



Micro Commercial Components

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182KD14NX*
 thru
180LD14NX*

Features

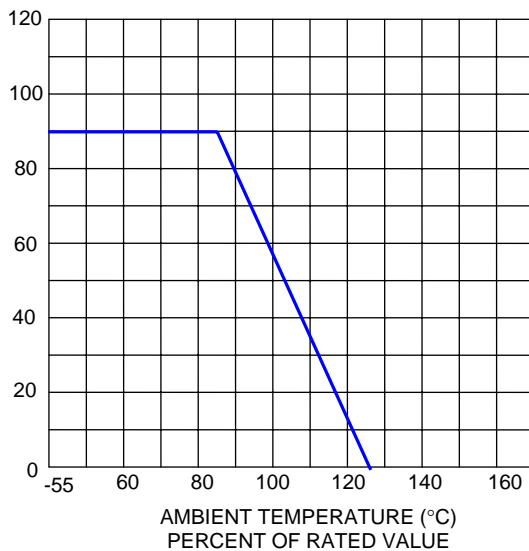
- Radial-Lead Varistor
- Designed to be Operated Continuously Across AC Power Lines
- No Derating Up to 85°C Ambient
- Available in Tape and Reel or Bulk Pack
- UL Recognized File # E306895(UL1449) and E306942(UL1414)

11 to 1000 Volts
Varistor
4.7 to 348.0 Joule

Maximum Ratings

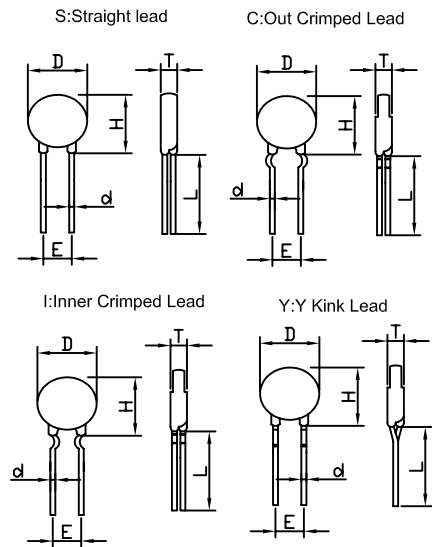
- Operating Ambient Temperature Range: -55°C to +85°C
- Storage Temperature Range: -55°C to +125°C
- Temperature Coefficient (αV) of Clamping Voltage (V_C) at Specified Test Current: <0.05%/°C
- Varistor voltage temperature coefficient:

$$\frac{V_b \text{ at } 25^\circ\text{C} - V_b \text{ at } 85^\circ\text{C}}{V_b \text{ at } 25^\circ\text{C}} \times \frac{1}{60} \times (100/^\circ\text{C})$$



CURRENT, ENERGY AND POWER DERATING CURVE

Note : * 'X' can be S, C, I or Y .
 'S' denotes straight lead
 'C' denotes out crimped lead
 'I' denotes inner crimped lead
 'Y' denotes kink lead



L: 20mm Min.

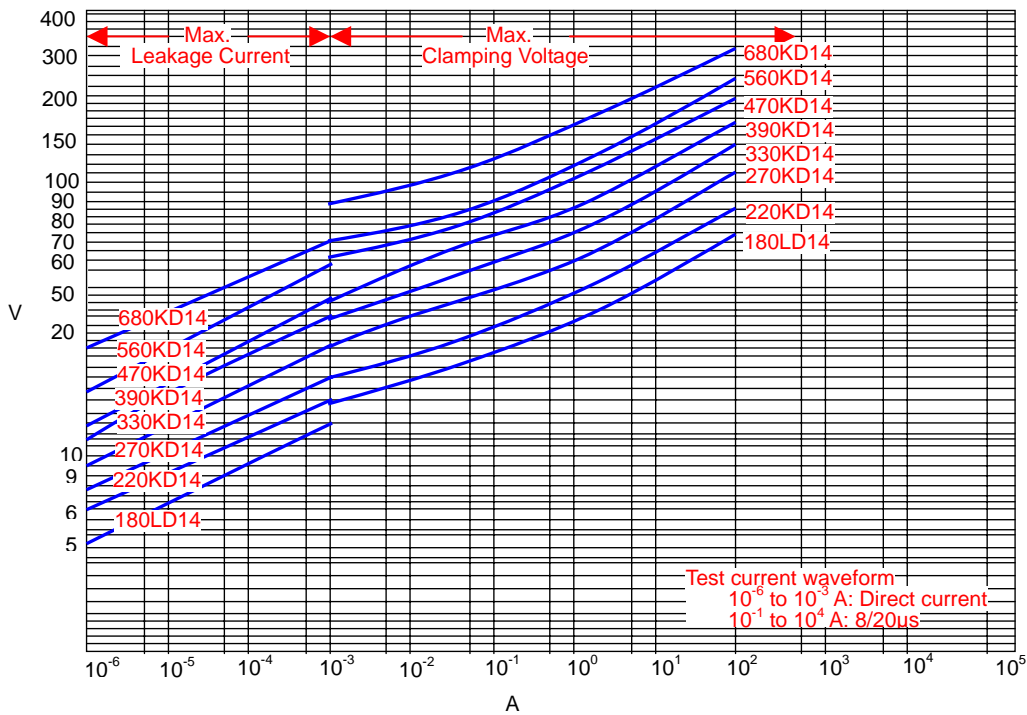
DIMENSIONS				Unit: mm	
Size	D max	H max		D± 0.05	E± 1.0
Lead	All	S	C/I/Y	All	All
05D	7.5	11	13	0.6	5
07D	9	13	15	0.6	5
10D	12.5	18	19.5	0.6	5
				0.8	7.5
14D	16.5	22	23	0.8	7.5
				1	10
20D	23	28	30	0.8	7.5
				1	10

