



**TEMPERATURE COMPENSATING AND
TEMPERATURE STABLE TYPES (CLASS I)**

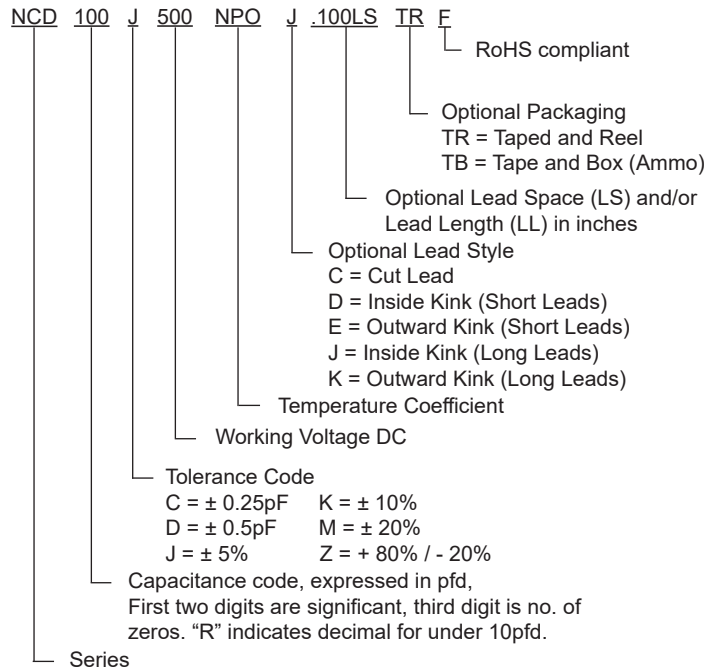
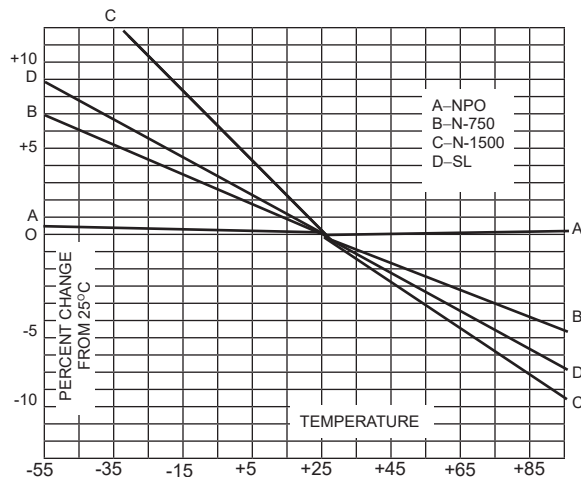


FEATURES

- PROVIDES AN ACCURATE, PREDICTABLE LINEAR CAPACITANCE CHANGE WITH VARIATIONS IN OPERATING TEMPERATURE
- NPO TYPES PROVIDE DRIFT FREE PERFORMANCE
- TIGHT TOLERANCES AVAILABLE
- AVAILABLE WITH FORMED LEADS AND ON TAPE

SPECIFICATIONS

Temperature Characteristics		NPO	N750	SL	N1500
Operating Temperature Range		-30°C ~ +85°C			
Capacitance Range		0.5 ~ 22pF	22 ~ 470pF	10 ~ 1000pF	22 ~ 1000pF
Standard Tolerance		±5% (J)			
Capacitance Change Over Temperature Range		±1%	-5% ~ +7.5%	-5% ~ +9%	-10% ~ +20%
Q Factor (Min. 1MHz)		1000 (C≥30pF) 400+20C (<30pF)			500 (C≥30pF) 200+10C (<30pF)
Insulation Resistance		Minimum 10,000 Megohms			
Temperature Coefficient		0±60ppm	N750±120ppm	N330±500ppm	N1500±250ppm
Working Voltage Range		50Vdc ~ 1KVdc			
Dielectric Withstanding Voltage (Test Voltage)		2.5 Times Rated Voltage For Not Less Than 1 Second, 50mA Maximum			
Load Life Test @ 85°C 1,000 Hours	Cap. Change	±3%	±15%	±30%	±50%
	Q Factor (min.)	Shall Conform To Initial Measurements Above			
I.R. (min.)		10,000 Megohms			
Test Conditions		<1,000pF; 1MHz, 1.2Vrms Max., ≥1,000pF; 1KHz, 1.2Vrms Max.			

