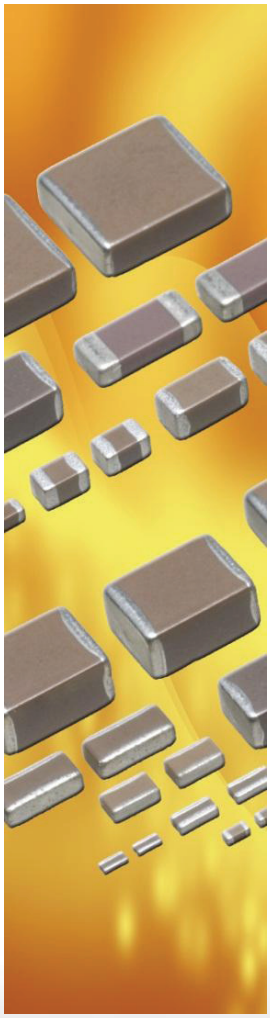
TDK

MULTILAYER CERAMIC CHIP CAPACITORS



# C Series
# Commercial Grade
# General (Up to 50V)

**Type:**

C0402 [EIA CC01005]
C0603 [EIA CC0201]
C1005 [EIA CC0402]
C1608 [EIA CC0603]
C2012 [EIA CC0805]
C3216 [EIA CC1206]
C3225 [EIA CC1210]
C4532 [EIA CC1812]
C5750 [EIA CC2220]

**Issue date:**
**January 2013**

Version A13

# REMINDERS

Please read before using this product

## SAFETY REMINDERS

## REMINDERS

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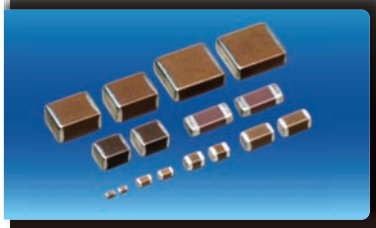
Notice : Effective January 2013, TDK will use a new catalog part number which adds product thickness and packaging specification detail. This new part number should be referenced on all catalog orders going forward, and is not applicable for OEM part number orders. Please be aware the last five digits of the TDK catalog part number will differ from the TDK item description (internal control number) on the product label. Contact your local TDK Sales representative for more information.

(Example)

| Catalog Issued date | TDK Part Number (In Catalog) | TDK Item Description (On Delivery Label) |
|---|---|---|
| Prior to January 2013 | C1608C0G1E103J | C1608C0G1E103JT000N |
| January 2013 and Later | C1608C0G1E103J080AA | C1608C0G1E103JT000N |



# C Series

## General (Up to 50V)

Type: C0402 [EIA CC01005], C0603 [EIA CC0201], C1005 [EIA CC0402], C1608 [EIA CC0603], C2012 [EIA CC0805], C3216 [EIA CC1206], C3225 [EIA CC1210], C4532 [EIA CC1812], C5750 [EIA CC2220]

Lead Free | RoHS COMPLIANT | Ecological

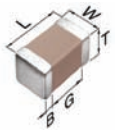
### Features

- High capacitance has been achieved through precision technologies that enable the use of multiple thinner ceramic dielectric layers.
- A monolithic structure ensures superior mechanical strength and reliability.
- Low ESL and excellent frequency characteristics allow for a circuit design that closely conforms to theoretical values.
- Low self-heating and high ripple resistance due to low ESR.

### Applications

- General electronic equipment
- Mobile communication equipment
- Power supply circuit
- Office automation equipment
- TV, LED displays
- Servers, PCs, Notebooks, Tablets

### Shape & Dimensions




| | |
|---|---|
| L | Body Length |
| W | Body Width |
| T | Body Height |
| B | Terminal Width |
| G | Terminal Spacing |

### Part Number Construction

C • 3225 • X7R • 1H • 106 • M • 250 • A • C

**Series Name**

**Dimensions L x W (mm)**

| Code | Length | Width | Terminal |
|---|---|---|---|
| C0402 | 0.40 ± 0.02 | 0.20 ± 0.02 | 0.07 min. |
| C0603 | 0.60 ± 0.03 | 0.30 ± 0.03 | 0.10 min. |
| C1005 | 1.00 ± 0.05 | 0.50 ± 0.05 | 0.10 min. |
| C1608 | 1.60 ± 0.10 | 0.80 ± 0.10 | 0.20 min. |
| C2012 | 2.00 ± 0.20 | 1.25 ± 0.20 | 0.20 min. |
| C3216 | 3.20 ± 0.20 | 1.60 ± 0.20 | 0.20 min. |
| C3225 | 3.20 ± 0.40 | 2.50 ± 0.30 | 0.20 min. |
| C4532 | 4.50 ± 0.40 | 3.20 ± 0.40 | 0.20 min. |
| C5750 | 5.70 ± 0.40 | 5.00 ± 0.40 | 0.20 min. |

*Dimension tolerance are typical values

**Temperature Characteristics**

| Temperature Characteristics | Capacitance Change | Temperature Range |
|---|---|---|
| CH | 0±60 ppm/°C | -25 to +85°C |
| C0G | 0±30 ppm/°C | -55 to +125°C |
| JB | ±10% | -25 to +85°C |
| X5R | ±15% | -55 to +85°C |
| X6S | ±22% | -55 to +105°C |
| X7R | ±15% | -55 to +125°C |
| X7S | ±22% | -55 to +125°C |

**Rated Voltage (DC)**

| Code | Voltage (DC) |
|---|---|
| 0G | 4V |
| 0J | 6.3V |
| 1A | 10V |
| 1C | 16V |
| 1E | 25V |
| 1V | 35V |
| 1H | 50V |

**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 = 1,000nF = 1µF

**Capacitance Tolerance**

| Code | Tolerance |
|---|---|
| B | ± 0.10pF |
| C | ± 0.25pF |
| D | ± 0.50pF |
| F | ± 1% |
| G | ± 2% |
| J | ± 5% |
| K | ± 10% |
| M | ± 20% |

**Nominal Thickness**

| Code | Thickness | Code | Thickness |
|---|---|---|---|
| 020 | 0.20 mm | 130 | 1.30 mm |
| 030 | 0.30 mm | 160 | 1.60 mm |
| 050 | 0.50 mm | 200 | 2.00 mm |
| 060 | 0.60 mm | 230 | 2.30 mm |
| 080 | 0.80 mm | 250 | 2.50 mm |
| 085 | 0.85 mm | 280 | 2.80 mm |
| 115 | 1.15 mm | 320 | 3.20 mm |
| 125 | 1.25 mm | | |

**Packaging Style**

| Code | Style |
|---|---|
| A | 178" Reel, 4mm Pitch |
| B | 178" Reel, 2mm Pitch |
| K | 178" Reel, 8mm Pitch |

**Special Reserved Code**

| Code | Description |
|---|---|
| A, B, C | TDK Internal Code |



• All specifications are subject to change without notice.

001-01 / 20130218 / mlcc_commercial_general_en

## Capacitance Range Chart

# EIA CC01005 [C0402]

**Capacitance Range Chart**

Temperature Characteristics: C0G(0 ± 30ppm/ºC), CH(0 ± 60ppm/ºC), JB(±10%)
Rated Voltage: 16V (1C), 10V (1A), 6.3V (0J),

| Capacitance (pF) | Code | Tolerance | C0G | CH | JB | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 1C (16V) | 1C (16V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 0.5 | 0R5 | C: ± 0.25pF | | | | | | |
| 0.75 | R75 | D: ± 0.50pF | | | | | | |
| 1 | 010 | J: ± 5% | | | | | | |
| 1.5 | 1R5 | K: ± 10% | | | | | | |
| 2 | 020 | M: ± 20% | | | | | | |
| 2.2 | 2R2 | | | | | | | |
| 3 | 030 | | | | | | | |
| 3.3 | 3R3 | | | | | | | |
| 4 | 040 | | | | | | | |
| 4.7 | 4R7 | | | | | | | |
| 5 | 050 | | | | | | | |
| 6 | 060 | | | | | | | |
| 6.8 | 6R8 | | | | | | | |
| 7 | 070 | | | | | | | |
| 8 | 080 | | | | | | | |
| 9 | 090 | | | | | | | |
| 10 | 100 | | | | | | | |
| 12 | 120 | | | | | | | |
| 15 | 150 | | | | | | | |
| 18 | 180 | | | | | | | |
| 22 | 220 | | | | | | | |
| 27 | 270 | | | | | | | |
| 33 | 330 | | | | | | | |
| 39 | 390 | | | | | | | |
| 47 | 470 | | | | | | | |
| 56 | 560 | | | | | | | |
| 68 | 680 | | | | | | | |
| 82 | 820 | | | | | | | |
| 100 | 101 | | | | | | | |
| 150 | 151 | | | | | | | |
| 220 | 221 | | | | | | | |
| 330 | 331 | | | | | | | |
| 470 | 471 | | | | | | | |
| 680 | 681 | | | | | | | |
| 1,000 | 102 | | | | | | | |
| 1,500 | 152 | | | | | | | |
| 2,200 | 222 | | | | | | | |
| 3,300 | 332 | | | | | | | |
| 4,700 | 472 | | | | | | | |
| 6,800 | 682 | | | | | | | |
| 10,000 | 103 | | | | | | | |

Standard Thickness
0.20 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC01005 [C0402]

**Capacitance Range Chart**

Temperature Characteristics: X5R (± 5%), X6S (±22%), X7R (±15%)
Rated Voltage: 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X5R | | | | X6S | | | X7R | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) | 1A (10V) | 0J (6.3V) | 0G (4V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 100 | 101 | K: ± 10%<br>M: ± 20% | ■ | | | | ■ | ■ | ■ | ■ | ■ | ■ |
| 150 | 151 | | ■ | | | | ■ | ■ | ■ | ■ | ■ | ■ |
| 220 | 221 | | ■ | | | | ■ | ■ | ■ | ■ | ■ | ■ |
| 330 | 331 | | ■ | | | | ■ | ■ | ■ | ■ | ■ | ■ |
| 470 | 471 | | ■ | | | | ■ | ■ | ■ | ■ | ■ | ■ |
| 680 | 681 | | ■ | | | | ■ | ■ | ■ | ■ | ■ | ■ |
| 1,000 | 102 | | | ■ | ■ | ■ | | | | | | |
| 1,500 | 152 | | | ■ | ■ | ■ | | | | | | |
| 2,200 | 222 | | | ■ | ■ | ■ | | | | | | |
| 3,300 | 332 | | | ■ | ■ | ■ | | | | | | |
| 4,700 | 472 | | | ■ | ■ | ■ | | | | | | |
| 6,800 | 682 | | | | ■ | ■ | | | | | | |
| 10,000 | 103 | | | | ■ | ■ | | | | | | |
| 22,000 | 223 | | | | ■ | ■ | | | | | | |
| 47,000 | 473 | | | | ■ | ■ | | | | | | |
| 100,000 | 104 | | | | ■ | ■ | | | | | | |

Standard Thickness
■ 0.20 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC0201 [C0603]

**Capacitance Range Chart**

Temperature Characteristics: C0G(0 ± 30ppm/ºC), CH(0 ± 60ppm/ºC), JB(±10%), X5R (± 5%)
Rated Voltage: 50V (1H), 25V (1E), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | C0G | | CH | | JB | | | | X5R | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1E (25V) | 1H (50V) | 1E (25V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 0.5 | 0R5 | C: ± 0.25pF | ■ | ■ | ■ | ■ | | | | | | | | | |
| 0.75 | R75 | D: ± 0.50pF | ■ | ■ | ■ | ■ | | | | | | | | | |
| 1 | 010 | J: ± 5% | ■ | ■ | ■ | ■ | | | | | | | | | |
| 1.5 | 1R5 | K: ± 10% | ■ | ■ | ■ | ■ | | | | | | | | | |
| 2 | 020 | M: ± 20% | ■ | ■ | ■ | ■ | | | | | | | | | |
| 2.2 | 2R2 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 3 | 030 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 3.3 | 3R3 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 4 | 040 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 4.7 | 4R7 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 5 | 050 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 6 | 060 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 6.8 | 6R8 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 7 | 070 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 8 | 080 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 9 | 090 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 10 | 100 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 12 | 120 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 15 | 150 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 18 | 180 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 22 | 220 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 27 | 270 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 33 | 330 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 39 | 390 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 47 | 470 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 56 | 560 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 68 | 680 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 82 | 820 | | ■ | ■ | ■ | ■ | | | | | | | | | |
| 100 | 101 | | ■ | ■ | ■ | ■ | ■ | | | | ■ | | | | |
| 150 | 151 | | | | | | ■ | | | | ■ | | | | |
| 220 | 221 | | | | | | ■ | | | | ■ | | | | |
| 330 | 331 | | | | | | ■ | | | | ■ | | | | |
| 470 | 471 | | | | | | ■ | | | | ■ | | | | |
| 680 | 681 | | | | | | ■ | | | | ■ | | | | |
| 1,000 | 102 | | | | | | ■ | | | | ■ | | | | |
| 1,500 | 152 | | | | | | ■ | | | | ■ | | | | |
| 2,200 | 222 | | | | | | ■ | | | | ■ | | | | |
| 3,300 | 332 | | | | | | ■ | | | | ■ | | | | |
| 4,700 | 472 | | | | | | | ■ | | | | ■ | | | |
| 6,800 | 682 | | | | | | | | ■ | | | | ■ | | |
| 10,000 | 103 | | | | | | | | ■ | | | | ■ | | |
| 15,000 | 153 | | | | | | | | ■ | ■ | | | ■ | ■ | |
| 22,000 | 223 | | | | | | | | ■ | ■ | | | ■ | ■ | |
| 33,000 | 333 | | | | | | | | ■ | ■ | | | ■ | ■ | |
| 47,000 | 473 | | | | | | | | ■ | ■ | | | ■ | ■ | |
| 68,000 | 683 | | | | | | | | ■ | ■ | | | ■ | ■ | |
| 100,000 | 104 | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 150,000 | 154 | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 220,000 | 224 | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 330,000 | 334 | | | | | | | | ■ | ■ | | | ■ | ■ | |
| 470,000 | 474 | | | | | | | | ■ | ■ | | | ■ | ■ | |
| 1,000,000 | 105 | | | | | | | | | | | | | ■ | ■ |

Standard Thickness

■ 0.30 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC0201 [C0603]

**Capacitance Range Chart**

Temperature Characteristics: X6S (±22%), X7R (±15%), X7S (±22%)
Rated Voltage: 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X6S | | | | | X7R | | | | X7S | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 100 | 101 | W: ± 0.05pF | | | | | | | | | | | | |
| 150 | 151 | B: ± 0.10pF | | | | | | | | | | | | |
| 220 | 221 | C: ± 0.25pF | | | | | | | | | | | | |
| 330 | 331 | D: ± 0.50pF | | | | | | | | | | | | |
| 470 | 471 | | | | | | | | | | | | | |
| 680 | 681 | | | | | | | | | | | | | |
| 1,000 | 102 | | | | | | | | | | | | | |
| 1,500 | 152 | | | | | | | | | | | | | |
| 2,200 | 222 | | | | | | | | | | | | | |
| 4,700 | 472 | | | | | | | | | | | | | |
| 10,000 | 103 | | | | | | | | | | | | | |
| 22,000 | 223 | | | | | | | | | | | | | |
| 47,000 | 473 | | | | | | | | | | | | | |
| 68,000 | 683 | | | | | | | | | | | | | |
| 100,000 | 104 | | | | | | | | | | | | | |
| 150,000 | 154 | | | | | | | | | | | | | |
| 220,000 | 224 | | | | | | | | | | | | | |

Standard Thickness

0.30 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC0402 [C1005]

**Capacitance Range Chart**

Temperature Characteristics: C0G (0 ± 30ppm/ºC), CH(0 ± 60ppm/ºC)
Rated Voltage: 50V (1H), 25V (1E)

| Capacitance (pF) | Code | Tolerance | C0G | | CH |
|---|---|---|---|---|---|
| | | | 1H (50V) | 1E (25V) | 1H (50V) |
| 0.5 | 0R5 | B: ± 0.10pF | | | |
| 0.75 | R75 | C: ± 0.25pF | | | |
| 1 | 010 | D: ± 0.50pF | | | |
| 1.5 | 1R5 | F: ± 1% | | | |
| 2 | 020 | G: ± 2% | | | |
| 3 | 030 | J: ± 5% | | | |
| 4 | 040 | K: ± 10% | | | |
| 5 | 050 | | | | |
| 6 | 060 | | | | |
| 7 | 070 | | | | |
| 8 | 080 | | | | |
| 9 | 090 | | | | |
| 10 | 100 | | | | |
| 12 | 120 | | | | |
| 15 | 150 | | | | |
| 18 | 180 | | | | |
| 22 | 220 | | | | |
| 27 | 270 | | | | |
| 33 | 330 | | | | |
| 39 | 390 | | | | |
| 47 | 470 | | | | |
| 56 | 560 | | | | |
| 68 | 680 | | | | |
| 82 | 820 | | | | |
| 100 | 101 | | | | |
| 120 | 121 | | | | |
| 150 | 151 | | | | |
| 180 | 181 | | | | |
| 220 | 221 | | | | |
| 270 | 271 | | | | |
| 330 | 331 | | | | |
| 390 | 391 | | | | |
| 470 | 471 | | | | |
| 560 | 561 | | | | |
| 680 | 681 | | | | |
| 820 | 821 | | | | |
| 1,000 | 102 | | | | |

Standard Thickness
0.50 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC0402 [C1005]

**Capacitance Range Chart**

Temperature Characteristics: JB(±10%)

Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | JB | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 220 | 221 | K: ± 10%<br>M: ± 20% | | | | | | | |
| 330 | 331 | | | | | | | | |
| 470 | 471 | | | | | | | | |
| 680 | 681 | | | | | | | | |
| 1,000 | 102 | | | | | | | | |
| 1,500 | 152 | | | | | | | | |
| 2,200 | 222 | | | | | | | | |
| 3,300 | 332 | | | | | | | | |
| 4,700 | 472 | | | | | | | | |
| 6,800 | 682 | | | | | | | | |
| 10,000 | 103 | | | | | | | | |
| 15,000 | 153 | | | | | | | | |
| 22,000 | 223 | | | | | | | | |
| 33,000 | 333 | | | | | | | | |
| 47,000 | 473 | | | | | | | | |
| 68,000 | 683 | | | | | | | | |
| 100,000 | 104 | | | | | | | | |
| 150,000 | 154 | | | | | | | | |
| 220,000 | 224 | | | | | | | | |
| 330,000 | 334 | | | | | | | | |
| 470,000 | 474 | | | | | | | | |
| 680,000 | 684 | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | |

Standard Thickness

0.50 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC0402 [C1005]

**Capacitance Range Chart**

Temperature Characteristics: X5R (± 5%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V(0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X5R | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 220 | 221 | K: ± 10%<br>M: ± 20% | | | | | | | |
| 330 | 331 | | | | | | | | |
| 470 | 471 | | | | | | | | |
| 680 | 681 | | | | | | | | |
| 1,000 | 102 | | | | | | | | |
| 1,500 | 152 | | | | | | | | |
| 2,200 | 222 | | | | | | | | |
| 3,300 | 332 | | | | | | | | |
| 4,700 | 472 | | | | | | | | |
| 6,800 | 682 | | | | | | | | |
| 10,000 | 103 | | | | | | | | |
| 15,000 | 153 | | | | | | | | |
| 22,000 | 223 | | | | | | | | |
| 33,000 | 333 | | | | | | | | |
| 47,000 | 473 | | | | | | | | |
| 68,000 | 683 | | | | | | | | |
| 100,000 | 104 | | | | | | | | |
| 150,000 | 154 | | | | | | | | |
| 220,000 | 224 | | | | | | | | |
| 330,000 | 334 | | | | | | | | |
| 470,000 | 474 | | | | | | | | |
| 680,000 | 684 | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | |

Standard Thickness
0.50 mm

**Capacitance Range Chart**

Temperature Characteristics: X6S (±22%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V(0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X6S | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 10,000 | 103 | K: ± 10%<br>M: ± 20% | | | | | | | |
| 15,000 | 153 | | | | | | | | |
| 22,000 | 223 | | | | | | | | |
| 33,000 | 333 | | | | | | | | |
| 47,000 | 473 | | | | | | | | |
| 68,000 | 683 | | | | | | | | |
| 100,000 | 104 | | | | | | | | |
| 150,000 | 154 | | | | | | | | |
| 220,000 | 224 | | | | | | | | |
| 330,000 | 334 | | | | | | | | |
| 470,000 | 474 | | | | | | | | |
| 680,000 | 684 | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | |

Standard Thickness
0.50 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC0402 [C1005]

**Capacitance Range Chart**

Temperature Characteristics: X7R (±15%), X7S (±22%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X7R | | | | | X7S | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 220 | 221 | K: ± 10%<br>M: ± 20% | ■ | | | | | | | |
| 330 | 331 | | ■ | | | | | | | |
| 470 | 471 | | ■ | | | | | | | |
| 680 | 681 | | ■ | | | | | | | |
| 1,000 | 102 | | ■ | | ■ | | | | | |
| 1,500 | 152 | | ■ | | | | | | | |
| 2,200 | 222 | | ■ | | | | | | | |
| 3,300 | 332 | | ■ | | | | | | | |
| 4,700 | 472 | | ■ | | | | | | | |
| 6,800 | 682 | | ■ | | | | | | | |
| 10,000 | 103 | | ■ | ■ | ■ | ■ | | | | |
| 15,000 | 153 | | ■ | ■ | | | | | | |
| 22,000 | 223 | | ■ | ■ | ■ | | | | | |
| 33,000 | 333 | | ■ | ■ | | | | | | |
| 47,000 | 473 | | ■ | ■ | ■ | ■ | | | | |
| 68,000 | 683 | | ■ | ■ | ■ | ■ | | | | |
| 100,000 | 104 | | ■ | ■ | ■ | ■ | ■ | | | |
| 150,000 | 154 | | | | | ■ | ■ | | | |
| 220,000 | 224 | | | | | ■ | ■ | | | |
| 330,000 | 334 | | | | | | | ■ | ■ | |
| 470,000 | 474 | | | | | | | ■ | ■ | |
| 680,000 | 684 | | | | | | | ■ | ■ | ■ |
| 1,000,000 | 105 | | | | | | | ■ | ■ | ■ |
| 1,500,000 | 155 | | | | | | | ■ | ■ | ■ |
| 2,200,000 | 225 | | | | | | | ■ | ■ | ■ |

Standard Thickness
■ 0.50 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC0603 [C1608]

**Capacitance Range Chart**

Temperature Characteristics: C0G (0 ± 30ppm/ºC), CH(0 ± 60ppm/ºC)
Rated Voltage: 50V (1H), 25V (1E)

| Capacitance (pF) | Code | Tolerance | C0G | | CH |
|---|---|---|---|---|---|
| | | | 1H (50V) | 1E (25V) | 1H (50V) |
| 0.5 | 0R5 | C: ± 0.25pF | | | |
| 0.75 | R75 | D: ± 0.50pF | | | |
| 1 | 010 | J: ± 5% | | | |
| 1.5 | 1R5 | K: ± 10% | | | |
| 2 | 020 | | | | |
| 3 | 030 | | | | |
| 4 | 040 | | | | |
| 5 | 050 | | | | |
| 6 | 060 | | | | |
| 7 | 070 | | | | |
| 8 | 080 | | | | |
| 9 | 090 | | | | |
| 10 | 100 | | | | |
| 12 | 120 | | | | |
| 15 | 150 | | | | |
| 18 | 180 | | | | |
| 22 | 220 | | | | |
| 27 | 270 | | | | |
| 33 | 330 | | | | |
| 39 | 390 | | | | |
| 47 | 470 | | | | |
| 56 | 560 | | | | |
| 68 | 680 | | | | |
| 82 | 820 | | | | |
| 100 | 101 | | | | |
| 120 | 121 | | | | |
| 150 | 151 | | | | |
| 180 | 181 | | | | |
| 220 | 221 | | | | |
| 270 | 271 | | | | |
| 330 | 331 | | | | |
| 390 | 391 | | | | |
| 470 | 471 | | | | |
| 560 | 561 | | | | |
| 680 | 681 | | | | |
| 820 | 821 | | | | |
| 1,000 | 102 | | | | |
| 1,200 | 122 | | | | |
| 1,500 | 152 | | | | |
| 1,800 | 182 | | | | |
| 2,200 | 222 | | | | |
| 2,700 | 272 | | | | |
| 3,300 | 332 | | | | |
| 3,900 | 392 | | | | |
| 4,700 | 472 | | | | |
| 5,600 | 562 | | | | |
| 6,800 | 682 | | | | |
| 8,200 | 822 | | | | |
| 10,000 | 103 | | | | |

Standard Thickness
0.80 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC0603 [C1608]

**Capacitance Range Chart**

Temperature Characteristics: JB(±10%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | JB | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 10,000 | 103 | K: ± 10%<br>M: ± 20% | | | | | | | |
| 15,000 | 153 | | | | | | | | |
| 22,000 | 223 | | | | | | | | |
| 33,000 | 333 | | | | | | | | |
| 47,000 | 473 | | | | | | | | |
| 68,000 | 683 | | | | | | | | |
| 100,000 | 104 | | | | | | | | |
| 150,000 | 154 | | | | | | | | |
| 220,000 | 224 | | | | | | | | |
| 330,000 | 334 | | | | | | | | |
| 470,000 | 474 | | | | | | | | |
| 680,000 | 684 | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | |
| 15,000,000 | 156 | | | | | | | | |
| 22,000,000 | 226 | | | | | | | | |

