

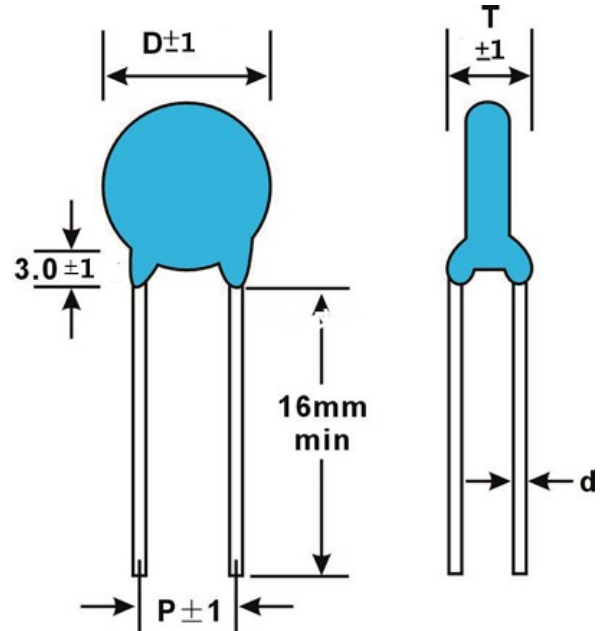
CT81 HIGH VOLTAGE CERAMIC CAPACITOR

FEATURES

Use for coupling, and by-pass circuit.
Stable and high reliability products

SPECIFICATIONS

| | |
|-----------------------------|--|
| OPERATING TEMPERATURE RANGE | Class 1 -40°C to +125°C Class 2 -40°C to +105°C |
| TEMPERATURE COEFFICIENTS | Class 1 NPO SL Class 2 Y5P Y5U Y5V |
| RATED WORKING VOLTAGE | 500V - 6300V. DC |
| CAPACITANCE RANGE | 100pF – 10,000pF |
| TEST VOLTAGE | 2 times of the rated voltage. |
| INSULATION RESISTANCE | SL/NPO:IR≥10000mΩ, Y5P/Y5U/Y5V:IR≥4000mΩ |
| DISSIPATION FACTOR (tanδ) | at 1 KHz , ± 0.2 Vrms.25°C Y5P/Y5U/Y5V:≤2.5% SL/NPO:≤0.15% |