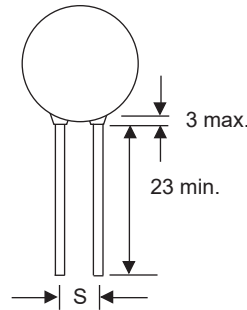




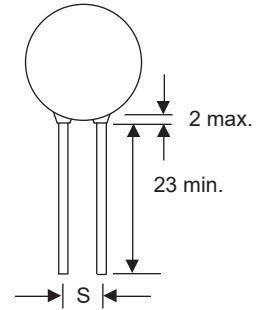
Lead Spacing (mm) - S				
Body Diameter	Standard Bulk	Standard T&R	Optional Bulk mm (inches)	Optional T&R mm (inches)
5 ~ 11	6.35 ± 0.8	5.0 ± 0.8	5.0 ± 0.8 (0.200LS)	2.5 ± 0.8 (0.100LS)
≥12	6.35 ± 0.8	5.0 ± 0.8	7.5 ± 0.8 (0.295LS)	7.5 ± 0.8 (0.295LS)*
			10.0 ± 0.8 (0.395LS)	10.0 ± 0.8 (0.395LS)*

*T&R 7.5mm & 10mm LS not available on 270pF, 330pF & 470pF N750 parts

Standard
500Vdc & Up



Low Voltage
100Vdc & Below



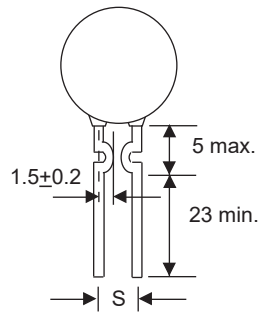
LEAD DIAMETER

0.6MM IS STANDARD

BODY THICKNESS

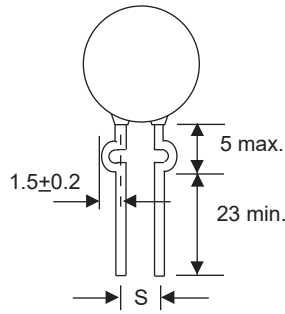
2 ~ 4MM DEPENDENT ON CV

J Style

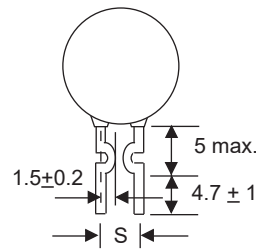


(BULK AND TAPED STYLES)

K Style

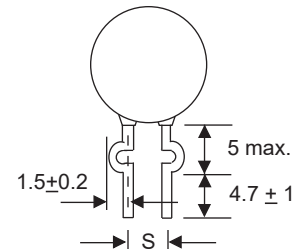


D Style



(BULK ONLY)