Standard Thickness
0.80 mm

**Capacitance Range Chart**

Temperature Characteristics: X5R (± 5%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X5R | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 10,000 | 103 | K: ± 10%<br>M: ± 20% | | | | | | | |
| 15,000 | 153 | | | | | | | | |
| 22,000 | 223 | | | | | | | | |
| 33,000 | 333 | | | | | | | | |
| 47,000 | 473 | | | | | | | | |
| 68,000 | 683 | | | | | | | | |
| 100,000 | 104 | | | | | | | | |
| 150,000 | 154 | | | | | | | | |
| 220,000 | 224 | | | | | | | | |
| 330,000 | 334 | | | | | | | | |
| 470,000 | 474 | | | | | | | | |
| 680,000 | 684 | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | |
| 15,000,000 | 156 | | | | | | | | |
| 22,000,000 | 226 | | | | | | | | |

Standard Thickness
0.80 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC0603 [C1608]

**Capacitance Range Chart**

Temperature Characteristics: X6S (±22%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X6S | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 150,000 | 154 | K: ± 10% | | | | | | | |
| 220,000 | 224 | M: ± 20% | | | | | | | |
| 330,000 | 334 | | | | | | | | |
| 470,000 | 474 | | | | | | | | |
| 680,000 | 684 | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | |

Standard Thickness
0.80 mm

**Capacitance Range Chart**

Temperature Characteristics: X7R (±15%), X7S (±22%)
Rated Voltage: 50V (1V), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X7R | | | | | | X7S | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 10,000 | 103 | K: ± 10% | | | | | | | | | |
| 15,000 | 153 | M: ± 20% | | | | | | | | | |
| 22,000 | 223 | | | | | | | | | | |
| 33,000 | 333 | | | | | | | | | | |
| 47,000 | 473 | | | | | | | | | | |
| 68,000 | 683 | | | | | | | | | | |
| 100,000 | 104 | | | | | | | | | | |
| 150,000 | 154 | | | | | | | | | | |
| 220,000 | 224 | | | | | | | | | | |
| 330,000 | 334 | | | | | | | | | | |
| 470,000 | 474 | | | | | | | | | | |
| 680,000 | 684 | | | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | | | |

Standard Thickness
0.80 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC0805 [C2012]

**Capacitance Range Chart**

Temperature Characteristics: C0G (0 ± 30ppm/ºC), CH(0 ± 60ppm/ºC), JB(±10%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J)

| Capacitance (pF) | Code | Tolerance | C0G | | CH | JB | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1E (25V) | 1H (50V) | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) |
| 1,000 | 102 | J: ± 5% | | | | | | | | | |
| 1,200 | 122 | K: ± 10% | | | | | | | | | |
| 1,500 | 152 | M: ± 20% | | | | | | | | | |
| 1,800 | 182 | | | | | | | | | | |
| 2,200 | 222 | | | | | | | | | | |
| 2,700 | 272 | | | | | | | | | | |
| 3,300 | 332 | | | | | | | | | | |
| 3,900 | 392 | | | | | | | | | | |
| 4,700 | 472 | | | | | | | | | | |
| 5,600 | 562 | | | | | | | | | | |
| 6,800 | 682 | | | | | | | | | | |
| 8,200 | 822 | | | | | | | | | | |
| 10,000 | 103 | | | | | | | | | | |
| 15,000 | 153 | | | | | | | | | | |
| 22,000 | 223 | | | | | | | | | | |
| 33,000 | 333 | | | | | | | | | | |
| 100,000 | 104 | | | | | | | | | | |
| 150,000 | 154 | | | | | | | | | | |
| 220,000 | 224 | | | | | | | | | | |
| 330,000 | 334 | | | | | | | | | | |
| 470,000 | 474 | | | | | | | | | | |
| 680,000 | 684 | | | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | | | |
| 15,000,000 | 156 | | | | | | | | | | |
| 22,000,000 | 226 | | | | | | | | | | |
| 33,000,000 | 336 | | | | | | | | | | |
| 47,000,000 | 476 | | | | | | | | | | |

Standard Thickness
- 0.60 mm
- 0.85 mm
- 1.25 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC0805 [C2012]

**Capacitance Range Chart**

Temperature Characteristics: X5R (± 5%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X5R | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 100,000 | 104 | K: ± 10%<br>M: ± 20% | | | | | | | |
| 150,000 | 154 | | | | | | | | |
| 220,000 | 224 | | | | | | | | |
| 330,000 | 334 | | | | | | | | |
| 470,000 | 474 | | | | | | | | |
| 680,000 | 684 | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | |
| 15,000,000 | 156 | | | | | | | | |
| 22,000,000 | 226 | | | | | | | | |
| 33,000,000 | 336 | | | | | | | | |
| 47,000,000 | 476 | | | | | | | | |

Standard Thickness
0.85 mm
1.25 mm

**Capacitance Range Chart**

Temperature Characteristics: X6S (±22%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X6S | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 470,000 | 474 | K: ± 10%<br>M: ± 20% | | | | | | | |
| 680,000 | 684 | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | |
| 15,000,000 | 156 | | | | | | | | |
| 22,000,000 | 226 | | | | | | | | |
| 33,000,000 | 336 | | | | | | | | |
| 47,000,000 | 476 | | | | | | | | |

Standard Thickness
0.85 mm
1.25 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC0805 [C2012]

**Capacitance Range Chart**

Temperature Characteristics: X7R (±15%), X7S (±22%)

Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X7R | | | | | | X7S | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 100,000 | 104 | K: ± 10%<br>M: ± 20% | | | | | | | | | |
| 150,000 | 154 | | | | | | | | | | |
| 220,000 | 224 | | | | | | | | | | |
| 330,000 | 334 | | | | | | | | | | |
| 470,000 | 474 | | | | | | | | | | |
| 680,000 | 684 | | | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | | | |
| 15,000,000 | 156 | | | | | | | | | | |
| 22,000,000 | 226 | | | | | | | | | | |

Standard Thickness

0.85 mm

1.25 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC1206 [C3216]

**Capacitance Range Chart**

Temperature Characteristics: C0G (0 ± 30ppm/ºC), CH(0 ± 60ppm/ºC), JB(±10%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J)

| Capacitance (pF) | Code | Tolerance | C0G | CH | JB | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1H (50V) | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) |
| 3,900 | 392 | J: ± 5% | | | | | | | | |
| 4,700 | 472 | K: ± 10% | | | | | | | | |
| 5,600 | 562 | M: ± 20% | | | | | | | | |
| 6,800 | 682 | | | | | | | | | |
| 8,200 | 822 | | | | | | | | | |
| 10,000 | 103 | | | | | | | | | |
| 15,000 | 153 | | | | | | | | | |
| 22,000 | 223 | | | | | | | | | |
| 33,000 | 333 | | | | | | | | | |
| 47,000 | 473 | | | | | | | | | |
| 68,000 | 683 | | | | | | | | | |
| 100,000 | 104 | | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | | |
| 15,000,000 | 156 | | | | | | | | | |
| 22,000,000 | 226 | | | | | | | | | |
| 33,000,000 | 336 | | | | | | | | | |
| 47,000,000 | 476 | | | | | | | | | |
| 68,000,000 | 686 | | | | | | | | | |
| 100,000,000 | 107 | | | | | | | | | |

Standard Thickness
- 0.60 mm
- 0.85 mm
- 1.15 mm
- 1.30 mm
- 1.60 mm

**Capacitance Range Chart**

Temperature Characteristics: X5R (± 5%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X5R | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 1,000,000 | 105 | K: ± 10% | | | | | | | |
| 1,500,000 | 155 | M: ± 20% | | | | | | | |
| 2,200,000 | 225 | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | |
| 15,000,000 | 156 | | | | | | | | |
| 22,000,000 | 226 | | | | | | | | |
| 33,000,000 | 336 | | | | | | | | |
| 47,000,000 | 476 | | | | | | | | |
| 68,000,000 | 686 | | | | | | | | |
| 100,000,000 | 107 | | | | | | | | |

Standard Thickness
- 1.15 mm
- 1.30 mm
- 1.60 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC1206 [C3216]

**Capacitance Range Chart**

Temperature Characteristics: X6S (±22%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X6S | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 1,500,000 | 155 | K: ± 10%<br>M: ± 20% | | | | | | | |
| 2,200,000 | 225 | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | |
| 15,000,000 | 156 | | | | | | | | |
| 22,000,000 | 226 | | | | | | | | |
| 33,000,000 | 336 | | | | | | | | |
| 47,000,000 | 476 | | | | | | | | |
| 68,000,000 | 686 | | | | | | | | |
| 100,000,000 | 107 | | | | | | | | |

Standard Thickness
- 0.85 mm
- 1.60 mm

**Capacitance Range Chart**

Temperature Characteristics: X7R (±15%), X7S (±22%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X7R | | | | | | X7S | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 1A (10V) | 0J (6.3V) | 0G (4V) |
| 220,000 | 224 | K: ± 10%<br>M: ± 20% | | | | | | | | | |
| 330,000 | 334 | | | | | | | | | | |
| 470,000 | 474 | | | | | | | | | | |
| 680,000 | 684 | | | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | | | |
| 15,000,000 | 156 | | | | | | | | | | |
| 22,000,000 | 226 | | | | | | | | | | |
| 33,000,000 | 336 | | | | | | | | | | |
| 47,000,000 | 476 | | | | | | | | | | |

Standard Thickness
- 1.15 mm
- 1.60 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC1210 [C3225]

**Capacitance Range Chart**

Temperature Characteristics: C0G (0 ± 30ppm/ºC), CH(0 ± 60ppm/ºC), JB(±10%), X5R (± 5%)
Rated Voltage: 50V (1H), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J)

| Capacitance (pF) | Code | Tolerance | C0G | CH | JB | | | | | X5R | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1H (50V) | 1H (50V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 1H (50V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) |
| 22,000 | 223 | J: ± 5% | 1.25 mm | 1.25 mm | | | | | | | | | | |
| 33,000 | 333 | K: ± 10% | 1.60 mm | 1.60 mm | | | | | | | | | | |
| 47,000 | 473 | M: ± 20% | 2.00 mm | 2.00 mm | | | | | | | | | | |
| 68,000 | 683 | | 2.00 mm | 2.00 mm | | | | | | | | | | |
| 100,000 | 104 | | 2.50 mm | 2.50 mm | | | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | | | | | | |
| 1,500,000 | 155 | | | | | | | | | | | | | |
| 2,200,000 | 225 | | | | 2.00 mm | | | | | 2.50 mm | | | | |
| 3,300,000 | 335 | | | | 2.50 mm | | | | | 2.50 mm | | | | |
| 4,700,000 | 475 | | | | 2.50 mm | | | | | 2.50 mm | | | | |
| 6,800,000 | 685 | | | | 2.50 mm | 2.00 mm | 2.00 mm | | | 2.50 mm | 2.50 mm | 2.00 mm | | |
| 10,000,000 | 106 | | | | 2.50 mm | 2.50 mm | 2.00 mm | | | 2.50 mm | | 2.00 mm | | |
| 15,000,000 | 156 | | | | | | 2.50 mm | 2.30 mm | | | | 2.50 mm | 2.30 mm | |
| 22,000,000 | 226 | | | | | | 2.50 mm | 2.50 mm | | | | 2.50 mm | 2.30 mm | 2.00 mm |
| 33,000,000 | 336 | | | | | | | | | | | | 2.00 mm | 2.00 mm |
| 47,000,000 | 476 | | | | | | | | | | | | 2.50 mm | 2.50 mm |
| 68,000,000 | 686 | | | | | | | | 2.00 mm | | | | | 2.00 mm |
| 100,000,000 | 107 | | | | | | | | 2.50 mm | | | | | 2.50 mm |

Standard Thickness

1.25 mm 1.60 mm 2.00 mm 2.30 mm 2.50 mm

**Capacitance Range Chart**

Temperature Characteristics: X6S (±22%), X7R (±15%), X7S (±22%)
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

| Capacitance (pF) | Code | Tolerance | X6S | | | | | | X7R | | | | X7S | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 0J (6.3V) | 0G (4V) | 1H (50V) | 1E (25V) | 1C (16V) | 1A (10V) | 1H (50V) | 0J (6.3V) |
| 1,000,000 | 105 | K: ± 10% | | | | | | | 1.60 mm | | | | | |
| 1,500,000 | 155 | M: ± 20% | | | | | | | 2.00 mm | | | | | |
| 2,200,000 | 225 | | | | | | | | 2.00 mm | | | | | |
| 3,300,000 | 335 | | | | | | | | 2.50 mm | 1.60 mm | | | | |
| 4,700,000 | 475 | | 2.50 mm | | | | | | 2.50 mm | 2.00 mm | | | | |
| 6,800,000 | 685 | | 2.50 mm | 2.50 mm | 2.50 mm | | | | | 2.50 mm | | | 2.50 mm | |
| 10,000,000 | 106 | | 2.50 mm | 2.50 mm | 2.50 mm | | | | 2.50 mm | 2.50 mm | 2.00 mm | | 2.50 mm | |
| 15,000,000 | 156 | | | | | | | | | | 2.50 mm | | | |
| 22,000,000 | 226 | | | | | 2.50 mm | | | | | 2.50 mm | 2.30 mm | | |
| 33,000,000 | 336 | | | | | | | | | | | | | |
| 47,000,000 | 476 | | | | | | 2.50 mm | | | | | | | 2.50 mm |
| 100,000,000 | 107 | | | | | | 2.50 mm | 2.50 mm | | | | | | |

Standard Thickness

1.60 mm 2.00 mm 2.30 mm 2.50 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC1812 [C4532]

**Capacitance Range Chart**

Temperature Characteristics: C0G (0 ± 30ppm/ºC), CH(0 ± 60ppm/ºC), JB(±10%)
Rated Voltage: 50V (1H), 25V (1E), 16V (1C)

| Capacitance (pF) | Code | Tolerance | C0G | CH | JB | | |
|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1H (50V) | 1H (50V) | 1E (25V) | 1C (16V) |
| 47,000 | 473 | J: ± 5%<br>K: ± 10%<br>M: ± 20% | | | | | |
| 68,000 | 683 | | | | | | |
| 100,000 | 104 | | | | | | |
| 150,000 | 154 | | | | | | |
| 220,000 | 224 | | | | | | |
| 6,800,000 | 685 | | | | | | |
| 10,000,000 | 106 | | | | | | |
| 15,000,000 | 156 | | | | | | |
| 22,000,000 | 226 | | | | | | |
| 33,000,000 | 336 | | | | | | |

Standard Thickness
- 1.60 mm
- 2.00 mm
- 2.50 mm
- 3.20 mm

**Capacitance Range Chart**

Temperature Characteristics: X5R (± 5%), X6S (±22%), X7R (±15%)
Rated Voltage: 50V (1H), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J)

| Capacitance (pF) | Code | Tolerance | X5R | | | | | X6S | X7R | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1H (50V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 0J (6.3V) | 1H (50V) | 1E (25V) | 1C (16V) |
| 1,000,000 | 105 | K: ± 10%<br>M: ± 20% | | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | | | |
| 15,000,000 | 156 | | | | | | | | | | |
| 22,000,000 | 226 | | | | | | | | | | |
| 33,000,000 | 336 | | | | | | | | | | |
| 47,000,000 | 476 | | | | | | | | | | |
| 68,000,000 | 686 | | | | | | | | | | |
| 100,000,000 | 107 | | | | | | | | | | |

Standard Thickness
- 1.60 mm
- 2.00 mm
- 2.30 mm
- 2.50 mm
- 2.80 mm



• All specifications are subject to change without notice.

## Capacitance Range Chart

# EIA CC2220 [C5750]

**Capacitance Range Chart**

Temperature Characteristics: JB(±10%), X5R (± 5%), X7R (±15%)
Rated Voltage: 50V (1H), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J)

| Capacitance (pF) | Code | Tolerance | JB | X5R | | | | | X7R | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1E (25V) | 1H (50V) | 1E (25V) | 1C (16V) | 1A (10V) | 0J (6.3V) | 1H (50V) | 1E (25V) | 1C (16V) |
| 4,700,000 | 475 | K: ± 10%<br>M: ± 20% | | | | | | | | | |
| 6,800,000 | 685 | | | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | | | |
| 15,000,000 | 156 | | | | | | | | | | |
| 22,000,000 | 226 | | | | | | | | | | |
| 33,000,000 | 336 | | | | | | | | | | |
| 47,000,000 | 476 | | | | | | | | | | |
| 68,000,000 | 686 | | | | | | | | | | |
| 100,000,000 | 107 | | | | | | | | | | |

Standard Thickness
- 2.00 mm
- 2.30 mm
- 2.50 mm
- 2.80 mm



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 1 (Temperature Compensating)**

Temperature Characteristics: C0G (-55 to +125ºC, 0 ± 30 ppm/ºC)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 0.5 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402C0G1C0R5C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603C0G1H0R5C030BA | C0603C0G1E0R5C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005C0G1H0R5B050BA | | |
| | | | ± 0.25pF | C1005C0G1H0R5C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608C0G1H0R5C080AA | | |
| 0.75 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402C0G1CR75C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603C0G1HR75C030BA | C0603C0G1ER75C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005C0G1HR75B050BA | | |
| | | | ± 0.25pF | C1005C0G1HR75C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608C0G1HR75C080AA | | |
| 1 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402C0G1C010C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603C0G1H010C030BA | C0603C0G1E010C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005C0G1H010B050BA | | |
| | | | ± 0.25pF | C1005C0G1H010C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608C0G1H010C080AA | | |
| 1.5 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402C0G1C1R5C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603C0G1H1R5C030BA | C0603C0G1E1R5C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005C0G1H1R5B050BA | | |
| | | | ± 0.25pF | C1005C0G1H1R5C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608C0G1H1R5C080AA | | |
| 2 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402C0G1C020C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603C0G1H020C030BA | C0603C0G1E020C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005C0G1H020B050BA | | |
| | | | ± 0.25pF | C1005C0G1H020C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608C0G1H020C080AA | | |
| 2.2 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402C0G1C2R2C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603C0G1H2R2C030BA | C0603C0G1E2R2C030BA | |
| 3 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402C0G1C030C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603C0G1H030C030BA | C0603C0G1E030C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005C0G1H030B050BA | | |
| | | | ± 0.25pF | C1005C0G1H030C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608C0G1H030C080AA | | |
| 3.3 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402C0G1C3R3C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603C0G1H3R3C030BA | C0603C0G1E3R3C030BA | |
| 4 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402C0G1C040C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603C0G1H040C030BA | C0603C0G1E040C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005C0G1H040B050BA | | |
| | | | ± 0.25pF | C1005C0G1H040C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608C0G1H040C080AA | | |
| 4.7 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402C0G1C4R7C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603C0G1H4R7C030BA | C0603C0G1E4R7C030BA | |
| 5 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402C0G1C050C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603C0G1H050C030BA | C0603C0G1E050C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005C0G1H050B050BA | | |
| | | | ± 0.25pF | C1005C0G1H050C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608C0G1H050C080AA | | |
| 6 pF | 0402 | 0.20 ± 0.02 | ± 0.50pF | | | C0402C0G1C060D020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.50pF | C0603C0G1H060D030BA | C0603C0G1E060D030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.25pF | C1005C0G1H060C050BA | | |
| | | | ± 0.50pF | C1005C0G1H060D050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608C0G1H060C080AA | | |
| | | | ± 0.50pF | C1608C0G1H060D080AA | | |
| 6.8 pF | 0402 | 0.20 ± 0.02 | ± 0.50pF | | | C0402C0G1C6R8D020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.50pF | C0603C0G1H6R8D030BA | C0603C0G1E6R8D030BA | |
| 7 pF | 0402 | 0.20 ± 0.02 | ± 0.50pF | | | C0402C0G1C070D020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.50pF | C0603C0G1H070D030BA | C0603C0G1E070D030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.25pF | C1005C0G1H070C050BA | | |
| | | | ± 0.50pF | C1005C0G1H070D050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608C0G1H070C080AA | | |
| | | | ± 0.50pF | C1608C0G1H070D080AA | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 1 (Temperature Compensating)**

Temperature Characteristics: C0G (-55 to +125ºC, 0 ± 30 ppm/ºC)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 8 pF | 0402 | 0.20 ± 0.02 | ± 0.50pF | | | C0402C0G1C080D020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.50pF | C0603C0G1H080D030BA | C0603C0G1E080D030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.25pF | C1005C0G1H080C050BA | | |
| | | | ± 0.50pF | C1005C0G1H080D050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608C0G1H080C080AA | | |
| | | | ± 0.50pF | C1608C0G1H080D080AA | | |
| 9 pF | 0402 | 0.20 ± 0.02 | ± 0.50pF | | | C0402C0G1C090D020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.50pF | C0603C0G1H090D030BA | C0603C0G1E090D030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.25pF | C1005C0G1H090C050BA | | |
| | | | ± 0.50pF | C1005C0G1H090D050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608C0G1H090C080AA | | |
| | | | ± 0.50pF | C1608C0G1H090D080AA | | |
| 10 pF | 0402 | 0.20 ± 0.02 | ± 0.50pF | | | C0402C0G1C100D020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.50pF | C0603C0G1H100D030BA | C0603C0G1E100D030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.25pF | C1005C0G1H100C050BA | | |
| | | | ± 0.50pF | C1005C0G1H100D050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608C0G1H100C080AA | | |
| | | | ± 0.50pF | C1608C0G1H100D080AA | | |
| 12 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402C0G1C120K020BC |
| | | | ± 5% | | | C0402C0G1C120J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603C0G1H120K030BA | C0603C0G1E120K030BA | |
| | | | ± 5% | C0603C0G1H120J030BA | C0603C0G1E120J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005C0G1H120J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608C0G1H120J080AA | | |
| 15 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402C0G1C150K020BC |
| | | | ± 5% | | | C0402C0G1C150J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603C0G1H150K030BA | C0603C0G1E150K030BA | |
| | | | ± 5% | C0603C0G1H150J030BA | C0603C0G1E150J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 1% | C1005C0G1H150F050BA | | |
| | | | ± 2% | C1005C0G1H150G050BA | | |
| | | | ± 5% | C1005C0G1H150J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 1% | C1608C0G1H150F080AA | | |
| | | | ± 2% | C1608C0G1H150G080AA | | |
| | | | ± 5% | C1608C0G1H150J080AA | | |
| 18 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402C0G1C180K020BC |
| | | | ± 5% | | | C0402C0G1C180J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603C0G1H180K030BA | C0603C0G1E180K030BA | |
| | | | ± 5% | C0603C0G1H180J030BA | C0603C0G1E180J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005C0G1H180J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608C0G1H180J080AA | | |
| 22 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402C0G1C220K020BC |
| | | | ± 5% | | | C0402C0G1C220J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603C0G1H220K030BA | C0603C0G1E220K030BA | |
| | | | ± 5% | C0603C0G1H220J030BA | C0603C0G1E220J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 1% | C1005C0G1H220F050BA | | |
| | | | ± 2% | C1005C0G1H220G050BA | | |
| | | | ± 5% | C1005C0G1H220J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 1% | C1608C0G1H220F080AA | | |
| | | | ± 2% | C1608C0G1H220G080AA | | |
| | | | ± 5% | C1608C0G1H220J080AA | | |
| 27 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402C0G1C270K020BC |
| | | | ± 5% | | | C0402C0G1C270J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603C0G1H270K030BA | C0603C0G1E270K030BA | |
| | | | ± 5% | C0603C0G1H270J030BA | C0603C0G1E270J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005C0G1H270J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608C0G1H270J080AA | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 1 (Temperature Compensating)**

Temperature Characteristics: C0G (-55 to +125ºC, 0 ± 30 ppm/ºC)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 33 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402C0G1C330K020BC |
| | | | ± 5% | | | C0402C0G1C330J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603C0G1H330K030BA | C0603C0G1E330K030BA | |
| | | | ± 5% | C0603C0G1H330J030BA | C0603C0G1E330J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 1% | C1005C0G1H330F050BA | | |
| | | | ± 2% | C1005C0G1H330G050BA | | |
| | | | ± 5% | C1005C0G1H330J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 1% | C1608C0G1H330F080AA | | |
| | | | ± 2% | C1608C0G1H330G080AA | | |
| | | | ± 5% | C1608C0G1H330J080AA | | |
| 39 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402C0G1C390K020BC |
| | | | ± 5% | | | C0402C0G1C390J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603C0G1H390K030BA | C0603C0G1E390K030BA | |
| | | | ± 5% | C0603C0G1H390J030BA | C0603C0G1E390J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005C0G1H390J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608C0G1H390J080AA | | |
| 47 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402C0G1C470K020BC |
| | | | ± 5% | | | C0402C0G1C470J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603C0G1H470K030BA | C0603C0G1E470K030BA | |
| | | | ± 5% | C0603C0G1H470J030BA | C0603C0G1E470J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 1% | C1005C0G1H470F050BA | | |
| | | | ± 2% | C1005C0G1H470G050BA | | |
| | | | ± 5% | C1005C0G1H470J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 1% | C1608C0G1H470F080AA | | |
| | | | ± 2% | C1608C0G1H470G080AA | | |
| | | | ± 5% | C1608C0G1H470J080AA | | |
| 56 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402C0G1C560K020BC |
| | | | ± 5% | | | C0402C0G1C560J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603C0G1H560K030BA | C0603C0G1E560K030BA | |
| | | | ± 5% | C0603C0G1H560J030BA | C0603C0G1E560J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005C0G1H560J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608C0G1H560J080AA | | |
| 68 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402C0G1C680K020BC |
| | | | ± 5% | | | C0402C0G1C680J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603C0G1H680K030BA | C0603C0G1E680K030BA | |
| | | | ± 5% | C0603C0G1H680J030BA | C0603C0G1E680J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 1% | C1005C0G1H680F050BA | | |
| | | | ± 2% | C1005C0G1H680G050BA | | |
| | | | ± 5% | C1005C0G1H680J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 1% | C1608C0G1H680F080AA | | |
| | | | ± 2% | C1608C0G1H680G080AA | | |
| | | | ± 5% | C1608C0G1H680J080AA | | |
| 82 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402C0G1C820K020BC |
| | | | ± 5% | | | C0402C0G1C820J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603C0G1H820K030BA | C0603C0G1E820K030BA | |
| | | | ± 5% | C0603C0G1H820J030BA | C0603C0G1E820J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005C0G1H820J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608C0G1H820J080AA | | |
| 100 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402C0G1C101K020BC |
| | | | ± 5% | | | C0402C0G1C101J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603C0G1H101K030BA | C0603C0G1E101K030BA | |
| | | | ± 5% | C0603C0G1H101J030BA | C0603C0G1E101J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 1% | C1005C0G1H101F050BA | | |
| | | | ± 10% | C1005C0G1H101K050BA | | |
| | | | ± 2% | C1005C0G1H101G050BA | | |
| | | | ± 5% | C1005C0G1H101J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 1% | C1608C0G1H101F080AA | | |
| | | | ± 10% | C1608C0G1H101K080AA | | |
| | | | ± 2% | C1608C0G1H101G080AA | | |
| | | | ± 5% | C1608C0G1H101J080AA | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 1 (Temperature Compensating)**

