Micro Commercial Components

Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

821KD07JX* THRU 180LD07JX*

11 to 510 Volts Varistor 1.5 to 60 Joule

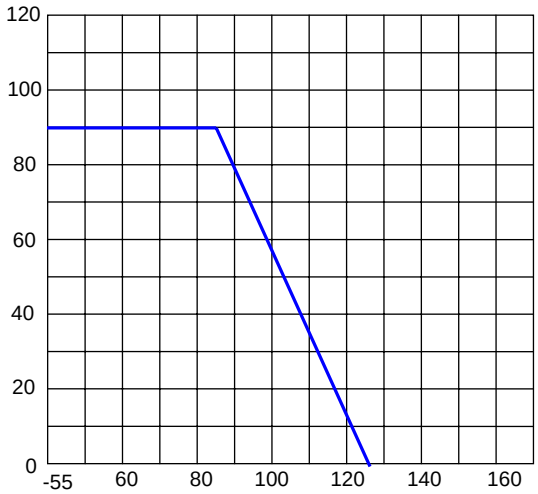
Features

- High Surge, High Energy
- Designed to be Operated Continuously Across AC Power Lines
- No Derating Up to 85℃ Ambient
- Available in Tape and Reel or Bulk Pack
- UL Recognized File # E306895(UL1449) and E306942(UL1414)

Maximum Ratings

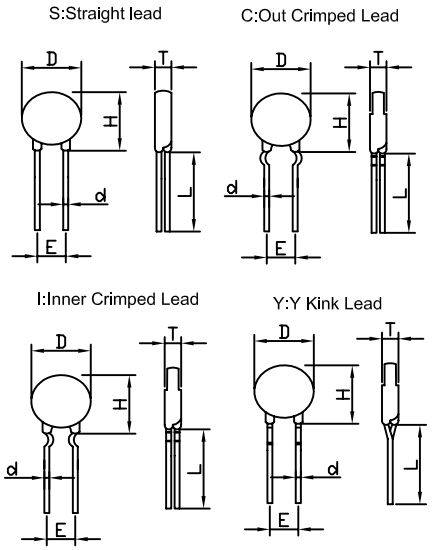
- Operating Ambient Temperature Range: -55℃ to +85℃
- Storage Temperature Range: -55℃ to +125℃
- Temperature Coefficient (αV) of Clamping Voltage (V_c) at Specified Test Current:<0.05%/℃
- Varistor voltage temperature coefficient:

$$\frac{Vb \text{ at } 25℃ - Vb \text{ at } 85℃}{Vb \text{ at } 25℃} \times \frac{1}{60} \times (100/℃)$$



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

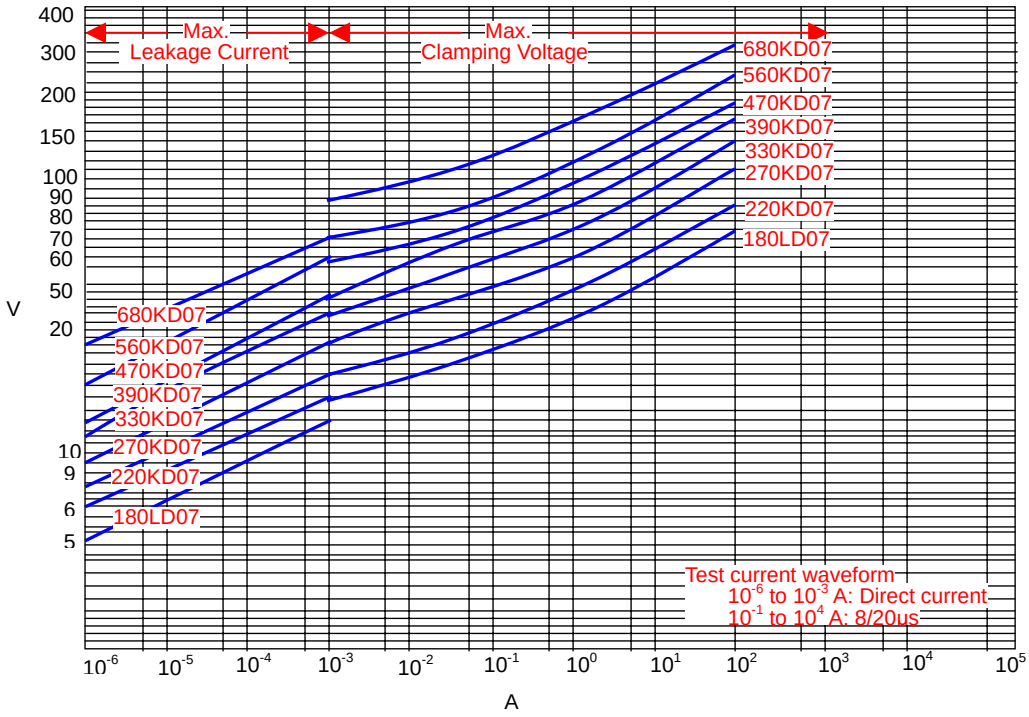
Electrical Characteristics @ 25°C Unless Otherwise Noted