E Style

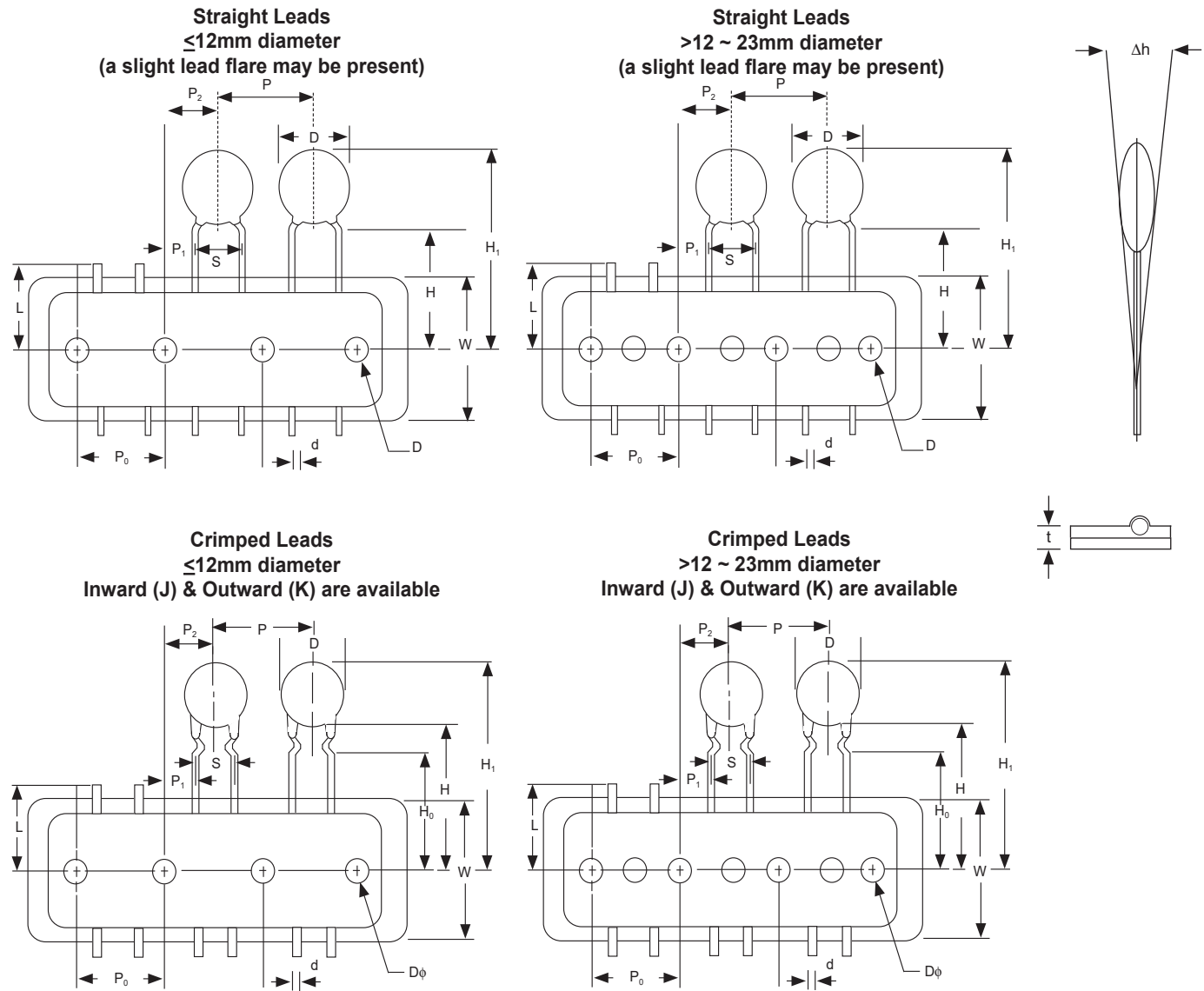


STANDARD PRODUCTS AND MAXIMUM DIAMETER (mm) BY T.C. AND VOLTAGE

Cap. (pF)	NPO			N750			SL			N1500		
	Working Voltage (Vdc)											
	50	100	500	1K	50	100	500	1K	50	100	500	1K
0.5 ~ 9.1	6	6	6	-	-	-	-	-	-	-	-	-
10	6	6	6	-	-	-	6	6	6	-	-	-
12	6	6	6	-	-	-	6	6	6	-	-	-
15	6	6	6	-	-	-	6	6	6	-	-	-
18	6	6	-	-	-	-	6	6	6	-	-	-
22	6	6	6	6	6	6	6	6	6	6	6	6
27	-	-	-	6	6	6	6	6	6	6	6	6
33	-	-	-	6	6	7	6	6	6	6	6	6
39	-	-	-	6	6	7	6	6	6	6	6	6
47	-	-	-	6	7	8	6	6	6	6	6	6
56	-	-	-	7	7	8	6	6	6	6	6	6
68	-	-	-	7	7	9	6	6	6	6	6	6
82	-	-	-	7	7	9	6	6	7	6	6	7
100	-	-	-	8	8	10	6	7	7	6	7	7
120	-	-	-	8	8	10	6	7	7	6	7	7
150	-	-	-	9	9	12	6	8	8	6	7	8
180	-	-	-	9	9	14	6	8	8	6	8	8
220	-	-	-	10	10	16	7	9	9	7	9	9
270	-	-	-	12	12	-	8	9	10	8	9	10
330	-	-	-	14	14	-	8	12	12	8	12	12
470	-	-	-	16	16	-	9	14	14	9	14	14
560	-	-	-	-	-	-	10	14	14	10	14	14
680	-	-	-	-	-	-	11	16	16	10	16	16
750	-	-	-	-	-	-	12	16	16	12	16	16
820	-	-	-	-	-	-	14	16	16	12	16	16
1000	-	-	-	-	-	-	14	16	16	14	16	16

NIC RESERVES THE RIGHT TO REQUEST MINIMUM QUANTITIES ON CERTAIN VALUES

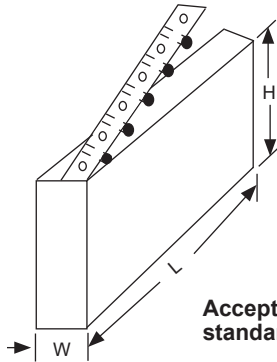
DIMENSIONS (mm)



Symbol	D max.	d	P	P ₀	P ₁	P ₂	S	H	H ₀	H ₁	Dφ	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 ~ 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 ~ 23				±1.5	±1.3									

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

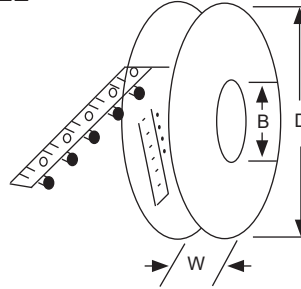
AMMO PACK



$H \leq 372$ (14.64")
 $L \leq 377$ (14.84")
 $W \leq 55$ (2.16")

Acceptable to standard radial type cartridge.

REEL



$D \leq 354$ (13.93")
 $B \geq 21$ (.83") but
 ≤ 30 (1.18")
 $W \leq 55$ (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.