Electrical Characteristics @ 25°C Unless Otherwise Noted

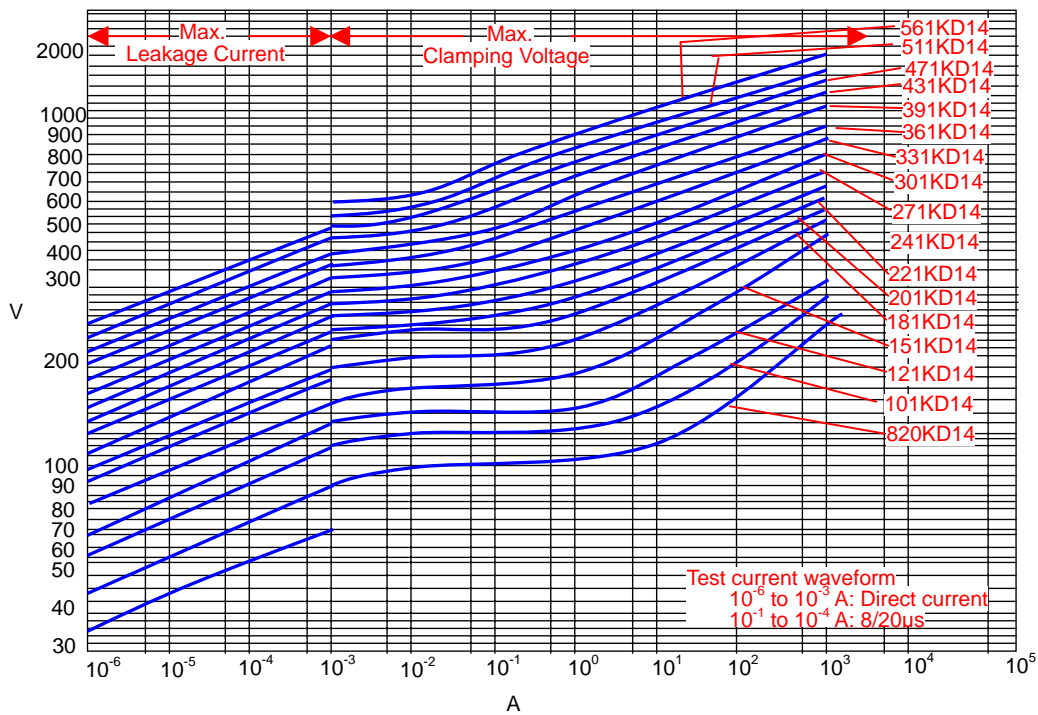
Part Number	Maximum Allowable Voltage		Maximum Energy	Withstanding Surge Current		Rated Wattage (W)	Varistor Voltage	Maximum Clamping Voltage
	ACrms	DC	10/1000us	1 time	2 times		V1mA	V50A
	(V)	(V)	(J)	(A)		(V)	(V)	
182KD14N X	1000	1465	348	4500	2500	0.6	1800(1620-1980)	2970
112KD14N X	680	895	248				1100(990-1210)	1815
102KD14N X	625	825	224				1000(900-1100)	1650
911KD14N X	550	745	204				910(819-1001)	1500
821KD14N X	510	670	188				820(738-902)	1355
781KD14N X	485	640	184				780(702-858)	1290
751KD14N X	460	615	180				750(675-825)	1240
681KD14N X	420	560	172				680(612-748)	1120
621KD14N X	385	505	164				620(558-682)	1025
561KD14N X	350	460	156				560(504-616)	920
511KD14N X	320	418	148				510(459-561)	842
471KD14N X	300	385	140				470(423-517)	775
431KD14N X	275	350	132				430(387-473)	710
391KD14N X	250	320	120				390(351-429)	650
361KD14N X	230	300	104				360(324-396)	595
331KD14N X	210	275	92				330(297-363)	550
301KD14N X	195	250	84				300(270-330)	505
271KD14N X	175	225	79				270(243-297)	455
241KD14N X	150	200	67				240(216-264)	395
221KD14N X	140	180	62				220(198-242)	360
201KD14N X	130	170	57	200(185-225)	340			
181KD14N X	115	150	52	180(162-198)	300			
151KD14N X	95	125	44	150(135-165)	250			
121KD14N X	75	100	32	120(108-132)	200			
101KD14N X	60	85	28	100(90-110)	165			
820KD14N X	50	65	22	82(74-90)	135			
680KD14N X	40	56	17	1000	500	0.1	68(61-75)	*135
560KD14N X	35	45	14				56(50-62)	*110
470KD14N X	30	38	12				47(42-52)	*93
390KD14N X	25	31	9.4				39(35-43)	*77
330KD14N X	20	26	8.8				33(30-36)	*65
270KD14N X	17	22	6.9				27(24-30)	*53
220KD14N X	14	18	5.4				22(20-24)	*43
180LD14 N X	11	14	4.7				18(15-21)	*36

