



Class III Ceramic Disc Capacitors (RoHS Compliant) CDR Series

■ FEATURES

- Stable capacitance change over the specified temperature
- Low loss at wide range of frequency
- Cost saving by replacing film capacitors
- Ultra large capacitance in small sizes
- Dissipation factor-5%



■ CHARACTERISTICS

Item	Characteristics
Operating Temperature Range	-25°C ~ +85°C
Capacitance Tolerance (min.)	Within the tolerance at 1KHz, 0.1Vrms, 25°C
Working Voltage (WVDC)	12WV, 16WV, 25WV, 50WV, 63WV, 100 WV
Insulation Resistance	12WV/16WV: 100MΩ or 10MΩ x μ whichever is less; 25WV/50WV: 1,000MΩ or 20MΩ x μF, whichever is less
Test Voltage	2.5 x WVDC
Life Test	At 2 x WVDC @85°C for 1000 hours @ 85°C, capacitors shall meet the following: the capacitance change for Y5P will be ±10%; Y5U will be ±20%; Y5V will be ±30%; the dissipation factor for Y5P and Y5U will be 5%; Y5V will be 7.5%.
Humidity Test	At exposure in the ambient temperature of 40°C, and at 95% RH for 500 hours: the capacitance change for Y5P will be ±10%; Y5U will be ±20%; Y5V will be ±30%; the dissipation factor for Y5P and Y5U will be 7.5%; Y5V will be 7.5%.

■ PART NUMBERING SYSTEM

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

Temp. Coeff.	Code
Y5P	W
Y5U	U
Y5V	V

Lead Space	Code
5.0mm	5
6.3mm	6

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

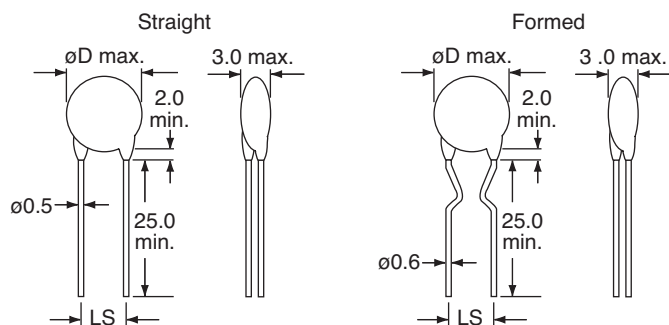
■ TEMPERATURE COEFFICIENT CHARACTERISTICS

Temperature Coefficient	Y5P	Y5U	Y5V
Operating Temp. Range	-25°C ~ +85°C	-25°C ~ +85°C	-5°C ~ +85°C
Capacitance Change	±10%	+20, -55%	+30, -80°



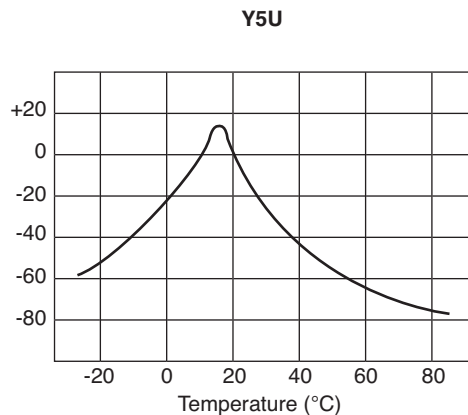
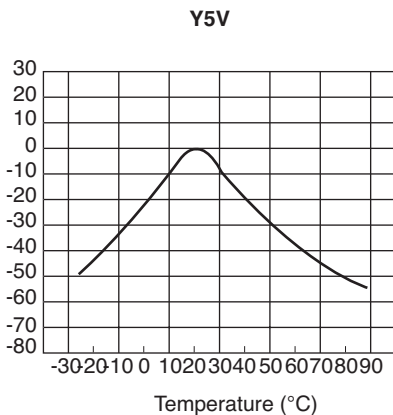
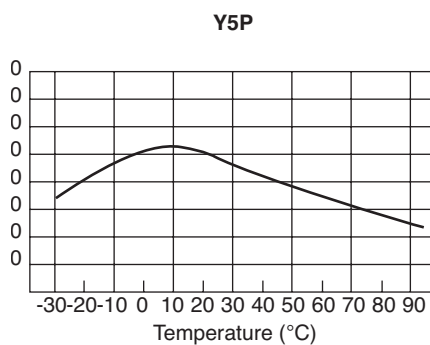
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■ DIMENSIONS (mm), CAPACITANCE RANGES (pF)



Dimensions		Working Voltage (WV); Temperature Coefficient; Capacitance Range (pF)								
		12V			25V			50V/63V/100V		
ϕD (mm)	LS (mm)	Y5P	Y5U	Y5V	Y5P	Y5U	Y5V	Y5P	Y5U	Y5V
5	5.0	.01	.01 ~ .022	.01 ~ .022	---	.01 ~ .022	---	---	.01	---
5.5	5.0	.022	.033 ~ .047	.033 ~ .047	.01	---	.033 ~ .047	.01	.022	---
6	5.0	.033	---	.1	---	---	---	---	---	---
6.5	5.0	---	---	---	---	.047	---	---	---	.047
7	5.0	.047	.1	---	.022	---	.1	---	---	---
8.5	5.0	---	---	---	.033	.1	---	.022	.47	---
9.5	5.0	---	.22	.22	.047	---	.22	.033	.1	.1
12	5.0	.1	---	---	---	.22	---	.047	---	---
13.5	5.0	---	---	---	---	---	---	---	---	---
15	6.3	---	.47	.47	.1	---	---	.1	---	---

■ TYPICAL TEMPERATURE CHARACTERISTICS



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