

Ceramic Disc Capacitors

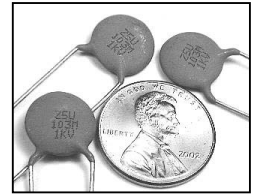
NCD Series High Voltage

HIGH VOLTAGE TYPE

FEATURES

- 2KV, 3KV AND 5KV VOLTAGE RATINGS
- HIGH PERFORMANCE AND RELIABILITY
- ECONOMICALLY PRICED
- AVAILABLE WITH FORMED LEADS
- TAPE PACKAGING OPTION FOR AUTOMATIC INSERTION

*See Part Number System for Details

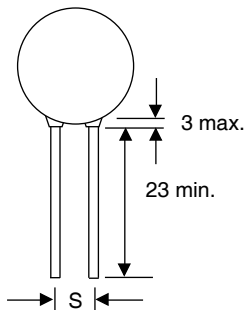


SPECIFICATIONS

Temperature Characteristics	NPO	SL	N3300	Y5P	Z5U	Z5V
Operating Temperature Range	-30°C ~ +85°C				+10°C ~ +85°C	
Capacitance Change Over Temperature Range	0±30ppm	N330 ± 500ppm	-13% ~ +12%	±10%	+22% ~ -56%	+22% ~ -82%
Dissipation Factor	0.1% max.		0.3% max.	2.5% max.	5% max.	
Insulation Resistance	Minimum 10,000 Megohms					
Dielectric Withstanding Voltage (Test Voltage)	2.5 Times Rated Voltage For Not Less Than 1 Second, 50mA Maximum					
Test Conditions	≤1,000pF; 1MHz, 1.2Vrms Max., >1,000pF; 1KHz, 1.2Vrms Max.			1KHz, 1.0V ±0.2Vrms Max.	1KHz, 0.5V ±0.1Vrms Max.	

TEMPERATURE CHARACTERISTICS: See Class I and Class II Data Sheets

Standard



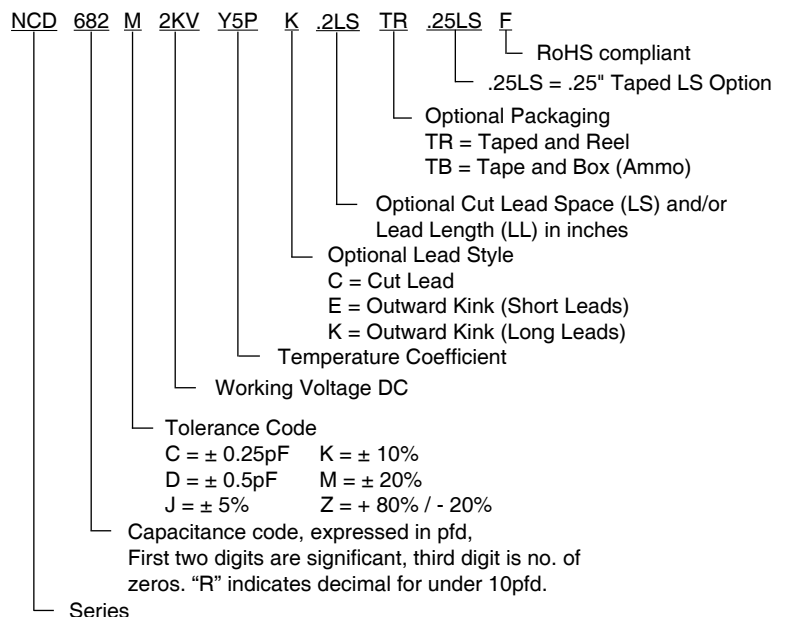
LEAD SPACING AND DIAMETER(mm)

Voltage Rating	Lead Spacing - S Bulk ±0.8mm	Lead Spacing - S Tape & Reel/Tape & Box	Lead Diameter ±0.05
2KVdc	(7~10mm Dia.):6.35mm (12~22mm Dia.):9.5mm	(7~10mm Dia.):6.35mm (12~22mm Dia.):9.5mm*	0.6mm
3KVdc	(7~10mm Dia.):6.35mm (12~22mm Dia.):9.5mm	(7~10mm Dia.):6.35mm (12~22mm Dia.):9.5mm*	(7~10mm Dia.):0.6mm (12~22mm Dia.):0.8mm
5KVdc	(7~10mm Dia.):6.35mm (12~22mm Dia.):9.5mm	(7~10mm Dia.):6.35mm (12~22mm Dia.):9.5mm*	0.8mm

*All values are not available on tape. Consult factory for availability and leadspac options.

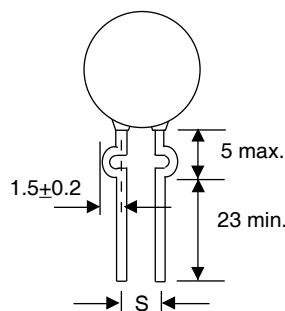
THICKNESS 5 ~ 7MM DEPENDENT ON CV

(thinner parts available by special order)

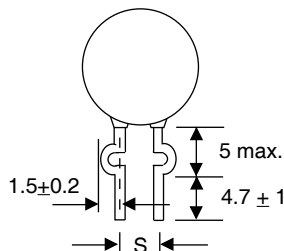


Voltage Ratings 4KVDC and Higher Have Resin Body Coating.