Temperature Characteristics: C0G (-55 to +125ºC, 0 ± 30 ppm/ºC)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 120 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005C0G1H121K050BA | | |
| | | | ± 5% | C1005C0G1H121J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H121K080AA | | |
| | | | ± 5% | C1608C0G1H121J080AA | | |
| 150 pF | 1005 | 0.50 ± 0.05 | ± 1% | C1005C0G1H151F050BA | | |
| | | | ± 10% | C1005C0G1H151K050BA | | |
| | | | ± 2% | C1005C0G1H151G050BA | | |
| | | | ± 5% | C1005C0G1H151J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 1% | C1608C0G1H151F080AA | | |
| | | | ± 10% | C1608C0G1H151K080AA | | |
| | | | ± 2% | C1608C0G1H151G080AA | | |
| | | | ± 5% | C1608C0G1H151J080AA | | |
| 180 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005C0G1H181K050BA | | |
| | | | ± 5% | C1005C0G1H181J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H181K080AA | | |
| | | | ± 5% | C1608C0G1H181J080AA | | |
| 220 pF | 1005 | 0.50 ± 0.05 | ± 1% | C1005C0G1H221F050BA | | |
| | | | ± 10% | C1005C0G1H221K050BA | | |
| | | | ± 2% | C1005C0G1H221G050BA | | |
| | | | ± 5% | C1005C0G1H221J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 1% | C1608C0G1H221F080AA | | |
| | | | ± 10% | C1608C0G1H221K080AA | | |
| | | | ± 2% | C1608C0G1H221G080AA | | |
| | | | ± 5% | C1608C0G1H221J080AA | | |
| 270 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005C0G1H271K050BA | | |
| | | | ± 5% | C1005C0G1H271J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H271K080AA | | |
| | | | ± 5% | C1608C0G1H271J080AA | | |
| 330 pF | 1005 | 0.50 ± 0.05 | ± 1% | C1005C0G1H331F050BA | | |
| | | | ± 10% | C1005C0G1H331K050BA | | |
| | | | ± 2% | C1005C0G1H331G050BA | | |
| | | | ± 5% | C1005C0G1H331J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 1% | C1608C0G1H331F080AA | | |
| | | | ± 10% | C1608C0G1H331K080AA | | |
| | | | ± 2% | C1608C0G1H331G080AA | | |
| | | | ± 5% | C1608C0G1H331J080AA | | |
| 390 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005C0G1H391K050BA | | |
| | | | ± 5% | C1005C0G1H391J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H391K080AA | | |
| | | | ± 5% | C1608C0G1H391J080AA | | |
| 470 pF | 1005 | 0.50 ± 0.05 | ± 1% | C1005C0G1H471F050BA | | |
| | | | ± 10% | C1005C0G1H471K050BA | | |
| | | | ± 2% | C1005C0G1H471G050BA | | |
| | | | ± 5% | C1005C0G1H471J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 1% | C1608C0G1H471F080AA | | |
| | | | ± 10% | C1608C0G1H471K080AA | | |
| | | | ± 2% | C1608C0G1H471G080AA | | |
| | | | ± 5% | C1608C0G1H471J080AA | | |
| 560 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005C0G1H561K050BA | | |
| | | | ± 5% | C1005C0G1H561J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H561K080AA | | |
| | | | ± 5% | C1608C0G1H561J080AA | | |
| 680 pF | 1005 | 0.50 ± 0.05 | ± 1% | C1005C0G1H681F050BA | | |
| | | | ± 10% | C1005C0G1H681K050BA | | |
| | | | ± 2% | C1005C0G1H681G050BA | | |
| | | | ± 5% | C1005C0G1H681J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 1% | C1608C0G1H681F080AA | | |
| | | | ± 10% | C1608C0G1H681K080AA | | |
| | | | ± 2% | C1608C0G1H681G080AA | | |
| | | | ± 5% | C1608C0G1H681J080AA | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 1 (Temperature Compensating)**

Temperature Characteristics: C0G (-55 to +125ºC, 0 ± 30 ppm/ºC)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 820 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005C0G1H821K050BA | | |
| | | | ± 5% | C1005C0G1H821J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H821K080AA | | |
| | | | ± 5% | C1608C0G1H821J080AA | | |
| 1 nF | 1005 | 0.50 ± 0.05 | ± 1% | C1005C0G1H102F050BA | | |
| | | | ± 10% | C1005C0G1H102K050BA | | |
| | | | ± 2% | C1005C0G1H102G050BA | | |
| | | | ± 5% | C1005C0G1H102J050BA | C1005C0G1E102J050BA | |
| | 1608 | 0.80 ± 0.10 | ± 1% | C1608C0G1H102F080AA | | |
| | | | ± 10% | C1608C0G1H102K080AA | | |
| | | | ± 2% | C1608C0G1H102G080AA | | |
| | | | ± 5% | C1608C0G1H102J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012C0G1H102K060AA | | |
| | | | ± 5% | C2012C0G1H102J060AA | | |
| 1.2 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H122K080AA | | |
| | | | ± 5% | C1608C0G1H122J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012C0G1H122K060AA | | |
| | | | ± 5% | C2012C0G1H122J060AA | | |
| 1.5 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H152K080AA | | |
| | | | ± 5% | C1608C0G1H152J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012C0G1H152K060AA | | |
| | | | ± 5% | C2012C0G1H152J060AA | | |
| 1.8 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H182K080AA | | |
| | | | ± 5% | C1608C0G1H182J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012C0G1H182K060AA | | |
| | | | ± 5% | C2012C0G1H182J060AA | | |
| 2.2 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H222K080AA | | |
| | | | ± 5% | C1608C0G1H222J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012C0G1H222K060AA | | |
| | | | ± 5% | C2012C0G1H222J060AA | | |
| | | 0.85 ± 0.15 | ± 5% | C2012C0G1H222J085AA | | |
| 2.7 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H272K080AA | | |
| | | | ± 5% | C1608C0G1H272J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012C0G1H272K060AA | | |
| | | | ± 5% | C2012C0G1H272J060AA | | |
| 3.3 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H332K080AA | | |
| | | | ± 5% | C1608C0G1H332J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012C0G1H332K060AA | | |
| | | | ± 5% | C2012C0G1H332J060AA | | |
| | | 1.25 ± 0.20 | ± 5% | C2012C0G1H332J125AA | | |
| 3.9 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H392K080AA | | |
| | | | ± 5% | C1608C0G1H392J080AA | C1608C0G1E392J080AA | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012C0G1H392K060AA | | |
| | | | ± 5% | C2012C0G1H392J060AA | | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216C0G1H392K060AA | | |
| | | | ± 5% | C3216C0G1H392J060AA | | |
| 4.7 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H472K080AA | | |
| | | | ± 5% | C1608C0G1H472J080AA | C1608C0G1E472J080AA | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012C0G1H472K060AA | | |
| | | | ± 5% | C2012C0G1H472J060AA | | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216C0G1H472K060AA | | |
| | | | ± 5% | C3216C0G1H472J060AA | | |
| 5.6 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H562K080AA | | |
| | | | ± 5% | C1608C0G1H562J080AA | C1608C0G1E562J080AA | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012C0G1H562K060AA | | |
| | | | ± 5% | C2012C0G1H562J060AA | | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216C0G1H562K060AA | | |
| | | | ± 5% | C3216C0G1H562J060AA | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 1 (Temperature Compensating)**

Temperature Characteristics: C0G (-55 to +125ºC, 0 ± 30 ppm/ºC)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 6.8 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H682K080AA | | |
| | | | ± 5% | C1608C0G1H682J080AA | C1608C0G1E682J080AA | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012C0G1H682K060AA | | |
| | | | ± 5% | C2012C0G1H682J060AA | | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216C0G1H682K060AA | | |
| | | | ± 5% | C3216C0G1H682J060AA | | |
| 8.2 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H822K080AA | | |
| | | | ± 5% | C1608C0G1H822J080AA | C1608C0G1E822J080AA | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012C0G1H822K060AA | | |
| | | | ± 5% | C2012C0G1H822J060AA | | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216C0G1H822K060AA | | |
| | | | ± 5% | C3216C0G1H822J060AA | | |
| 10 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608C0G1H103K080AA | | |
| | | | ± 5% | C1608C0G1H103J080AA | C1608C0G1E103J080AA | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012C0G1H103K060AA | | |
| | | | ± 5% | C2012C0G1H103J060AA | C2012C0G1E103J060AA | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216C0G1H103K060AA | | |
| | | | ± 5% | C3216C0G1H103J060AA | | |
| 15 nF | 2012 | 0.85 ± 0.15 | ± 10% | C2012C0G1H153K085AA | | |
| | | | ± 5% | C2012C0G1H153J085AA | C2012C0G1E153J085AA | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216C0G1H153K060AA | | |
| | | | ± 5% | C3216C0G1H153J060AA | | |
| 22 nF | 2012 | 1.25 ± 0.20 | ± 10% | C2012C0G1H223K125AA | | |
| | | | ± 5% | C2012C0G1H223J125AA | C2012C0G1E223J125AA | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216C0G1H223K060AA | | |
| | | | ± 5% | C3216C0G1H223J060AA | | |
| | 3225 | 1.25 ± 0.20 | ± 10% | C3225C0G1H223K125AA | | |
| | | | ± 5% | C3225C0G1H223J125AA | | |
| 33 nF | 2012 | 1.25 ± 0.20 | ± 10% | C2012C0G1H333K125AA | | |
| | | | ± 5% | C2012C0G1H333J125AA | C2012C0G1E333J125AA | |
| | 3216 | 0.85 ± 0.15 | ± 10% | C3216C0G1H333K085AA | | |
| | | | ± 5% | C3216C0G1H333J085AA | | |
| | 3225 | 1.60 ± 0.20 | ± 10% | C3225C0G1H333K160AA | | |
| | | | ± 5% | C3225C0G1H333J160AA | | |
| 47 nF | 3216 | 1.15 ± 0.15 | ± 10% | C3216C0G1H473K115AA | | |
| | | | ± 5% | C3216C0G1H473J115AA | | |
| | 3225 | 2.00 ± 0.20 | ± 10% | C3225C0G1H473K200AA | | |
| | | | ± 5% | C3225C0G1H473J200AA | | |
| | 4532 | 1.60 ± 0.20 | ± 10% | C4532C0G1H473K160KA | | |
| | | | ± 5% | C4532C0G1H473J160KA | | |
| 68 nF | 3216 | 1.60 ± 0.20 | ± 10% | C3216C0G1H683K160AA | | |
| | | | ± 5% | C3216C0G1H683J160AA | | |
| | 3225 | 2.00 ± 0.20 | ± 10% | C3225C0G1H683K200AA | | |
| | | | ± 5% | C3225C0G1H683J200AA | | |
| | 4532 | 1.60 ± 0.20 | ± 10% | C4532C0G1H683K160KA | | |
| | | | ± 5% | C4532C0G1H683J160KA | | |
| 100 nF | 3216 | 1.60 ± 0.20 | ± 10% | C3216C0G1H104K160AA | | |
| | | | ± 5% | C3216C0G1H104J160AA | | |
| | 3225 | 2.50 ± 0.30 | ± 10% | C3225C0G1H104K250AA | | |
| | | | ± 5% | C3225C0G1H104J250AA | | |
| | 4532 | 2.00 ± 0.20 | ± 10% | C4532C0G1H104K200KA | | |
| | | | ± 5% | C4532C0G1H104J200KA | | |
| 150 nF | 4532 | 2.50 ± 0.30 | ± 10% | C4532C0G1H154K250KA | | |
| | | | ± 5% | C4532C0G1H154J250KA | | |
| 220 nF | 4532 | 3.20 ± 0.30 | ± 10% | C4532C0G1H224K320KA | | |
| | | | ± 5% | C4532C0G1H224J320KA | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 1 (Temperature Compensating)**

Temperature Characteristics: CH (-25 to +85ºC, 0 ± 60 ppm/ºC)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 0.5 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402CH1C0R5C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603CH1H0R5C030BA | C0603CH1E0R5C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005CH1H0R5B050BA | | |
| | | | ± 0.25pF | C1005CH1H0R5C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608CH1H0R5C080AA | | |
| 0.75 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402CH1CR75C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603CH1HR75C030BA | C0603CH1ER75C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005CH1HR75B050BA | | |
| | | | ± 0.25pF | C1005CH1HR75C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608CH1HR75C080AA | | |
| 1 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402CH1C010C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603CH1H010C030BA | C0603CH1E010C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005CH1H010B050BA | | |
| | | | ± 0.25pF | C1005CH1H010C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608CH1H010C080AA | | |
| 1.5 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402CH1C1R5C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603CH1H1R5C030BA | C0603CH1E1R5C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005CH1H1R5B050BA | | |
| | | | ± 0.25pF | C1005CH1H1R5C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608CH1H1R5C080AA | | |
| 2 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402CH1C020C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603CH1H020C030BA | C0603CH1E020C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005CH1H020B050BA | | |
| | | | ± 0.25pF | C1005CH1H020C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608CH1H020C080AA | | |
| 2.2 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402CH1C2R2C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603CH1H2R2C030BA | C0603CH1E2R2C030BA | |
| 3 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402CH1C030C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603CH1H030C030BA | C0603CH1E030C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005CH1H030B050BA | | |
| | | | ± 0.25pF | C1005CH1H030C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608CH1H030C080AA | | |
| 3.3 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402CH1C3R3C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603CH1H3R3C030BA | C0603CH1E3R3C030BA | |
| 4 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402CH1C040C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603CH1H040C030BA | C0603CH1E040C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005CH1H040B050BA | | |
| | | | ± 0.25pF | C1005CH1H040C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608CH1H040C080AA | | |
| 4.7 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402CH1C4R7C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603CH1H4R7C030BA | C0603CH1E4R7C030BA | |
| 5 pF | 0402 | 0.20 ± 0.02 | ± 0.25pF | | | C0402CH1C050C020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.25pF | C0603CH1H050C030BA | C0603CH1E050C030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.10pF | C1005CH1H050B050BA | | |
| | | | ± 0.25pF | C1005CH1H050C050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608CH1H050C080AA | | |
| 6 pF | 0402 | 0.20 ± 0.02 | ± 0.50pF | | | C0402CH1C060D020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.50pF | C0603CH1H060D030BA | C0603CH1E060D030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.25pF | C1005CH1H060C050BA | | |
| | | | ± 0.50pF | C1005CH1H060D050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608CH1H060C080AA | | |
| | | | ± 0.50pF | C1608CH1H060D080AA | | |
| 6.8 pF | 0402 | 0.20 ± 0.02 | ± 0.50pF | | | C0402CH1C6R8D020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.50pF | C0603CH1H6R8D030BA | C0603CH1E6R8D030BA | |
| 7 pF | 0402 | 0.20 ± 0.02 | ± 0.50pF | | | C0402CH1C070D020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.50pF | C0603CH1H070D030BA | C0603CH1E070D030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.25pF | C1005CH1H070C050BA | | |
| | | | ± 0.50pF | C1005CH1H070D050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608CH1H070C080AA | | |
| | | | ± 0.50pF | C1608CH1H070D080AA | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 1 (Temperature Compensating)**

Temperature Characteristics: CH (-25 to +85ºC, 0 ± 60 ppm/ºC)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 8 pF | 0402 | 0.20 ± 0.02 | ± 0.50pF | | | C0402CH1C080D020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.50pF | C0603CH1H080D030BA | C0603CH1E080D030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.25pF | C1005CH1H080C050BA | | |
| | | | ± 0.50pF | C1005CH1H080D050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608CH1H080C080AA | | |
| | | | ± 0.50pF | C1608CH1H080D080AA | | |
| 9 pF | 0402 | 0.20 ± 0.02 | ± 0.50pF | | | C0402CH1C090D020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.50pF | C0603CH1H090D030BA | C0603CH1E090D030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.25pF | C1005CH1H090C050BA | | |
| | | | ± 0.50pF | C1005CH1H090D050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608CH1H090C080AA | | |
| | | | ± 0.50pF | C1608CH1H090D080AA | | |
| 10 pF | 0402 | 0.20 ± 0.02 | ± 0.50pF | | | C0402CH1C100D020BC |
| | 0603 | 0.30 ± 0.03 | ± 0.50pF | C0603CH1H100D030BA | C0603CH1E100D030BA | |
| | 1005 | 0.50 ± 0.05 | ± 0.25pF | C1005CH1H100C050BA | | |
| | | | ± 0.50pF | C1005CH1H100D050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 0.25pF | C1608CH1H100C080AA | | |
| | | | ± 0.50pF | C1608CH1H100D080AA | | |
| 12 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402CH1C120K020BC |
| | | | ± 5% | | | C0402CH1C120J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603CH1H120K030BA | C0603CH1E120K030BA | |
| | | | ± 5% | C0603CH1H120J030BA | C0603CH1E120J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005CH1H120J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608CH1H120J080AA | | |
| 15 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402CH1C150K020BC |
| | | | ± 5% | | | C0402CH1C150J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603CH1H150K030BA | C0603CH1E150K030BA | |
| | | | ± 5% | C0603CH1H150J030BA | C0603CH1E150J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005CH1H150J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608CH1H150J080AA | | |
| 18 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402CH1C180K020BC |
| | | | ± 5% | | | C0402CH1C180J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603CH1H180K030BA | C0603CH1E180K030BA | |
| | | | ± 5% | C0603CH1H180J030BA | C0603CH1E180J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005CH1H180J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608CH1H180J080AA | | |
| 22 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402CH1C220K020BC |
| | | | ± 5% | | | C0402CH1C220J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603CH1H220K030BA | C0603CH1E220K030BA | |
| | | | ± 5% | C0603CH1H220J030BA | C0603CH1E220J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005CH1H220J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608CH1H220J080AA | | |
| 27 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402CH1C270K020BC |
| | | | ± 5% | | | C0402CH1C270J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603CH1H270K030BA | C0603CH1E270K030BA | |
| | | | ± 5% | C0603CH1H270J030BA | C0603CH1E270J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005CH1H270J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608CH1H270J080AA | | |
| 33 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402CH1C330K020BC |
| | | | ± 5% | | | C0402CH1C330J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603CH1H330K030BA | C0603CH1E330K030BA | |
| | | | ± 5% | C0603CH1H330J030BA | C0603CH1E330J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005CH1H330J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608CH1H330J080AA | | |
| 39 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402CH1C390K020BC |
| | | | ± 5% | | | C0402CH1C390J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603CH1H390K030BA | C0603CH1E390K030BA | |
| | | | ± 5% | C0603CH1H390J030BA | C0603CH1E390J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005CH1H390J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608CH1H390J080AA | | |



• All specifications are subject to change without notice.

# Capacitance Range Table

**Class 1 (Temperature Compensating)**

Temperature Characteristics: CH (-25 to +85ºC, 0 ± 60 ppm/ºC)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 47 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402CH1C470K020BC |
| | | | ± 5% | | | C0402CH1C470J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603CH1H470K030BA | C0603CH1E470K030BA | |
| | | | ± 5% | C0603CH1H470J030BA | C0603CH1E470J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005CH1H470J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608CH1H470J080AA | | |
| 56 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402CH1C560K020BC |
| | | | ± 5% | | | C0402CH1C560J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603CH1H560K030BA | C0603CH1E560K030BA | |
| | | | ± 5% | C0603CH1H560J030BA | C0603CH1E560J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005CH1H560J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608CH1H560J080AA | | |
| 68 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402CH1C680K020BC |
| | | | ± 5% | | | C0402CH1C680J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603CH1H680K030BA | C0603CH1E680K030BA | |
| | | | ± 5% | C0603CH1H680J030BA | C0603CH1E680J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005CH1H680J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608CH1H680J080AA | | |
| 82 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402CH1C820K020BC |
| | | | ± 5% | | | C0402CH1C820J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603CH1H820K030BA | C0603CH1E820K030BA | |
| | | | ± 5% | C0603CH1H820J030BA | C0603CH1E820J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 5% | C1005CH1H820J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 5% | C1608CH1H820J080AA | | |
| 100 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | C0402CH1C101K020BC |
| | | | ± 5% | | | C0402CH1C101J020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603CH1H101K030BA | C0603CH1E101K030BA | |
| | | | ± 5% | C0603CH1H101J030BA | C0603CH1E101J030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005CH1H101K050BA | | |
| | | | ± 5% | C1005CH1H101J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H101K080AA | | |
| | | | ± 5% | C1608CH1H101J080AA | | |
| 120 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005CH1H121K050BA | | |
| | | | ± 5% | C1005CH1H121J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H121K080AA | | |
| | | | ± 5% | C1608CH1H121J080AA | | |
| 150 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005CH1H151K050BA | | |
| | | | ± 5% | C1005CH1H151J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H151K080AA | | |
| | | | ± 5% | C1608CH1H151J080AA | | |
| 180 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005CH1H181K050BA | | |
| | | | ± 5% | C1005CH1H181J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H181K080AA | | |
| | | | ± 5% | C1608CH1H181J080AA | | |
| 220 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005CH1H221K050BA | | |
| | | | ± 5% | C1005CH1H221J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H221K080AA | | |
| | | | ± 5% | C1608CH1H221J080AA | | |
| 270 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005CH1H271K050BA | | |
| | | | ± 5% | C1005CH1H271J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H271K080AA | | |
| | | | ± 5% | C1608CH1H271J080AA | | |
| 330 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005CH1H331K050BA | | |
| | | | ± 5% | C1005CH1H331J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H331K080AA | | |
| | | | ± 5% | C1608CH1H331J080AA | | |
| 390 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005CH1H391K050BA | | |
| | | | ± 5% | C1005CH1H391J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H391K080AA | | |
| | | | ± 5% | C1608CH1H391J080AA | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 1 (Temperature Compensating)**

Temperature Characteristics: CH (-25 to +85ºC, 0 ± 60 ppm/ºC)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 470 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005CH1H471K050BA | | |
| | | | ± 5% | C1005CH1H471J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H471K080AA | | |
| | | | ± 5% | C1608CH1H471J080AA | | |
| 560 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005CH1H561K050BA | | |
| | | | ± 5% | C1005CH1H561J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H561K080AA | | |
| | | | ± 5% | C1608CH1H561J080AA | | |
| 680 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005CH1H681K050BA | | |
| | | | ± 5% | C1005CH1H681J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H681K080AA | | |
| | | | ± 5% | C1608CH1H681J080AA | | |
| 820 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005CH1H821K050BA | | |
| | | | ± 5% | C1005CH1H821J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H821K080AA | | |
| | | | ± 5% | C1608CH1H821J080AA | | |
| 1 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005CH1H102K050BA | | |
| | | | ± 5% | C1005CH1H102J050BA | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H102K080AA | | |
| | | | ± 5% | C1608CH1H102J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012CH1H102K060AA | | |
| | | | ± 5% | C2012CH1H102J060AA | | |
| 1.2 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H122K080AA | | |
| | | | ± 5% | C1608CH1H122J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012CH1H122K060AA | | |
| | | | ± 5% | C2012CH1H122J060AA | | |
| 1.5 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H152K080AA | | |
| | | | ± 5% | C1608CH1H152J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012CH1H152K060AA | | |
| | | | ± 5% | C2012CH1H152J060AA | | |
| 1.8 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H182K080AA | | |
| | | | ± 5% | C1608CH1H182J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012CH1H182K060AA | | |
| | | | ± 5% | C2012CH1H182J060AA | | |
| 2.2 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H222K080AA | | |
| | | | ± 5% | C1608CH1H222J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012CH1H222K060AA | | |
| | | | ± 5% | C2012CH1H222J060AA | | |
| | | 0.85 ± 0.15 | ± 5% | C2012CH1H222J085AA | | |
| 2.7 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H272K080AA | | |
| | | | ± 5% | C1608CH1H272J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012CH1H272K060AA | | |
| | | | ± 5% | C2012CH1H272J060AA | | |
| 3.3 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H332K080AA | | |
| | | | ± 5% | C1608CH1H332J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012CH1H332K060AA | | |
| | | | ± 5% | C2012CH1H332J060AA | | |
| | | 1.25 ± 0.20 | ± 5% | C2012CH1H332J125AA | | |
| 3.9 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H392K080AA | | |
| | | | ± 5% | C1608CH1H392J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012CH1H392K060AA | | |
| | | | ± 5% | C2012CH1H392J060AA | | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216CH1H392K060AA | | |
| | | | ± 5% | C3216CH1H392J060AA | | |
| 4.7 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H472K080AA | | |
| | | | ± 5% | C1608CH1H472J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012CH1H472K060AA | | |
| | | | ± 5% | C2012CH1H472J060AA | | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216CH1H472K060AA | | |
| | | | ± 5% | C3216CH1H472J060AA | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 1 (Temperature Compensating)**

Temperature Characteristics: CH (-25 to +85ºC, 0 ± 60 ppm/ºC)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 5.6 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H562K080AA | | |
| | | | ± 5% | C1608CH1H562J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012CH1H562K060AA | | |
| | | | ± 5% | C2012CH1H562J060AA | | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216CH1H562K060AA | | |
| | | | ± 5% | C3216CH1H562J060AA | | |
| 6.8 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H682K080AA | | |
| | | | ± 5% | C1608CH1H682J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012CH1H682K060AA | | |
| | | | ± 5% | C2012CH1H682J060AA | | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216CH1H682K060AA | | |
| | | | ± 5% | C3216CH1H682J060AA | | |
| 8.2 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H822K080AA | | |
| | | | ± 5% | C1608CH1H822J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012CH1H822K060AA | | |
| | | | ± 5% | C2012CH1H822J060AA | | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216CH1H822K060AA | | |
| | | | ± 5% | C3216CH1H822J060AA | | |
| 10 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608CH1H103K080AA | | |
| | | | ± 5% | C1608CH1H103J080AA | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012CH1H103K060AA | | |
| | | | ± 5% | C2012CH1H103J060AA | | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216CH1H103K060AA | | |
| | | | ± 5% | C3216CH1H103J060AA | | |
| 15 nF | 2012 | 0.85 ± 0.15 | ± 10% | C2012CH1H153K085AA | | |
| | | | ± 5% | C2012CH1H153J085AA | | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216CH1H153K060AA | | |
| | | | ± 5% | C3216CH1H153J060AA | | |
| 22 nF | 2012 | 1.25 ± 0.20 | ± 10% | C2012CH1H223K125AA | | |
| | | | ± 5% | C2012CH1H223J125AA | | |
| | 3216 | 0.60 ± 0.15 | ± 10% | C3216CH1H223K060AA | | |
| | | | ± 5% | C3216CH1H223J060AA | | |
| | 3225 | 1.25 ± 0.20 | ± 10% | C3225CH1H223K125AA | | |
| | | | ± 5% | C3225CH1H223J125AA | | |
| 33 nF | 2012 | 1.25 ± 0.20 | ± 10% | C2012CH1H333K125AA | | |
| | | | ± 5% | C2012CH1H333J125AA | | |
| | 3216 | 0.85 ± 0.15 | ± 10% | C3216CH1H333K085AA | | |
| | | | ± 5% | C3216CH1H333J085AA | | |
| | 3225 | 1.60 ± 0.20 | ± 10% | C3225CH1H333K160AA | | |
| | | | ± 5% | C3225CH1H333J160AA | | |
| 47 nF | 3216 | 1.15 ± 0.15 | ± 10% | C3216CH1H473K115AA | | |
| | | | ± 5% | C3216CH1H473J115AA | | |
| | 3225 | 2.00 ± 0.20 | ± 10% | C3225CH1H473K200AA | | |
| | | | ± 5% | C3225CH1H473J200AA | | |
| | 4532 | 1.60 ± 0.20 | ± 10% | C4532CH1H473K160KA | | |
| | | | ± 5% | C4532CH1H473J160KA | | |
| 68 nF | 3216 | 1.60 ± 0.20 | ± 10% | C3216CH1H683K160AA | | |
| | | | ± 5% | C3216CH1H683J160AA | | |
| | 3225 | 2.00 ± 0.20 | ± 10% | C3225CH1H683K200AA | | |
| | | | ± 5% | C3225CH1H683J200AA | | |
| | 4532 | 1.60 ± 0.20 | ± 10% | C4532CH1H683K160KA | | |
| | | | ± 5% | C4532CH1H683J160KA | | |
| 100 nF | 3216 | 1.60 ± 0.20 | ± 10% | C3216CH1H104K160AA | | |
| | | | ± 5% | C3216CH1H104J160AA | | |
| | 3225 | 2.50 ± 0.30 | ± 10% | C3225CH1H104K250AA | | |
| | | | ± 5% | C3225CH1H104J250AA | | |
| | 4532 | 2.00 ± 0.20 | ± 10% | C4532CH1H104K200KA | | |
| | | | ± 5% | C4532CH1H104J200KA | | |
| 150 nF | 4532 | 2.50 ± 0.30 | ± 10% | C4532CH1H154K250KA | | |
| | | | ± 5% | C4532CH1H154J250KA | | |



• All specifications are subject to change without notice.