Part Number	Maximum Allowable Voltage		Maximum Energy	Withstanding Surge Current 8/20us		Rated Wattage	Varistor Voltage	Maximum Clamping Voltage
	ACrms	DC	10/1000us	1 time	2 times	(W)	V1mA	V10A
	(V)	(V)	(J)	(A)			(V)	(V)
821KD07 X	510	670	60.0	1750	1250	0.25	820(738-902)	1355
781KD07JX	485	640	59.0				780(702-858)	1290
751KD07JX	460	615	58.0				750(675-825)	1240
681KD07 X	420	560	56.0				680(612-748)	1120
621KD07JX	385	505	54.0				620(558-682)	1025
561KD07 X	350	460	51.0				560(504-616)	920
511KD07JX	320	418	45.0				510(459-561)	842
471KD07JX	300	385	42.0				470(423-517)	775
431KD07JX	275	350	40.0				430(387-473)	710
391KD07JX	250	320	35.0				390(351-429)	650
361KD07JX	230	300	32.0				360(324-396)	595
331KD07JX	210	275	28.0				330(297-363)	550
301KD07 X	195	250	26.0				300(270-330)	505
271KD07JX	175	225	24.0				270(243-297)	455
241KD07JX	150	200	21.0				240(216-264)	395
221KD07JX	140	180	19.0				220(198-242)	360
201KD07JX	130	170	27.5				200(180-220)	340
181KD07JX	115	150	16.0				180(162-198)	300
151KD07JX	95	125	13.0				150(135-165)	250
121KD07JX	75	100	11.0				120(108-132)	200
101KD07JX	60	85	9.0				100(90-110)	165
820KD07JX	50	65	7.0				82(74-90)	135
680KD07 X	40	56	5.4	500	250	0.02	68(61-75)	*135
560KD07JX	35	45	4.4				56(50-62)	*110
470KD07JX	30	38	3.8				47(42-52)	*93
390KD07JX	25	31	3.0				39(35-43)	*77
330KD07JX	20	26	2.8				33(30-36)	*65
270KD07 X	17	22	2.1				27(24-30)	*53
220KD07JX	14	18	1.7				22(20-24)	*43
180LD07JX	11	14	1.5				18(15-21)	*36

