HIGH VOLTAGE CERAMIC CAPACITOR 2KV-15KV

SPECIFICATION:

- OPERATING TEMPERATURE RANGE: −25°C +85°C.
- RATED WORKING VOLTAGE: 2KV TO 15KV
- CAPACITANCE: WITHIN THE TOLERENCE FOR CLASS I AT 1MHz, CLASS II AT 1 KHz, 1 TO 3Vrms, 25°C
- TEST VOLTAGE: 2KV & ABOVE: 2 TIMES RATED VOLTAGE, 10KV & ABOVE: 1.5 TIMES RATED VOLTAGE, 50 mA MAX CHARGING CURRENT
- DISSIPATION FACTOR/Q FACTOR:
  CLASS I: 1MHz, 1 TO 3Vrms, 25°C
  C ≤ 30PF ..... Q ≥ 400 + 20C
  C > 30PF ..... Q ≥ 1,000
  CLASS II: 1KHz, 1 TO 3Vrms, 25°C
  B, E ..... 2.5% MAX
  F ..... 5% MAX
- INSULATION RESISTANCE: 10,000 MΩ or 200 MΩ μF, WHICHEVER IS THE SMALLER.
- HUMIDITY TEST: PER EIA RS198-C, METHOD B3, CONDITION B. △C/C: 30% MAX FOR F, 20% MAX FOR OTHERS
- LIFE TEST: PER EIA RS198-C, METHOD C2, CONDITION C AT 85 ±2°C and 200% RATED WORKING VOLTAGE
  △C/C: 30% MAX FOR F, 20% MAX FOR OTHERS. DF: 5% MAX FOR F, 3% MAX FOR OTHERS, I.R.: 10,000 MΩ MIN

1. High Voltage — Type 'K'

2. Temperature Coefficient (Ref. Fig. 1 & 2)

CLASS I : NPO, N750, SL
CLASS II: B, E, F.

3. Rated Voltage (D.C.)

Code	Voltage	Code	Voltage
3D	2KV	3J	8KV
3F	3KV	4A	10KV
3G	4KV	4B	12KV
3H	5KV	4C	15KV
3I	6KV		

4. Rated capacitance

100PF ~ 47000PF in E-24 Series Coded by
Two Significant digits + No. of Zero

5. Tolerence on rated capacitance.

J = ±5% K = ±10% M = ±20%
Z = +80 −20% P = +100 −0%

6. Lead Shape. (Ref. Fig. 3.)

Code	Type	
K		Short Kink
S	Bulk	Short Straight
L		Long Straight

7. Lead Spacing. (F)

Code	Dimension. (mm)		
	K	S	L
5	5.0 ± 0.8		
6	6.3 ± 0.8		
7	7.5 ± 0.8		
0	10.0 ± 0.8		

8. Lead Length. (L)

Code	Dimension (mm)		
	K	S	L
3	3.5 ± 1.0	3.5 ± 1.0	3.5 ± 1.0
5	5.0 ± 0.8	5.0 ± 0.8	5.0 ± 0.8
6	6.3 ± 0.8	6.3 ± 0.8	6.3 ± 0.8
0	10.0 ± 0.8	10.0 ± 0.8	10.0 ± 0.8
1	–	–	25min

9. Lead Wire. (d)

8	0.8 ± 0.05	2KV ~ 15KV

10. Grade

Code	Temp. Range
Y	−25°C ~ +85°C
Z	−10°C ~ +70°C

Part Code Designation

Example:	K	B	3H	120	K	—	L	5	5	5	Y
	(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)	(10)