K Style



E Style



(BULK AND TAPED STYLES)

®

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NCD Series High Voltage

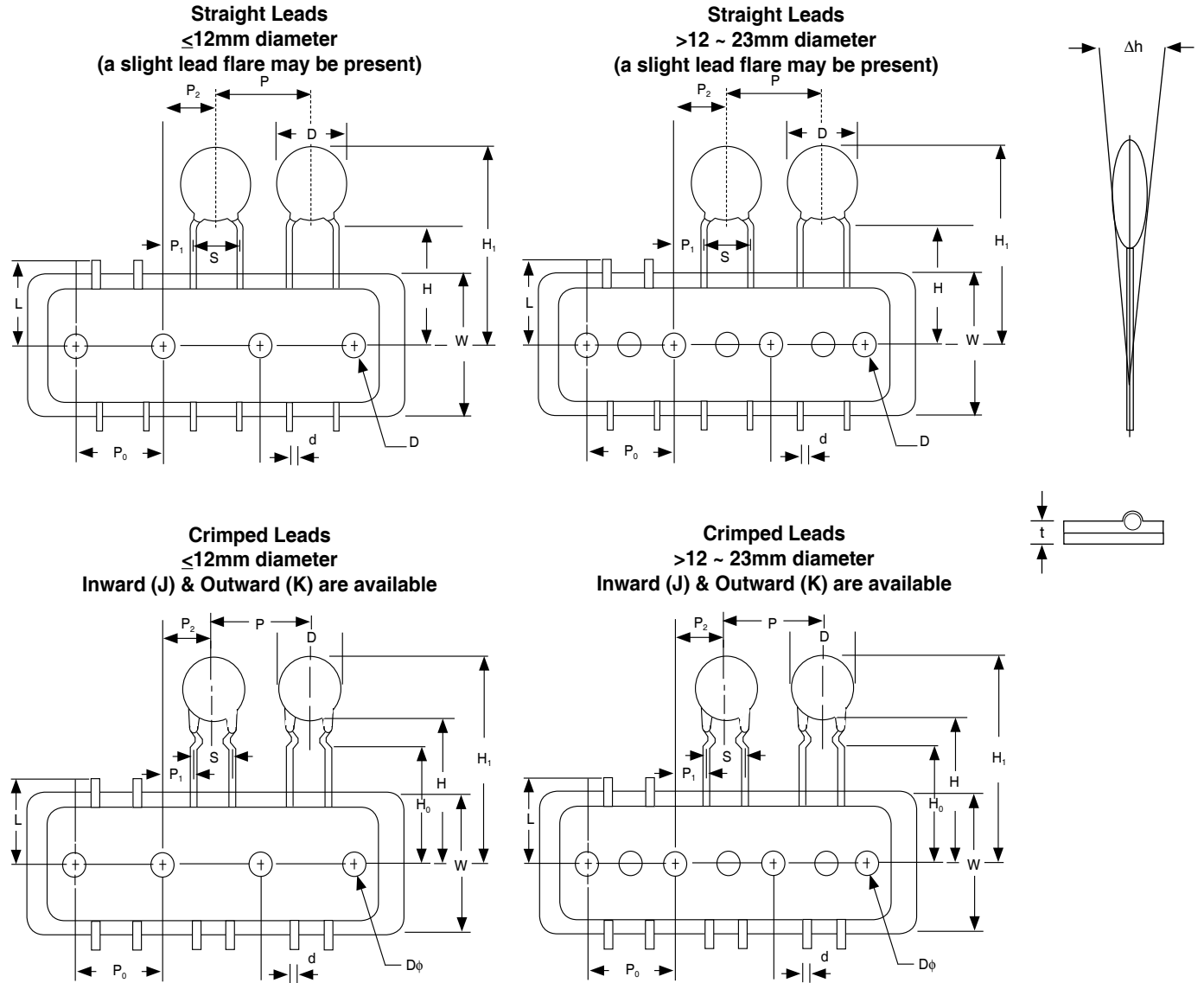
STANDARD PRODUCTS AND MAXIMUM DIAMETER (mm) BY T.C. AND VOLTAGE

Cap. (pF)	NPO			SL			Y5P			Z5U			Z5V		
	Working Voltage (Vdc)														
	2K	3K	5K	2K	3K	5K	2K	3K	5K	2K	3K	5K	2K	3K	5K
1.0 ~12	7	8	9	7	8	8									
15 ~ 27	8	9		7	8	8									
33	9	10		7	8	9									
39	9	10		7	8	9									
47	10	12		7	8	9									
68	12	12		8	9	10									
82				8	10	12									
100				9	10	12	7	8	8						
120				9	12	12	7	8	8						
150				10	12	14	7	8	8	8	8				
180				10	14	16	7	8	8	8	8				
220				12	14	16	7	8	8	8	8				
270				14	16	18	7	8	8	8	8				
330				14	18	20	7	8	9	8	8				
470				16	18	22	7	8	10	8	8				
680				18	22		7	9	12	8	9				
820				20			8	10	14	8	9				
1000				22			9	12	14	7	8	12	7	8	9
1500							10	12	16	8	9	16	7	8	10
2200							12	14	20	9	10	16	8	9	12
3300							14	16	24	12	12	18	9	10	14
4700							16	18	26	12	16	18	10	12	16
5600							18	20		14	16	20	12	12	16
6800							20	22		14	18	22	12	14	18
8200							22			16	18	24	14	14	18
10,000										16	20		14	16	20
12,000										18	22		16	18	22
15,000										20			16	18	24
18,000										22			18	20	
22,000													18	22	
33,000													22		

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Taping Specifications

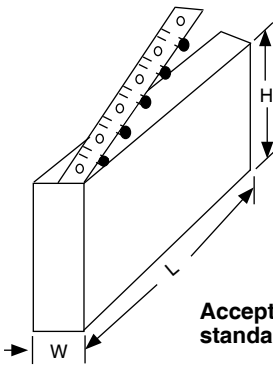
DIMENSIONS (mm)



Symbol	D max.	d	P	P ₀	P ₁	P ₂	S	H	H ₀	H ₁	D ϕ	W	L	t	Δh
Value	≤ 12	0.6	12.7	12.7	5.1	6.35	2.5	20.0	Applies to Parts with Crimped Leads	32.25 max.	4.0	18.0	11.0 max.	0.6	0.0
					3.85		5.0								
					3.18		6.35								
	$>12 \sim 23$	0.6 or 0.8*	25.4	8.95	12.7	7.5	16.0	H max. + D max.							
				7.7	9.5										
Tolerance	≤ 12	+0.06 -0.05	± 1.0	± 0.2	± 0.7	± 1.0	+0.8 -0.2	+1.5 -1.0	± 0.5	---	± 0.2	± 0.5	---	± 0.3	± 2.0
	$>12 \sim 23$				± 1.5										