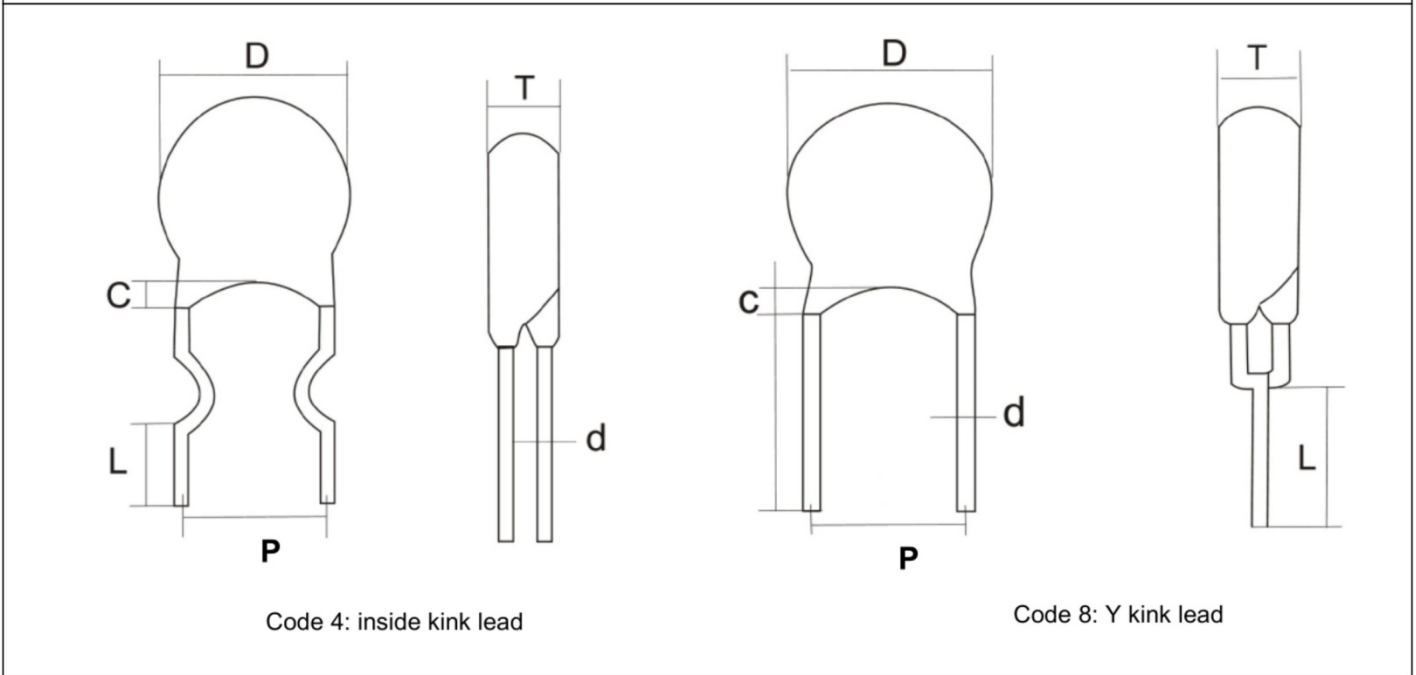
