

# Lead Type Disc High Voltage Ceramic Capacitors-HV Series (500VDC-6.3KVDC) Data Sheet

## Feature

- Wide capacitance range from 100pF to 100000pF
- Operating Temperature:  $-25^{\circ}\text{C} \sim 85^{\circ}\text{C}$
- Storage Temperature:  $15^{\circ}\text{C} \sim 35^{\circ}\text{C}$
- The high voltage disc ceramic capacitors have feature of withstanding higher voltage

## Applications

- These capacitors are used in bypass and coupling circuit, and those capacitors with low dissipation factor are particularly suitable to be used in circuits such as line scanning in Tvset

## Part Number Code

N	07	F	1	B	472	M	N0	B	0	S	0	N	0
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<b>Rated Voltage</b> L: 500VDC N: 1KVDC R: 2KVDC S: 3KVDC C:3.15KVDC T: 4KVDC W: 5KVDC A: 6KVDC Y: 6.3KVDC	<b>Pitch</b> A:2.5mm B:5.0mm E:7.5mm D:10.0mm	<b>Tolerance</b> C:±0.25pF J±5% :K:±10% M:±20%	<b>Package</b> B: Bulk T:Tape	<b>Inner Management</b>	<b>Nominal capacitance</b> 10:100pF 100:101pF 222:2200pF 103:10000pF	<b>Environmental Standard</b> 0:RoHS 2:RoHS+Halogen-Free	<b>Foot Type</b> 1:Long straight 2:Outside Crimped 3:Short Straight 4:Inner Crimped 8:Vertical Crimped	<b>Core Diameter</b> 04: 4.0mm 05: 5.0mm 16: 16.0mm C0: 5.0mm C4: 5.4mm C6: 5.6mm	<b>Temperature Characteristic</b> A:NP0 S:SL B:Y5P E:Y5U F:Y5V	<b>Lead Length</b> S0~S9:1.0~1.9mm X0~X9:2.0~2.9mm A0~A9:3.0~3.9mm B0~B9:4.0~4.9mm C0~C9:5.0~5.9mm D0~D9:6.0~6.9mm E0~E9:7.0~7.9mm	<b>Lead Length</b> F0~F9:8.0~8.9mm G0~G9:9.0~9.9mm H0~H9:10.0~10.9mm J0~J9:11.0~11.9mm K0~K9:12.0~12.9mm L0~L9:13.0~13.9mm M0~M9:14.0~14.9mm	<b>Lead Length</b> M0~M9:14.0~14.9mm N0:16~27.0mm(Bulk) <b>Crimped Lead Taped</b> N0:H0=16.5mm P0:H0=17.0mm Q0:H0=19.0mm <b>Straight Lead</b> Q0:20.0mm

## Specifications

<b>Capacitance and Dissipation factor testing condition</b>	SL/NP0:25℃、1±0.1MHz、1.0Vrms Y5P/Y5U/Y5V:25℃、1±0.1MHz、1.0Vrms
<b>Dissipation Factor(tanδ)</b>	SL/NP0:≤0.15% Y5P/Y5U/Y5V:≤2.5%
<b>Rated Voltage</b>	500VDC、1000VDC、2000VDC、3000VDC、4000VDC、5000VDC、6000VDC
<b>Withstand Voltage</b>	1.5U <sub>R</sub> +500V(DC)
<b>Insulation Resistance (I.R.)</b>	SL/NP0:IR≥10000MΩ;Y5P/Y5U/Y5V:IR≥4000MΩ
<b>Temperature Characteristic</b>	SL、NP0、Y5P、Y5U、Y5V

