TDK MLCC Catalog Number Description

Series Name
- Description:
  - C: General Purpose
  - CKC: Array
  - CKG: MEGACAP
  - CLL: Ultra Low Inductance

Case Size Code
- Code:
  - C: 0.40 x 0.20, 0.50 x 0.20, 0.60 x 0.30, 0.80 x 1.60, 0.90 x 0.60, 1.00 x 0.50, 1.25 x 2.00, 1.37 x 1.00, 1.60 x 0.80, 1.60 x 3.20, 2.00 x 1.25, 2.44 x 1.00, 3.20 x 1.60, 3.20 x 3.20, 4.50 x 2.00, 4.50 x 3.20, 5.50 x 4.00, 5.70 x 5.00, 6.50 x 5.50, 7.50 x 6.30
- Code:
  - CKC: 0402, 0510, 0603, 0816, N27, 1005, 1220, M25, 1608, C1A, 1632, L22, L4, E1A, A43, G1A, 3225, 32K, 4520, 4532, 45K, 45N, 5750, 57K, 57N, 7563

Capacitance
- Code:
  - Voltage:
    - 04V, 063V, 10V, 16V, 25V, 50V, 35V, 100V, 200V, 250V, 630V, 450V

Temperature Characteristics
- Temperature:
  - Temperature Coefficient or Capacitance Change:
    - CH: -25°C to +85°C, 0±60ppm/°C
    - C0G: -55°C to +125°C, 0±30ppm/°C
    - NP0: -55°C to +150°C, 0±30ppm/°C
    - JB: -25°C to +85°C, ±10%
    - X5R: -55°C to +85°C, ±15%
    - X6S: -55°C to +105°C, ±22%
    - X7R: -55°C to +125°C, ±15%
    - X7S: -55°C to +125°C, ±22%
    - X7T: -55°C to +125°C, ±22, -33%
    - X8R: -55°C to +150°C, ±15%
    - X9R: -55°C to +200°C, ±9%

Thickness Code
- Code:
  - Thickness: 020, 030, 045, 050, 055, 060, 065, 070, 080, 085, 100, 105, 110, 115, 120, 125, 130, 160, 200, 220, 240, 280, 290, 320, 335, 500

Nominal Capacitance (pF)
- Nominal Capacitance is expressed in three-digit codes and in units of pico Farads (pF). The first and second digits identify the first and second significant figures of the capacitance. The third digit identifies the multiplier. R designates a decimal point.
- Ex. OR2 = 0.2pF; 103 = 10,000pF; 105 = 1,000,000pF = 1μF
**TDK MLCC Catalog Number Description**


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<th><strong>Nominal Capacitance (pF)</strong></th>
<th><strong>Temperature Characteristics</strong></th>
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<tr>
<td><strong>CGB</strong></td>
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<td><strong>Case Size Code</strong></td>
<td><strong>Thickess Code</strong></td>
<td><strong>Nominal Capacitance (pF)</strong></td>
<td><strong>Temperature Characteristics</strong></td>
</tr>
<tr>
<td>Low Profile</td>
<td>CGB</td>
<td>0.60 x 0.30</td>
<td>1</td>
<td>0.02 mm max.</td>
<td>JB -25°C to +85°C ±10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.00 x 0.50</td>
<td>2</td>
<td>0.33 mm max.</td>
<td>X5R -55°C to +85°C ±15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.60 x 0.80</td>
<td>3</td>
<td>0.50 mm max.</td>
<td>X6S -55°C to +105°C ±22%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.00 x 1.25</td>
<td>4</td>
<td>0.65 mm max.</td>
<td>X7R -55°C to +125°C ±15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
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- **Temperature Characteristics**
  - JB: -25°C to +85°C ±10%
  - X5R: -55°C to +85°C ±15%
  - X6S: -55°C to +105°C ±22%
  - X7R: -55°C to +125°C ±15%
  - X7S: -55°C to +125°C ±22%

- **Rated Voltage Code**
  - 0: 4V
  - 1: 10V, 16V, 25V

- **Nominal Capacitance (pF)**
  - The capacitance is expressed in three digit codes and in units of pico Farads (pF). The first and second digits identify the first and second significant figures of the capacitance. The third digit identifies the multiplier. R designates a decimal point.
  - Ex. 0R2 = 0.2pF; 103 = 10,000pF; 105 = 1,000,000pF = 1μF

- **Life Test Condition Description**
  - 1: 1.0 x Rated Voltage
  - 3: 1.5 x Rated Voltage

- **Special Code Description**
  - B: TDK internal code
  - C: TDK internal code

- **Packaging Code Description**
  - A: 178mm Reel / 4mm Pitch
  - B: 178mm Reel / 2mm Pitch

- **Thickness Code Description**
  - 022: 0.22 mm max.
  - 033: 0.33 mm max.
  - 050: 0.50 mm max.
  - 055: 0.55 mm max.
  - 065: 0.65 mm max.