*Lead diameter dependent on capacitor diameter. Contact NIC for details

AMMO PACK



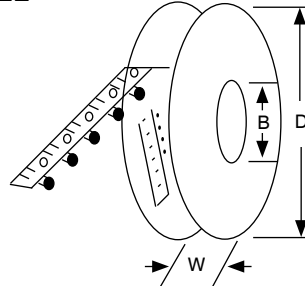
$$H \leq 372 \text{ (14.64")}$$

$$L \leq 377 \text{ (14.84")}$$

$$W \leq 55 \text{ (2.16")}$$

Acceptable to standard radial type cartridge.

REEL



$$D \leq 354 \text{ (13.93")}$$

$$B \geq 21 \text{ (.83") but}$$

$$\leq 30 \text{ (1.18")}$$

$$W \leq 55 \text{ (2.16")}$$

Acceptable to standard radial type cartridge with a few extra accessories.

PART NUMBER SUFFIX FOR OPTIONAL TAPE & REEL OR TAPE & BOX PACKAGING

Tape & Reel Straight Lead Options

TRF = Tape & Reel with 5mm lead-space
 TR.100LSF = Tape & Reel with 2.0mm lead-space
 TR.250LSF = Tape & Reel with 6.35mm lead-space
 TR.300LSF = Tape & Reel with 7.5mm lead-space
 TR.375LSF = Tape & Reel with 9.5mm lead-space

Tape & Reel Crimped Lead Options (J = Inward Crimp, K = Outward Crimp)

JTRF or KTRF = Tape & Reel with 5mm lead-space
 JTR.250LSF or KTR.250LSF = Tape & Reel with 6.35mm lead-space
 JTR.300LSF or KTR.300LSF = Tape & Reel with 7.5mm lead-space
 JTR.375LSF or KTR.375LSF = Tape & Reel with 9.5mm lead-space

Tape & Box Straight Lead Options

TBF = Tape & Reel with 5mm lead-space
 TB.100LSF = Tape & Reel with 2.0mm lead-space
 TB.250LSF = Tape & Reel with 6.35mm lead-space
 TB.300LSF = Tape & Reel with 7.5mm lead-space
 TB.375LSF = Tape & Reel with 9.5mm lead-space

Tape & Box Crimped Lead Options (J = Inward Crimp, K = Outward Crimp)

JTBF or KTBF = Tape & Reel with 5mm lead-space
 JTB.250LSF or KTB.250LSF = Tape & Reel with 6.35mm lead-space
 JTB.300LSF or KTB.300LSF = Tape & Reel with 7.5mm lead-space
 JTB.375LSF or KTB.375LSF = Tape & Reel with 9.5mm lead-space

Notes:

1. The above lead-space options may not be available in all part diameters. Contact NIC for details.
2. Inward "J style" and outward "K style" may not be available in all part diameters and voltages. Contact NIC for details.