# Capacitance Range Table

**Class 1 (Temperature Compensating)**

Temperature Characteristics: CH (-25 to +85ºC, 0 ± 60 ppm/ºC)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 220 nF | 4532 | 3.20 ± 0.30 | ± 10% | C4532CH1H224K320KA | | |
| | | | ± 5% | C4532CH1H224J320KA | | |

**Class 2 (Temperature Stable)**

Temperature Characteristics: JB (-25 to +85ºC, ±10%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 100 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | | C0402JB1C101K020BC |
| | | | ± 20% | | | | C0402JB1C101M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603JB1E101K030BA | |
| | | | ± 20% | | | C0603JB1E101M030BA | |
| 150 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | | C0402JB1C151K020BC |
| | | | ± 20% | | | | C0402JB1C151M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603JB1E151K030BA | |
| | | | ± 20% | | | C0603JB1E151M030BA | |
| 220 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | | C0402JB1C221K020BC |
| | | | ± 20% | | | | C0402JB1C221M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603JB1E221K030BA | |
| | | | ± 20% | | | C0603JB1E221M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H221K050BA | | | |
| | | | ± 20% | C1005JB1H221M050BA | | | |
| 330 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | | C0402JB1C331K020BC |
| | | | ± 20% | | | | C0402JB1C331M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603JB1E331K030BA | |
| | | | ± 20% | | | C0603JB1E331M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H331K050BA | | | |
| | | | ± 20% | C1005JB1H331M050BA | | | |
| 470 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | | C0402JB1C471K020BC |
| | | | ± 20% | | | | C0402JB1C471M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603JB1E471K030BA | |
| | | | ± 20% | | | C0603JB1E471M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H471K050BA | | | |
| | | | ± 20% | C1005JB1H471M050BA | | | |
| 680 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | | C0402JB1C681K020BC |
| | | | ± 20% | | | | C0402JB1C681M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603JB1E681K030BA | |
| | | | ± 20% | | | C0603JB1E681M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H681K050BA | | | |
| | | | ± 20% | C1005JB1H681M050BA | | | |
| 1 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603JB1E102K030BA | |
| | | | ± 20% | | | C0603JB1E102M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H102K050BA | | | |
| | | | ± 20% | C1005JB1H102M050BA | | | |
| 1.5 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603JB1E152K030BA | |
| | | | ± 20% | | | C0603JB1E152M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H152K050BA | | | |
| | | | ± 20% | C1005JB1H152M050BA | | | |
| 2.2 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603JB1E222K030BA | |
| | | | ± 20% | | | C0603JB1E222M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H222K050BA | | | |
| | | | ± 20% | C1005JB1H222M050BA | | | |
| 3.3 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603JB1E332K030BA | |
| | | | ± 20% | | | C0603JB1E332M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H332K050BA | | | |
| | | | ± 20% | C1005JB1H332M050BA | | | |
| 4.7 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | | C0603JB1C472K030BA |
| | | | ± 20% | | | | C0603JB1C472M030BA |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H472K050BA | | | |
| | | | ± 20% | C1005JB1H472M050BA | | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: JB (-25 to +85ºC, ±10%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 6.8 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H682K050BA | | | |
| | | | ± 20% | C1005JB1H682M050BA | | | |
| 10 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H103K050BB | | C1005JB1E103K050BA | |
| | | | ± 20% | C1005JB1H103M050BB | | C1005JB1E103M050BA | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1H103K080AA | | | |
| | | | ± 20% | C1608JB1H103M080AA | | | |
| 15 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H153K050BB | | C1005JB1E153K050BA | C1005JB1C153K050BA |
| | | | ± 20% | C1005JB1H153M050BB | | C1005JB1E153M050BA | C1005JB1C153M050BA |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1H153K080AA | | | |
| | | | ± 20% | C1608JB1H153M080AA | | | |
| 22 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H223K050BB | | C1005JB1E223K050BA | C1005JB1C223K050BA |
| | | | ± 20% | C1005JB1H223M050BB | | C1005JB1E223M050BA | C1005JB1C223M050BA |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1H223K080AA | | | |
| | | | ± 20% | C1608JB1H223M080AA | | | |
| 33 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H333K050BB | | C1005JB1E333K050BA | C1005JB1C333K050BA |
| | | | ± 20% | C1005JB1H333M050BB | | C1005JB1E333M050BA | C1005JB1C333M050BA |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1H333K080AA | | | |
| | | | ± 20% | C1608JB1H333M080AA | | | |
| 47 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H473K050BB | | C1005JB1E473K050BA | C1005JB1C473K050BA |
| | | | ± 20% | C1005JB1H473M050BB | | C1005JB1E473M050BA | C1005JB1C473M050BA |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1H473K080AA | | | |
| | | | ± 20% | C1608JB1H473M080AA | | | |
| 68 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H683K050BB | C1005JB1V683K050BB | C1005JB1E683K050BC | C1005JB1C683K050BA |
| | | | ± 20% | C1005JB1H683M050BB | C1005JB1V683M050BB | C1005JB1E683M050BC | C1005JB1C683M050BA |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1H683K080AA | | | |
| | | | ± 20% | C1608JB1H683M080AA | | | |
| 100 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603JB1E104K030BB | C0603JB1C104K030BC |
| | | | ± 20% | | | C0603JB1E104M030BB | C0603JB1C104M030BC |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1H104K050BB | C1005JB1V104K050BB | C1005JB1E104K050BC | C1005JB1C104K050BA |
| | | | ± 20% | C1005JB1H104M050BB | C1005JB1V104M050BB | C1005JB1E104M050BC | C1005JB1C104M050BA |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1H104K080AA | | | |
| | | | ± 20% | C1608JB1H104M080AA | | | |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012JB1H104K085AA | | | |
| | | | ± 20% | C2012JB1H104M085AA | | | |
| 150 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603JB1E154K030BC | C0603JB1C154K030BC |
| | | | ± 20% | | | C0603JB1E154M030BC | C0603JB1C154M030BC |
| | 1005 | 0.50 ± 0.05 | ± 10% | | | | C1005JB1C154K050BB |
| | | | ± 20% | | | C1005JB1E154M050BC | C1005JB1C154M050BB |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1H154K080AB | C1608JB1V154K080AB | C1608JB1E154K080AA | |
| | | | ± 20% | C1608JB1H154M080AB | C1608JB1V154M080AB | C1608JB1E154M080AA | |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012JB1H154K085AA | | | |
| | | | ± 20% | C2012JB1H154M085AA | | | |
| 220 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603JB1E224K030BC | C0603JB1C224K030BC |
| | | | ± 20% | | | C0603JB1E224M030BC | C0603JB1C224M030BC |
| | 1005 | 0.50 ± 0.05 | ± 10% | | | C1005JB1E224K050BC | C1005JB1C224K050BB |
| | | | ± 20% | | | C1005JB1E224M050BC | C1005JB1C224M050BB |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1H224K080AB | C1608JB1V224K080AB | C1608JB1E224K080AA | |
| | | | ± 20% | C1608JB1H224M080AB | C1608JB1V224M080AB | C1608JB1E224M080AA | |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012JB1H224K125AA | | | |
| | | | ± 20% | C2012JB1H224M125AA | | | |
| 330 nF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005JB1V334K050BC | C1005JB1E334K050BB | C1005JB1C334K050BC |
| | | | ± 20% | | C1005JB1V334M050BC | C1005JB1E334M050BB | C1005JB1C334M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1H334K080AB | C1608JB1V334K080AB | C1608JB1E334K080AC | C1608JB1C334K080AA |
| | | | ± 20% | C1608JB1H334M080AB | C1608JB1V334M080AB | C1608JB1E334M080AC | C1608JB1C334M080AA |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012JB1H334K125AA | | | |
| | | | ± 20% | C2012JB1H334M125AA | | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: JB (-25 to +85ºC, ±10%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 470 nF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005JB1V474K050BC | C1005JB1E474K050BB | C1005JB1C474K050BC |
| | | | ± 20% | | C1005JB1V474M050BC | C1005JB1E474M050BB | C1005JB1C474M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1H474K080AB | C1608JB1V474K080AB | C1608JB1E474K080AC | C1608JB1C474K080AA |
| | | | ± 20% | C1608JB1H474M080AB | C1608JB1V474M080AB | C1608JB1E474M080AC | C1608JB1C474M080AA |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012JB1H474K125AB | | | |
| | | | ± 20% | C2012JB1H474M125AB | | | |
| 680 nF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005JB1V684K050BC | C1005JB1E684K050BC | C1005JB1C684K050BC |
| | | | ± 20% | | C1005JB1V684M050BC | C1005JB1E684M050BC | C1005JB1C684M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1H684K080AB | C1608JB1V684K080AB | C1608JB1E684K080AC | C1608JB1C684K080AA |
| | | | ± 20% | C1608JB1H684M080AB | C1608JB1V684M080AB | C1608JB1E684M080AC | C1608JB1C684M080AA |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012JB1H684K125AB | | C2012JB1E684K125AA | |
| | | | ± 20% | C2012JB1H684M125AB | | C2012JB1E684M125AA | |
| 1 µF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005JB1V105K050BC | C1005JB1E105K050BC | C1005JB1C105K050BC |
| | | | ± 20% | | C1005JB1V105M050BC | C1005JB1E105M050BC | C1005JB1C105M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1H105K080AB | C1608JB1V105K080AB | C1608JB1E105K080AC | C1608JB1C105K080AA |
| | | | ± 20% | C1608JB1H105M080AB | C1608JB1V105M080AB | C1608JB1E105M080AC | C1608JB1C105M080AA |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012JB1H105K085AB | C2012JB1V105K085AB | C2012JB1E105K085AC | C2012JB1C105K085AA |
| | | | ± 20% | C2012JB1H105M085AB | C2012JB1V105M085AB | C2012JB1E105M085AC | C2012JB1C105M085AA |
| | | 1.25 ± 0.20 | ± 10% | C2012JB1H105K125AB | | C2012JB1E105K125AA | |
| | | | ± 20% | C2012JB1H105M125AB | | C2012JB1E105M125AA | |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216JB1H105K160AA | | | |
| | | | ± 20% | C3216JB1H105M160AA | | | |
| 1.5 µF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005JB1V155K050BC | | C1005JB1C155K050BC |
| | | | ± 20% | | C1005JB1V155M050BC | | C1005JB1C155M050BC |
| | | 0.50 ± 0.10 | ± 10% | | | C1005JB1E155K050BC | |
| | | | ± 20% | | | C1005JB1E155M050BC | |
| | 1608 | 0.80 ± 0.10 | ± 10% | | C1608JB1V155K080AC | C1608JB1E155K080AB | C1608JB1C155K080AB |
| | | | ± 20% | | C1608JB1V155M080AC | C1608JB1E155M080AB | C1608JB1C155M080AB |
| | 2012 | 0.85 ± 0.15 | ± 10% | | | C2012JB1E155K085AC | |
| | | | ± 20% | | | C2012JB1E155M085AC | |
| | | 1.25 ± 0.20 | ± 10% | C2012JB1H155K125AB | C2012JB1V155K125AB | C2012JB1E155K125AB | C2012JB1C155K125AA |
| | | | ± 20% | C2012JB1H155M125AB | C2012JB1V155M125AB | C2012JB1E155M125AB | C2012JB1C155M125AA |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216JB1H155K160AB | | C3216JB1E155K160AA | |
| | | | ± 20% | C3216JB1H155M160AB | | C3216JB1E155M160AA | |
| 2.2 µF | 1005 | 0.50 +0.15/-0.10 | ± 10% | | | C1005JB1E225K050BC | |
| | | | ± 20% | | | C1005JB1E225M050BC | |
| | | 0.50 ± 0.05 | ± 10% | | C1005JB1V225K050BC | | C1005JB1C225K050BC |
| | | | ± 20% | | C1005JB1V225M050BC | | C1005JB1C225M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | | C1608JB1V225K080AC | C1608JB1E225K080AB | C1608JB1C225K080AB |
| | | | ± 20% | | C1608JB1V225M080AC | C1608JB1E225M080AB | C1608JB1C225M080AB |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012JB1H225K085AB | C2012JB1V225K085AB | C2012JB1E225K085AB | C2012JB1C225K085AC |
| | | | ± 20% | C2012JB1H225M085AB | C2012JB1V225M085AB | C2012JB1E225M085AB | C2012JB1C225M085AC |
| | | 1.25 ± 0.20 | ± 10% | C2012JB1H225K125AB | C2012JB1V225K125AB | C2012JB1E225K125AC | C2012JB1C225K125AA |
| | | | ± 20% | C2012JB1H225M125AB | C2012JB1V225M125AB | C2012JB1E225M125AC | C2012JB1C225M125AA |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216JB1H225K160AB | | C3216JB1E225K160AA | |
| | | | ± 20% | C3216JB1H225M160AB | | C3216JB1E225M160AA | |
| | 3225 | 2.00 ± 0.20 | ± 10% | C3225JB1H225K200AA | | | |
| | | | ± 20% | C3225JB1H225M200AA | | | |
| 3.3 µF | 1608 | 0.80 ± 0.10 | ± 10% | | | C1608JB1E335K080AC | C1608JB1C335K080AC |
| | | | ± 20% | | | C1608JB1E335M080AC | C1608JB1C335M080AC |
| | | 0.80 ± 0.20 | ± 10% | | C1608JB1V335K080AC | | |
| | | | ± 20% | | C1608JB1V335M080AC | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | | | | C2012JB1C335K060AC |
| | | | ± 20% | | | | C2012JB1C335M060AC |
| | | 0.85 ± 0.15 | ± 10% | | | C2012JB1E335K085AC | C2012JB1C335K085AB |
| | | | ± 20% | | | C2012JB1E335M085AC | C2012JB1C335M085AB |
| | | 1.25 ± 0.20 | ± 10% | C2012JB1H335K125AB | C2012JB1V335K125AC | C2012JB1E335K125AB | C2012JB1C335K125AC |
| | | | ± 20% | C2012JB1H335M125AB | C2012JB1V335M125AC | C2012JB1E335M125AB | C2012JB1C335M125AC |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216JB1H335K160AB | C3216JB1V335K160AB | C3216JB1E335K160AA | |
| | | | ± 20% | C3216JB1H335M160AB | C3216JB1V335M160AB | C3216JB1E335M160AA | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: JB (-25 to +85ºC, ±10%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 3.3 µF | 3225 | 2.50 ± 0.30 | ± 10% | C3225JB1H335K250AA | | | |
| | | | ± 20% | C3225JB1H335M250AA | | | |
| 4.7 µF | 1608 | 0.80 ± 0.10 | ± 10% | | | C1608JB1E475K080AC | C1608JB1C475K080AC |
| | | | ± 20% | | | C1608JB1E475M080AC | C1608JB1C475M080AC |
| | | 0.80 ± 0.20 | ± 10% | | C1608JB1V475K080AC | | |
| | | | ± 20% | | C1608JB1V475M080AC | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | | | | C2012JB1C475K060AC |
| | | | ± 20% | | | | C2012JB1C475M060AC |
| | | 0.85 ± 0.15 | ± 10% | | | C2012JB1E475K085AC | C2012JB1C475K085AB |
| | | | ± 20% | | | C2012JB1E475M085AC | C2012JB1C475M085AB |
| | | 1.25 ± 0.20 | ± 10% | C2012JB1H475K125AB | C2012JB1V475K125AC | C2012JB1E475K125AB | C2012JB1C475K125AC |
| | | | ± 20% | C2012JB1H475M125AB | C2012JB1V475M125AC | C2012JB1E475M125AB | C2012JB1C475M125AC |
| | 3216 | 0.85 ± 0.10 | ± 10% | C3216JB1H475K085AB | C3216JB1V475K085AB | C3216JB1E475K085AB | |
| | | | ± 20% | C3216JB1H475M085AB | C3216JB1V475M085AB | C3216JB1E475M085AB | |
| | | 1.15 ± 0.10 | ± 10% | | | C3216JB1E475K115AB | |
| | | | ± 20% | | | C3216JB1E475M115AB | |
| | | 1.60 ± 0.20 | ± 10% | C3216JB1H475K160AB | C3216JB1V475K160AB | C3216JB1E475K160AA | |
| | | | ± 20% | C3216JB1H475M160AB | C3216JB1V475M160AB | C3216JB1E475M160AA | |
| | 3225 | 2.50 ± 0.30 | ± 10% | C3225JB1H475K250AB | | | |
| | | | ± 20% | C3225JB1H475M250AB | | | |
| 6.8 µF | 1608 | 0.80 ± 0.20 | ± 10% | | | C1608JB1E685K080AC | C1608JB1C685K080AB |
| | | | ± 20% | | | C1608JB1E685M080AC | C1608JB1C685M080AB |
| | 2012 | 0.85 ± 0.15 | ± 10% | | | | C2012JB1C685K085AC |
| | | | ± 20% | | | | C2012JB1C685M085AC |
| | | 1.25 ± 0.20 | ± 10% | | C2012JB1V685K125AC | C2012JB1E685K125AC | C2012JB1C685K125AC |
| | | | ± 20% | | C2012JB1V685M125AC | C2012JB1E685M125AC | C2012JB1C685M125AB |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216JB1H685K160AB | C3216JB1V685K160AB | C3216JB1E685K160AB | C3216JB1C685K160AA |
| | | | ± 20% | C3216JB1H685M160AB | C3216JB1V685M160AB | C3216JB1E685M160AB | C3216JB1C685M160AA |
| | 3225 | 2.00 ± 0.20 | ± 10% | | | C3225JB1E685K200AA | C3225JB1C685K200AA |
| | | | ± 20% | | | C3225JB1E685M200AA | C3225JB1C685M200AA |
| | | 2.50 ± 0.30 | ± 10% | C3225JB1H685K250AB | | | |
| | | | ± 20% | C3225JB1H685M250AB | | | |
| | 4532 | 2.50 ± 0.30 | ± 10% | C4532JB1H685K250KA | | | |
| | | | ± 20% | C4532JB1H685M250KA | | | |
| 10 µF | 1608 | 0.80 ± 0.20 | ± 20% | | | C1608JB1E106M080AC | C1608JB1C106M080AB |
| | 2012 | 0.85 ± 0.15 | ± 10% | | C2012JB1V106K085AC | C2012JB1E106K085AC | C2012JB1C106K085AC |
| | | | ± 20% | | C2012JB1V106M085AC | C2012JB1E106M085AC | C2012JB1C106M085AC |
| | | 1.25 ± 0.20 | ± 10% | | C2012JB1V106K125AC | C2012JB1E106K125AB | C2012JB1C106K125AB |
| | | | ± 20% | | C2012JB1V106M125AC | C2012JB1E106M125AB | C2012JB1C106M125AB |
| | 3216 | 0.85 ± 0.10 | ± 10% | | | C3216JB1E106K085AC | C3216JB1C106K085AB |
| | | | ± 20% | | | C3216JB1E106M085AC | C3216JB1C106M085AB |
| | | 1.60 ± 0.20 | ± 10% | C3216JB1H106K160AB | C3216JB1V106K160AB | C3216JB1E106K160AB | C3216JB1C106K160AA |
| | | | ± 20% | C3216JB1H106M160AB | C3216JB1V106M160AB | C3216JB1E106M160AB | C3216JB1C106M160AA |
| | 3225 | 2.00 ± 0.20 | ± 10% | | | | C3225JB1C106K200AA |
| | | | ± 20% | | | | C3225JB1C106M200AA |
| | | 2.50 ± 0.30 | ± 10% | C3225JB1H106K250AB | | C3225JB1E106K250AA | |
| | | | ± 20% | C3225JB1H106M250AB | | C3225JB1E106M250AA | |
| | 4532 | 2.50 ± 0.30 | ± 10% | | | C4532JB1E106K250KA | |
| | | | ± 20% | | | C4532JB1E106M250KA | |
| 15 µF | 2012 | 1.25 ± 0.20 | ± 20% | | C2012JB1V156M125AC | C2012JB1E156M125AC | C2012JB1C156M125AC |
| | 3216 | 1.60 ± 0.20 | ± 20% | | C3216JB1V156M160AC | C3216JB1E156M160AB | C3216JB1C156M160AB |
| | 3225 | 2.30 ± 0.20 | ± 20% | | | C4532JB1E156M250KA | C3225JB1C156M250AA |
| 22 µF | 2012 | 0.85 ± 0.15 | ± 20% | | | | C2012JB1C226M085AC |
| | | 1.25 ± 0.20 | ± 20% | | C2012JB1V226M125AC | C2012JB1E226M125AC | C2012JB1C226M125AC |
| | 3216 | 1.60 ± 0.20 | ± 20% | | C3216JB1V226M160AC | C3216JB1E226M160AB | C3216JB1C226M160AB |
| | 3225 | 2.50 ± 0.30 | ± 20% | | | | C3225JB1C226M250AA |
| | 4532 | 2.00 ± 0.20 | ± 20% | | | | C4532JB1C226M200KA |
| | | 2.50 ± 0.30 | ± 20% | | | C4532JB1E226M250KA | |
| | 5750 | 2.50 ± 0.30 | ± 20% | | | C5750JB1E226M250KA | |



• All specifications are subject to change without notice.