## Dimensions (mm)



Rated Voltage (VDC)	Temperature Coefficient Group					Dimension (mm)		Lead Size (mm)			
	Y5P (B)	Y5U (E)	Y5V (F)	SL	NP0	D±1	T±1	F	d±0.05		
Nominal Capacitance (pF)											
500	100-1500	1500-2200	3300-4700	20-150	0.5-22	5.5	2.0	5.0±0.8	0.5		
	/	3300-4700	6800	/	/	6.5					
	2200	5600-6800	6800-10000	/	/	7.5					
	3300	10000	/	/	/	9.5					
	4700	/	20000-22000	/	/	10.5	2.5	7.5±0.8	0.6		
	10000	/	/	/	/	14.5					
	/	/	47000	/	/	17.0					
	/	/	100000	/	/	20.0					
1000	100-820	/	/	20-100	0.5-22	5.5	2.5	5.0±0.8	0.5		
	1000	/	/	/	/	6.0					
	/	1500-3300	4700-6800	/	/	6.5					
	1500-1800	4700-5600	/	/	/	7.5					
	2200-2700	/	10000	/	/	8.5					
	/	6800	15000	/	/	9.5					
	3300	10000	/	/	/	10.5					
	4700	/	/	/	/	11.5					
	/	/	20000-22000	/	/	13.0				7.5±0.8	0.6
	/	/	33000	/	/	15.0					
	10000	/	47000	/	/	17.5					
	/	/	100000	/	/	22.5					
2000	100-470	1000	1500-2200	/	/	6.0	2.5/3.0	5.0±0.8	0.5		
	560-820	/	3300	10-120	0.5-10	7.0					
	1000	2200	4700	68	/	8.0					
	1500	4700	6800	/	/	10.0	3.0	7.5±0.8	0.6		
	1800-2200	/	10000	/	/	11.0					
	2700	/	/	/	/	12.0					
	3300	/	/	/	/	13.0					
	2200	/	/	/	/	14.0					
	4700	10000	20000-22000	/	/	14.5					

Rated Voltage (VDC)	Temperature Coefficient Group					Dimension (mm)		Lead Size (mm)	
	Y5P(B)	Y5U(E)	Y5V(F)	SL	NPO	D±1	T±1	F	d±0.05
	Nominal Capacitance (pF)								
3000	100-470	680-1000	1500	27-68	3-22	6.0	3.0/3.5	7.5±0.8	0.6
	270-680	/	2200	/	/	7.0	3.5		
	/	1500	3300	82	/	8.0			
	1000	2200	4700	/	/	9.0			
	/	3300	6800-10000	/	/	11.0		10.0±0.8	0.6/0.7
	/	4700	10000	/	/	13.0			
	/	10000	/	/	/	17.5			
	/	/	20000-22000	/	/	20.5			
3150	100-470	1000	1500	10-39	/	6.0	3.5	7.5±0.8	0.6
	680	/	2200	47-68	/	7.0			
	/	1500	3300	82	/	8.0			
	1000	2200	4700	/	/	9.0			
	1500	3200	/	/	/	11.0	10.0±0.8	0.7	
	2200	4700	/	/	/	13.0			
	/	/	10000	/	/	14.0			
	/	10000	/	/	/	17.5			
4000	100-470	680-1000	1500	10-68	3-22	6.0	3.0/3.5	7.5±0.8	0.6
	270-680	/	2200	/	/	7.0	3.5		
	/	1500	3300	82	/	8.0			
	1000	2200	4700	/	/	9.0			
	/	3300	6800-10000	/	/	11.0		10.0±0.8	0.6/0.7
	/	4700	10000	/	/	13.0			
	/	10000	/	/	/	17.5			
	/	/	20000-22000	/	/	20.5			
5000	100-220	330-470	1000	10-39	/	6.0	3.5/4.5	10.0±0.8	0.6/0.7
	330	560-1000	1500	47-56	/	7.0	4.5		
	470	/	2200	68-82	/	8.0			
	560-680	1500	/	/	/	9.0			
	/	2200	3300	/	/	10.0		13.5	16.5
	1000	/	4700	/	/	11.0			
	/	3300	/	/	/	13.5			
	/	4700	/	/	/	16.5			