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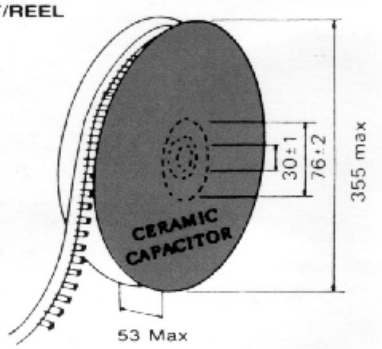
RATED VOLT VOLT/DC	TEMP. CHARATERISTICS/CAPACITANCE (PF)				MAX m/m
	SL	Y5P (B)	Z5U (E)	Z5V (F)	Dφ
2KV	1 – 15	100 – 470	–	1000	7
	5 – 22	560	1000	2200	8
	10 – 33	820	1500	3300	9
	22 – 47	1000	2200	4700	10
	33 – 82	2200	3300	6800	12
	50 – 100	3300	4700	8200	14
	82 – 220	4700	6800 – 8200	10000	16
	100 – 330	5600 – 6800	10000	22000	18
	220 – 470	8200	–	–	20
	290 – 680	10000	22000	47000	24
3KV	1 – 10	100 – 330	–	1000	7
	5 – 15	390 – 970	1000	1500	8
	10 – 22	680	1500	2200	9
	20 – 33	320 – 1000	2200	3300	10
	27 – 47	1500	3300	4700	12
	33 – 82	1800	4700	5600	14
	80 – 150	2000 – 2700	5000	10000	16
	100 –	3300 – 3900	6800	–	18
	200 – 330	4700	8200 – 10000	22000	20
4KV	1 – 15	100 – 270	–	1000	8
	10 – 22	330 – 560	1000	1500	9
	20 – 32	680 – 820	1500	2200	10
	30 – 45	1000 – 1200	2200	3300	12
	40 – 72	1500	3300	4700	14
	–	2200	4700	5600	16
	70 – 120	–	6800	–	18
	180 – 220	3300	8200	10000	20
	220 – 390	4700	10000	–	22
5KV	1 – 15	220	–	–	8
	16 – 22	270 – 330	–	1000	9
	23 – 33	470	1000	–	10
	34 – 47	680	1500	1500	12
	50 – 68	1000	–	1800	13
	–	1500	1800	2200	15
	70 – 100	2200	2200	3300	18
	120 – 220	3300	–	–	22
6KV	1 – 20	220	–	–	8
	15 – 27	470	–	1000	10
	20 – 39	680 – 820	1000	1500	12
	30 – 68	1000	1500	1800	14
	50 – 100	1500	1800	2200	16
	80 – 160	1800	2200	3300	18
	150 – 220	–	–	–	20
	200 – 350	2200	–	–	22
8KV	1 – 18	100	–	–	9
	10 – 27	220	470 – 680	–	10
	20 – 36	330 – 420	1000	–	12
	30 – 60	560 – 680	1500	–	14
	50 – 100	1000	2000 – 2200	–	16
10KV	1 – 15	100	–	–	10
	10 – 30	220 – 270	–	–	12
	20 – 50	330	–	–	14
	30 – 82	470 – 680	1000	–	16
	50 – 120	1000	–	–	18
	100 – 150	1500	2200	–	22
12KV	–	100	–	–	10
	–	220 – 330	–	–	12
	–	470	–	–	14
	–	680	1000	–	16
	–	1200	1500	–	20
15KV	–	100 – 150	–	–	10
	–	220	–	–	12
	–	330 – 470	–	–	14
	–	680	–	–	18
	–	100	1000	–	22

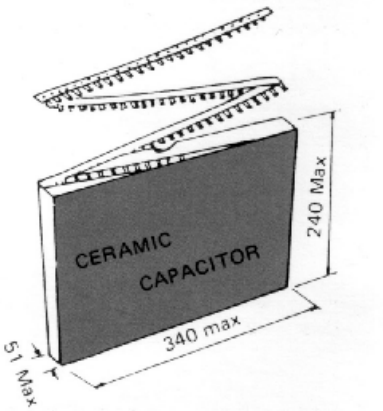
2500PCS/REEL
5000PCS/BOX

T/REEL



RADIAL TYPE
T/BOX

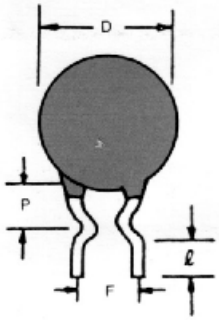
2000PCS/BOX



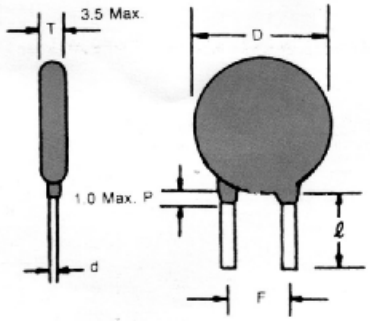
REMARK: CUSTOMER DESIGN AVAILABLE UPON REQUEST.

Fig. 3 (Lead Shape)