*680K-180L Max. Clamping Voltage testing current 10A

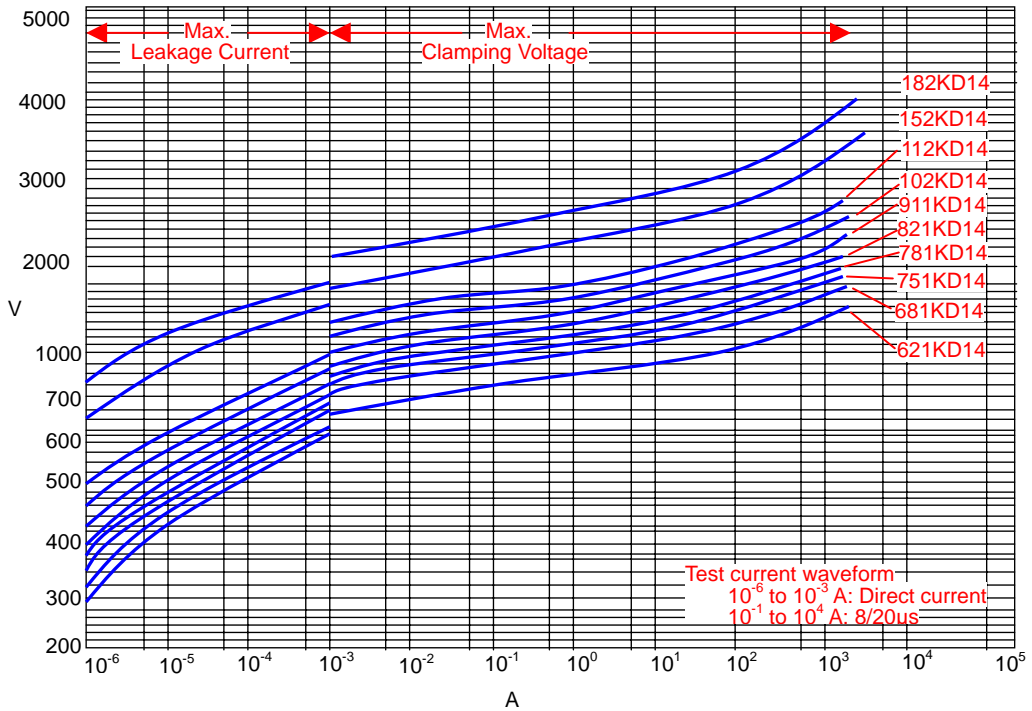
V-I Curve (180L to 680K)



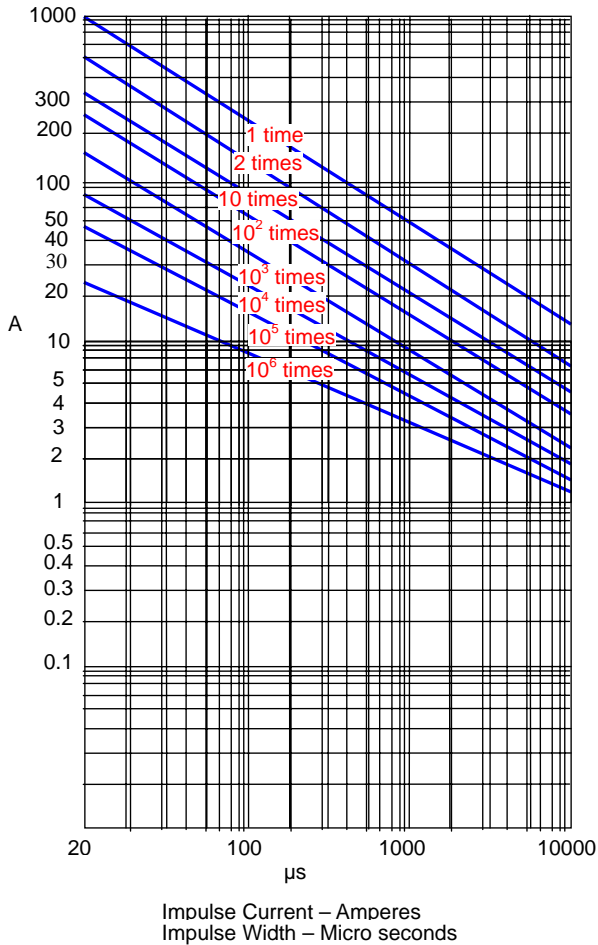
V-I Curve (820K to 561K)



