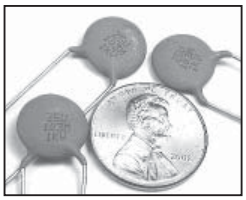
TEMPERATURE COMPENSATING AND TEMPERATURE STABLE TYPES (CLASS I)



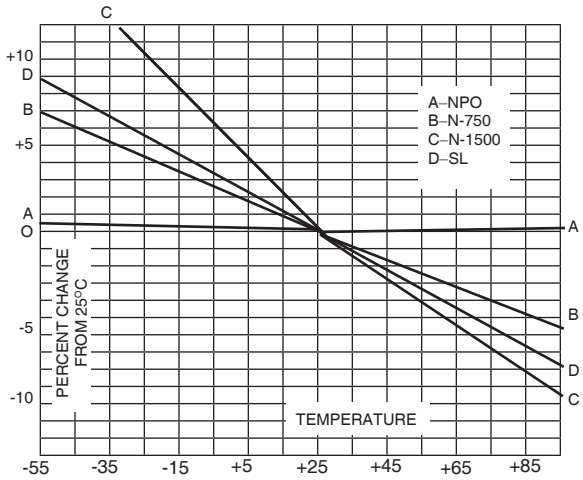
FEATURES

- 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

*See Part Number System for Details

SPECIFICATIONS

Temperature Characteristics		NPO	N750	SL	N1500
Operating Temperature Range		-30°C ~ +85°C			
Capacitance Range		0.5 ~ 470pF	22 ~ 470pF	0.5 ~ 1000pF	22 ~ 2200pF
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 Confom To Initial Measurements Above			
	I.R. (min.)	10,000 Megohms			
Test Conditions		<1,000pF; 1MHz, 1.2Vrms Max., ≥1,000pF; 1KHz, 1.2Vrms Max.			

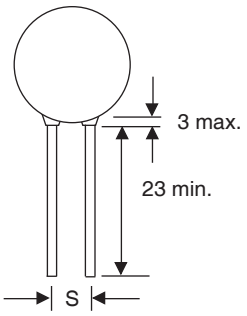


NCD 101 J 500 NPO J .100LS TR F

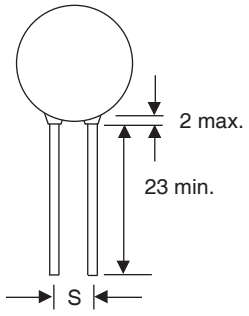
- F — RoHS compliant
- TR — Optional Packaging: TR = Taped and Reel; TB = Tape and Box (Ammo)
- .100LS — Optional Lead Space (LS) and/or Lead Length (LL) in inches
- J — Optional Lead Style: C = Cut Lead; D = Inside Kink (Short Leads); E = Outward Kink (Short Leads); J = Inside Kink (Long Leads); K = Outward Kink (Long Leads)
- NPO — Temperature Coefficient
- 500 — Working Voltage DC
- J — Tolerance Code: C = ± 0.25pF; D = ± 0.5pF; J = ± 5%; K = ± 10%; M = ± 20%; Z = + 80% / - 20%
- 101 — Capacitance code, expressed in pfd, First two digits are significant, third digit is no. of zeros. "R" indicates decimal for under 10pfd.
- NCD — Series

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)

Standard
500Vdc & Up



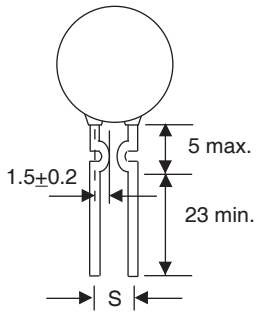
Low Voltage
100Vdc & Below



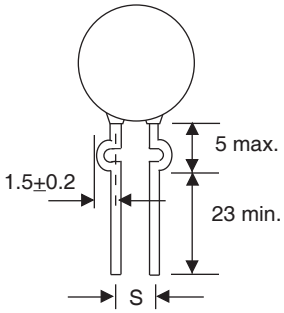
LEAD DIAMETER
0.6MM IS STANDARD

BODY THICKNESS
2 ~ 4MM DEPENDENT ON CV

J Style

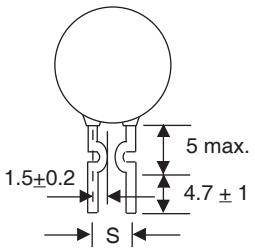


K Style

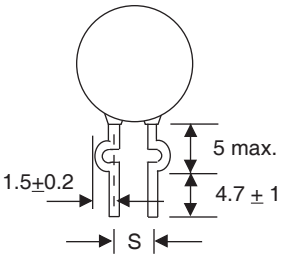


(BULK AND TAPED STYLES)

D Style



E Style



(BULK ONLY)