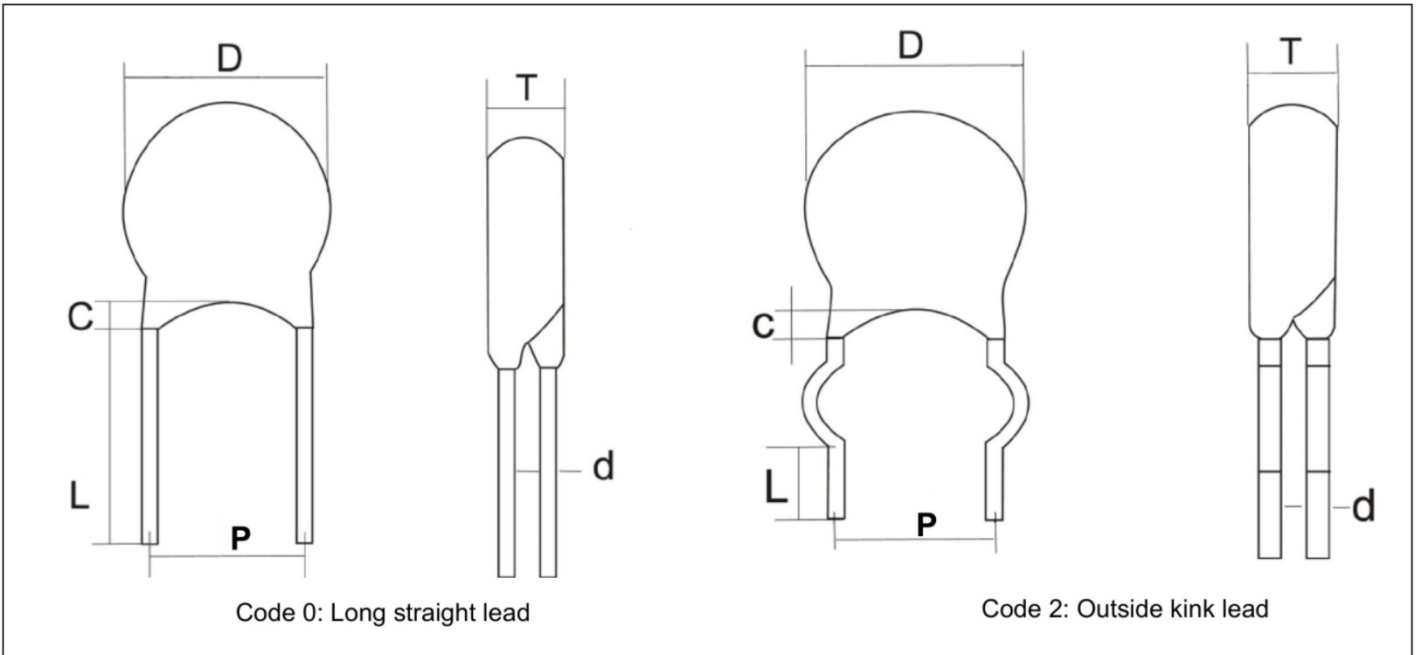


