High Voltage Class I Ceramic Disc Capacitors — 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)	1KWV, 2KWV, 3KWV, or 6KWV
Insulation Resistance	10,000MΩ min. or 200MΩ x μF whichever is the smaller
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 ≤0.5pF; for >30pF the capacitance change will be ≤±5%. For ≤30pF Q ≥ 27.5 = 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 ≤0.5pF; for >30pF the capacitance change will be ≤±5%. For ≤30pF Q ≥ 27.5 = 5/3C; for >30pF Q ≥ 350

PART NUMBERING SYSTEM

1	4	0	1	0	2	N	9	-	1	0	1	K	-	R	C
Series			Voltage			Temp. Coeff.	Lead Space		1st digit / 2nd digit / # ø's			Tolerance		Suffix (RoHS Compliant)	

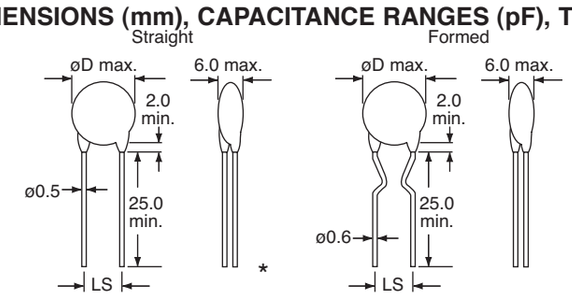
Voltage	Code
1KV	102
2KV	202
3KV	302
6KV	602

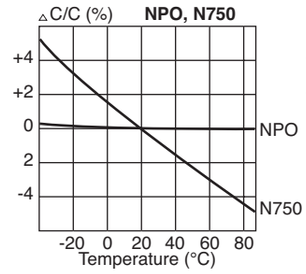
Temp. Coeff.	Code
NPO	N
SL	S

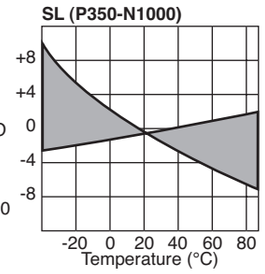
Lead Space	Code
6.35mm	6
9.52mm	9

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

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







* lead diameter is ø0.8mm max. for 6 KV

Dimensions		Working Voltage (WV); Temperature Coefficient; Capacitance Range (pF)							
		1KV		2KV		3KV		6KV	
øD (mm)	LS (mm)	NPO	SL	NPO	SL	NPO	SL	NPO	SL
6.5	6.35	1 ~ 25	30 ~ 80	- - -	- - -	- - -	- - -	- - -	- - -
7	6.35	- - -	- - -	1 ~ 10	20 ~ 33	- - -	- - -	- - -	- - -
8.5	6.35	26 ~ 40	81 ~ 40	11 ~ 18	34 ~ 68	- - -	- - -	- - -	10 ~ 22
9.5	6.35	41 ~ 70	141 ~ 240	- - -	- - -	- - -	- - -	10	33
10	6.35	- - -	- - -	- - -	69 ~ 100	1 ~ 16	15 ~ 56	12 ~ 15	47 ~ 56
11	6.35	- - -	- - -	19 ~ 39	110 ~ 140	18 ~ 24	62 ~ 82	- - -	- - -
12	9.52	- - -	- - -	- - -	- - -	- - -	- - -	18 ~ 22	68 ~ 100
13	9.52	71 ~ 120	241 ~ 400	40 ~ 62	150 ~ 230	- - -	- - -	- - -	- - -
14	9.52	- - -	- - -	- - -	- - -	- - -	- - -	33	120
16	9.52	- - -	- - -	63 ~ 82	240 ~ 310	27 ~ 51	91 ~ 160	47 ~ 56	150 ~ 180
18	9.52	- - -	- - -	- - -	- - -	- - -	- - -	68 ~ 82	220
20	9.52	- - -	- - -	- - -	- - -	- - -	- - -	100	330

Specifications are subject to change without notice. No liability or warranty implied by this information. Environmental compliance based on producer documentation.