## Capacitance Range Table

### Class 2 (Temperature Stable)

Temperature Characteristics: JB (-25 to +85ºC, ±10%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 33 µF | 3216 | 1.60 ± 0.20 | ± 20% | | | C3216JB1E336M160AC | C3216JB1C336M160AB |
| | 4532 | 2.50 ± 0.30 | ± 20% | | | | C4532JB1C336M250KA |
| 47 µF | 3216 | 1.60 ± 0.20 | ± 20% | | | C3216JB1E476M160AC | C3216JB1C476M160AB |

### Class 2 (Temperature Stable)

Temperature Characteristics: JB (-25 to +85ºC, ±10%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 10V | Rated Voltage Edc: 6.3V | Rated Voltage Edc: 4V |
| 1 nF | 0402 | 0.20 ± 0.02 | ± 10% | C0402JB1A102K020BC | C0402JB0J102K020BC | C0402JB0G102K020BC |
| | | | ± 20% | C0402JB1A102M020BC | C0402JB0J102M020BC | C0402JB0G102M020BC |
| 1.5 nF | 0402 | 0.20 ± 0.02 | ± 10% | C0402JB1A152K020BC | C0402JB0J152K020BC | C0402JB0G152K020BC |
| | | | ± 20% | C0402JB1A152M020BC | C0402JB0J152M020BC | C0402JB0G152M020BC |
| 2.2 nF | 0402 | 0.20 ± 0.02 | ± 10% | C0402JB1A222K020BC | C0402JB0J222K020BC | C0402JB0G222K020BC |
| | | | ± 20% | C0402JB1A222M020BC | C0402JB0J222M020BC | C0402JB0G222M020BC |
| 3.3 nF | 0402 | 0.20 ± 0.02 | ± 10% | C0402JB1A332K020BC | C0402JB0J332K020BC | C0402JB0G332K020BC |
| | | | ± 20% | C0402JB1A332M020BC | C0402JB0J332M020BC | C0402JB0G332M020BC |
| 4.7 nF | 0402 | 0.20 ± 0.02 | ± 10% | C0402JB1A472K020BC | C0402JB0J472K020BC | C0402JB0G472K020BC |
| | | | ± 20% | C0402JB1A472M020BC | C0402JB0J472M020BC | C0402JB0G472M020BC |
| 6.8 nF | 0402 | 0.20 ± 0.02 | ± 10% | | C0402JB0J682K020BC | C0402JB0G682K020BC |
| | | | ± 20% | | C0402JB0J682M020BC | C0402JB0G682M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603JB1A682K030BA | | |
| | | | ± 20% | C0603JB1A682M030BA | | |
| 10 nF | 0402 | 0.20 ± 0.02 | ± 10% | | C0402JB0J103K020BC | C0402JB0G103K020BC |
| | | | ± 20% | | C0402JB0J103M020BC | C0402JB0G103M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603JB1A103K030BA | | |
| | | | ± 20% | C0603JB1A103M030BA | | |
| 15 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603JB1A153K030BC | C0603JB0J153K030BA | |
| | | | ± 20% | C0603JB1A153M030BC | C0603JB0J153M030BA | |
| 22 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603JB1A223K030BC | C0603JB0J223K030BC | |
| | | | ± 20% | C0603JB1A223M030BC | C0603JB0J223M030BC | |
| 33 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603JB1A333K030BC | C0603JB0J333K030BC | |
| | | | ± 20% | C0603JB1A333M030BC | C0603JB0J333M030BC | |
| 47 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603JB1A473K030BC | C0603JB0J473K030BC | |
| | | | ± 20% | C0603JB1A473M030BC | C0603JB0J473M030BC | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1A473K050BA | | |
| | | | ± 20% | C1005JB1A473M050BA | | |
| 68 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603JB1A683K030BC | C0603JB0J683K030BC | |
| | | | ± 20% | C0603JB1A683M030BC | C0603JB0J683M030BC | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1A683K050BA | | |
| | | | ± 20% | C1005JB1A683M050BA | | |
| 100 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603JB1A104K030BC | C0603JB0J104K030BC | |
| | | | ± 20% | C0603JB1A104M030BC | C0603JB0J104M030BC | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1A104K050BA | | |
| | | | ± 20% | C1005JB1A104M050BA | | |
| 150 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603JB1A154K030BB | C0603JB0J154K030BB | |
| | | | ± 20% | C0603JB1A154M030BB | C0603JB0J154M030BB | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1A154K050BC | C1005JB0J154K050BB | |
| | | | ± 20% | C1005JB1A154M050BC | C1005JB0J154M050BB | |
| 220 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603JB1A224K030BB | C0603JB0J224K030BB | |
| | | | ± 20% | C0603JB1A224M030BB | C0603JB0J224M030BB | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1A224K050BC | C1005JB0J224K050BB | |
| | | | ± 20% | C1005JB1A224M050BC | C1005JB0J224M050BB | |
| 330 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603JB1A334K030BC | C0603JB0J334K030BC | |
| | | | ± 20% | C0603JB1A334M030BC | C0603JB0J334M030BC | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1A334K050BC | C1005JB0J334K050BB | |
| | | | ± 20% | C1005JB1A334M050BC | C1005JB0J334M050BB | |
| 470 nF | 0603 | 0.30 ± 0.03 | ± 20% | C0603JB1A474M030BC | C0603JB0J474M030BC | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1A474K050BB | C1005JB0J474K050BB | |
| | | | ± 20% | C1005JB1A474M050BB | C1005JB0J474M050BB | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: JB (-25 to +85ºC, ±10%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number Rated Voltage Edc: 10V | Rated Voltage Edc: 6.3V | Rated Voltage Edc: 4V |
|---|---|---|---|---|---|---|
| 680 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1A684K050BC | C1005JB0J684K050BB | |
| | | | ± 20% | C1005JB1A684M050BC | C1005JB0J684M050BB | |
| | 1608 | 0.80 +0.15/-0.10 | ± 10% | C1608JB1A684K080AC | | |
| | | | ± 20% | C1608JB1A684M080AC | | |
| 1 µF | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1A105K050BB | C1005JB0J105K050BB | |
| | | | ± 20% | C1005JB1A105M050BB | C1005JB0J105M050BB | |
| | 1608 | 0.80 +0.15/-0.10 | ± 10% | C1608JB1A105K080AC | | |
| | | | ± 20% | C1608JB1A105M080AC | | |
| 1.5 µF | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1A155K050BC | C1005JB0J155K050BB | |
| | | | ± 20% | C1005JB1A155M050BC | C1005JB0J155M050BB | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1A155K080AC | C1608JB0J155K080AB | |
| | | | ± 20% | C1608JB1A155M080AC | C1608JB0J155M080AB | |
| 2.2 µF | 1005 | 0.50 ± 0.05 | ± 10% | C1005JB1A225K050BC | C1005JB0J225K050BC | C1005JB0G225K050BB |
| | | | ± 20% | C1005JB1A225M050BC | C1005JB0J225M050BC | C1005JB0G225M050BB |
| | 1608 | 0.80 +0.20/-0.10 | ± 10% | C1608JB1A225K080AC | C1608JB0J225K080AB | |
| | | | ± 20% | C1608JB1A225M080AC | C1608JB0J225M080AB | |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012JB1A225K085AA | | |
| | | | ± 20% | C2012JB1A225M085AA | | |
| 3.3 µF | 1005 | 0.50 ± 0.10 | ± 10% | C1005JB1A335K050BC | C1005JB0J335K050BC | C1005JB0G335K050BB |
| | | | ± 20% | C1005JB1A335M050BC | C1005JB0J335M050BC | C1005JB0G335M050BB |
| | 1608 | 0.80 +0.20/-0.10 | ± 10% | | C1608JB0J335K080AB | |
| | | | ± 20% | | C1608JB0J335M080AB | |
| | | 0.80 ± 0.10 | ± 10% | C1608JB1A335K080AB | | |
| | | | ± 20% | C1608JB1A335M080AB | | |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012JB1A335K125AA | | |
| | | | ± 20% | C2012JB1A335M125AA | | |
| 4.7 µF | 1005 | 0.50 +0.15/-0.10 | ± 10% | C1005JB1A475K050BC | C1005JB0J475K050BC | C1005JB0G475K050BB |
| | | | ± 20% | C1005JB1A475M050BC | C1005JB0J475M050BC | C1005JB0G475M050BB |
| | 1608 | 0.80 +0.20/-0.10 | ± 10% | | C1608JB0J475K080AB | |
| | | | ± 20% | | C1608JB0J475M080AB | |
| | | 0.80 ± 0.10 | ± 10% | C1608JB1A475K080AB | | |
| | | | ± 20% | C1608JB1A475M080AB | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012JB1A475K060AB | | |
| | | | ± 20% | C2012JB1A475M060AB | | |
| | | 0.85 ± 0.15 | ± 10% | | C2012JB0J475K085AB | |
| | | | ± 20% | | C2012JB0J475M085AB | |
| | | 1.25 ± 0.20 | ± 10% | C2012JB1A475K125AA | | |
| | | | ± 20% | C2012JB1A475M125AA | | |
| 6.8 µF | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1A685K080AC | C1608JB0J685K080AB | |
| | | | ± 20% | C1608JB1A685M080AC | C1608JB0J685M080AB | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012JB1A685K060AC | | |
| | | | ± 20% | C2012JB1A685M060AC | | |
| | | 0.85 ± 0.15 | ± 10% | C2012JB1A685K085AC | C2012JB0J685K085AB | |
| | | | ± 20% | C2012JB1A685M085AC | C2012JB0J685M085AB | |
| | | 1.25 ± 0.20 | ± 10% | C2012JB1A685K125AC | C2012JB0J685K125AB | |
| | | | ± 20% | C2012JB1A685M125AC | C2012JB0J685M125AB | |
| 10 µF | 1608 | 0.80 ± 0.10 | ± 10% | C1608JB1A106K080AC | C1608JB0J106K080AB | |
| | | | ± 20% | C1608JB1A106M080AC | C1608JB0J106M080AB | |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012JB1A106K085AC | C2012JB0J106K085AB | |
| | | | ± 20% | C2012JB1A106M085AC | C2012JB0J106M085AB | |
| | | 1.25 ± 0.20 | ± 10% | C2012JB1A106K125AC | C2012JB0J106K125AB | |
| | | | ± 20% | C2012JB1A106M125AC | C2012JB0J106M125AB | |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216JB1A106K160AA | | |
| | | | ± 20% | C3216JB1A106M160AA | | |
| 15 µF | 1608 | 0.80 ± 0.20 | ± 20% | C1608JB1A156M080AC | C1608JB0J156M080AC | C1608JB0G156M080AA |
| | 2012 | 0.85 ± 0.15 | ± 20% | C2012JB1A156M085AC | C2012JB0J156M085AB | |
| | | 1.25 ± 0.20 | ± 20% | C2012JB1A156M125AB | C2012JB0J156M125AC | |
| | 3216 | 1.60 ± 0.20 | ± 20% | C3216JB1A156M160AC | | |
| | 3225 | 2.30 ± 0.20 | ± 20% | C3225JB1A156M230AA | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

### Class 2 (Temperature Stable)

Temperature Characteristics: JB (-25 to +85ºC, ±10%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 10V | Rated Voltage Edc: 6.3V | Rated Voltage Edc: 4V |
| 22 µF | 1608 | 0.80 ± 0.20 | ± 20% | C1608JB1A226M080AC | C1608JB0J226M080AC | C1608JB0G226M080AA |
| | 2012 | 0.85 ± 0.15 | ± 20% | C2012JB1A226M085AC | C2012JB0J226M085AB | |
| | | 1.25 ± 0.20 | ± 20% | C2012JB1A226M125AB | C2012JB0J226M125AC | |
| | 3216 | 1.60 ± 0.20 | ± 20% | C3216JB1A226M160AC | | |
| | 3225 | 2.50 ± 0.30 | ± 20% | C3225JB1A226M250AA | | |
| 33 µF | 2012 | 1.25 ± 0.20 | ± 20% | C2012JB1A336M125AC | C2012JB0J336M125AC | |
| | 3216 | 1.30 ± 0.10 | ± 20% | | C3216JB0J336M130AC | |
| | | 1.60 ± 0.20 | ± 20% | C3216JB1A336M160AB | | |
| 47 µF | 2012 | 1.25 ± 0.20 | ± 20% | C2012JB1A476M125AC | C2012JB0J476M125AC | |
| | 3216 | 1.60 ± 0.20 | ± 20% | C3216JB1A476M160AB | C3216JB0J476M160AC | |
| 68 µF | 3216 | 1.60 ± 0.20 | ± 20% | C3216JB1A686M160AC | C3216JB0J686M160AB | |
| | 3225 | 2.00 ± 0.20 | ± 20% | | C3225JB0J686M200AC | |
| 100 µF | 3216 | 1.60 +0.30/-0.10 | ± 20% | | C3216JB0J107M160AB | |
| | | 1.60 ± 0.20 | ± 20% | C3216JB1A107M160AC | | |
| | 3225 | 2.50 ± 0.30 | ± 20% | | C3225JB0J107M250AC | |

### Class 2 (Temperature Stable)

Temperature Characteristics: X5R (-55 to +85ºC, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 100 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | | C0402X5R1C101K020BC |
| | | | ± 20% | | | | C0402X5R1C101M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X5R1E101K030BA | |
| | | | ± 20% | | | C0603X5R1E101M030BA | |
| 150 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | | C0402X5R1C151K020BC |
| | | | ± 20% | | | | C0402X5R1C151M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X5R1E151K030BA | |
| | | | ± 20% | | | C0603X5R1E151M030BA | |
| 220 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | | C0402X5R1C221K020BC |
| | | | ± 20% | | | | C0402X5R1C221M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X5R1E221K030BA | |
| | | | ± 20% | | | C0603X5R1E221M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H221K050BA | | | |
| | | | ± 20% | C1005X5R1H221M050BA | | | |
| 330 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | | C0402X5R1C331K020BC |
| | | | ± 20% | | | | C0402X5R1C331M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X5R1E331K030BA | |
| | | | ± 20% | | | C0603X5R1E331M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H331K050BA | | | |
| | | | ± 20% | C1005X5R1H331M050BA | | | |
| 470 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | | C0402X5R1C471K020BC |
| | | | ± 20% | | | | C0402X5R1C471M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X5R1E471K030BA | |
| | | | ± 20% | | | C0603X5R1E471M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H471K050BA | | | |
| | | | ± 20% | C1005X5R1H471M050BA | | | |
| 680 pF | 0402 | 0.20 ± 0.02 | ± 10% | | | | C0402X5R1C681K020BC |
| | | | ± 20% | | | | C0402X5R1C681M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X5R1E681K030BA | |
| | | | ± 20% | | | C0603X5R1E681M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H681K050BA | | | |
| | | | ± 20% | C1005X5R1H681M050BA | | | |
| 1 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X5R1E102K030BA | |
| | | | ± 20% | | | C0603X5R1E102M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H102K050BA | | | |
| | | | ± 20% | C1005X5R1H102M050BA | | | |
| 1.5 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X5R1E152K030BA | |
| | | | ± 20% | | | C0603X5R1E152M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H152K050BA | | | |
| | | | ± 20% | C1005X5R1H152M050BA | | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X5R (-55 to +85ºC, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 2.2 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X5R1E222K030BA | |
| | | | ± 20% | | | C0603X5R1E222M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H222K050BA | | | |
| | | | ± 20% | C1005X5R1H222M050BA | | | |
| 3.3 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X5R1E332K030BA | |
| | | | ± 20% | | | C0603X5R1E332M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H332K050BA | | | |
| | | | ± 20% | C1005X5R1H332M050BA | | | |
| 4.7 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | | C0603X5R1C472K030BA |
| | | | ± 20% | | | | C0603X5R1C472M030BA |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H472K050BA | | | |
| | | | ± 20% | C1005X5R1H472M050BA | | | |
| 6.8 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H682K050BA | | | |
| | | | ± 20% | C1005X5R1H682M050BA | | | |
| 10 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H103K050BB | | C1005X5R1E103K050BA | |
| | | | ± 20% | C1005X5R1H103M050BB | | C1005X5R1E103M050BA | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1H103K080AA | | | |
| | | | ± 20% | C1608X5R1H103M080AA | | | |
| 15 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H153K050BB | | C1005X5R1E153K050BA | C1005X5R1C153K050BA |
| | | | ± 20% | C1005X5R1H153M050BB | | C1005X5R1E153M050BA | C1005X5R1C153M050BA |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1H153K080AA | | | |
| | | | ± 20% | C1608X5R1H153M080AA | | | |
| 22 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H223K050BB | | C1005X5R1E223K050BA | C1005X5R1C223K050BA |
| | | | ± 20% | C1005X5R1H223M050BB | | C1005X5R1E223M050BA | C1005X5R1C223M050BA |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1H223K080AA | | | |
| | | | ± 20% | C1608X5R1H223M080AA | | | |
| 33 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H333K050BB | | C1005X5R1E333K050BA | C1005X5R1C333K050BA |
| | | | ± 20% | C1005X5R1H333M050BB | | C1005X5R1E333M050BA | C1005X5R1C333M050BA |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1H333K080AA | | | |
| | | | ± 20% | C1608X5R1H333M080AA | | | |
| 47 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H473K050BB | | C1005X5R1E473K050BA | C1005X5R1C473K050BA |
| | | | ± 20% | C1005X5R1H473M050BB | | C1005X5R1E473M050BA | C1005X5R1C473M050BA |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1H473K080AA | | | |
| | | | ± 20% | C1608X5R1H473M080AA | | | |
| 68 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H683K050BB | C1005X5R1V683K050BB | C1005X5R1E683K050BC | C1005X5R1C683K050BA |
| | | | ± 20% | C1005X5R1H683M050BB | C1005X5R1V683M050BB | C1005X5R1E683M050BC | C1005X5R1C683M050BA |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1H683K080AA | | | |
| | | | ± 20% | C1608X5R1H683M080AA | | | |
| 100 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X5R1E104K030BB | C0603X5R1C104K030BC |
| | | | ± 20% | | | C0603X5R1E104M030BB | C0603X5R1C104M030BC |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1H104K050BB | C1005X5R1V104K050BB | C1005X5R1E104K050BC | C1005X5R1C104K050BA |
| | | | ± 20% | C1005X5R1H104M050BB | C1005X5R1V104M050BB | C1005X5R1E104M050BC | C1005X5R1C104M050BA |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1H104K080AA | | | |
| | | | ± 20% | C1608X5R1H104M080AA | | | |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X5R1H104K085AA | | | |
| | | | ± 20% | C2012X5R1H104M085AA | | | |
| 150 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X5R1E154K030BC | C0603X5R1C154K030BC |
| | | | ± 20% | | | C0603X5R1E154M030BC | C0603X5R1C154M030BC |
| | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X5R1V154K050BC | C1005X5R1E154K050BC | C1005X5R1C154K050BB |
| | | | ± 20% | | C1005X5R1V154M050BC | C1005X5R1E154M050BC | C1005X5R1C154M050BB |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1H154K080AB | C1608X5R1V154K080AB | C1608X5R1E154K080AA | |
| | | | ± 20% | C1608X5R1H154M080AB | C1608X5R1V154M080AB | C1608X5R1E154M080AA | |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X5R1H154K085AA | | | |
| | | | ± 20% | C2012X5R1H154M085AA | | | |
| 220 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X5R1E224K030BC | C0603X5R1C224K030BC |
| | | | ± 20% | | | C0603X5R1E224M030BC | C0603X5R1C224M030BC |
| | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X5R1V224K050BC | C1005X5R1E224K050BC | C1005X5R1C224K050BB |
| | | | ± 20% | | C1005X5R1V224M050BC | C1005X5R1E224M050BC | C1005X5R1C224M050BB |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1H224K080AB | C1608X5R1V224K080AB | C1608X5R1E224K080AA | |
| | | | ± 20% | C1608X5R1H224M080AB | C1608X5R1V224M080AB | C1608X5R1E224M080AA | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X5R (-55 to +85ºC, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 220 nF | 2012 | 1.25 ± 0.20 | ± 10% | C2012X5R1H224K125AA | | | |
| | | | ± 20% | C2012X5R1H224M125AA | | | |
| 330 nF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X5R1V334K050BC | C1005X5R1E334K050BB | C1005X5R1C334K050BC |
| | | | ± 20% | | C1005X5R1V334M050BC | C1005X5R1E334M050BB | C1005X5R1C334M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1H334K080AB | C1608X5R1V334K080AB | C1608X5R1E334K080AC | C1608X5R1C334K080AA |
| | | | ± 20% | C1608X5R1H334M080AB | C1608X5R1V334M080AB | C1608X5R1E334M080AC | C1608X5R1C334M080AA |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012X5R1H334K125AA | | | |
| | | | ± 20% | C2012X5R1H334M125AA | | | |
| 470 nF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X5R1V474K050BC | C1005X5R1E474K050BB | C1005X5R1C474K050BC |
| | | | ± 20% | | C1005X5R1V474M050BC | C1005X5R1E474M050BB | C1005X5R1C474M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1H474K080AB | C1608X5R1V474K080AB | C1608X5R1E474K080AC | C1608X5R1C474K080AA |
| | | | ± 20% | C1608X5R1H474M080AB | C1608X5R1V474M080AB | C1608X5R1E474M080AC | C1608X5R1C474M080AA |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012X5R1H474K125AB | | | |
| | | | ± 20% | C2012X5R1H474M125AB | | | |
| 680 nF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X5R1V684K050BC | C1005X5R1E684K050BC | C1005X5R1C684K050BB |
| | | | ± 20% | | C1005X5R1V684M050BC | C1005X5R1E684M050BC | C1005X5R1C684M050BB |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1H684K080AB | C1608X5R1V684K080AB | C1608X5R1E684K080AC | C1608X5R1C684K080AA |
| | | | ± 20% | C1608X5R1H684M080AB | C1608X5R1V684M080AB | C1608X5R1E684M080AC | C1608X5R1C684M080AA |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012X5R1H684K125AB | | C2012X5R1E684K125AA | |
| | | | ± 20% | C2012X5R1H684M125AB | | C2012X5R1E684M125AA | |
| 1 µF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X5R1V105K050BC | C1005X5R1E105K050BC | C1005X5R1C105K050BC |
| | | | ± 20% | | C1005X5R1V105M050BC | C1005X5R1E105M050BC | C1005X5R1C105M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1H105K080AB | C1608X5R1V105K080AB | C1608X5R1E105K080AC | C1608X5R1C105K080AA |
| | | | ± 20% | C1608X5R1H105M080AB | C1608X5R1V105M080AB | C1608X5R1E105M080AC | C1608X5R1C105M080AA |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X5R1H105K085AB | C2012X5R1V105K085AB | C2012X5R1E105K085AC | C2012X5R1C105K085AA |
| | | | ± 20% | C2012X5R1H105M085AB | C2012X5R1V105M085AB | C2012X5R1E105M085AC | C2012X5R1C105M085AA |
| | | 1.25 ± 0.20 | ± 10% | C2012X5R1H105K125AB | | C2012X5R1E105K125AA | |
| | | | ± 20% | C2012X5R1H105M125AB | | C2012X5R1E105M125AA | |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X5R1H105K160AA | | | |
| | | | ± 20% | C3216X5R1H105M160AA | | | |
| 1.5 µF | 1005 | 0.50 +0.15/-0.10 | ± 10% | | C1005X5R1V155K050BC | | |
| | | | ± 20% | | C1005X5R1V155M050BC | | |
| | | 0.50 ± 0.05 | ± 10% | | | | C1005X5R1C155K050BC |
| | | | ± 20% | | | | C1005X5R1C155M050BC |
| | | 0.50 ± 0.10 | ± 10% | | | C1005X5R1E155K050BC | |
| | | | ± 20% | | | C1005X5R1E155M050BC | |
| | 1608 | 0.80 ± 0.10 | ± 10% | | C1608X5R1V155K080AC | C1608X5R1E155K080AB | C1608X5R1C155K080AB |
| | | | ± 20% | | C1608X5R1V155M080AC | C1608X5R1E155M080AB | C1608X5R1C155M080AB |
| | 2012 | 0.85 ± 0.15 | ± 10% | | | C2012X5R1E155K085AC | |
| | | | ± 20% | | | C2012X5R1E155M085AC | |
| | | 1.25 ± 0.20 | ± 10% | C2012X5R1H155K125AB | C2012X5R1V155K125AB | C2012X5R1E155K125AA | C2012X5R1C155K125AA |
| | | | ± 20% | C2012X5R1H155M125AB | C2012X5R1V155M125AB | C2012X5R1E155M125AA | C2012X5R1C155M125AA |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X5R1H155K160AB | | C3216X5R1E155K160AA | |
| | | | ± 20% | C3216X5R1H155M160AB | | C3216X5R1E155M160AA | |
| 2.2 µF | 1005 | 0.50 +0.10/-0.15 | ± 10% | | C1005X5R1V225K050BC | | |
| | | | ± 20% | | C1005X5R1V225M050BC | | |
| | | 0.50 +0.15/-0.10 | ± 10% | | | C1005X5R1E225K050BC | |
| | | | ± 20% | | | C1005X5R1E225M050BC | |
| | | 0.50 ± 0.05 | ± 10% | | | | C1005X5R1C225K050BC |
| | | | ± 20% | | | | C1005X5R1C225M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | | C1608X5R1V225K080AC | C1608X5R1E225K080AB | C1608X5R1C225K080AB |
| | | | ± 20% | | C1608X5R1V225M080AC | C1608X5R1E225M080AB | C1608X5R1C225M080AB |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X5R1H225K085AB | C2012X5R1V225K085AB | C2012X5R1E225K085AC | C2012X5R1C225K085AC |
| | | | ± 20% | C2012X5R1H225M085AB | C2012X5R1V225M085AB | C2012X5R1E225M085AC | C2012X5R1C225M085AC |
| | | 1.25 ± 0.20 | ± 10% | C2012X5R1H225K125AB | C2012X5R1V225K125AB | C2012X5R1E225K125AC | C2012X5R1C225K125AA |
| | | | ± 20% | C2012X5R1H225M125AB | C2012X5R1V225M125AB | C2012X5R1E225M125AC | C2012X5R1C225M125AA |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X5R1H225K160AB | | C3216X5R1E225K160AA | |
| | | | ± 20% | C3216X5R1H225M160AB | | C3216X5R1E225M160AA | |
| | 3225 | 2.50 ± 0.30 | ± 10% | C3225X5R1H225K250AB | | | |
| | | | ± 20% | C3225X5R1H225M250AB | | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X5R (-55 to +85ºC, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 3.3 µF | 1608 | 0.80 ± 0.10 | ± 10% | | | C1608X5R1E335K080AC | C1608X5R1C335K080AC |
| | | | ± 20% | | | C1608X5R1E335M080AC | C1608X5R1C335M080AC |
| | | 0.80 ± 0.20 | ± 10% | | C1608X5R1V335K080AC | | |
| | | | ± 20% | | C1608X5R1V335M080AC | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | | | | C2012X5R1C335K060AC |
| | | | ± 20% | | | | C2012X5R1C335M060AC |
| | | 0.85 ± 0.15 | ± 10% | | | C2012X5R1E335K085AC | C2012X5R1C335K085AB |
| | | | ± 20% | | | C2012X5R1E335M085AC | C2012X5R1C335M085AB |
| | | 1.25 ± 0.20 | ± 10% | C2012X5R1H335K125AB | C2012X5R1V335K125AC | C2012X5R1E335K125AB | C2012X5R1C335K125AC |
| | | | ± 20% | C2012X5R1H335M125AB | C2012X5R1V335M125AC | C2012X5R1E335M125AB | C2012X5R1C335M125AC |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X5R1H335K160AB | C3216X5R1V335K160AB | C3216X5R1E335K160AA | |
| | | | ± 20% | C3216X5R1H335M160AB | C3216X5R1V335M160AB | C3216X5R1E335M160AA | |
| | 3225 | 2.50 ± 0.30 | ± 10% | C3225X5R1H335K250AB | | | |
| | | | ± 20% | C3225X5R1H335M250AB | | | |
| 4.7 µF | 1608 | 0.80 ± 0.10 | ± 10% | | | C1608X5R1E475K080AC | C1608X5R1C475K080AC |
| | | | ± 20% | | | C1608X5R1E475M080AC | C1608X5R1C475M080AC |
| | | 0.80 ± 0.20 | ± 10% | | C1608X5R1V475K080AC | | |
| | | | ± 20% | | C1608X5R1V475M080AC | | |
| | 2012 | 0.60 ± 0.15 | ± 10% | | | | C2012X5R1C475K060AC |
| | | | ± 20% | | | | C2012X5R1C475M060AC |
| | | 0.85 ± 0.15 | ± 10% | | | C2012X5R1E475K085AC | C2012X5R1C475K085AB |
| | | | ± 20% | | | C2012X5R1E475M085AC | C2012X5R1C475M085AB |
| | | 1.25 ± 0.20 | ± 10% | C2012X5R1H475K125AB | C2012X5R1V475K125AC | C2012X5R1E475K125AB | C2012X5R1C475K125AC |
| | | | ± 20% | C2012X5R1H475M125AB | C2012X5R1V475M125AC | C2012X5R1E475M125AB | C2012X5R1C475M125AC |
| | 3216 | 0.85 ± 0.10 | ± 10% | C3216X5R1H475K085AB | C3216X5R1V475K085AB | C3216X5R1E475K085AB | |
| | | | ± 20% | C3216X5R1H475M085AB | C3216X5R1V475M085AB | C3216X5R1E475M085AB | |
| | | 1.15 ± 0.10 | ± 10% | | | C3216X5R1E475K115AB | |
| | | | ± 20% | | | C3216X5R1E475M115AB | |
| | | 1.15 ± 0.15 | ± 10% | | | | C3216X5R1C475K115AA |
| | | | ± 20% | | | | C3216X5R1C475M115AA |
| | | 1.60 ± 0.20 | ± 10% | C3216X5R1H475K160AB | C3216X5R1V475K160AB | C3216X5R1E475K160AA | |
| | | | ± 20% | C3216X5R1H475M160AB | C3216X5R1V475M160AB | C3216X5R1E475M160AA | |
| | 3225 | 2.50 ± 0.30 | ± 10% | C3225X5R1H475K250AB | | | |
| | | | ± 20% | C3225X5R1H475M250AB | | | |
| 6.8 µF | 1608 | 0.80 ± 0.20 | ± 10% | | | C1608X5R1E685K080AC | C1608X5R1C685K080AB |
| | | | ± 20% | | | C1608X5R1E685M080AC | C1608X5R1C685M080AB |
| | 2012 | 0.85 ± 0.15 | ± 10% | | | | C2012X5R1C685K085AC |
| | | | ± 20% | | | | C2012X5R1C685M085AC |
| | | 1.25 ± 0.20 | ± 10% | | C2012X5R1V685K125AC | C2012X5R1E685K125AC | C2012X5R1C685K125AC |
| | | | ± 20% | | C2012X5R1V685M125AC | C2012X5R1E685M125AC | C2012X5R1C685M125AC |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X5R1H685K160AB | C3216X5R1V685K160AB | C3216X5R1E685K160AB | C3216X5R1C685K160AA |
| | | | ± 20% | C3216X5R1H685M160AB | C3216X5R1V685M160AB | C3216X5R1E685M160AB | C3216X5R1C685M160AA |
| | 3225 | 2.00 ± 0.20 | ± 10% | | | | C3225X5R1C685K200AA |
| | | | ± 20% | | | | C3225X5R1C685M200AA |
| | | 2.50 ± 0.30 | ± 10% | C3225X5R1H685K250AB | | C3225X5R1E685K250AA | |
| | | | ± 20% | C3225X5R1H685M250AB | | C3225X5R1E685M250AA | |
| | 4532 | 2.50 ± 0.30 | ± 10% | C4532X5R1H685K250KA | | | |
| | | | ± 20% | C4532X5R1H685M250KA | | | |
| 10 µF | 1608 | 0.80 ± 0.20 | ± 20% | | | C1608X5R1E106M080AC | C1608X5R1C106M080AB |
| | 2012 | 0.85 ± 0.15 | ± 10% | | C2012X5R1V106K085AC | C2012X5R1E106K085AC | C2012X5R1C106K085AC |
| | | | ± 20% | | C2012X5R1V106M085AC | C2012X5R1E106M085AC | C2012X5R1C106M085AC |
| | | 1.25 ± 0.20 | ± 10% | | C2012X5R1V106K125AC | C2012X5R1E106K125AB | C2012X5R1C106K125AC |
| | | | ± 20% | | C2012X5R1V106M125AC | C2012X5R1E106M125AB | C2012X5R1C106M125AC |
| | 3216 | 0.85 ± 0.10 | ± 10% | | | C3216X5R1E106K085AC | C3216X5R1C106K085AC |
| | | | ± 20% | | | C3216X5R1E106M085AC | C3216X5R1C106M085AC |
| | | 1.60 ± 0.20 | ± 10% | C3216X5R1H106K160AB | C3216X5R1V106K160AB | C3216X5R1E106K160AB | C3216X5R1C106K160AA |
| | | | ± 20% | C3216X5R1H106M160AB | C3216X5R1V106M160AB | C3216X5R1E106M160AB | C3216X5R1C106M160AA |