How to order

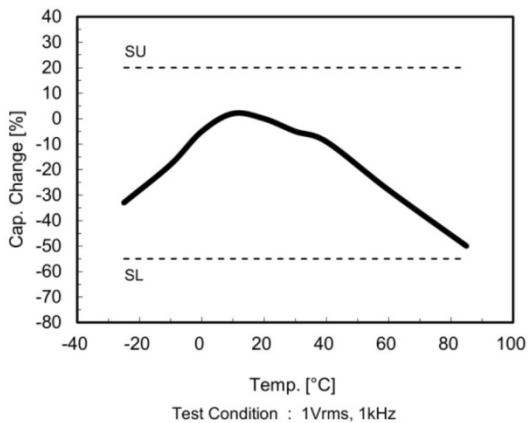
| | | | | | | | |
|-------------|---|---|--|---|--|---|--|
| <u>CT81</u> | <u>P</u> | <u>102</u> | <u>K</u> | <u>1000</u> | <u>0050</u> | <u>B</u> | <u>000</u> |
| Type | Material Code | Capacitance Code | Tolerance | Rated Voltage | Size Code | Package Code | Suffix Indicate Special Requirement |
| CT81 | Code for Dielectrics B: X7R E: Z5U Z: Y5V U: Y5U P: Y5P V: Z5V X: X5R Y: Y5T D: N4700 N: NPO S: SL | pF Code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) 104 = 0.1uF 100 = 10pF 470 = 47pF 0R1 = 0.1pF R47 = 0.47pF | K: +/-10% J: +/-5% K: +/-10% M: +/-20% Z: +80-20% | For DC Voltage 0500: 500VDC 2000: 2000VDC 3000: 3000VDC | Pitch for CT81 0050: pitch size 5mm 0075: pitch size 7.5mm 0100: pitch size 10mm 5mm pitch Sh ape 4= 4050 F first number indicates lead sh ape, rest th ree numbers indicates pitch size 050= 5mm 075= 7.5mm 100= 10mm | B: Bulk A: Ammo Taped R: Tape & Reel | 000: Indicating Standard If for cut leads or long leads: 000: mean standard LL 035: cut leads to 3.5mm 040: cut leads to 4mm 250: 25mm long leads |



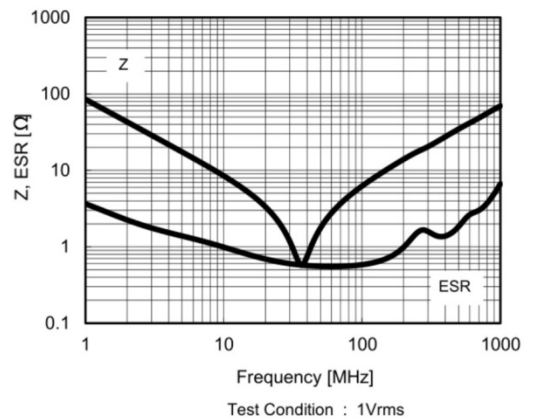
Lead Styles:



