



# Class I Ceramic Disc Capacitors (RoHS Compliant) CDR Series

## FEATURES

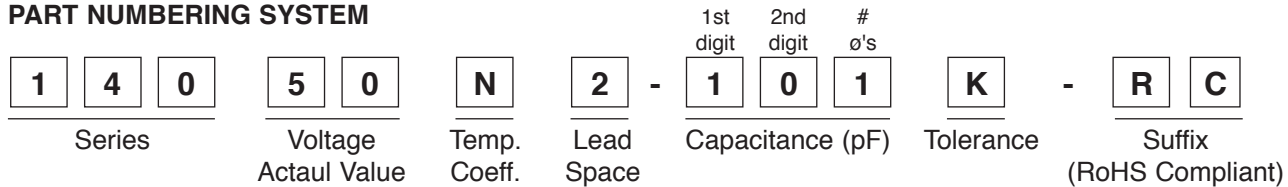
- Linear temperature coefficient of capacitance
- High stability of capacitance
- Low loss across a wide frequency range



## 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

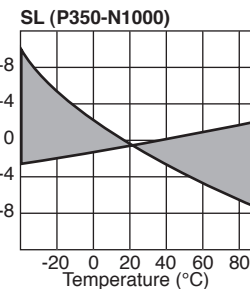
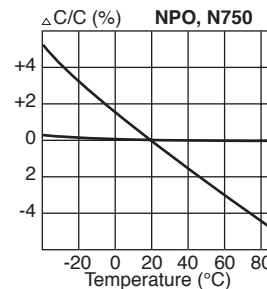
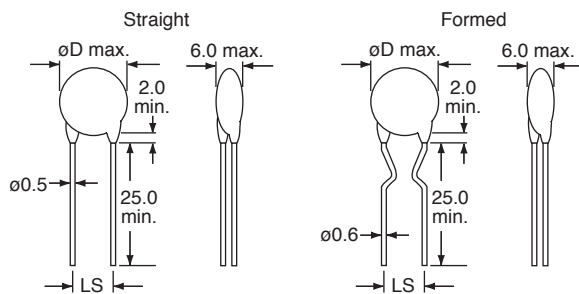


Temp. Coeff.	Code
NPO	<b>N</b>
N750	<b>E</b>
SL	<b>S</b>

Lead Space	Code
2.5mm	<b>2</b>
5.0mm	<b>5</b>

Tolerance	Code	Tolerance	Code
±0.25pF	<b>C</b>	±20%	<b>M</b>
±5%	<b>J</b>	±0.5pF	<b>D</b>
±10%	<b>K</b>	+80/-20%	<b>Z</b>

## 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	1-33	---	39 ~ 100
6	2.5/5.0	56 ~ 68	---	180 ~ 220	36	18 ~ 33	120 ~ 150
7.5	2.5/5.0	82 ~ 100	---	250 ~ 330	39 ~ 68	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	---	---	400 ~ 470
12.5	5.0	300 ~ 330	---	---	---	---	560