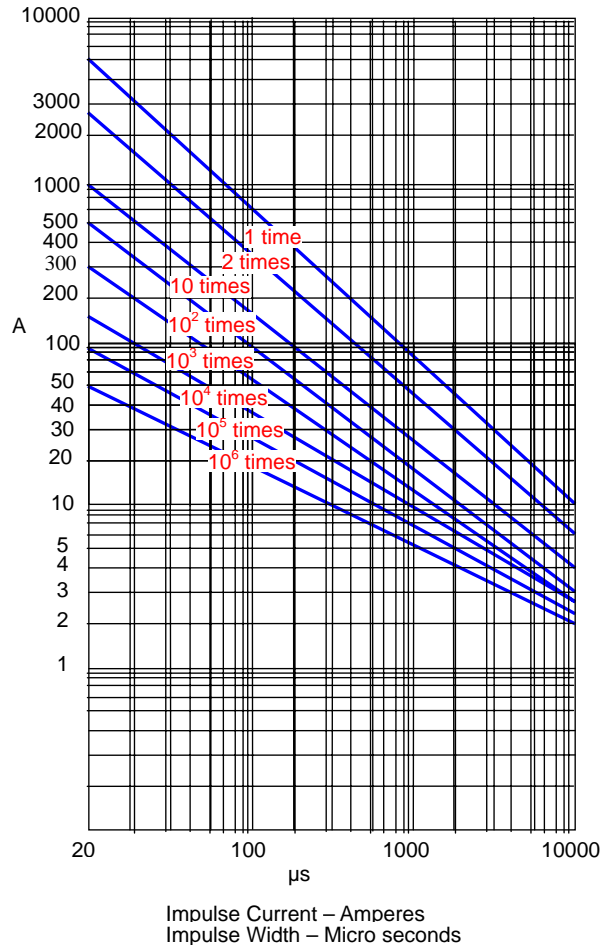
V-I Curve (621K to 182K)



V-I Surge Life Time Ratings (180L to 680K)



V-I Surge Life Time Ratings (820K to 182K)



Note 2.

T Thickness (max.)

Unit:mm

Part Code	D05	D07	D10	D14	D20
182K			12.6	12.8	13.5
112K			10.5	10.7	11.2
102K			9.9	10.1	10.7
911K			9.4	9.6	10.1
821K		8.3	8.8	9.0	9.5
781K		8.1	8.6	8.8	9.3
751K	7.9	7.9	8.4	8.6	9.1
681K	7.5	7.5	8.0	8.2	8.7
621K	7.2	7.2	7.6	7.8	8.3
561K	6.9	6.9	7.3	7.5	8.0
511K	6.6	6.6	7.0	7.2	7.7
471K	6.4	6.4	6.8	7.0	7.5
431K	6.1	6.1	6.5	6.7	7.2
391K	5.3	5.3	5.7	5.9	6.4
361K	5.1	5.1	5.5	5.7	6.2
331K	4.9	4.9	5.3	5.5	6.0
301K	4.8	4.8	5.2	5.4	5.9
271K	4.6	4.6	5.0	5.2	5.7
241K	4.4	4.4	4.8	5.0	5.5
221K	4.3	4.3	4.7	4.9	5.4
201K	4.2	4.2	4.6	4.8	5.3
181K	4.1	4.1	4.5	4.7	5.2
151K	4.5	4.5	4.9	5.1	5.6
121K	4.1	4.1	4.5	4.6	5.3
101K	3.9	3.9	4.4	4.5	5.1
820K	3.8	3.8	4.3	4.4	4.9
680K	5.5	5.5	6.0	6.1	6.1
560K	5.0	5.0	5.5	5.6	5.6
470K	5.0	5.0	5.5	5.6	5.6
390K	4.7	4.7	5.1	5.2	5.4
330K	4.7	4.7	5.1	5.2	5.4
270K	4.7	4.7	5.1	5.2	5.4
220K	4.5	4.5	4.9	5.0	5.3
180L	4.5	4.5	4.9	5.0	5.2



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