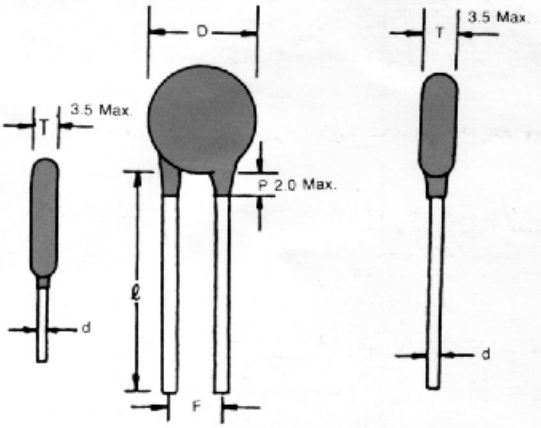
(6-1) K Type



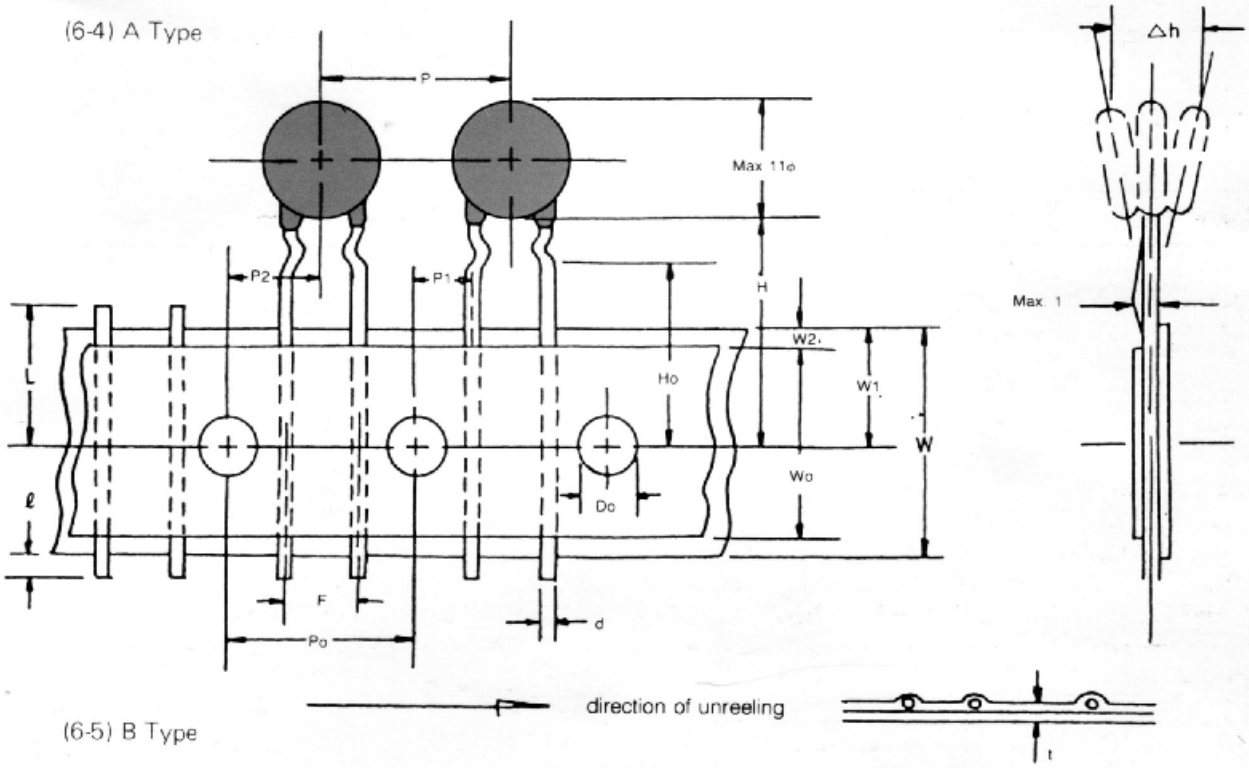
(6-2) S Type



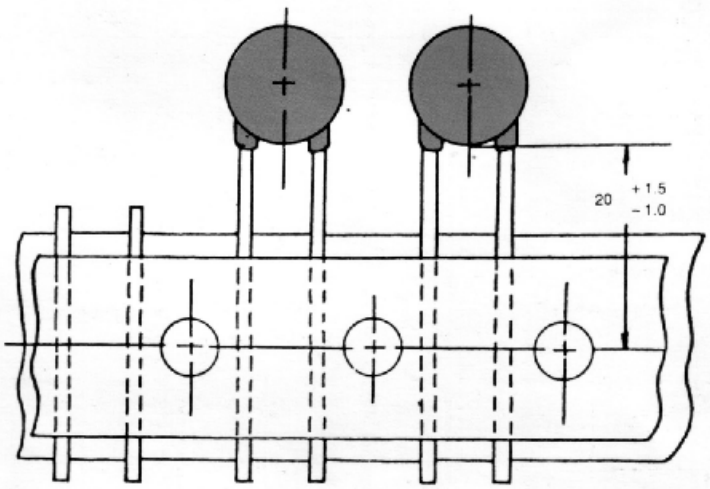
(6-3) L Type



(6-4) A Type



(6-5) B Type



Unit: mm

Symbol	P	P_0	P_1	P_2	d	F	△h	W	W_0	W_1	W_2	ℓ	D_0	t	L	H	H_0
Dimension	12.7	12.7	3.85	6.35	0.6	5	0	18	12.5	9	3	2	4	0.7	11	20	16
Tolerance	±1	±0.3	±0.7	±1.3	+0.06 −0.05	±0.8	±2	$\pm\frac{1}{0.5}$	Min	+0.75 −0.5	Max	Max	±0.3	±0.2	Max	+1.5 −1.0	±0.5