• All specifications are subject to change without notice.

## Capacitance Range Table

### Class 2 (Temperature Stable)

Temperature Characteristics: X5R (-55 to +85ºC, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 10 µF | 3225 | 2.00 ± 0.20 | ± 10% | | | | C3225X5R1C106K200AA |
| | | | ± 20% | | | | C3225X5R1C106M200AA |
| | | 2.50 ± 0.30 | ± 10% | C3225X5R1H106K250AB | | C3225X5R1E106K250AA | |
| | | | ± 20% | C3225X5R1H106M250AB | | C3225X5R1E106M250AA | |
| | 4532 | 2.50 ± 0.30 | ± 10% | | | C4532X5R1E106K250KA | |
| | | | ± 20% | | | C4532X5R1E106M250KA | |
| | 5750 | 2.30 ± 0.20 | ± 10% | C5750X5R1H106K230KA | | | |
| | | | ± 20% | C5750X5R1H106M230KA | | | |
| 15 µF | 2012 | 1.25 ± 0.20 | ± 20% | | C2012X5R1V156M125AC | C2012X5R1E156M125AC | C2012X5R1C156M125AC |
| | 3216 | 1.60 ± 0.20 | ± 20% | | C3216X5R1V156M160AC | C3216X5R1E156M160AB | C3216X5R1C156M160AB |
| | 3225 | 2.50 ± 0.30 | ± 20% | | | | C3225X5R1C156M250AA |
| | 4532 | 2.50 ± 0.30 | ± 20% | | | C4532X5R1E156M250KA | |
| | | 2.80 ± 0.30 | ± 20% | | | C4532X5R1E156M280KA | |
| 22 µF | 2012 | 0.85 ± 0.15 | ± 20% | | | | C2012X5R1C226M085AC |
| | | 1.25 ± 0.20 | ± 10% | | | | C2012X5R1C226K125AC |
| | | | ± 20% | | C2012X5R1V226M125AC | C2012X5R1E226M125AC | C2012X5R1C226M125AC |
| | 3216 | 1.60 ± 0.20 | ± 20% | | C3216X5R1V226M160AC | C3216X5R1E226M160AB | C3216X5R1C226M160AB |
| | 3225 | 2.50 ± 0.30 | ± 10% | | | | C3225X5R1C226K250AA |
| | | | ± 20% | | | | C3225X5R1C226M250AA |
| | 4532 | 2.00 ± 0.20 | ± 20% | | | | C4532X5R1C226M200KA |
| | | 2.30 ± 0.20 | ± 20% | | | | C4532X5R1C226M230KA |
| | | 2.50 ± 0.30 | ± 20% | | | C4532X5R1E226M250KA | |
| | 5750 | 2.30 ± 0.20 | ± 20% | | | C5750X5R1E226M230KA | |
| | | 2.50 ± 0.30 | ± 20% | | | C5750X5R1E226M250KA | |
| 33 µF | 3216 | 1.60 ± 0.20 | ± 20% | | | C3216X5R1E336M160AC | C3216X5R1C336M160AB |
| | 4532 | 2.50 ± 0.30 | ± 20% | | | | C4532X5R1C336M250KA |
| | 5750 | 2.00 ± 0.20 | ± 20% | | | | C5750X5R1C336M200KA |
| 47 µF | 3216 | 1.60 ± 0.20 | ± 20% | | | C3216X5R1E476M160AC | C3216X5R1C476M160AB |
| | 5750 | 2.30 ± 0.20 | ± 20% | | | | C5750X5R1C476M230KA |

### Class 2 (Temperature Stable)

Temperature Characteristics: X5R (-55 to +85ºC, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 10V | Rated Voltage Edc: 6.3V | Rated Voltage Edc: 4V |
| 1 nF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X5R1A102K020BC | C0402X5R0J102K020BC | C0402X5R0G102K020BC |
| | | | ± 20% | C0402X5R1A102M020BC | C0402X5R0J102M020BC | C0402X5R0G102M020BC |
| 1.5 nF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X5R1A152K020BC | C0402X5R0J152K020BC | C0402X5R0G152K020BC |
| | | | ± 20% | C0402X5R1A152M020BC | C0402X5R0J152M020BC | C0402X5R0G152M020BC |
| 2.2 nF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X5R1A222K020BC | C0402X5R0J222K020BC | C0402X5R0G222K020BC |
| | | | ± 20% | C0402X5R1A222M020BC | C0402X5R0J222M020BC | C0402X5R0G222M020BC |
| 3.3 nF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X5R1A332K020BC | C0402X5R0J332K020BC | C0402X5R0G332K020BC |
| | | | ± 20% | C0402X5R1A332M020BC | C0402X5R0J332M020BC | C0402X5R0G332M020BC |
| 4.7 nF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X5R1A472K020BC | C0402X5R0J472K020BC | C0402X5R0G472K020BC |
| | | | ± 20% | C0402X5R1A472M020BC | C0402X5R0J472M020BC | C0402X5R0G472M020BC |
| 6.8 nF | 0402 | 0.20 ± 0.02 | ± 10% | | C0402X5R0J682K020BC | C0402X5R0G682K020BC |
| | | | ± 20% | | C0402X5R0J682M020BC | C0402X5R0G682M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603X5R1A682K030BA | | |
| | | | ± 20% | C0603X5R1A682M030BA | | |
| 10 nF | 0402 | 0.20 ± 0.02 | ± 10% | | C0402X5R0J103K020BC | C0402X5R0G103K020BC |
| | | | ± 20% | | C0402X5R0J103M020BC | C0402X5R0G103M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603X5R1A103K030BA | | |
| | | | ± 20% | C0603X5R1A103M030BA | | |
| 15 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X5R1A153K030BC | C0603X5R0J153K030BA | |
| | | | ± 20% | C0603X5R1A153M030BC | C0603X5R0J153M030BA | |
| 22 nF | 0402 | 0.20 ± 0.02 | ± 20% | | C0402X5R0J223M020BC | C0402X5R0G223M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603X5R1A223K030BC | C0603X5R0J223K030BC | |
| | | | ± 20% | C0603X5R1A223M030BC | C0603X5R0J223M030BC | |
| 33 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X5R1A333K030BC | C0603X5R0J333K030BC | |
| | | | ± 20% | C0603X5R1A333M030BC | C0603X5R0J333M030BC | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X5R (-55 to +85ºC, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 10V | Rated Voltage Edc: 6.3V | Rated Voltage Edc: 4V |
| 47 nF | 0402 | 0.20 ± 0.02 | ± 20% | | C0402X5R0J473M020BC | C0402X5R0G473M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603X5R1A473K030BC | C0603X5R0J473K030BC | |
| | | | ± 20% | C0603X5R1A473M030BC | C0603X5R0J473M030BC | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1A473K050BA | | |
| | | | ± 20% | C1005X5R1A473M050BA | | |
| 68 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X5R1A683K030BC | C0603X5R0J683K030BC | |
| | | | ± 20% | C0603X5R1A683M030BC | C0603X5R0J683M030BC | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1A683K050BA | | |
| | | | ± 20% | C1005X5R1A683M050BA | | |
| 100 nF | 0402 | 0.20 ± 0.02 | ± 20% | | C0402X5R0J104M020BC | C0402X5R0G104M020BC |
| | 0603 | 0.30 ± 0.03 | ± 10% | C0603X5R1A104K030BC | C0603X5R0J104K030BC | |
| | | | ± 20% | C0603X5R1A104M030BC | C0603X5R0J104M030BC | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1A104K050BA | C1005X5R0J104K050BA | |
| | | | ± 20% | C1005X5R1A104M050BA | | |
| 150 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X5R1A154K030BB | C0603X5R0J154K030BB | |
| | | | ± 20% | C0603X5R1A154M030BB | C0603X5R0J154M030BB | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1A154K050BC | C1005X5R0J154K050BB | |
| | | | ± 20% | C1005X5R1A154M050BC | C1005X5R0J154M050BB | |
| 220 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X5R1A224K030BB | C0603X5R0J224K030BB | |
| | | | ± 20% | C0603X5R1A224M030BB | C0603X5R0J224M030BB | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1A224K050BC | C1005X5R0J224K050BB | |
| | | | ± 20% | C1005X5R1A224M050BC | C1005X5R0J224M050BB | |
| 330 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X5R1A334K030BC | C0603X5R0J334K030BC | |
| | | | ± 20% | C0603X5R1A334M030BC | C0603X5R0J334M030BC | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1A334K050BB | C1005X5R0J334K050BB | |
| | | | ± 20% | C1005X5R1A334M050BB | C1005X5R0J334M050BB | |
| 470 nF | 0603 | 0.30 ± 0.03 | ± 10% | | C0603X5R0J474K030BC | |
| | | | ± 20% | C0603X5R1A474M030BC | C0603X5R0J474M030BC | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1A474K050BB | C1005X5R0J474K050BB | |
| | | | ± 20% | C1005X5R1A474M050BB | C1005X5R0J474M050BB | |
| | 1608 | 0.80 +0.15/-0.10 | ± 10% | C1608X5R1A474K080AA | | |
| 680 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1A684K050BB | C1005X5R0J684K050BB | |
| | | | ± 20% | C1005X5R1A684M050BB | C1005X5R0J684M050BB | |
| | 1608 | 0.80 +0.15/-0.10 | ± 10% | C1608X5R1A684K080AC | | |
| | | | ± 20% | C1608X5R1A684M080AC | | |
| 1 µF | 0603 | 0.30 ± 0.05 | ± 20% | | C0603X5R0J105M030BC | C0603X5R0G105M030BC |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1A105K050BB | C1005X5R0J105K050BB | |
| | | | ± 20% | C1005X5R1A105M050BB | C1005X5R0J105M050BB | |
| | 1608 | 0.80 +0.15/-0.10 | ± 10% | C1608X5R1A105K080AC | | |
| | | | ± 20% | C1608X5R1A105M080AC | | |
| 1.5 µF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1A155K050BC | C1005X5R0J155K050BB | |
| | | | ± 20% | C1005X5R1A155M050BC | C1005X5R0J155M050BB | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1A155K080AB | C1608X5R0J155K080AB | |
| | | | ± 20% | C1608X5R1A155M080AB | C1608X5R0J155M080AB | |
| 2.2 µF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X5R1A225K050BC | C1005X5R0J225K050BC | C1005X5R0G225K050BB |
| | | | ± 20% | C1005X5R1A225M050BC | C1005X5R0J225M050BC | C1005X5R0G225M050BB |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1A225K080AC | C1608X5R0J225K080AB | |
| | | | ± 20% | C1608X5R1A225M080AC | C1608X5R0J225M080AB | |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X5R1A225K085AA | C2012X5R0J225K085AA | |
| | | | ± 20% | C2012X5R1A225M085AA | C2012X5R0J225M085AA | |
| 3.3 µF | 1005 | 0.50 ± 0.10 | ± 10% | C1005X5R1A335K050BC | C1005X5R0J335K050BC | C1005X5R0G335K050BB |
| | | | ± 20% | C1005X5R1A335M050BC | C1005X5R0J335M050BC | C1005X5R0G335M050BB |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1A335K080AC | C1608X5R0J335K080AB | |
| | | | ± 20% | C1608X5R1A335M080AC | C1608X5R0J335M080AB | |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012X5R1A335K125AA | | |
| | | | ± 20% | C2012X5R1A335M125AA | | |
| 4.7 µF | 1005 | 0.50 +0.15/-0.10 | ± 10% | C1005X5R1A475K050BC | C1005X5R0J475K050BC | C1005X5R0G475K050BB |
| | | | ± 20% | C1005X5R1A475M050BC | C1005X5R0J475M050BC | C1005X5R0G475M050BB |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1A475K080AC | C1608X5R0J475K080AB | |
| | | | ± 20% | C1608X5R1A475M080AC | C1608X5R0J475M080AB | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X5R (-55 to +85ºC, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 10V | Rated Voltage Edc: 6.3V | Rated Voltage Edc: 4V |
| 4.7 µF | 2012 | 0.60 ± 0.15 | ± 10% | C2012X5R1A475K060AB | | |
| | | | ± 20% | C2012X5R1A475M060AB | | |
| | | 0.85 ± 0.15 | ± 10% | C2012X5R1A475K085AC | C2012X5R0J475K085AB | |
| | | | ± 20% | C2012X5R1A475M085AC | C2012X5R0J475M085AB | |
| | | 1.25 ± 0.20 | ± 10% | C2012X5R1A475K125AA | C2012X5R0J475K125AA | |
| | | | ± 20% | C2012X5R1A475M125AA | C2012X5R0J475M125AA | |
| 6.8 µF | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1A685K080AC | C1608X5R0J685K080AB | |
| | | | ± 20% | C1608X5R1A685M080AC | C1608X5R0J685M080AB | |
| | 2012 | 0.60 ± 0.15 | ± 10% | C2012X5R1A685K060AC | | |
| | | | ± 20% | C2012X5R1A685M060AC | | |
| | | 0.85 ± 0.15 | ± 10% | C2012X5R1A685K085AB | C2012X5R0J685K085AB | |
| | | | ± 20% | C2012X5R1A685M085AB | C2012X5R0J685M085AB | |
| | | 1.25 ± 0.20 | ± 10% | C2012X5R1A685K125AB | C2012X5R0J685K125AB | |
| | | | ± 20% | C2012X5R1A685M125AB | C2012X5R0J685M125AB | |
| 10 µF | 1005 | 0.50 ± 0.05 | ± 20% | | C1005X5R0J106M050BC | C1005X5R0G106M050BB |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X5R1A106K080AC | C1608X5R0J106K080AB | |
| | | | ± 20% | C1608X5R1A106M080AC | C1608X5R0J106M080AB | |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X5R1A106K085AB | C2012X5R0J106K085AB | |
| | | | ± 20% | C2012X5R1A106M085AB | C2012X5R0J106M085AB | |
| | | 1.25 ± 0.20 | ± 10% | C2012X5R1A106K125AB | C2012X5R0J106K125AB | |
| | | | ± 20% | C2012X5R1A106M125AB | C2012X5R0J106M125AB | |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X5R1A106K160AB | | |
| | | | ± 20% | C3216X5R1A106M160AB | | |
| 15 µF | 1608 | 0.80 ± 0.20 | ± 20% | C1608X5R1A156M080AC | C1608X5R0J156M080AC | C1608X5R0G156M080AA |
| | 2012 | 0.85 ± 0.15 | ± 20% | C2012X5R1A156M085AC | C2012X5R0J156M085AB | |
| | | 1.25 ± 0.20 | ± 20% | C2012X5R1A156M125AB | C2012X5R0J156M125AC | |
| | 3216 | 1.60 ± 0.20 | ± 20% | C3216X5R1A156M160AB | | |
| | 3225 | 2.30 ± 0.20 | ± 20% | C3225X5R1A156M230AA | | |
| 22 µF | 1608 | 0.80 ± 0.20 | ± 20% | C1608X5R1A226M080AC | C1608X5R0J226M080AC | C1608X5R0G226M080AA |
| | 2012 | 0.85 ± 0.15 | ± 20% | C2012X5R1A226M085AC | C2012X5R0J226M085AB | |
| | | 1.25 ± 0.20 | ± 10% | C2012X5R1A226K125AB | C2012X5R0J226K125AB | |
| | | | ± 20% | C2012X5R1A226M125AB | C2012X5R0J226M125AC | |
| | 3216 | 0.85 ± 0.15 | ± 20% | | C3216X5R0J226M085AC | |
| | | 1.60 ± 0.20 | ± 20% | C3216X5R1A226M160AC | C3216X5R0J226M160AA | |
| | 3225 | 2.00 ± 0.20 | ± 10% | | C3225X5R0J226K200AA | |
| | | | ± 20% | | C3225X5R0J226M200AA | |
| | | 2.30 ± 0.20 | ± 20% | C3225X5R1A226M230AA | | |
| | 4532 | 2.30 ± 0.20 | ± 20% | C4532X5R1A226M230KA | | |
| 33 µF | 2012 | 1.25 ± 0.20 | ± 20% | C2012X5R1A336M125AC | C2012X5R0J336M125AC | |
| | 3216 | 1.30 ± 0.10 | ± 20% | | C3216X5R0J336M130AC | |
| | | 1.60 ± 0.20 | ± 20% | C3216X5R1A336M160AB | | |
| | 3225 | 2.00 ± 0.20 | ± 20% | C3225X5R1A336M200AC | C3225X5R0J336M200AA | |
| | | 2.50 ± 0.30 | ± 20% | | C3225X5R0J336M250AA | |
| | 4532 | 2.30 ± 0.20 | ± 20% | C4532X5R1A336M230KA | | |
| 47 µF | 2012 | 1.25 ± 0.20 | ± 20% | C2012X5R1A476M125AC | C2012X5R0J476M125AC | C2012X5R0G476M125AB |
| | 3216 | 1.60 ± 0.20 | ± 20% | C3216X5R1A476M160AB | C3216X5R0J476M160AC | |
| | 3225 | 2.50 ± 0.30 | ± 20% | C3225X5R1A476M250AC | C3225X5R0J476M250AA | |
| | 4532 | 2.50 ± 0.30 | ± 20% | | C4532X5R0J476M250KA | |
| | | 2.80 ± 0.30 | ± 20% | C4532X5R1A476M280KA | | |
| 68 µF | 3216 | 1.60 ± 0.20 | ± 20% | C3216X5R1A686M160AC | C3216X5R0J686M160AB | |
| | 3225 | 2.00 ± 0.20 | ± 20% | | C3225X5R0J686M200AC | |
| | 4532 | 2.80 ± 0.30 | ± 20% | | C4532X5R0J686M280KA | |
| | 5750 | 2.30 ± 0.20 | ± 20% | C5750X5R1A686M230KA | | |
| 100 µF | 3216 | 1.60 ± 0.20 | ± 20% | C3216X5R1A107M160AC | C3216X5R0J107M160AB | C3216X5R0G107M160AB |
| | 3225 | 2.50 ± 0.30 | ± 20% | | C3225X5R0J107M250AC | |
| | 4532 | 2.80 ± 0.30 | ± 20% | C4532X5R1A107M280KC | C4532X5R0J107M280KA | |
| | 5750 | 2.80 ± 0.30 | ± 20% | C5750X5R1A107M280KC | C5750X5R0J107M280KA | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X6S (-55 to +105ºC, ±22%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 2.2 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X6S1E222K030BA | C0603X6S1C222K030BA |
| | | | ± 20% | | | C0603X6S1E222M030BA | C0603X6S1C222M030BA |
| 4.7 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | | C0603X6S1C472K030BA |
| | | | ± 20% | | | | C0603X6S1C472M030BA |
| 10 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X6S1H103K050BB | | | |
| | | | ± 20% | C1005X6S1H103M050BB | | | |
| 15 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X6S1H153K050BB | | | |
| | | | ± 20% | C1005X6S1H153M050BB | | | |
| 22 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X6S1H223K050BB | | | |
| | | | ± 20% | C1005X6S1H223M050BB | | | |
| 33 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X6S1H333K050BB | | | |
| | | | ± 20% | C1005X6S1H333M050BB | | | |
| 47 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X6S1H473K050BB | | | |
| | | | ± 20% | C1005X6S1H473M050BB | | | |
| 68 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X6S1H683K050BB | C1005X6S1V683K050BB | C1005X6S1E683K050BC | |
| | | | ± 20% | C1005X6S1H683M050BB | C1005X6S1V683M050BB | C1005X6S1E683M050BC | |
| 100 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X6S1H104K050BB | C1005X6S1V104K050BB | C1005X6S1E104K050BB | |
| | | | ± 20% | C1005X6S1H104M050BB | C1005X6S1V104M050BB | C1005X6S1E104M050BB | |
| 150 nF | 1005 | 0.50 ± 0.05 | ± 10% | | | C1005X6S1E154K050BC | C1005X6S1C154K050BB |
| | | | ± 20% | | | C1005X6S1E154M050BC | C1005X6S1C154M050BB |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X6S1H154K080AB | C1608X6S1V154K080AB | | |
| | | | ± 20% | C1608X6S1H154M080AB | C1608X6S1V154M080AB | | |
| 220 nF | 1005 | 0.50 ± 0.05 | ± 10% | | | C1005X6S1E224K050BC | C1005X6S1C224K050BB |
| | | | ± 20% | | | C1005X6S1E224M050BC | C1005X6S1C224M050BB |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X6S1H224K080AB | C1608X6S1V224K080AB | | |
| | | | ± 20% | C1608X6S1H224M080AB | C1608X6S1V224M080AB | | |
| 330 nF | 1005 | 0.50 ± 0.05 | ± 10% | | | | C1005X6S1C334K050BC |
| | | | ± 20% | | | | C1005X6S1C334M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X6S1H334K080AB | C1608X6S1V334K080AB | C1608X6S1E334K080AB | |
| | | | ± 20% | C1608X6S1H334M080AB | C1608X6S1V334M080AB | C1608X6S1E334M080AB | |
| 470 nF | 1005 | 0.50 ± 0.05 | ± 10% | | | | C1005X6S1C474K050BC |
| | | | ± 20% | | | | C1005X6S1C474M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X6S1H474K080AB | C1608X6S1V474K080AB | C1608X6S1E474K080AB | |
| | | | ± 20% | C1608X6S1H474M080AB | C1608X6S1V474M080AB | C1608X6S1E474M080AB | |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012X6S1H474K125AB | | | |
| | | | ± 20% | C2012X6S1H474M125AB | | | |
| 680 nF | 1005 | 0.50 ± 0.05 | ± 10% | | | | C1005X6S1C684K050BC |
| | | | ± 20% | | | | C1005X6S1C684M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X6S1H684K080AC | C1608X6S1V684K080AB | C1608X6S1E684K080AB | C1608X6S1C684K080AC |
| | | | ± 20% | C1608X6S1H684M080AC | C1608X6S1V684M080AB | C1608X6S1E684M080AB | C1608X6S1C684M080AC |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012X6S1H684K125AB | | | |
| | | | ± 20% | C2012X6S1H684M125AB | | | |
| 1 µF | 1005 | 0.50 ± 0.05 | ± 10% | | | | C1005X6S1C105K050BC |
| | | | ± 20% | | | | C1005X6S1C105M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X6S1H105K080AC | C1608X6S1V105K080AB | C1608X6S1E105K080AB | C1608X6S1C105K080AC |
| | | | ± 20% | C1608X6S1H105M080AC | C1608X6S1V105M080AB | C1608X6S1E105M080AB | C1608X6S1C105M080AC |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X6S1H105K085AB | C2012X6S1V105K085AB | C2012X6S1E105K085AB | |
| | | | ± 20% | C2012X6S1H105M085AB | C2012X6S1V105M085AB | C2012X6S1E105M085AB | |
| | | 1.25 ± 0.20 | ± 10% | C2012X6S1H105K125AB | | | |
| | | | ± 20% | C2012X6S1H105M125AB | | | |
| 1.5 µF | 1005 | 0.50 +0.15/-0.10 | ± 10% | | | | C1005X6S1C155K050BC |
| | | | ± 20% | | | | C1005X6S1C155M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | | | | C1608X6S1C155K080AC |
| | | | ± 20% | | | | C1608X6S1C155M080AC |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012X6S1H155K125AB | C2012X6S1V155K125AB | C2012X6S1E155K125AB | |
| | | | ± 20% | C2012X6S1H155M125AB | C2012X6S1V155M125AB | C2012X6S1E155M125AB | |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X6S1H155K160AB | C3216X6S1V155K160AB | | |
| | | | ± 20% | C3216X6S1H155M160AB | C3216X6S1V155M160AB | | |
| 2.2 µF | 1005 | 0.50 +0.10/-0.15 | ± 10% | | | | C1005X6S1C225K050BC |
| | | | ± 20% | | | | C1005X6S1C225M050BC |