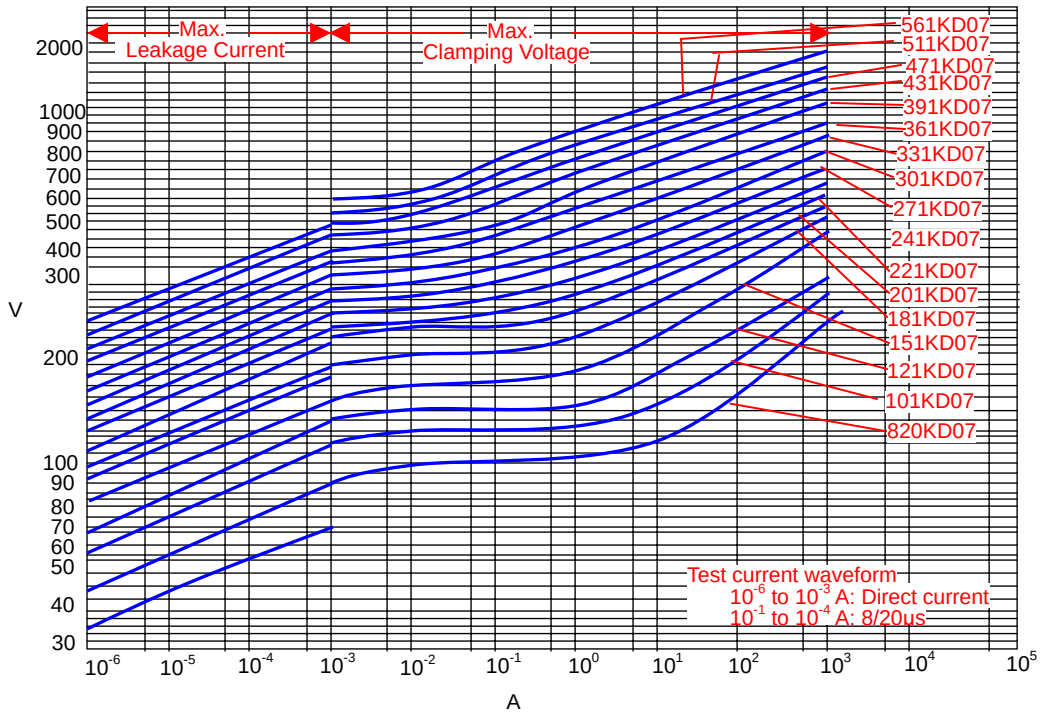
*680K-180L Max. Clamping Voltage testing current 2.5A.

Micro Commercial Components

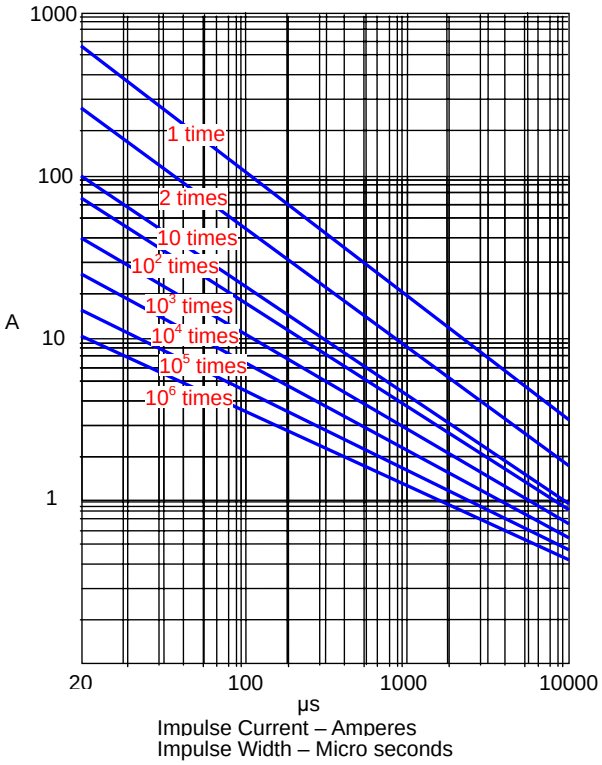
V-I Curve (180L to 680K)



V-I Curve (820K to 561K)