Rated Voltage (VDC)	Temperature Coefficient Group					Dimension (mm)		Lead Size (mm)	
	Y5P(B)	Y5U(E)	Y5V(F)	SL	NPO	D±1	T±1	F	d±0.05
	Nominal Capacitance (pF)								
6000	100-220	330-470	1000	10-39	/	6.0	3.5/4.5	10.0 ±0.8	0.6/0.7
	330	560-1000	1500	47-56	/	7.0	4.5		
	470	/	2200	68-82	/	8.0			
	560-680	1500	/	/	/	9.0			
	/	2200	3300	/	/	10.0			
	1000	/	4700	/	/	11.0			
	/	3300	/	/	/	13.5			
	/	4700	/	/	/	16.5			
6300	100-220	1000	/	10-39	/	6.0	3.5/4.5	10.0 ±0.8	0.6/0.7
	330	/	/	47-68	/	7.0	4.5		
	470	/	2200	82	/	8.0			
	680	/	/	/	/	9.0			
	1000	2200	3300	/	/	10.0			
	/	/	4700	/	/	11.0			

## Lead Configuration

Lead Style	Drawing	Lead Length L (mm)	Coating Lead Length C (mm)
Long Straight		16.0 min	① C ≤ 2.5mm (Product diameter < 12mm)  ② C ≤ 3.0mm (Product diameter ≥ 12mm)
Short Straight		① [2.5 ≤ L < 6.0] ± 0.5; ② [6.0 ≤ L ≤ 10] ± 1.0	① C ≤ 2.5mm (Product diameter < 12mm)  ② C ≤ 3.0mm (Product diameter ≥ 12mm)
Outside Crimped		① [2.5 ≤ L < 6.0] ± 0.5; ② [6.0 ≤ L ≤ 10] ± 1.0	Not exceed the bend point
Inner Crimped		① [2.5 ≤ L < 6.0] ± 0.5; ② [6.0 ≤ L ≤ 10] ± 1.0	Not exceed the bend point
Vertical Crimped		① [2.5 ≤ L < 6.0] ± 0.5; ② [6.0 ≤ L ≤ 10] ± 1.0	Not exceed the bend point

## Taping And Dimensions (mm)

Figure	Fig.1		Fig.2				
	Symbol	P=5.0	P=7.5		P=10.0		
	Po	12.7±0.3	12.7±0.3	12.7±0.3			
	P	12.7±1.0	25.4±1.0	25.4±1.0			
	P1	3.85±0.7	8.95±0.7	7.7±0.7			
	P2	6.35±1.3	12.7±1.3	12.7±1.3			
	F	5±0.8	7.5±0.8	10.0±0.8			
	Δh	0±2.0	0±2.0	0±2.0			
	W	18.0+1.5/-1.0	18.0 +1.5/-1.0	18.0 +1.5/-1.0			
	Wo	10.5 Max	10.5 Max	10.5 Max			
	W1	9.0+0.75/-0.5	9.0+0.75/-0.5	9.0+0.75/-0.5			
	W2	3.0 Max	3.0 Max	3.0 Max			
	Do	4.0±0.2	4.0±0.2	4.0±0.2			
	H	20+1.5/-1.0	20+1.5/-1.0	20+1.5/-1.0			
	Ho	16.5&17.0&19.0 +1.5/-1.0	16.5&17.0&19.0 +1.5/-1.0	16.5&17.0&19.0 +1.5/-1.0			
	L	Straight Lead	Crimped Lead	Straight Lead	Crimped Lead	Straight Lead	Crimped Lead
		11.0 Max	9.0 Max	11.0 Max	9.0 Max	11.0 Max	9.0 Max
	t1	0.5±0.2	0.5±0.2	0.5±0.2			
	Fig.2 (P=7.5 & 10)	t2	1.7 Max	1.7 Max	1.7 Max		