Capacitance - Temperature Characteristics



Z & ESR - Frequency Characteristics



CT81 HIGH VOLTAGE CERAMIC CAPACITOR

| Item | | 500V | | | | 1 KV | | | | 2 KV | | | | 3 KV | | | | Remark |
|------------|------------------------------------|------|-----|-----|--------|------|-----|---------|--------|------|-----|---------|--------|------|-----|------|--------|--------|
| Dielectric | Capacitance Code Tolerance Code | D±1 | T±1 | P±1 | d±0.05 | D±1 | T±1 | P±1 | d±0.05 | D±1 | T±1 | P±1 | d±0.05 | D±1 | T±1 | P±1 | d±0.05 | |
| NPO | 1R0-9R0 D | 5.5 | 2.2 | 5.0 | 0.5 | 5.5 | 2.2 | 5.0 | 0.5 | 6.0 | 2.3 | 5.0 | 0.5 | 6.0 | 3.5 | 7.5 | 0.7 | |
| NPO | 100 K | 5.5 | 2.2 | 5.0 | 0.5 | 5.5 | 2.2 | 5.0 | 0.5 | 6.0 | 2.3 | 5.0 | 0.5 | 6.0 | 3.5 | 7.5 | 0.7 | |
| SL | 120-101K | 5.5 | 2.2 | 5.0 | 0.5 | 5.5 | 2.2 | 5.0 | 0.5 | 6.0 | 2.8 | 5.0 | 0.5 | 6.0 | 3.5 | 7.5 | 0.7 | |
| Y5P | 120-101K | 5.5 | 2.2 | 5.0 | 0.5 | 6.0 | 2.3 | 5.0 | 0.5 | 6.0 | 2.8 | 5.0 | 0.5 | 6.1 | 3.5 | 7.5 | 0.7 | |
| Y5P | 151-561K | 6.0 | 2.2 | 5.0 | 0.5 | 6.0 | 2.3 | 5.0 | 0.5 | 6.0 | 3.0 | 5.0 | 0.5 | 6.0 | 3.5 | 7.5 | 0.7 | |
| Y5U | 102M | 6.5 | 2.3 | 5.0 | 0.5 | / | / | / | / | 5.6 | 3.0 | 5.0 | 0.5 | 6.0 | 3.5 | 7.5 | 0.7 | |
| Y5P | 681-102K | 6.0 | 2.2 | 5.0 | 0.5 | 6.5 | 2.3 | 5.0 | 0.5 | 8.0 | 3.0 | 5.0 | 0.5 | 9.1 | 3.5 | 7.5 | 0.7 | |
| Y5V | 122-222M | 6.0 | 2.2 | 5.0 | 0.5 | / | / | / | / | 6.0 | 3.0 | 5.0 | 0.5 | 6.0 | 3.5 | 7.5 | 0.7 | |
| Y5U | 122-222M | 6.0 | 2.2 | 5.0 | 0.5 | 7.0 | 2.3 | 5.0 | 0.5 | 8.0 | 3.0 | 5.0 | 0.5 | 9.1 | 3.5 | 7.5 | 0.7 | |
| Y5P | 122-222K | 8.0 | 2.2 | 5.0 | 0.5 | 8.5 | 2.3 | 5.0/7.5 | 0.5 | 11.0 | 3.0 | 5.0/7.5 | 0.6 | 13.0 | 3.5 | 7.5 | 0.7 | |
| Y5V | 272-472M | 6.0 | 2.2 | 5.0 | 0.5 | 6.5 | 2.5 | 5.0 | 0.5 | 8.0 | 3.0 | 7.5 | 0.6 | 9.0 | 3.5 | 7.5 | 0.6 | |
| Y5U | 272-472M | 7.0 | 2.2 | 5.0 | 0.5 | 8.0 | 2.3 | 5.0 | 0.5 | 10.0 | 3.0 | 5.0 | 0.5 | 13.1 | 3.8 | 10.0 | 0.7 | |
| Y5P | 272-472K | 11.0 | 2.2 | 5.0 | 0.5 | 12.0 | 2.3 | 5.0 | 0.5 | 14.4 | 3.0 | 7.5 | 0.6 | / | / | / | / | |
| Y5P | 562K | 12.0 | 2.5 | 5.0 | 0.5 | 13.0 | 2.5 | 7.5 | 0.6 | 17.0 | 3.0 | 7.5 | 0.6 | / | / | / | / | |
| Y5V | 682-103M | 8.0 | 2.2 | 5.0 | 0.5 | 9.0 | 2.3 | 5.0 | 0.5 | 10.0 | 3.0 | 7.5 | 0.6 | 11.0 | 3.5 | 7.5 | 0.7 | |
| Y5U | 682-103M | 9.0 | 2.2 | 5.0 | 0.5 | 12.0 | 2.3 | 5.0 | 0.5 | 14.4 | 3.0 | 10.0 | 0.6 | 17.2 | 3.8 | 10.0 | 0.7 | |
| Y5V | 153-223M | 11.0 | 2.2 | 5.0 | 0.5 | 13.5 | 2.5 | 7.5 | 0.6 | 15.0 | 3.5 | 10.0 | 0.6 | / | / | / | / | |
| Y5V | 473M | 17.0 | 2.5 | 7.5 | 0.6 | 17.0 | 2.5 | 10.0 | 0.7 | 21.0 | 3.5 | 10.0 | 0.7 | / | / | / | / | |
| Y5V | 473M | 15.0 | 2.3 | 7.5 | 0.5 | 17.5 | 2.5 | 10.0 | 0.7 | 21.0 | 3.5 | 10.0 | 0.7 | / | / | / | / | |
| Y5V | 104M Φ19 | 20.0 | 2.3 | 7.5 | 0.5 | 20.4 | 2.8 | 10.0 | 0.7 | 26.5 | 3.5 | 10.0 | 0.7 | / | / | / | / | |
| Y5V | 104M Φ24 | 23.5 | 2.3 | 7.5 | 0.5 | 22.4 | 2.8 | 10.0 | 0.7 | 26.5 | 3.5 | 10.0 | 0.7 | / | / | / | / | |

