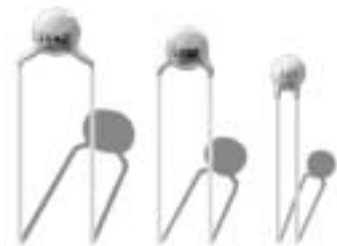


FEATURES

- Large capacitance in small sizes
- Non linear temperature coefficient of capacitance.



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, 100WV, or 500WV                                                                                                                                                                                                                                                   |
| Insulation Resistance        | 10,000MΩ min. or 200MΩμF, 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%; Z5U will be ±20%; Z5V will be ±30%; the dissipation factor for Y5P and Z5U will be ≤50x10 <sup>-3</sup> ; Z5V will be ≤75x10 <sup>-3</sup> . |
| 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%; Z5U will be ±20%; Z5V will be ±30%; the dissipation factor for Y5P and Z5U will be ≤50x10 <sup>-3</sup> ; Z5V will be ≤75x10 <sup>-3</sup> .  |

PART NUMBERING SYSTEM

C

D

R

Series

5

0

Voltage Actual Value

P

Temp. Coeff.

2

Lead Space

-

1

1st digit

0

2nd digit

1

#  
ø's

K

Tolerance

S

Style

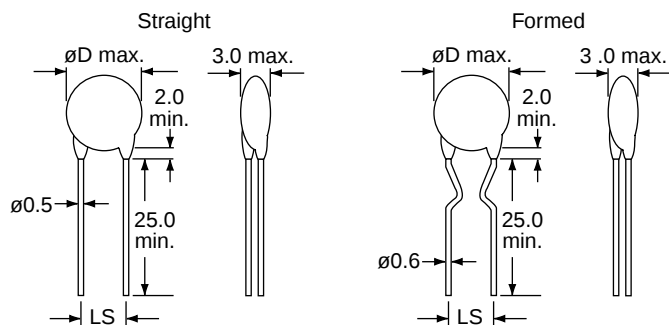
Capacitance (pF)

| Temp. Coeff. | Code | Lead Space | Code | Tolerance | Code | Tolerance | Code | Style    | Code |
|--------------|------|------------|------|-----------|------|-----------|------|----------|------|
| Y5P          | P    | 2.5mm      | 2    | ±0.25pF   | C    | ±20%      | M    | Straight | S    |
| Z5U          | Z    | 5.0mm      | 5    | ±5%       | J    | ±0.5pF    | D    | Formed   | F    |
| Z5V          | Q    | 9.5mm      | 9    | ±10%      | K    | +80/-20%  | Z    |          |      |

TEMPERATURE COEFFICIENT CHARACTERISTICS

| Temperature Coefficient | Y5P           | Z5U           | Z5V           |
|-------------------------|---------------|---------------|---------------|
| Operating Temp. Range   | -25°C ~ +85°C | +10°C ~ +85°C | +10°C ~ +85°C |
| Capacitance Change      | ±10%          | +20%, -55%    | +30%, -80%    |

## ■ DIMENSIONS (mm), CAPACITANCE RANGES (pF)



| Dimensions |         | Working Voltage (WV); Temperature Coefficient; Capacitance Range (pF) |               |                 |             |             |
|------------|---------|-----------------------------------------------------------------------|---------------|-----------------|-------------|-------------|
|            |         | 50 and 100                                                            |               |                 | 500         |             |
| øD (mm)    | LS (mm) | Y5P                                                                   | Z5U           | Z5V             | Y5P         | Z5U         |
| 5          | 2.5/5.0 | 200 ~ 2200                                                            | 1000 ~ 5000   | 1000 ~ 10000    | 150 ~ 270   | 1000 ~ 2200 |
| 6          | 2.5/5.0 | 2700 ~ 3000                                                           | 6800 ~ 8200   | ---             | 390 ~ 1200  | 3700 ~ 3900 |
| 7.5        | 2.5/5.0 | 3300 ~ 3900                                                           | 10000         | 20000 ~ 22000   | 1500 ~ 2000 | ---         |
| 8.5        | 2.5/5.0 | 4700 ~ 5600                                                           | ---           | ---             | 2200 ~ 2700 | 4700 ~ 5000 |
| 9.5        | 5.0     | 6800 ~ 8200                                                           | ---           | ---             | 3000 ~ 3300 | 6800 ~ 8200 |
| 10.5       | 5.0     | 10000                                                                 | 20000 ~ 22000 | ---             | 3900        | 10000       |
| 14.5       | 9.5     | ---                                                                   | ---           | 33000 ~ 100,000 | ---         | ---         |

## ■ TYPICAL TEMPERATURE CHARACTERISTICS

