

Data Sheet

Customer: _____

Product: High Voltage Ceramic Disc Capacitor _____

Type : K _____

Issued Date : 29-May-2023 _____

Edition: Ver. 5 _____

Record of change

Date	Ver.	Description	Page
30-Dec.-2016	1		
01-Feb.-2023	2	Revised Part No.	
01-March-2023	3	Add Lead Shape (Vertical crimped)	2,4
07-April-2023	4	Add Rated Voltage (D.C.) 3.15KV > 3K1	2
29-May-2023	5	Add Rated Voltage 1KV Dia. & spec.	2,3

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Prepared by	Checked by	Approved by	Accepted by (customer)
29-May-2023	29-May-2023	29-May-2023	
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SPECIFICATION

1. Operating temperature range: -25°C~+85°C
2. Rated working voltage: 1KV to 15KV
3. Capacitance: Within tolerance for Class I at 1MHz / Class II at 1 KHz, 1 to 3Vrms, 25°C
4. Test voltage: 1KV : 2.5 times , 2KV & above: 2 times rated voltage , 3 ~ 5KV: 1.75 times, 6 ~ 15KV: 1.5 times. 50mA max charging current for 1 ~ 5 seconds.
5. Dissipation factor/Q factor:

Class I: 1MHz, 1 TO 3Vrms, 25°C	Class II: 1KHz, 1 TO 3Vrms, 25°C
C≤30PF..... Q≥400+20C	Y5P, Z5U..... 2.5% Max
C>30PF..... Q≥ 1,000	Z5V 5% Max
6. Insulation Resistance: 10,000 MΩ or 200 MΩ.μF, whichever is smaller.
7. Humidity test: Per EIA RS198-C, Method B3, Condition B. ΔC/C: 30% Max for Z5V, 20% Max for others.
8. Life test: Per EIA RS198-C, Method C2, Condition C at 85±2°C and 200% rated working voltage.
ΔC/C: 30% Max for Z5V, 20% Max for others.. DF: 5% max for Z5V, 3% Max for others. I.R.: 10,000 MΩ Min.

Part No. Designation

Example	K	P	6K3	221	K	-	L	0	1	8	B	D	11.5
	(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)	(10)	(11)	(12)

1. High Voltage—Type'K'

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

CLASS I : N (CH) , S (SL)

CLASS II : P (Y5P), Z (Z5U), V (Z5V)

3. Rated Voltage (D.C.)

Code	Voltage	Code	Voltage
1K0	1000V	6K0	6000V
2K0	2000V	6K3	6300V
3K0	3000V	8K0	8000V
3K1	3150V	10K	10000V
4K0	4000V	15K	15000V
5K0	5000V		

4. Rated Capacitance

100PF ~ 47000PF in E-24 Series Coded by

Two Significant digits + No. of Zero

5. Tolerance On Rated Capacitance

J = ±5%, K = ±10%, M = ±20%, Z = +80 ~ -20 %

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

Code	Type	
K	Bulk	Short Kink
S		Short Straight
L		Long Straight
V		Vertical Crimped
A	Taping	Inside kink
B		Straight
V		Vertical Crimped

7. Lead Spacing. (F)

Code	Dimension. (mm)		
	K	S	L
5	5.0 ± 0.8		
6	6.35 ± 0.8		
7	7.5 ± 0.8		
0	9.5 ± 0.8		

8. Lead Length. (L)

Code	Dimension (mm)		
	K	S	L
5	5.0 ± 0.8	5.0 ± 0.8	
6	6.0 ± 0.8	6.0 ± 0.8	
0	10.0 ± 0.8	10.0 ± 0.8	
1	---	---	25min

9. Lead Wire. (d)

Code	Dia (φ mm)	Rated Voltage (D.C.)
6	0.6 ± 0.05	1KV~ 8KV
8	0.8 ± 0.05	6KV~ 15KV

