	11.0	14.0	20.0	5.0	0.6	4.5
07D561K	9.0	11.0	14.0	20.0	5.0	0.6	6.2
07D621K	9.0	11.0	14.0	20.0	5.0	0.6	6.4
07D680K	9.0	11.0	14.0	20.0	5.0	0.6	4.5
07D681K	9.0	11.0	14.0	20.0	5.0	0.6	6.4
07D751K	9.0	11.0	14.0	20.0	5.0	0.6	6.5
07D820K	9.0	11.0	14.0	20.0	5.0	0.6	4.1