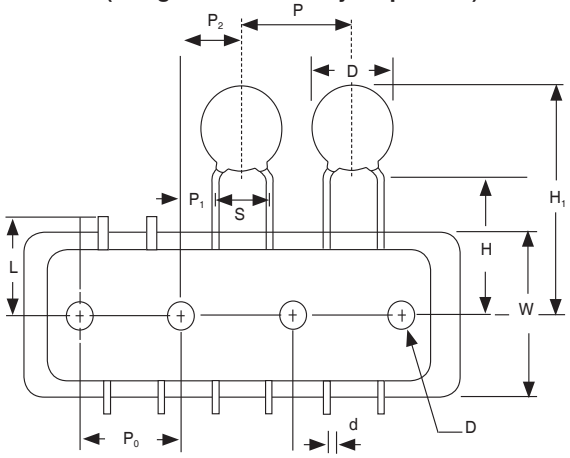
STANDARD PRODUCTS AND MAXIMUM DIAMETER (mm) BY T.C. AND VOLTAGE

Cap. (pF)	NPO			N750			SL			N1500		
	Working Voltage (Vdc)											
	50 100	500	1K	50 100	500	1K	50 100	500	1K	50 100	500	1K
0.5 ~ 18	6	6	6	-	-	-	6	6	6	-	-	-
20	6	6	6	6	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	6	6	6
33	6	6	7	6	6	7	6	6	6	6	6	6
39	6	7	7	6	6	7	6	6	6	6	6	6
47	6	7	8	6	7	8	6	6	6	6	6	6
56	7	7	8	7	7	8	6	6	6	6	6	6
68	7	7	9	7	7	9	6	6	6	6	6	6
75	7	7	9	7	7	9	6	6	7	6	6	7
82	7	7	9	7	7	9	6	6	7	6	6	7
100	8	8	10	8	8	10	6	6	7	6	7	7
120	8	8	10	8	8	10	6	6	7	6	7	7
150	9	9	12	9	9	12	6	7	8	6	8	8
180	9	9	14	9	9	14	6	7	8	6	8	8
220	10	10	16	10	10	16	7	8	9	7	9	9
270	12	12	16	12	12	16	8	9	10	8	9	10
330	14	14	18	14	14	18	8	10	12	8	10	12
470	16	16	20	16	16	20	9	12	14	9	12	14
560	-	-	-	-	-	-	10	12	14	10	14	14
680	-	-	-	-	-	-	10	14	16	10	14	16
750	-	-	-	-	-	-	12	16	16	12	16	16
820	-	-	-	-	-	-	12	16	16	12	16	16
1000	-	-	-	-	-	-	14	16	18	14	16	18

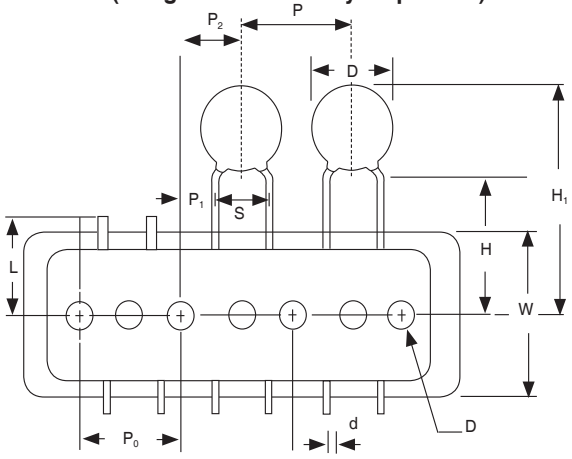
NIC RESERVES THE RIGHT TO REQUEST MINIMUM QUANTITIES ON CERTAIN VALUES

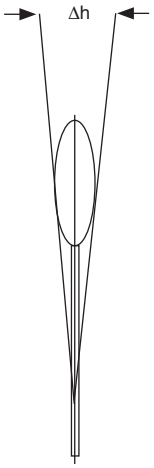
DIMENSIONS (mm)

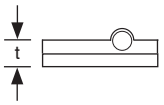
Straight Leads
≤12mm diameter
(a slight lead flare may be present)



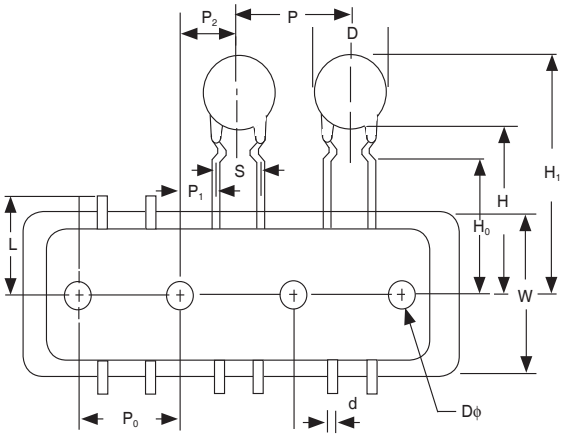
Straight Leads
>12 ~ 23mm diameter
(a slight lead flare may be present)



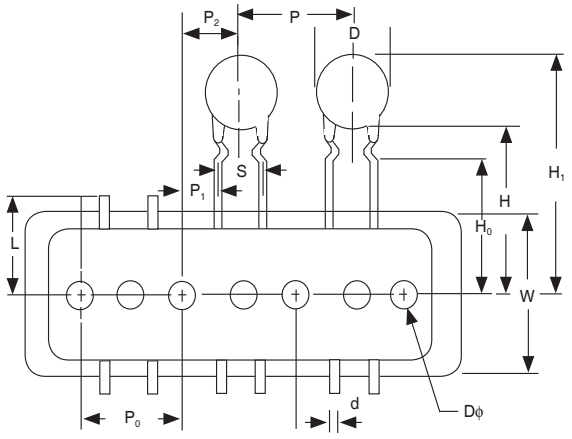




Crimped Leads
≤12mm diameter
Inward (J) & Outward (K) are available



Crimped Leads
>12 ~ 23mm diameter
Inward (J) & Outward (K) are available



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 16.0	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			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**