

◆ Features

A wide selection of sizes is available (0201 to 2225)

High capacitance in given case size.

RoHS & REACH Compliance



◆ Specifications

| Dielectric | NP0 | X7R | X5R | Y5V |
|----------------------------|--|------------------------------------|-----------------------|---------------------------|
| Size | 0201, 0402, 0603, 0805, 1206, 1210, 1812, 1825, 2220, 2225 | | | |
| Capacitance range | 0.1pF to 0.27μF | 100pF to 47μF | 100pF to 220μF | 0.01μF to 100μF |
| Capacitance tolerance | Cap ≤ 5pF#1: A (±0.05pF), B (±0.1pF), C (±0.25pF) 5pF < Cap < 10pF: C (±0.25pF), D (±0.5pF) Cap ≥ 10pF: F (±1%), G (±2%), J (±5%), K (±10%) | J (±5%), K (±10%), M (±20%) | K (±10%), M (±20%) | M (±20%), Z (-20/+80%) |
| Rated voltage (WVDC) | 10V, 16V, 25V, 50V, 100V | 4V, 6.3V, 10V, 16V, 25V, 50V, 100V | | |
| Operating temperature | -55 to +125°C | | -55 to +85°C | -25 to +85°C |
| Capacitance characteristic | ±30ppm | ±15% | ±15% | +30/-80% |
| Termination | Ni/Sn (lead-free termination) | | | |

#1: NP0, 0.1pF product only provide B tolerance

◆ The Outlines and External Dimensions of Capacitors

| Outline | Size Inch (mm) | L (mm) | W (mm) | T (mm)/Symbol | Soldering Method * | M _B (mm) | |
|-------------|---|------------------------|-------------------------|-------------------------|-----------------------|--|--|
| | 01R5 (0402) | 0.4±0.02 | 0.2±0.02 | 0.2±0.02 | V | R | 0.10±0.03 |
| | 0201 (0603) | 0.6±0.03 | 0.3±0.03 | 0.3±0.03 | L | R | 0.15±0.05 |
| | | 0.6±0.05 ^{#2} | 0.3±0.05 ^{#2} | 0.3±0.05 ^{#2} | | | 0.15±0.1/-0.05 |
| | | 0.6±0.09 ^{#3} | 0.3±0.09 ^{#3} | 0.3±0.09 ^{#3} | | | |
| | 0402 (1005) | 1.00±0.05 | 0.50±0.05 | 0.50±0.05 | N | R | 0.25 +0.05/-0.10 |
| | | 1.00±0.20 | 0.50±0.20 | 0.5±0.20 | Q | R | |
| | | 1.60±0.10 | 0.80±0.10 | 0.80±0.07 | E | R | |
| | 0603 (1608) | 1.60±0.15/-0.10 | 0.80±0.15/-0.10 | 0.50±0.10 | S | R / W | 0.40±0.15 |
| | | | | 0.80±0.15/-0.10 | H | R / W | |
| | | | | 0.8±0.20 ^{#1} | X | R / W | |
| | 0805 (2012) | 2.00±0.15 | 1.25±0.10 | 0.50±0.10 | H | R / W | 0.50±0.20 |
| | | | | 0.60±0.10 | A | R / W | |
| | | | | 0.80±0.10 | B | R / W | |
| | | | | 1.25±0.10 | D | R | |
| | | | | 0.85±0.10 | T | R / W | |
| | 1206 (3216) | 3.20±0.20 | 1.60±0.20 | 1.25±0.20 | I | R | 0.60±0.20 (0.5±0.25) ^{***} |
| | | | | 0.80±0.10 | B | R / W | |
| | | | | 0.95±0.10 | C | R | |
| | | | | 1.25±0.10 | D | R | |
| | | | | 1.15±0.15 | J | R | |
| 1210 (3225) | 3.20±0.30 | 2.50±0.20 | 1.60±0.20 | G | R | 0.75±0.25 | |
| | | | 0.85±0.10 | T | R | | |
| | | | 1.25±0.10 | D | R | | |
| | | | 1.60±0.20 | G | R | | |
| | | | 2.00±0.20 | K | R | | |
| 1808 (4520) | 4.50±0.40 (4.5±0.5/-0.3) ^{**} | 2.03±0.25 | 2.50±0.30 | M | R | 0.75±0.25 (0.5±0.25) ^{***} | |
| | | | 2.50±0.50 ^{#4} | 2.50±0.50 ^{#4} | | | |
| | | | 1.25±0.10 | D | R | | |
| | | | 1.40±0.15 | F | R | | |
| 1812 (4532) | 4.50±0.40 (4.5±0.5/-0.3) ^{**} | 3.20±0.30 | 1.60±0.20 | G | R | 0.75±0.25 (0.5±0.25) ^{***} | |
| | | | 2.00±0.20 | K | R | | |
| | | | 2.50±0.30 | M | R | | |
| | | | 2.80±0.30 | U | R | | |
| | | | 1.25±0.10 | D | R | | |
| 1825 (4563) | 4.60±0.50 | 6.30±0.40 | 1.60±0.20 (G) | 2.00±0.20 | R | ≧ 0.26 | |
| 2211 (5728) | 5.70±0.50 | 2.80±0.30 | (K) | | R | ≧ 0.30 | |
| 2220 (5750) | 5.70±0.50 | 5.00±0.40 | 2.50±0.30 (M) | | R | ≧ 0.30 | |
| 2225 (5763) | 5.70±0.50 | 6.30±0.40 | 2.80±0.30 (U) | | R | ≧ 0.30 | |