



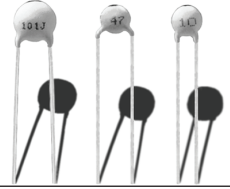
Class I Ceramic Disc Capacitors (RoHS Compliant) CDR Series

FEATURES

- Linear temperature coefficient of capacitance
- High stability of capacitance
- Low loss across a wide frequency range



RoHS Compliant



CHARACTERISTICS

Item	Characteristics
Operating Temperature Range	-25°C ~ +85°C
Capacitance Tolerance (min.)	Within the tolerance at 1MHz, 1~3Vrms, 25°C
Working Voltage (WVDC)	50WV or 500WV
Insulation Resistance	10,000MΩ min.
Test Voltage	3 x WVDC
Life Test	At 2 x WVDC @85°C for 1000 hours @ 85°C, capacitors shall meet the following: the capacitance change for ≤30pF will be ≤±5% or ≤0.3pF; for >30pF the capacitance change will be ≤±3%. For ≤30pF Q ≥ 275 = 5/3C; for >30pF Q ≥ 350
Humidity Test	At exposure in the ambient temperature of 40°C, and at 95% RH for 500 hours the capacitors shall meet the following after 24 hours exposure at room temperature: the capacitance change for ≤30pF will be ≤±5% or ≤0.3pF; for >30pF the capacitance change will be ≤±5%. For ≤30pF Q ≥ 275 = 5/3C; for >30pF Q ≥ 350

PART NUMBERING SYSTEM

1	4	0	-	5	0	N	2	-	1	0	1	K	-	R	C
Series				Voltage (Actual Value)		Temp. Coeff.	Lead Space		Capacitance (pF) 1st digit 2nd digit # ø's			Tolerance		Suffix (RoHS Compliant)	

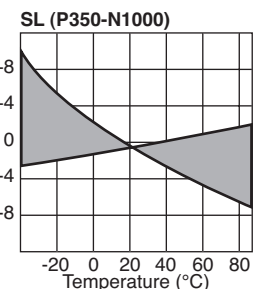
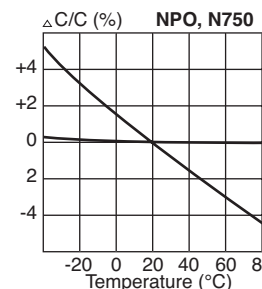
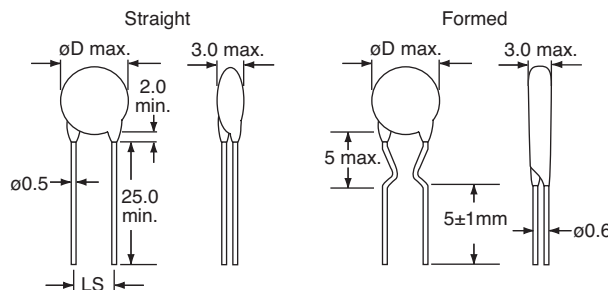
Temp. Coeff.	Code
NPO	N
N750	E
SL	S

Lead Space	Code
2.5mm	2
5.0mm	5

Tolerance	Code
±0.25pF	C
±5%	J
±10%	K

Tolerance	Code
±20%	M
±0.5pF	D
+80/-20%	Z

DIMENSIONS (mm), CAPACITANCE RANGES (pF), TYPICAL TEMPERATURE CHARACTERISTICS



Dimensions		Working Voltage (WV); Temperature Coefficient; Capacitance Range (pF)					
		50/100			500		
øD (mm)	LS (mm)	NPO	N750	SL	NPO	N750	SL
5	2.5/5.0	1 ~ 47	22 ~ 47	50 ~ 150	- - -	- - -	39 ~ 100
6	2.5/5.0	56 ~ 68	- - -	180 ~ 220	1-36	18 ~ 33	120 ~ 150
7.5	2.5/5.0	82 ~ 100	- - -	250 ~ 330	39 ~ 82	39 ~ 68	180 ~ 220
8.5	2.5/5.0	120 ~ 150	- - -	390 ~ 470	- - -	- - -	270 ~ 300
9.5	5.0	180 ~ 200	- - -	500 ~ 680	- - -	- - -	300 ~ 390
10.5	5.0	220 ~ 270	- - -	820	100	- - -	400 ~ 470
12.5	5.0	300 ~ 330	- - -	- - -	- - -	- - -	560

