

Data Sheet

Customer: _____

Product: High Voltage Ceramic Disc Capacitor _____

Type : K _____

Issued Date : 16-May-2024 _____

Edition: Ver. 7 _____

Record of change

Date	Ver.	Description	Page
30-Dec.-2016	1		
01-Feb.-2023	2	Revised Part No.	
01-Mar.-2023	3	Add Lead Shape (Vertical crimped)	2,4
07-Apr.-2023	4	Add Rated Voltage (D.C.) 3.15KV > 3K1	2
29-May-2023	5	Add Rated Voltage 1KV Dia. & spec.	2,3
15-Dec.-2023	6	Add Temperature Coefficient & Revise Capacitance size max.	3,4
16-May-2024	7	Revised Test voltang within 3.15KV-2 times,3.15KV above-1.5 times	2

HITANO ENTERPRISE CORP.

7F-7, No. 3, Wu Chuan 1st Road, New Taipei Industrial
Park, New Taipei City, TAIWAN, R.O.C.

Tel: +886 2 2299 1331 (Rep.)

Fax: +886 2 2298 2466, 2298 2969

Prepared by	Checked by	Approved by	Accepted by (customer)
16-May-2024	16-May-2024	16-May-2024	
Randy Yu	Michelle Lin	Arthur Su	

SPECIFICATION

- Operating temperature range: -25°C~+85°C
- Rated working voltage: 1KV to 15KV
- Capacitance: Within tolerance for Class I at 1MHz / Class II at 1KHz, 1 to 3Vrms, 25°C
- Test voltage: 1KV to 3.15KV: 2 times rated voltage with 50mA max charging current.
4KV and above: 1.5 times rated voltage with 50mA max charging current.
- 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, Y5U 2.5% Max
C>30PF..... Q≥ 1,000	Z5V, Y5V 5% Max
- Insulation Resistance: 10,000 MΩ or 200 MΩ.μF, whichever is smaller.
- Humidity test: Per EIA RS198-C, Method B3, Condition B. ΔC/C: 30% Max for Z5V, 20% Max for others.
- 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	2K0	221	K	-	L	5	1	6	B	D	7
	(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 : S (SL)

CLASS II : P (Y5P), Z (Z5U), V (Z5V), U (Y5U), Y (Y5V)

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

10PF ~ 33000PF in E-24 Series Coded by Two

Significant digits + No. of Zero

5. Tolerance On Rated Capacitance

Code	Tolerance	Rated T.C.
J	±5%	S
K	±10%	P
M	±20%	P, Z, Y, U
Z	+80-20%	Z, V, Y, U

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 (ψmm)	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 (∅ mm)
9	9
24	24

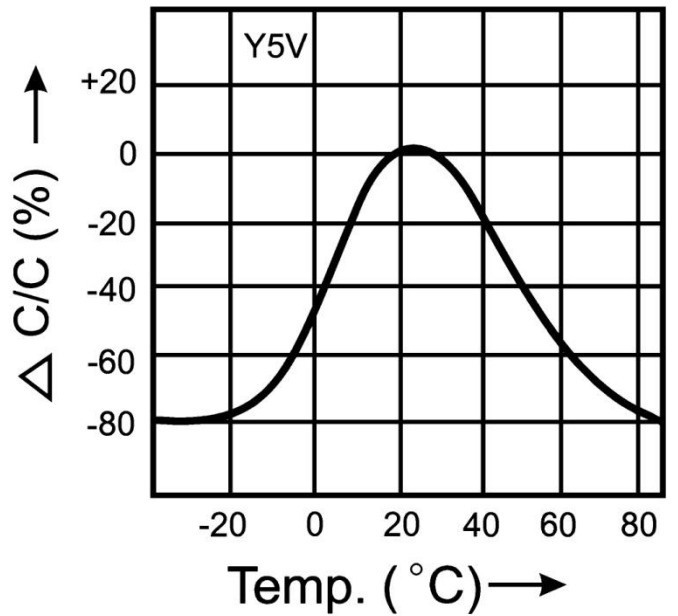
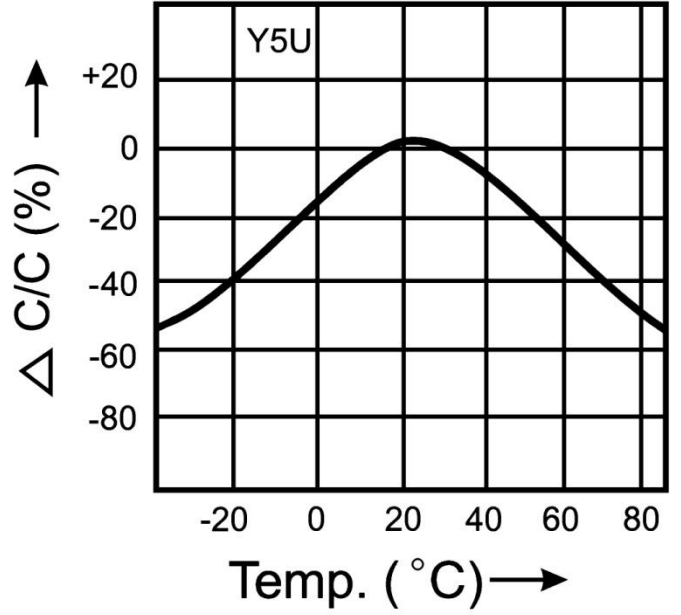
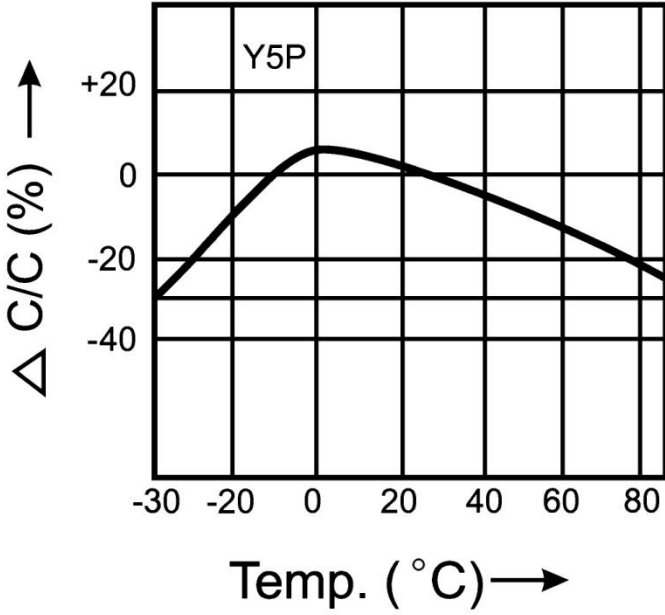
HIGH VOLTAGE CERAMIC CAPACITORS 1KV-15KV