• All specifications are subject to change without notice.

## Capacitance Range Table

### Class 2 (Temperature Stable)

Temperature Characteristics: X6S (-55 to +105ºC, ±22%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 2.2 µF | 1608 | 0.80 ± 0.10 | ± 10% | | | | C1608X6S1C225K080AC |
| | | | ± 20% | | | | C1608X6S1C225M080AC |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X6S1H225K085AC | C2012X6S1V225K085AB | C2012X6S1E225K085AB | C2012X6S1C225K085AB |
| | | | ± 20% | C2012X6S1H225M085AC | C2012X6S1V225M085AB | C2012X6S1E225M085AB | C2012X6S1C225M085AB |
| | | 1.25 ± 0.20 | ± 10% | C2012X6S1H225K125AB | C2012X6S1V225K125AB | C2012X6S1E225K125AC | |
| | | | ± 20% | C2012X6S1H225M125AB | C2012X6S1V225M125AB | C2012X6S1E225M125AC | |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X6S1H225K160AB | C3216X6S1V225K160AB | | |
| | | | ± 20% | C3216X6S1H225M160AB | C3216X6S1V225M160AB | | |
| 3.3 µF | 1608 | 0.80 ± 0.20 | ± 10% | | | | C1608X6S1C335K080AC |
| | | | ± 20% | | | | C1608X6S1C335M080AC |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012X6S1H335K125AC | C2012X6S1V335K125AB | C2012X6S1E335K125AC | C2012X6S1C335K125AC |
| | | | ± 20% | C2012X6S1H335M125AC | C2012X6S1V335M125AB | C2012X6S1E335M125AC | C2012X6S1C335M125AC |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X6S1H335K160AB | C3216X6S1V335K160AB | | |
| | | | ± 20% | C3216X6S1H335M160AB | C3216X6S1V335M160AB | | |
| 4.7 µF | 1608 | 0.80 ± 0.20 | ± 10% | | | | C1608X6S1C475K080AC |
| | | | ± 20% | | | | C1608X6S1C475M080AC |
| | 2012 | 0.85 ± 0.15 | ± 10% | | | | C2012X6S1C475K085AC |
| | | | ± 20% | | | | C2012X6S1C475M085AC |
| | | 1.25 ± 0.20 | ± 10% | C2012X6S1H475K125AC | C2012X6S1V475K125AB | C2012X6S1E475K125AC | C2012X6S1C475K125AC |
| | | | ± 20% | C2012X6S1H475M125AC | C2012X6S1V475M125AB | C2012X6S1E475M125AC | C2012X6S1C475M125AC |
| | 3216 | 0.85 ± 0.10 | ± 10% | | C3216X6S1V475K085AC | C3216X6S1E475K085AB | |
| | | | ± 20% | | C3216X6S1V475M085AC | C3216X6S1E475M085AB | |
| | | 1.60 ± 0.20 | ± 10% | C3216X6S1H475K160AB | C3216X6S1V475K160AB | C3216X6S1E475K160AB | |
| | | | ± 20% | C3216X6S1H475M160AB | C3216X6S1V475M160AB | C3216X6S1E475M160AB | |
| | 3225 | 2.50 ± 0.30 | ± 10% | C3225X6S1H475K250AB | | | |
| | | | ± 20% | C3225X6S1H475M250AB | | | |
| 6.8 µF | 2012 | 1.25 ± 0.20 | ± 10% | | | | C2012X6S1C685K125AC |
| | | | ± 20% | | | | C2012X6S1C685M125AC |
| | 3216 | 1.60 ± 0.20 | ± 10% | | C3216X6S1V685K160AC | C3216X6S1E685K160AB | C3216X6S1C685K160AC |
| | | | ± 20% | | C3216X6S1V685M160AC | C3216X6S1E685M160AB | C3216X6S1C685M160AC |
| | 3225 | 2.50 ± 0.30 | ± 10% | C3225X6S1H685K250AC | C3225X6S1V685K250AC | C3225X6S1E685K250AB | |
| | | | ± 20% | C3225X6S1H685M250AC | C3225X6S1V685M250AC | C3225X6S1E685M250AB | |
| 10 µF | 2012 | 0.85 ± 0.15 | ± 10% | | | | C2012X6S1C106K085AC |
| | | | ± 20% | | | | C2012X6S1C106M085AC |
| | | 1.25 ± 0.20 | ± 10% | | | | C2012X6S1C106K125AC |
| | | | ± 20% | | | | C2012X6S1C106M125AC |
| | 3216 | 0.85 ± 0.10 | ± 10% | | | | C3216X6S1C106K085AC |
| | | | ± 20% | | | | C3216X6S1C106M085AC |
| | | 1.60 ± 0.20 | ± 10% | | C3216X6S1V106K160AC | C3216X6S1E106K160AB | C3216X6S1C106K160AB |
| | | | ± 20% | | C3216X6S1V106M160AC | C3216X6S1E106M160AB | C3216X6S1C106M160AB |
| | 3225 | 2.50 ± 0.30 | ± 10% | C3225X6S1H106K250AC | C3225X6S1V106K250AC | C3225X6S1E106K250AC | |
| | | | ± 20% | C3225X6S1H106M250AC | C3225X6S1V106M250AC | C3225X6S1E106M250AC | |
| 15 µF | 2012 | 1.25 ± 0.20 | ± 20% | | | | C2012X6S1C156M125AC |
| | 3216 | 1.60 ± 0.20 | ± 20% | | | | C3216X6S1C156M160AC |
| 22 µF | 2012 | 1.25 ± 0.20 | ± 20% | | | | C2012X6S1C226M125AC |
| | 3216 | 1.60 ± 0.20 | ± 20% | | | | C3216X6S1C226M160AC |
| | 3225 | 2.50 ± 0.30 | ± 20% | | | | C3225X6S1C226M250AC |

### Class 2 (Temperature Stable)

Temperature Characteristics: X6S (-55 to +105ºC, ±22%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 10V | Rated Voltage Edc: 6.3V | Rated Voltage Edc: 4V |
| 100 pF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X6S1A101K020BC | C0402X6S0J101K020BC | C0402X6S0G101K020BC |
| | | | ± 20% | C0402X6S1A101M020BC | C0402X6S0J101M020BC | C0402X6S0G101M020BC |
| 150 pF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X6S1A151K020BC | C0402X6S0J151K020BC | C0402X6S0G151K020BC |
| | | | ± 20% | C0402X6S1A151M020BC | C0402X6S0J151M020BC | C0402X6S0G151M020BC |
| 220 pF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X6S1A221K020BC | C0402X6S0J221K020BC | C0402X6S0G221K020BC |
| | | | ± 20% | C0402X6S1A221M020BC | C0402X6S0J221M020BC | C0402X6S0G221M020BC |
| 330 pF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X6S1A331K020BC | C0402X6S0J331K020BC | C0402X6S0G331K020BC |
| | | | ± 20% | C0402X6S1A331M020BC | C0402X6S0J331M020BC | C0402X6S0G331M020BC |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X6S (-55 to +105ºC, ±22%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 10V | Rated Voltage Edc: 6.3V | Rated Voltage Edc: 4V |
| 470 pF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X6S1A471K020BC | C0402X6S0J471K020BC | C0402X6S0G471K020BC |
| | | | ± 20% | C0402X6S1A471M020BC | C0402X6S0J471M020BC | C0402X6S0G471M020BC |
| 680 pF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X6S1A681K020BC | C0402X6S0J681K020BC | C0402X6S0G681K020BC |
| | | | ± 20% | C0402X6S1A681M020BC | C0402X6S0J681M020BC | C0402X6S0G681M020BC |
| 2.2 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X6S1A222K030BA | C0603X6S0J222K030BA | |
| | | | ± 20% | C0603X6S1A222M030BA | C0603X6S0J222M030BA | |
| 4.7 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X6S1A472K030BA | C0603X6S0J472K030BA | |
| | | | ± 20% | C0603X6S1A472M030BA | C0603X6S0J472M030BA | |
| 10 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X6S1A103K030BA | C0603X6S0J103K030BA | |
| | | | ± 20% | C0603X6S1A103M030BA | C0603X6S0J103M030BA | |
| 22 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X6S0G223K030BC |
| | | | ± 20% | | | C0603X6S0G223M030BC |
| 47 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X6S0G473K030BC |
| | | | ± 20% | | | C0603X6S0G473M030BC |
| 68 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X6S0G683K030BC |
| | | | ± 20% | | | C0603X6S0G683M030BC |
| 100 nF | 0603 | 0.30 ± 0.03 | ± 10% | | C0603X6S0J104K030BC | C0603X6S0G104K030BC |
| | | | ± 20% | | C0603X6S0J104M030BC | C0603X6S0G104M030BC |
| | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X6S0J104K050BA | C1005X6S0G104K050BA |
| | | | ± 20% | | C1005X6S0J104M050BA | C1005X6S0G104M050BA |
| 150 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X6S1A154K030BC | C0603X6S0J154K030BC | C0603X6S0G154K030BB |
| | | | ± 20% | C0603X6S1A154M030BC | C0603X6S0J154M030BC | C0603X6S0G154M030BB |
| | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X6S0J154K050BC | C1005X6S0G154K050BB |
| | | | ± 20% | | C1005X6S0J154M050BC | C1005X6S0G154M050BB |
| 220 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X6S1A224K030BC | C0603X6S0J224K030BC | C0603X6S0G224K030BB |
| | | | ± 20% | C0603X6S1A224M030BC | C0603X6S0J224M030BC | C0603X6S0G224M030BB |
| | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X6S0J224K050BB | C1005X6S0G224K050BB |
| | | | ± 20% | | C1005X6S0J224M050BB | C1005X6S0G224M050BB |
| 330 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X6S1A334K050BC | C1005X6S0J334K050BB | C1005X6S0G334K050BB |
| | | | ± 20% | C1005X6S1A334M050BC | C1005X6S0J334M050BB | C1005X6S0G334M050BB |
| 470 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X6S1A474K050BC | C1005X6S0J474K050BC | C1005X6S0G474K050BB |
| | | | ± 20% | C1005X6S1A474M050BC | C1005X6S0J474M050BC | C1005X6S0G474M050BB |
| 680 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X6S1A684K050BC | C1005X6S0J684K050BB | C1005X6S0G684K050BB |
| | | | ± 20% | C1005X6S1A684M050BC | C1005X6S0J684M050BB | C1005X6S0G684M050BB |
| 1 µF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X6S1A105K050BC | C1005X6S0J105K050BC | C1005X6S0G105K050BB |
| | | | ± 20% | C1005X6S1A105M050BC | C1005X6S0J105M050BC | C1005X6S0G105M050BB |
| | 1608 | 0.80 +0.15/-0.10 | ± 10% | C1608X6S1A105K080AC | C1608X6S0J105K080AC | |
| | | | ± 20% | C1608X6S1A105M080AC | C1608X6S0J105M080AC | |
| 1.5 µF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X6S0J155K050BC | C1005X6S0G155K050BC |
| | | | ± 20% | | C1005X6S0J155M050BC | C1005X6S0G155M050BC |
| | | 0.50 ± 0.10 | ± 10% | C1005X6S1A155K050BC | | |
| | | | ± 20% | C1005X6S1A155M050BC | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X6S1A155K080AB | | |
| | | | ± 20% | C1608X6S1A155M080AB | C1608X6S0J155M080AB | |
| | | 0.80 ± 0.20 | ± 10% | | C1608X6S0J155K080AB | |
| 2.2 µF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X6S1A225K050BC | C1005X6S0J225K050BC | C1005X6S0G225K050BC |
| | | | ± 20% | C1005X6S1A225M050BC | C1005X6S0J225M050BC | C1005X6S0G225M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X6S1A225K080AB | C1608X6S0J225K080AB | |
| | | | ± 20% | C1608X6S1A225M080AB | C1608X6S0J225M080AB | |
| 3.3 µF | 1005 | 0.50 ± 0.10 | ± 10% | | | C1005X6S0G335K050BC |
| | | | ± 20% | | | C1005X6S0G335M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X6S1A335K080AC | C1608X6S0J335K080AB | |
| | | | ± 20% | C1608X6S1A335M080AC | C1608X6S0J335M080AB | |
| 4.7 µF | 1005 | 0.50 +0.15/-0.10 | ± 20% | | | C1005X6S0G475M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X6S1A475K080AC | C1608X6S0J475K080AB | |
| | | | ± 20% | C1608X6S1A475M080AC | C1608X6S0J475M080AB | |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X6S1A475K085AB | | |
| | | | ± 20% | C2012X6S1A475M085AB | | |
| | | 1.25 ± 0.20 | ± 10% | | C2012X6S0J475K125AB | |
| | | | ± 20% | | C2012X6S0J475M125AB | |



• All specifications are subject to change without notice.

## Capacitance Range Table

### Class 2 (Temperature Stable)

Temperature Characteristics: X6S (-55 to +105ºC, ±22%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 10V | Rated Voltage Edc: 6.3V | Rated Voltage Edc: 4V |
| 6.8 µF | 1608 | 0.80 ± 0.10 | ± 10% | | | C1608X6S0G685K080AC |
| | | | ± 20% | | | C1608X6S0G685M080AC |
| | | 0.80 ± 0.20 | ± 10% | C1608X6S1A685K080AC | C1608X6S0J685K080AB | |
| | | | ± 20% | C1608X6S1A685M080AC | C1608X6S0J685M080AB | |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X6S1A685K085AC | C2012X6S0J685K085AB | |
| | | | ± 20% | C2012X6S1A685M085AC | C2012X6S0J685M085AB | |
| | | 1.25 ± 0.20 | ± 10% | C2012X6S1A685K125AB | | |
| | | | ± 20% | C2012X6S1A685M125AB | | |
| | 3216 | 0.85 ± 0.10 | ± 10% | C3216X6S1A685K085AB | | |
| | | | ± 20% | C3216X6S1A685M085AB | | |
| 10 µF | 1608 | 0.80 ± 0.10 | ± 10% | | | C1608X6S0G106K080AB |
| | | | ± 20% | | | C1608X6S0G106M080AC |
| | | 0.80 ± 0.20 | ± 20% | C1608X6S1A106M080AC | C1608X6S0J106M080AC | |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X6S1A106K085AC | C2012X6S0J106K085AC | |
| | | | ± 20% | C2012X6S1A106M085AC | C2012X6S0J106M085AC | |
| | | 1.25 ± 0.20 | ± 10% | C2012X6S1A106K125AB | C2012X6S0J106K125AB | C2012X6S0G106K125AC |
| | | | ± 20% | C2012X6S1A106M125AB | C2012X6S0J106M125AB | C2012X6S0G106M125AC |
| | 3216 | 0.85 ± 0.10 | ± 10% | C3216X6S1A106K085AB | | |
| | | | ± 20% | C3216X6S1A106M085AB | | |
| | | 1.60 ± 0.20 | ± 10% | | C3216X6S0J106K160AC | |
| | | | ± 20% | | C3216X6S0J106M160AC | |
| 15 µF | 2012 | 0.85 ± 0.15 | ± 20% | | | C2012X6S0G156M085AC |
| | | 1.25 ± 0.20 | ± 20% | C2012X6S1A156M125AC | C2012X6S0J156M125AB | |
| | 3216 | 1.60 ± 0.20 | ± 20% | C3216X6S1A156M160AB | C3216X6S0J156M160AB | |
| 22 µF | 2012 | 0.85 ± 0.15 | ± 20% | | C2012X6S0J226M085AC | C2012X6S0G226M085AC |
| | | 1.25 ± 0.20 | ± 20% | C2012X6S1A226M125AC | C2012X6S0J226M125AB | C2012X6S0G226M125AC |
| | 3216 | 1.60 ± 0.20 | ± 20% | C3216X6S1A226M160AB | C3216X6S0J226M160AB | |
| 33 µF | 2012 | 1.25 ± 0.20 | ± 20% | | | C2012X6S0G336M125AC |
| | 3216 | 1.60 ± 0.20 | ± 20% | C3216X6S1A336M160AC | C3216X6S0J336M160AB | |
| 47 µF | 2012 | 1.25 ± 0.20 | ± 20% | | | C2012X6S0G476M125AC |
| | 3216 | 1.60 ± 0.20 | ± 20% | C3216X6S1A476M160AC | C3216X6S0J476M160AB | C3216X6S0G476M160AC |
| | 3225 | 2.50 ± 0.30 | ± 20% | | C3225X6S0J476M250AC | |
| 68 µF | 3216 | 1.60 ± 0.20 | ± 20% | | | C3216X6S0G686M160AC |
| 100 µF | 3216 | 1.60 +0.30/-0.10 | ± 20% | | | C3216X6S0G107M160AC |
| | 3225 | 2.50 ± 0.30 | ± 20% | | C3225X6S0J107M250AC | C3225X6S0G107M250AC |
| | 4532 | 2.80 ± 0.30 | ± 20% | | C4532X6S0J107M280KC | |