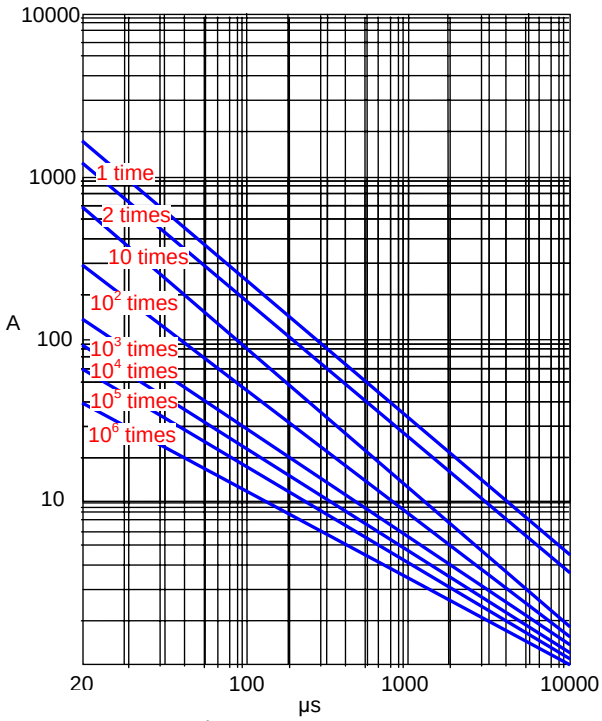


V-I Surge Life Time Ratings
(180L to 680K)



Impulse Current – Amperes
Impulse Width – Micro seconds

V-I Surge Life Time Ratings
(820K to751K)



Impulse Current – Amperes
Impulse Width – Micro seconds

Micro Commercial Components

Note 2.

T Thickness (max.)

Unit:mm

Part Code	D05	D07	D09	D10	D14	D18	D20
182K				12.5	12.5	12.5	15.6
152K				11	11	11	13.2
112K			7.5	8.5	8.5	8.5	10.1
102K			7.3	8.3	8.3	8.3	9.5
911K			7.1	8.1	8.1	8.1	9.0
821K		6.9	6.9	7.9	7.9	7.9	8.5
781K		6.7	6.7	7.7	7.7	7.7	8.4
751K	6.5	6.5	6.5	7.5	7.5	7.5	8.2
681K	6.4	6.4	6.4	7.1	7.1	7.1	7.8
621K	6.4	6.4	6.4	7.1	7.1	7.1	7.5
561K	6.2	6.2	6.2	6.7	6.7	6.7	7.0
511K	5.8	5.8	5.8	6.4	6.4	6.4	6.8
471K	5.6	5.6	5.6	6.1	6.1	6.1	6.6
431K	5.3	5.3	5.3	5.9	5.9	5.9	6.4
391K	5.1	5.1	5.1	5.7	5.7	5.7	6.2
361K	5.0	5.0	5.0	5.5	5.5	5.5	6.2
331K	4.8	4.8	4.8	5.3	5.3	5.3	5.9
301K	4.7	4.7	4.7	5.1	5.1	5.1	5.7
271K	4.5	4.5	4.5	5.0	5.0	5.0	5.6
241K	4.3	4.3	4.3	4.8	4.8	4.8	5.4
221K	4.2	4.2	4.2	4.7	4.7	4.7	5.3
201K	4.1	4.1	4.1	4.5	4.5	4.5	5.0
181K	4.1	4.1	4.1	4.5	4.5		5.0
151K	4.8	4.8	4.4	5.2	5.2		5.6
121K	4.5	4.5	4.1	4.9	4.9		5.3
101K	4.3	4.3	3.9	4.7	4.7		5.1
820K	4.1	4.1	3.8	4.5	4.5		4.9
680K	4.5	5.2	4.5	5.3	5.3		5.8
560K	4.5	5.0	4.4	5.1	5.1		5.7
470K	4.5	4.9	4.2	5.0	5.0		5.6
390K	4.5	4.8	4.0	4.9	4.9		5.5
330K	4.5	4.9	4.5	5.0	5.0		
270K	4.5	4.7	4.2	4.8	4.8		
220K	4.5	4.6	4.0	4.7	4.7		
180L	4.5	4.5	3.8	4.6	4.6		

Micro Commercial Components

IMPORTANT NOTICE
Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . *Micro Commercial Components Corp*. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp*. and all the companies whose products are represented on our website, harmless against all damages.
APPLICATIONS DISCLAIMER
Products offer by *Micro Commercial Components Corp*. are not intended for use in Medical, Aerospace or Military Applications.