10. Package

Code	Package	Q'ty
B	Bulk	1000pcs
A	Ammo Pack	2000pcs
R	Tape Reel	2500pcs

11. Extra Diameter Code : D

12. Diameter in mm

Code	Dia (Ø mm)
9	9
11.5	11.5

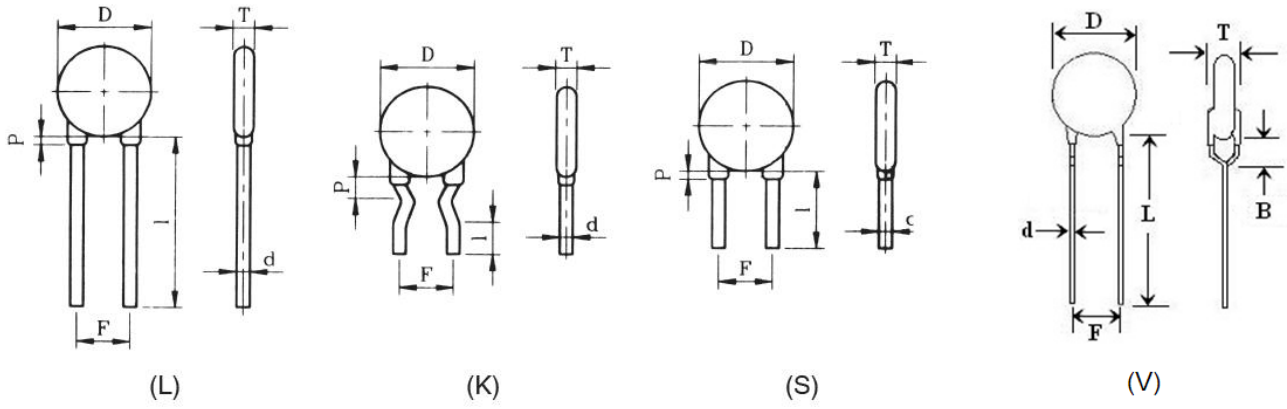
HIGH VOLTAGE CERAMIC CAPACITORS 1KV-15KV

RATED VOLTAGE (DC)	Temperature Characteristic / Capacitance (pF)					Size max
	N (CH)	S(SL)	P (Y5P)	Z (Z5U)	V (Z5V)	Dia (Ø mm)
1KV			100 – 560	1000 – 1500	1000 – 2200	5.5
			680 – 1000	1800 – 2200	3300	6.5
				3300	4700	7.5
			2200	4700	10000	9.5
			3300	10000		11.5
			4700		22000	12.5
				22000	30000	14.5
			10000		33000	16.5
				47000	18.5	
2KV	1 – 27	10 – 68	100 – 470	1000 – 1500	1000 – 1500	6.5
	30 – 39	80 – 100	560 – 1000	1800 – 2700	1800 – 2700	7.5
	47 – 68	120 – 150	1200 – 1500	3000 – 3900	3000 – 5000	8.5
	-	180 – 220	1800	4700 – 5000	5600 – 6800	9.5
	75 – 82	270 – 300	2200	5600 – 6800	10000	10.5
	-	330 – 390	3300	10000	-	11.5
	100 – 120	-	-	-	-	12.5
	-	470	3900 – 5000	-	15000 – 18000	14.5
	-	-	5600 – 6800	15000 – 18000	20000 – 22000	15.5
	-	560	-	-	-	16.5
	-	-	10000	20000 - 22000	-	17.5
3KV	1 – 18	10 – 56	100 – 470	1000	1000	6.5
	20 – 30	68 – 82	560 – 680	1200	1200 – 2000	7.5
	33	100	820 – 1000	1500 – 1800	2200 – 2700	8.5
	-	120 – 150	-	2000 – 2700	3000 – 5000	9.5
	36 – 47	180	1200 – 1500	3000 – 3900	5600 – 6800	10.5
	-	200	1800 – 2200	4700 – 5000	8200	11.5
	56 – 68	-	-	-	-	12.5
	-	220 – 300	2700 – 3300	5600	-	13.5
	82	-	-	6800	-	14.5
	-	330	3900 – 4700	8200 – 10000	10000	15.5
	100	390	-	-	-	16.5
	-	470 – 560	-	-	-	18.5