### Class 2 (Temperature Stable)

Temperature Characteristics: X7R (-55 to +125ºC, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 100 pF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X7R1E101K030BA | |
| | | | ± 20% | | | C0603X7R1E101M030BA | |
| 150 pF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X7R1E151K030BA | |
| | | | ± 20% | | | C0603X7R1E151M030BA | |
| 220 pF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X7R1E221K030BA | |
| | | | ± 20% | | | C0603X7R1E221M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H221K050BA | | | |
| | | | ± 20% | C1005X7R1H221M050BA | | | |
| 330 pF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X7R1E331K030BA | |
| | | | ± 20% | | | C0603X7R1E331M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H331K050BA | | | |
| | | | ± 20% | C1005X7R1H331M050BA | | | |
| 470 pF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X7R1E471K030BA | |
| | | | ± 20% | | | C0603X7R1E471M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H471K050BA | | | |
| | | | ± 20% | C1005X7R1H471M050BA | | | |
| 680 pF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X7R1E681K030BA | |
| | | | ± 20% | | | C0603X7R1E681M030BA | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X7R (-55 to +125ºC, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 680 pF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H681K050BA | | | |
| | | | ± 20% | C1005X7R1H681M050BA | | | |
| 1 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X7R1E102K030BA | |
| | | | ± 20% | | | C0603X7R1E102M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H102K050BA | | C1005X7R1E102K050BA | |
| | | | ± 20% | C1005X7R1H102M050BA | | | |
| 1.5 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X7R1E152K030BA | |
| | | | ± 20% | | | C0603X7R1E152M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H152K050BA | | | |
| | | | ± 20% | C1005X7R1H152M050BA | | | |
| 2.2 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X7R1E222K030BA | C0603X7R1C222K030BA |
| | | | ± 20% | | | C0603X7R1E222M030BA | C0603X7R1C222M030BA |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H222K050BA | | | |
| | | | ± 20% | C1005X7R1H222M050BA | | | |
| 3.3 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | C0603X7R1E332K030BA | |
| | | | ± 20% | | | C0603X7R1E332M030BA | |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H332K050BA | | | |
| | | | ± 20% | C1005X7R1H332M050BA | | | |
| 4.7 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | | C0603X7R1C472K030BA |
| | | | ± 20% | | | | C0603X7R1C472M030BA |
| | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H472K050BA | | | |
| | | | ± 20% | C1005X7R1H472M050BA | | | |
| 6.8 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H682K050BA | | | |
| | | | ± 20% | C1005X7R1H682M050BA | | | |
| 10 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H103K050BB | C1005X7R1V103K050BB | C1005X7R1E103K050BB | C1005X7R1C103K050BA |
| | | | ± 20% | C1005X7R1H103M050BB | C1005X7R1V103M050BB | C1005X7R1E103M050BB | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X7R1H103K080AA | | C1608X7R1E103K080AA | |
| | | | ± 20% | C1608X7R1H103M080AA | | | |
| 15 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H153K050BB | C1005X7R1V153K050BB | | |
| | | | ± 20% | C1005X7R1H153M050BB | C1005X7R1V153M050BB | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X7R1H153K080AA | | | |
| | | | ± 20% | C1608X7R1H153M080AA | | | |
| 22 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H223K050BB | C1005X7R1V223K050BB | C1005X7R1E223K050BB | |
| | | | ± 20% | C1005X7R1H223M050BB | C1005X7R1V223M050BB | C1005X7R1E223M050BB | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X7R1H223K080AA | | | |
| | | | ± 20% | C1608X7R1H223M080AA | | | |
| 33 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H333K050BB | C1005X7R1V333K050BB | | |
| | | | ± 20% | C1005X7R1H333M050BB | C1005X7R1V333M050BB | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X7R1H333K080AA | | | |
| | | | ± 20% | C1608X7R1H333M080AA | | | |
| 47 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H473K050BB | C1005X7R1V473K050BB | C1005X7R1E473K050BC | C1005X7R1C473K050BC |
| | | | ± 20% | C1005X7R1H473M050BB | C1005X7R1V473M050BB | C1005X7R1E473M050BC | C1005X7R1C473M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X7R1H473K080AA | | | |
| | | | ± 20% | C1608X7R1H473M080AA | | | |
| 68 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H683K050BB | C1005X7R1V683K050BB | C1005X7R1E683K050BB | C1005X7R1C683K050BC |
| | | | ± 20% | C1005X7R1H683M050BB | C1005X7R1V683M050BB | C1005X7R1E683M050BB | C1005X7R1C683M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X7R1H683K080AA | | | |
| | | | ± 20% | C1608X7R1H683M080AA | | | |
| 100 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1H104K050BB | C1005X7R1V104K050BB | C1005X7R1E104K050BB | C1005X7R1C104K050BC |
| | | | ± 20% | C1005X7R1H104M050BB | C1005X7R1V104M050BB | C1005X7R1E104M050BB | C1005X7R1C104M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X7R1H104K080AA | | C1608X7R1E104K080AA | |
| | | | ± 20% | C1608X7R1H104M080AA | | C1608X7R1E104M080AA | |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X7R1H104K085AA | | | |
| | | | ± 20% | C2012X7R1H104M085AA | | | |
| 150 nF | 1005 | 0.50 ± 0.05 | ± 10% | | | | C1005X7R1C154K050BC |
| | | | ± 20% | | | | C1005X7R1C154M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X7R1H154K080AB | C1608X7R1V154K080AB | C1608X7R1E154K080AA | |
| | | | ± 20% | C1608X7R1H154M080AB | C1608X7R1V154M080AB | C1608X7R1E154M080AA | |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X7R1H154K085AA | | | |
| | | | ± 20% | C2012X7R1H154M085AA | | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X7R (-55 to +125ºC, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 150 nF | 2012 | 1.25 ± 0.20 | ± 10% | C2012X7R1H154K125AA | | | |
| | | | ± 20% | C2012X7R1H154M125AA | | | |
| 220 nF | 1005 | 0.50 ± 0.05 | ± 10% | | | | C1005X7R1C224K050BC |
| | | | ± 20% | | | | C1005X7R1C224M050BC |
| | 1608 | 0.80 ± 0.10 | ± 10% | C1608X7R1H224K080AB | C1608X7R1V224K080AB | C1608X7R1E224K080AC | C1608X7R1C224K080AC |
| | | | ± 20% | C1608X7R1H224M080AB | C1608X7R1V224M080AB | C1608X7R1E224M080AC | C1608X7R1C224M080AC |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012X7R1H224K125AA | | | |
| | | | ± 20% | C2012X7R1H224M125AA | | | |
| | 3216 | 1.15 ± 0.15 | ± 10% | C3216X7R1H224K115AA | | | |
| | | | ± 20% | C3216X7R1H224M115AA | | | |
| 330 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608X7R1H334K080AC | C1608X7R1V334K080AB | C1608X7R1E334K080AC | C1608X7R1C334K080AC |
| | | | ± 20% | C1608X7R1H334M080AC | C1608X7R1V334M080AB | C1608X7R1E334M080AC | C1608X7R1C334M080AC |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012X7R1H334K125AA | | | |
| | | | ± 20% | C2012X7R1H334M125AA | | | |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X7R1H334K160AA | | | |
| | | | ± 20% | C3216X7R1H334M160AA | | | |
| 470 nF | 1608 | 0.80 ± 0.10 | ± 10% | C1608X7R1H474K080AC | C1608X7R1V474K080AB | C1608X7R1E474K080AB | C1608X7R1C474K080AC |
| | | | ± 20% | C1608X7R1H474M080AC | C1608X7R1V474M080AB | C1608X7R1E474M080AB | C1608X7R1C474M080AC |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012X7R1H474K125AB | C2012X7R1V474K125AB | C2012X7R1E474K125AA | |
| | | | ± 20% | C2012X7R1H474M125AB | C2012X7R1V474M125AB | C2012X7R1E474M125AA | |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X7R1H474K160AA | | | |
| | | | ± 20% | C3216X7R1H474M160AA | | | |
| 680 nF | 1608 | 0.80 ± 0.10 | ± 10% | | C1608X7R1V684K080AC | C1608X7R1E684K080AB | C1608X7R1C684K080AC |
| | | | ± 20% | | C1608X7R1V684M080AC | C1608X7R1E684M080AB | C1608X7R1C684M080AC |
| | 2012 | 1.25 ± 0.20 | ± 10% | C2012X7R1H684K125AB | C2012X7R1V684K125AB | C2012X7R1E684K125AB | C2012X7R1C684K125AA |
| | | | ± 20% | C2012X7R1H684M125AB | C2012X7R1V684M125AB | C2012X7R1E684M125AB | C2012X7R1C684M125AA |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X7R1H684K160AA | | | |
| | | | ± 20% | C3216X7R1H684M160AA | | | |
| 1 µF | 1608 | 0.80 ± 0.10 | ± 10% | | C1608X7R1V105K080AC | C1608X7R1E105K080AB | C1608X7R1C105K080AC |
| | | | ± 20% | | C1608X7R1V105M080AC | C1608X7R1E105M080AB | C1608X7R1C105M080AC |
| | 2012 | 0.85 ± 0.15 | ± 10% | C2012X7R1H105K085AC | C2012X7R1V105K085AB | C2012X7R1E105K085AB | C2012X7R1C105K085AA |
| | | | ± 20% | C2012X7R1H105M085AC | C2012X7R1V105M085AB | C2012X7R1E105M085AB | C2012X7R1C105M085AA |
| | | 1.25 ± 0.20 | ± 10% | C2012X7R1H105K125AB | C2012X7R1V105K125AB | C2012X7R1E105K125AB | C2012X7R1C105K125AA |
| | | | ± 20% | C2012X7R1H105M125AB | C2012X7R1V105M125AB | C2012X7R1E105M125AB | C2012X7R1C105M125AC |
| | 3216 | 0.85 ± 0.15 | ± 10% | | | C3216X7R1E105K085AA | |
| | | | ± 20% | | | C3216X7R1E105M085AA | |
| | | 1.60 ± 0.20 | ± 10% | C3216X7R1H105K160AB | | C3216X7R1E105K160AA | |
| | | | ± 20% | C3216X7R1H105M160AB | | C3216X7R1E105M160AA | |
| | 3225 | 1.60 ± 0.20 | ± 10% | C3225X7R1H105K160AA | | | |
| | | | ± 20% | C3225X7R1H105M160AA | | | |
| | 4532 | 1.60 ± 0.20 | ± 10% | C4532X7R1H105K160KA | | | |
| | | | ± 20% | C4532X7R1H105M160KA | | | |
| 1.5 µF | 2012 | 1.25 ± 0.20 | ± 10% | C2012X7R1H155K125AC | C2012X7R1V155K125AB | C2012X7R1E155K125AB | C2012X7R1C155K125AB |
| | | | ± 20% | C2012X7R1H155M125AC | C2012X7R1V155M125AB | C2012X7R1E155M125AB | C2012X7R1C155M125AB |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X7R1H155K160AB | C3216X7R1V155K160AB | C3216X7R1E155K160AA | |
| | | | ± 20% | C3216X7R1H155M160AB | C3216X7R1V155M160AB | C3216X7R1E155M160AA | |
| | 3225 | 2.00 ± 0.20 | ± 10% | C3225X7R1H155K200AA | | | |
| | | | ± 20% | C3225X7R1H155M200AA | | | |
| 2.2 µF | 2012 | 0.85 +0.15/-0.25 | ± 10% | | | C2012X7R1E225K085AB | |
| | | 0.85 ± 0.15 | ± 10% | | C2012X7R1V225K085AC | | C2012X7R1C225K085AB |
| | | | ± 20% | | C2012X7R1V225M085AC | C2012X7R1E225M085AB | C2012X7R1C225M085AB |
| | | 1.25 ± 0.20 | ± 10% | C2012X7R1H225K125AC | C2012X7R1V225K125AB | C2012X7R1E225K125AB | C2012X7R1C225K125AB |
| | | | ± 20% | C2012X7R1H225M125AC | C2012X7R1V225M125AB | C2012X7R1E225M125AB | C2012X7R1C225M125AB |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X7R1H225K160AB | C3216X7R1V225K160AB | C3216X7R1E225K160AA | |
| | | | ± 20% | C3216X7R1H225M160AB | C3216X7R1V225M160AB | C3216X7R1E225M160AA | |
| | 3225 | 2.00 ± 0.20 | ± 10% | C3225X7R1H225K200AB | | | |
| | | | ± 20% | C3225X7R1H225M200AB | | | |
| | | 2.50 ± 0.30 | ± 10% | C3225X7R1H225K250AB | | | |
| | 4532 | 1.60 ± 0.20 | ± 10% | C4532X7R1H225K160KA | | | |
| | | | ± 20% | C4532X7R1H225M160KA | | | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X7R (-55 to +125ºC, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 35V | Rated Voltage Edc: 25V | Rated Voltage Edc: 16V |
| 3.3 µF | 2012 | 1.25 ± 0.20 | ± 10% | | C2012X7R1V335K125AC | C2012X7R1E335K125AB | C2012X7R1C335K125AB |
| | | | ± 20% | | C2012X7R1V335M125AC | C2012X7R1E335M125AB | C2012X7R1C335M125AB |
| | 3216 | 1.60 ± 0.20 | ± 10% | C3216X7R1H335K160AC | C3216X7R1V335K160AB | C3216X7R1E335K160AC | |
| | | | ± 20% | C3216X7R1H335M160AC | C3216X7R1V335M160AB | C3216X7R1E335M160AC | |
| | 3225 | 1.60 ± 0.20 | ± 10% | | | C3225X7R1E335K160AA | |
| | | | ± 20% | | | C3225X7R1E335M160AA | |
| | | 2.50 ± 0.30 | ± 10% | C3225X7R1H335K250AB | | | |
| | | | ± 20% | C3225X7R1H335M250AB | | | |
| | 4532 | 2.00 ± 0.20 | ± 10% | C4532X7R1H335K200KA | | | |
| | | | ± 20% | C4532X7R1H335M200KA | | | |
| 4.7 µF | 2012 | 1.25 ± 0.20 | ± 10% | | C2012X7R1V475K125AC | C2012X7R1E475K125AB | C2012X7R1C475K125AB |
| | | | ± 20% | | C2012X7R1V475M125AC | C2012X7R1E475M125AB | C2012X7R1C475M125AB |
| | 3216 | 0.85 ± 0.10 | ± 10% | | C3216X7R1V475K085AC | C3216X7R1E475K085AB | C3216X7R1C475K085AB |
| | | | ± 20% | | C3216X7R1V475M085AC | C3216X7R1E475M085AB | C3216X7R1C475M085AB |
| | | 1.60 ± 0.20 | ± 10% | C3216X7R1H475K160AC | C3216X7R1V475K160AB | C3216X7R1E475K160AC | C3216X7R1C475K160AB |
| | | | ± 20% | C3216X7R1H475M160AC | C3216X7R1V475M160AB | C3216X7R1E475M160AC | C3216X7R1C475M160AB |
| | 3225 | 2.00 ± 0.20 | ± 10% | | | C3225X7R1E475K200AA | |
| | | | ± 20% | | | C3225X7R1E475M200AA | |
| | | 2.50 ± 0.30 | ± 10% | C3225X7R1H475K250AB | | | |
| | | | ± 20% | C3225X7R1H475M250AB | | | |
| | 4532 | 2.00 ± 0.20 | ± 10% | C4532X7R1H475K200KB | | | |
| | | | ± 20% | C4532X7R1H475M200KB | | C4532X7R1E475M200KA | |
| | 5750 | 2.00 ± 0.20 | ± 10% | C5750X7R1H475K200KA | | | |
| | | | ± 20% | C5750X7R1H475M200KA | | | |
| | | 2.80 ± 0.30 | ± 20% | C5750X7R1H475M280KA | | | |
| 6.8 µF | 3216 | 1.60 ± 0.20 | ± 10% | | C3216X7R1V685K160AC | C3216X7R1E685K160AB | C3216X7R1C685K160AC |
| | | | ± 20% | | C3216X7R1V685M160AC | C3216X7R1E685M160AB | C3216X7R1C685M160AC |
| | 3225 | 2.50 ± 0.30 | ± 10% | | | C3225X7R1E685K250AB | |
| | | | ± 20% | | | C3225X7R1E685M250AB | |
| | 4532 | 2.50 ± 0.30 | ± 10% | C4532X7R1H685K250KB | | | |
| | | | ± 20% | C4532X7R1H685M250KB | | | |
| | 5750 | 2.50 ± 0.30 | ± 10% | C5750X7R1H685K250KA | | | |
| | | | ± 20% | C5750X7R1H685M250KA | | | |
| 10 µF | 3216 | 1.60 ± 0.20 | ± 10% | | C3216X7R1V106K160AC | C3216X7R1E106K160AB | C3216X7R1C106K160AC |
| | | | ± 20% | | C3216X7R1V106M160AC | C3216X7R1E106M160AB | C3216X7R1C106M160AC |
| | 3225 | 2.00 ± 0.20 | ± 10% | | | | C3225X7R1C106K200AB |
| | | | ± 20% | | | | C3225X7R1C106M200AB |
| | | 2.50 ± 0.30 | ± 10% | | | C3225X7R1E106K250AC | |
| | | | ± 20% | C3225X7R1H106M250AC | | C3225X7R1E106M250AC | |
| | 4532 | 2.30 ± 0.20 | ± 10% | | | | C4532X7R1C106K230KA |
| | | | ± 20% | | | | C4532X7R1C106M230KA |
| | | 2.50 ± 0.30 | ± 10% | | | C4532X7R1E106K250KA | |
| | | | ± 20% | | | C4532X7R1E106M250KA | |
| | 5750 | 2.00 ± 0.20 | ± 20% | | | C5750X7R1E106M200KA | |
| | | 2.30 ± 0.20 | ± 10% | C5750X7R1H106K230KB | | | |
| | | | ± 20% | C5750X7R1H106M230KB | | | |
| 15 µF | 3225 | 2.50 ± 0.30 | ± 20% | | | | C3225X7R1C156M250AB |
| | 4532 | 2.50 ± 0.30 | ± 20% | | | C4532X7R1E156M250KC | |
| | | 2.80 ± 0.30 | ± 20% | | | C4532X7R1E156M280KB | |
| | 5750 | 2.30 ± 0.20 | ± 20% | | | C5750X7R1E156M230KA | |
| 22 µF | 3225 | 2.50 ± 0.30 | ± 10% | | | | C3225X7R1C226K250AC |
| | | | ± 20% | | | | C3225X7R1C226M250AC |
| | 4532 | 2.00 ± 0.20 | ± 20% | | | | C4532X7R1C226M200KC |
| | | 2.30 ± 0.20 | ± 20% | | | | C4532X7R1C226M230KB |
| | | 2.50 ± 0.30 | ± 20% | | | C4532X7R1E226M250KC | |
| | 5750 | 2.50 ± 0.30 | ± 20% | | | C5750X7R1E226M250KA | |
| | | 2.80 ± 0.30 | ± 20% | | | | C5750X7R1C226M280KA |
| 33 µF | 4532 | 2.50 ± 0.30 | ± 20% | | | | C4532X7R1C336M250KC |
| | 5750 | 2.00 ± 0.20 | ± 20% | | | | C5750X7R1C336M200KB |
| 47 µF | 5750 | 2.30 ± 0.20 | ± 20% | | | | C5750X7R1C476M230KB |



• All specifications are subject to change without notice.

## Capacitance Range Table

### Class 2 (Temperature Stable)

Temperature Characteristics: X7R (-55 to +125ºC, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 10V | Rated Voltage Edc: 6.3V | Rated Voltage Edc: 4V |
| 100 pF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X7R1A101K020BC | C0402X7R0J101K020BC | C0402X7R0G101K020BC |
| | | | ± 20% | C0402X7R1A101M020BC | C0402X7R0J101M020BC | C0402X7R0G101M020BC |
| 150 pF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X7R1A151K020BC | C0402X7R0J151K020BC | C0402X7R0G151K020BC |
| | | | ± 20% | C0402X7R1A151M020BC | C0402X7R0J151M020BC | C0402X7R0G151M020BC |
| 220 pF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X7R1A221K020BC | C0402X7R0J221K020BC | C0402X7R0G221K020BC |
| | | | ± 20% | C0402X7R1A221M020BC | C0402X7R0J221M020BC | C0402X7R0G221M020BC |
| 330 pF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X7R1A331K020BC | C0402X7R0J331K020BC | C0402X7R0G331K020BC |
| | | | ± 20% | C0402X7R1A331M020BC | C0402X7R0J331M020BC | C0402X7R0G331M020BC |
| 470 pF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X7R1A471K020BC | C0402X7R0J471K020BC | C0402X7R0G471K020BC |
| | | | ± 20% | C0402X7R1A471M020BC | C0402X7R0J471M020BC | C0402X7R0G471M020BC |
| 680 pF | 0402 | 0.20 ± 0.02 | ± 10% | C0402X7R1A681K020BC | C0402X7R0J681K020BC | C0402X7R0G681K020BC |
| | | | ± 20% | C0402X7R1A681M020BC | C0402X7R0J681M020BC | C0402X7R0G681M020BC |
| 2.2 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X7R1A222K030BA | C0603X7R0J222K030BA | |
| | | | ± 20% | C0603X7R1A222M030BA | C0603X7R0J222M030BA | |
| 4.7 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X7R1A472K030BA | C0603X7R0J472K030BA | |
| | | | ± 20% | C0603X7R1A472M030BA | C0603X7R0J472M030BA | |
| 10 nF | 0603 | 0.30 ± 0.03 | ± 10% | C0603X7R1A103K030BA | C0603X7R0J103K030BA | |
| | | | ± 20% | C0603X7R1A103M030BA | C0603X7R0J103M030BC | |
| 100 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1A104K050BB | | |
| 150 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1A154K050BB | | |
| | | | ± 20% | C1005X7R1A154M050BB | | |
| 220 nF | 1005 | 0.50 ± 0.05 | ± 10% | C1005X7R1A224K050BB | | |
| | | | ± 20% | C1005X7R1A224M050BB | | |
| 680 nF | 1608 | 0.80 +0.15/-0.10 | ± 10% | C1608X7R1A684K080AC | | |
| | | | ± 20% | C1608X7R1A684M080AC | | |
| 1 µF | 1608 | 0.80 +0.15/-0.10 | ± 10% | C1608X7R1A105K080AC | | |
| | | | ± 20% | C1608X7R1A105M080AC | | |
| 1.5 µF | 1608 | 0.80 ± 0.10 | ± 10% | C1608X7R1A155K080AC | C1608X7R0J155K080AB | |
| | | | ± 20% | C1608X7R1A155M080AC | C1608X7R0J155M080AB | |
| 2.2 µF | 1608 | 0.80 ± 0.10 | ± 10% | C1608X7R1A225K080AC | C1608X7R0J225K080AB | |
| | | | ± 20% | C1608X7R1A225M080AC | C1608X7R0J225M080AB | |
| 3.3 µF | 2012 | 1.25 ± 0.20 | ± 10% | C2012X7R1A335K125AC | | |
| | | | ± 20% | C2012X7R1A335M125AC | | |
| 4.7 µF | 2012 | 0.85 ± 0.15 | ± 10% | C2012X7R1A475K085AC | C2012X7R0J475K085AB | |
| | | | ± 20% | C2012X7R1A475M085AC | C2012X7R0J475M085AB | |
| | | 1.25 ± 0.20 | ± 10% | C2012X7R1A475K125AC | | |
| | | | ± 20% | C2012X7R1A475M125AC | | |
| 6.8 µF | 2012 | 1.25 ± 0.20 | ± 10% | C2012X7R1A685K125AC | C2012X7R0J685K125AB | |
| | | | ± 20% | C2012X7R1A685M125AC | C2012X7R0J685M125AB | |
| 10 µF | 2012 | 1.25 ± 0.20 | ± 10% | C2012X7R1A106K125AC | C2012X7R0J106K125AB | |
| | | | ± 20% | C2012X7R1A106M125AC | C2012X7R0J106M125AB | |
| | 3216 | 0.85 ± 0.10 | ± 10% | C3216X7R1A106K085AC | C3216X7R0J106K085AB | |
| | | | ± 20% | C3216X7R1A106M085AC | C3216X7R0J106M085AB | |
| | | 1.60 ± 0.20 | ± 10% | C3216X7R1A106K160AC | | |
| | | | ± 20% | C3216X7R1A106M160AC | | |
| 22 µF | 3225 | 2.30 ± 0.20 | ± 10% | C3225X7R1A226K230AC | | |
| | | | ± 20% | C3225X7R1A226M230AC | | |

### Class 2 (Temperature Stable)

Temperature Characteristics: X7S (-55 to +125ºC, ±22%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 10V | Rated Voltage Edc: 6.3V | Rated Voltage Edc: 4V |
| 100 nF | 0603 | 0.30 ± 0.03 | ± 10% | | C0603X7S1A104K030BC | | C0603X7S0G104K030BC |
| | | | ± 20% | | C0603X7S1A104M030BC | | C0603X7S0G104M030BC |
| 150 nF | 0603 | 0.30 ± 0.05 | ± 10% | | | C0603X7S0J154K030BC | |
| | | | ± 20% | | | C0603X7S0J154M030BC | |
| 220 nF | 0603 | 0.30 ± 0.03 | ± 10% | | | | C0603X7S0G224K030BC |
| | | | ± 20% | | | | C0603X7S0G224M030BC |
| | | 0.30 ± 0.05 | ± 10% | | | C0603X7S0J224K030BC | |
| | | | ± 20% | | | C0603X7S0J224M030BC | |



• All specifications are subject to change without notice.

## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X7S (-55 to +125ºC, ±22%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | TDK Part Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc: 50V | Rated Voltage Edc: 10V | Rated Voltage Edc: 6.3V | Rated Voltage Edc: 4V |
| 330 nF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X7S1A334K050BC | C1005X7S0J334K050BC | |
| | | | ± 20% | | C1005X7S1A334M050BC | C1005X7S0J334M050BC | |
| 470 nF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X7S1A474K050BC | C1005X7S0J474K050BB | |
| | | | ± 20% | | C1005X7S1A474M050BC | C1005X7S0J474M050BB | |
| 680 nF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X7S1A684K050BC | C1005X7S0J684K050BC | C1005X7S0G684K050BC |
| | | | ± 20% | | C1005X7S1A684M050BC | C1005X7S0J684M050BC | C1005X7S0G684M050BC |
| 1 µF | 1005 | 0.50 ± 0.05 | ± 10% | | C1005X7S1A105K050BC | C1005X7S0J105K050BC | C1005X7S0G105K050BC |
| | | | ± 20% | | C1005X7S1A105M050BC | C1005X7S0J105M050BC | C1005X7S0G105M050BC |
| 1.5 µF | 1005 | 0.50 +0.15/-0.10 | ± 10% | | C1005X7S1A155K050BC | | |
| | | 0.50 ± 0.05 | ± 10% | | | | C1005X7S0G155K050BC |
| | | | ± 20% | | | | C1005X7S0G155M050BC |
| | | 0.50 ± 0.10 | ± 10% | | | C1005X7S0J155K050BC | |
| | | | ± 20% | | | C1005X7S0J155M050BC | |
| | | 0.50 ± 0.15 | ± 20% | | C1005X7S1A155M050BC | | |
| 2.2 µF | 1005 | 0.50 ± 0.10 | ± 10% | | | C1005X7S0J225K050BC | |
| | | | ± 20% | | | C1005X7S0J225M050BC | |
| | | 0.50 +0.10/-0.15 | ± 10% | | C1005X7S1A225K050BC | | |
| | | 0.50 ± 0.05 | ± 10% | | | | C1005X7S0G225K050BC |
| | | | ± 20% | | | | C1005X7S0G225M050BC |
| | | 0.50 ± 0.10 | ± 20% | | C1005X7S1A225M050BC | | |
| | 1608 | 0.80 ± 0.10 | ± 10% | | C1608X7S1A225K080AC | C1608X7S0J225K080AB | |
| | | | ± 20% | | C1608X7S1A225M080AC | C1608X7S0J225M080AB | |
| 3.3 µF | 1608 | 0.80 ± 0.10 | ± 10% | | | C1608X7S0J335K080AC | C1608X7S0G335K080AC |
| | | | ± 20% | | | C1608X7S0J335M080AC | C1608X7S0G335M080AC |
| | | 0.80 ± 0.20 | ± 10% | | C1608X7S1A335K080AC | | |
| | | | ± 20% | | C1608X7S1A335M080AC | | |
| 4.7 µF | 1608 | 0.80 ± 0.10 | ± 10% | | | C1608X7S0J475K080AC | C1608X7S0G475K080AC |
| | | | ± 20% | | | C1608X7S0J475M080AC | C1608X7S0G475M080AC |
| | | 0.80 ± 0.20 | ± 10% | | C1608X7S1A475K080AC | | |
| | | | ± 20% | | C1608X7S1A475M080AC | | |
| 6.8 µF | 1608 | 0.80 ± 0.20 | ± 10% | | | C1608X7S0J685K080AC | C1608X7S0G685K080AB |
| | | | ± 20% | | | C1608X7S0J685M080AC | C1608X7S0G685M080AB |
| | 3225 | 2.50 ± 0.30 | ± 10% | C3225X7S1H685K250AB | | | |
| | | | ± 20% | C3225X7S1H685M250AB | | | |
| 10 µF | 1608 | 0.80 ± 0.20 | ± 20% | | | C1608X7S0J106M080AC | C1608X7S0G106M080AB |
| | 2012 | 0.85 ± 0.15 | ± 10% | | | C2012X7S0J106K085AC | C2012X7S0G106K085AC |
| | | | ± 20% | | | C2012X7S0J106M085AC | C2012X7S0G106M085AC |
| | 3225 | 2.50 ± 0.30 | ± 10% | C3225X7S1H106K250AB | | | |
| | | | ± 20% | C3225X7S1H106M250AB | | | |
| 15 µF | 2012 | 1.25 ± 0.20 | ± 20% | | C2012X7S1A156M125AC | C2012X7S0J156M125AC | C2012X7S0G156M125AC |
| | 3216 | 1.60 ± 0.20 | ± 20% | | C3216X7S1A156M160AC | C3216X7S0J156M160AB | |
| 22 µF | 2012 | 1.25 ± 0.20 | ± 20% | | C2012X7S1A226M125AC | C2012X7S0J226M125AC | C2012X7S0G226M125AC |
| | 3216 | 1.60 ± 0.20 | ± 20% | | C3216X7S1A226M160AC | C3216X7S0J226M160AB | |
| 33 µF | 3216 | 1.60 ± 0.20 | ± 20% | | | C3216X7S0J336M160AC | C3216X7S0G336M160AB |
| 47 µF | 3216 | 1.60 ± 0.20 | ± 20% | | | C3216X7S0J476M160AC | C3216X7S0G476M160AB |
| | 3225 | 2.50 ± 0.30 | ± 20% | | | C3225X7S0J476M250AC | |



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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.

**Как с нами связаться**

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