RATED VOLTAGE (DC)	Temperature Characteristic / Capacitance (pF)					Size max
	N (CH)	S(SL)	P (Y5P)	Z (Z5U/Y5U)	V (Z5V/Y5V)	Dia (Ø mm)
1KV		10-22	100 – 560	1000 – 1200	1000 – 2200	6
		33-68	680 – 1000	1500 – 2200		7
		100-150		3300	3300	8
		220	1500-2200		4700	9
				4700	10000	10
		330	3300	10000		12
			4700			13
		470			22000	14
				22000	30000-33000	16
			10000			17
				10000	27	
2KV		10 – 68	100 – 470	1000	1000	7
		82	560 – 1000		1500 – 2200	8
		100		2200	3000 – 4700	9
		150	1500-2200	3300	5600	11
		220	3300	4700	10000	12
		330		5600-6800		14
		470	4700	10000	20000-22000	16
			5600	15000	33000	18
			6800	20000 – 22000		21
			10000			24
3KV		10-47	100-330		1000	7
		56-68	470-560	1000	1500	8
		82-100	680-1000	1500	2200	9
		120		2200	3300	10
		150	1500	3300	4700	11
		180			6800	12
		220	2200	4700-5600	8200	14
		330	3300	6800	10000	16
		390-470	4700	10000	15000	18
					20000-22000	20
					33000	24

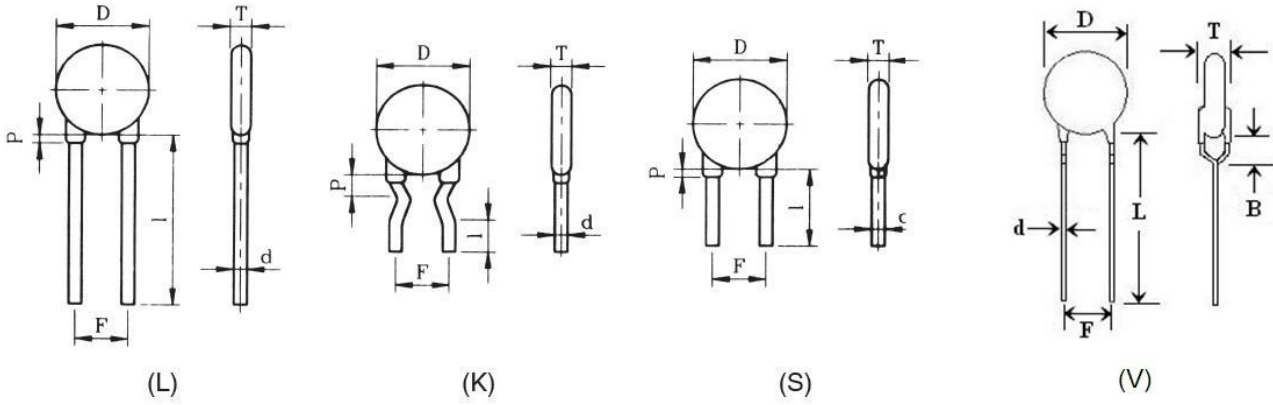
**For voltage higher than 3KV, please contact us for separate data sheet with the diameter of disc capacitors.