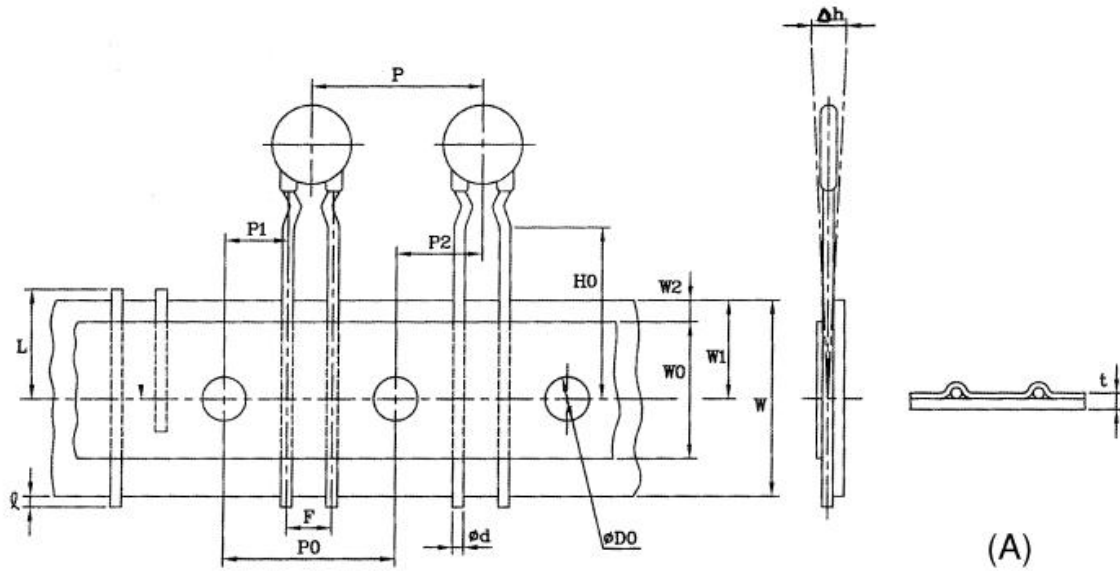
**For voltage higher than 3KV, please contact us for separate data sheet with the diameter of disc capacitors.

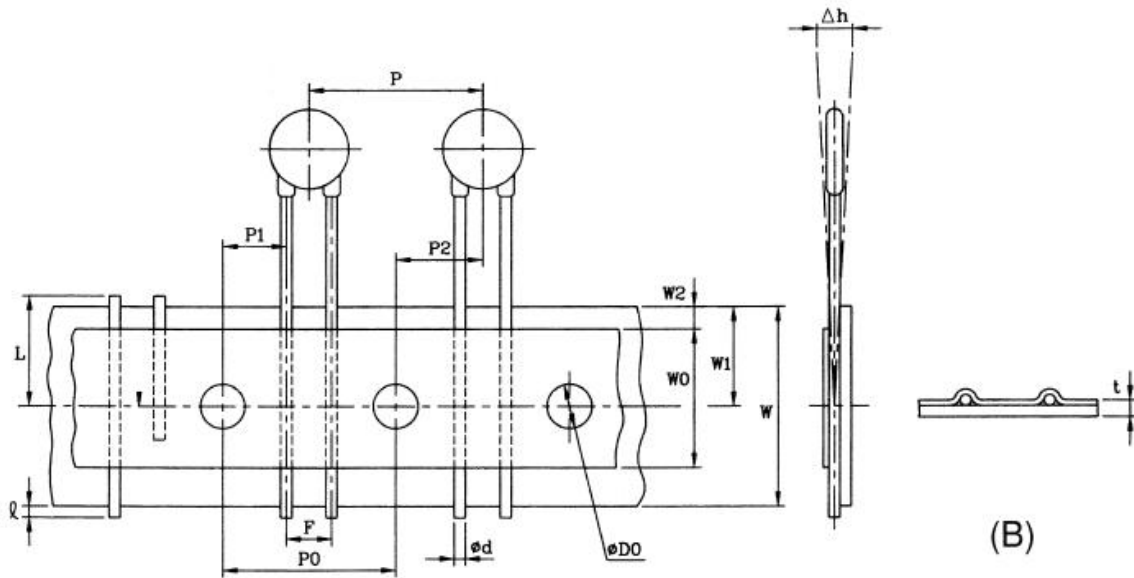
**All product specifications are subject to change without notice. Please confirm before you order.

Lead Shape (Fig. 3)



Taping Specification





Symbol	P	P ₀	P ₁	P ₂	φd	F	Δh	W	W ₀	W ₁	W ₂	D ₀	t	L	H	H ₀
Dimension	12.7	12.7	3.85	6.35	0.6	5.08 6.35 7.62	0	18	12.5	9	3	4	0.7	11	20.0 23.0	16.0 18.0
Tolerance	±1.0	±0.3	±0.7	±1.0	±0.05	+0.8 -0.2	±2	±0.5	Min	+0.75 -0.5	Max	±0.3	±0.2	Max	+1.5 -1.0	±0.5