| Item | | 4KV | | | | 5KV | | | | 6KV/6.3KV | | | | Remark |
|------------|------------------------------------|------|-----|------|--------|------|-----|------|--------|-----------|-----|------|--------|--------|
| Dielectric | Capacitance Code Tolerance Code | D±1 | T±1 | P±1 | d±0.05 | D±1 | T±1 | P±1 | d±0.05 | D±1 | T±1 | P±1 | d±0.05 | |
| Y5P | 101 K | 6.0 | 3.0 | 7.5 | 0.6 | 6.0 | 3.5 | 10.0 | 0.6 | 6.0 | 3.5 | 10.0 | 0.6 | |
| Y5P | 151 K | 6.0 | 3.5 | 7.5 | 0.6 | 6.0 | 4.5 | 10.0 | 0.6 | 6.0 | 4.5 | 10.0 | 0.6 | |
| Y5P | 221 K | 6.0 | 3.5 | 7.5 | 0.6 | 6.0 | 4.5 | 10.0 | 0.6 | 6.0 | 4.5 | 10.0 | 0.6 | |
| Y5P | 271 K | 7.0 | 3.5 | 7.5 | 0.6 | 6.0 | 4.5 | 10.0 | 0.6 | 6.0 | 4.5 | 10.0 | 0.6 | |
| Y5P | 331 K | 6.5 | 3.5 | 7.5 | 0.6 | 7.0 | 4.5 | 10.0 | 0.6 | 7.0 | 4.5 | 10.0 | 0.6 | |
| Y5U | 331 K | / | / | / | / | 6.0 | 4.5 | 10.0 | 0.6 | 6.0 | 4.5 | 10.0 | 0.6 | |
| Y5P | 471 K | 6.5 | 3.5 | 7.5 | 0.6 | 8.0 | 4.5 | 10.0 | 0.7 | 8.0 | 4.5 | 10.0 | 0.7 | |
| Y5U | 471 K | / | / | / | / | 6.0 | 4.5 | 10.0 | 0.6 | 6.0 | 4.5 | 10.0 | 0.6 | |
| Y5P | 561 K | 7.0 | 3.5 | 7.5 | 0.6 | 9.0 | 4.5 | 10.0 | 0.7 | 9.0 | 4.5 | 10.0 | 0.7 | |
| Y5U | 561 K | / | / | / | / | 7.0 | 4.5 | 10.0 | 0.6 | 7.0 | 4.5 | 10.0 | 0.6 | |
| Y5P | 681 K | 7.5 | 3.5 | 7.5 | 0.6 | 9.0 | 4.5 | 10.0 | 0.7 | 9.0 | 4.5 | 10.0 | 0.7 | |
| Y5P | 102 K | 9.0 | 3.5 | 7.5 | 0.6 | 11.0 | 4.5 | 10.0 | 0.7 | 11.0 | 4.5 | 10.0 | 0.7 | |
| Y5U | 102 M | 6.0 | 3.5 | 7.5 | 0.6 | 7.0 | 4.5 | 10.0 | 0.6 | 7.0 | 4.5 | 10.0 | 0.6 | |
| Y5V | 102 M | / | / | / | / | 6.0 | 4.5 | 10.0 | 0.6 | 6.0 | 4.5 | 10.0 | 0.6 | |
| Y5U | 152 M | 8.0 | 3.5 | 7.5 | 0.6 | 9.0 | 4.5 | 10.0 | 0.6 | 9.0 | 4.5 | 10.0 | 0.6 | |
| Y5V | 152 M | 6.0 | 3.5 | 7.5 | 0.6 | 7.0 | 4.5 | 10.0 | 0.6 | 7.0 | 4.5 | 10.0 | 0.6 | |
| Y5U | 222 M | 9.0 | 3.5 | 7.5 | 0.6 | 10.0 | 4.5 | 10.0 | 0.7 | 10.0 | 4.5 | 10.0 | 0.7 | |
| Y5V | 222 M | 7.0 | 3.5 | 7.5 | 0.6 | 8.0 | 4.5 | 10.0 | 0.7 | 8.0 | 4.5 | 10.0 | 0.7 | |
| Y5U | 332 M | 11.0 | 3.5 | 7.5 | 0.6 | 13.5 | 4.5 | 10.0 | 0.7 | 13.5 | 4.5 | 10.0 | 0.7 | |
| Y5V | 332 M | 8.0 | 3.5 | 7.5 | 0.6 | 10.0 | 4.5 | 10.0 | 0.7 | 10.0 | 4.5 | 10.0 | 0.7 | |
| Y5U | 472 M | 13.0 | 3.5 | 10.0 | 0.7 | 16.5 | 5.0 | 10.0 | 0.7 | 16.5 | 5.0 | 10.0 | 0.7 | |
| Y5V | 472 M | 9.0 | 3.5 | 7.5 | 0.6 | 11.0 | 4.5 | 10.0 | 0.7 | 11.0 | 4.5 | 10.0 | 0.7 | |
| Y5U | 103 M | 17.5 | 3.5 | 10.0 | 0.7 | / | / | / | / | 18.5 | 4.5 | 10.0 | 0.7 | |
| Y5V | 103 M | 13.5 | 3.5 | 10.0 | 0.7 | / | / | / | / | / | / | / | / | |
| Y5V | 203 M | 20.5 | 3.5 | 10.0 | 0.7 | / | / | / | / | / | / | / | / | |
| Y5V | 223 M | 20.5 | 3.5 | 10.0 | 0.7 | / | / | / | / | / | / | / | / | |

Ammo Taped and Cut Leads are available on request. Special size is on request too.
Please consult to sales if you need higher voltage than 6KV or other values.