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

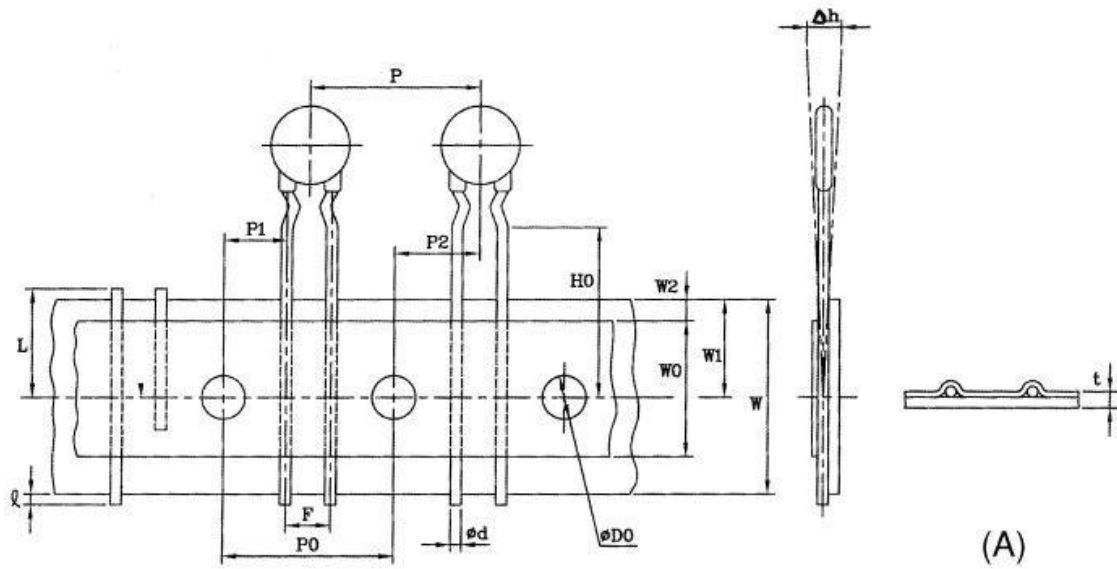
13. Temperature Coefficient

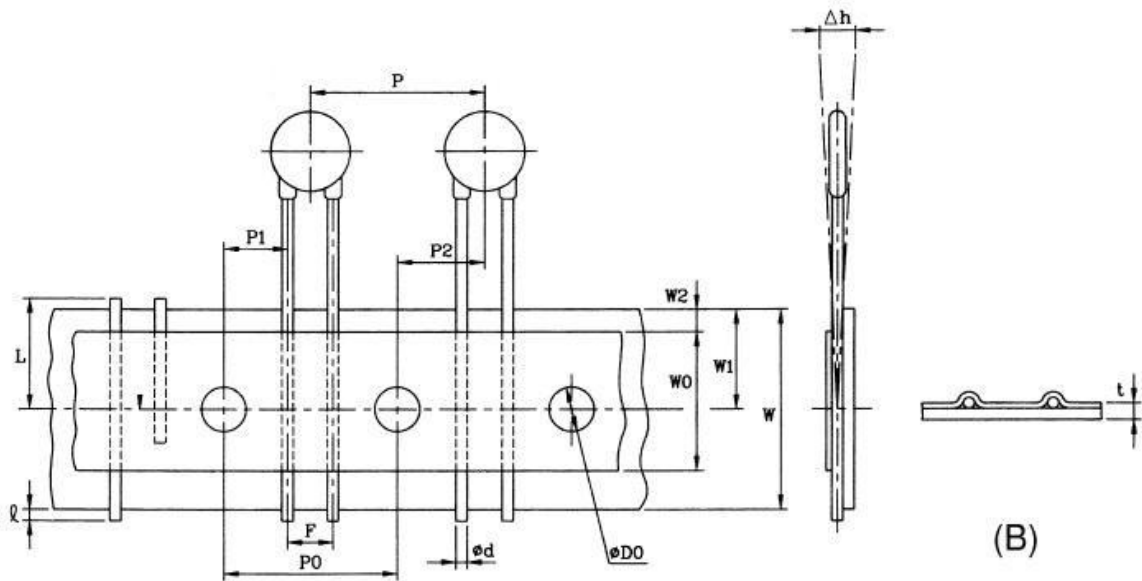


Lead Shape (Fig. 3)



Taping Specification





Symbol	P	P ₀	P ₁	P ₂	∅d	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