# Excellent Integrated System Limited

Stocking Distributor

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TDK Corporation
C2012X7R1C475M125AE

For any questions, you can email us directly:
sales@integrated-circuit.com

Distributor of TDK Corporation: Excellent Integrated System Limited
Datasheet of C2012X7R1C475M125AE - CAP CER 4.7UF 16V X7R 0805
Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

TDK

June 2016

# MULTILAYER CERAMIC CHIP CAPACITORS

## C Series
## Commercial Grade
## Soft Termination

**Type:**

**C1005 [EIA CC0402]**
**C1608 [EIA CC0603]**
**C2012 [EIA CC0805]**
**C3216 [EIA CC1206]**
**C3225 [EIA CC1210]**
**C4520 [EIA CC1808]**
**C4532 [EIA CC1812]**
**C5750 [EIA CC2220]**
**C7563 [EIA CC3025]**

Distributor of TDK Corporation: Excellent Integrated System Limited
Datasheet of C2012X7R1C475M125AE - CAP CER 4.7UF 16V X7R 0805
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# REMINDERS

Please read before using this product

## SAFETY REMINDERS

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(Example)

| Catalog Issued date | Catalog Number | Item Description (On Delivery Label) |
|---|---|---|
| Prior to January 2013 | C1608C0G1E103J(080AA) | C1608C0G1E103JT000N |
| January 2013 and Later | C1608C0G1E103J080AA | C1608C0G1E103JT000N |

EIS electronic components
Distributor of TDK Corporation: Excellent Integrated System Limited
Datasheet of C2012X7R1C475M125AE - CAP CER 4.7UF 16V X7R 0805
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# MULTILAYER CERAMIC CHIP CAPACITORS

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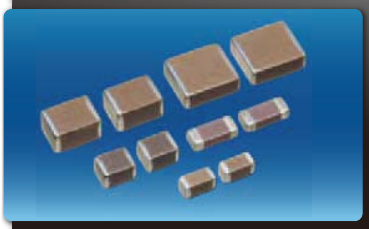
Lead Free | RoHS COMPLIANT | Ecological



# C Series

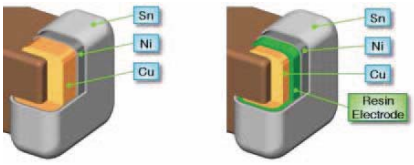
## Soft Termination

Type: C1005 [EIA CC0402], C1608 [EIA CC0603], C2012 [EIA CC0805], C3216 [EIA CC1206], C3225 [EIA CC1210], C4520 [EIA CC1808], C4532 [EIA CC1812], C5750 [EIA CC2220], C7563 [EIA CC3025]

## Features

- Improved board bending resistance, drop impact resistance, thermal shock resistance, and heat cycle properties.
- Conductive resin absorb external stress to protect solder joint parts and capacitor body.
- Compliance with the RoHS Directive.

**Standard Product** **Soft Termination**




## Applications

- Switching power supply
- Telecom base station
- Electronic circuits mounted on alumina substrate
- SMT application which requires bending robustness in which solder joint reliability is problematic

## Shape & Dimensions

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

## Catalog Number Construction

C • 7563 • X7S • 1C • 107 • M • 280 • L • E

**Series Name**

**Dimensions L x W (mm)**

| Code | Length | Width | Terminal |
|---|---|---|---|
| C1005 | 1.00 + 0.15/-0.05 | 0.50 + 0.10/-0.05 | 0.10 min. |
| C1608 | 1.60 + 0.20/-0.10 | 0.80 + 0.15/-0.10 | 0.20 min. |
| C2012 | 2.00 + 0.45/-0.20 | 1.25 + 0.25/-0.20 | 0.20 min. |
| C3216 | 3.20 + 0.40/-0.20 | 1.60 + 0.30/-0.20 | 0.20 min. |
| C3225 | 3.20 + 0.50/-0.40 | 2.50 ± 0.30 | 0.20 min. |
| C4520 | 4.50 + 0.30/-0.20 | 2.00 ± 0.15 | 0.20 min. |
| C4532 | 4.50 + 0.50/-0.40 | 3.20 ± 0.40 | 0.20 min. |
| C5750 | 5.70 + 0.50/-0.40 | 5.00 ± 0.40 | 0.20 min. |
| C7563 | 7.50 ± 0.50 | 6.30 ± 0.50 | 0.30 min. |

*Dimension tolerance are typical values

**Temperature Characteristics**

| Temperature Characteristics | Temperature Coefficient or Capacitance Change | Temperature Range |
|---|---|---|
| C0G | 0 ±30ppm/°C | -55 to +125°C |
| X7R | ±15% | -55 to +125°C |
| X7S | ±22% | -55 to +125°C |
| X7T | +22/-33% | -55 to +125°C |
| X8R | ±15% | -55 to +150°C |

**Rated Voltage (DC)**

| Code | Voltage (DC) |
|---|---|
| 1A | 10V |
| 1C | 16V |
| 1E | 25V |
| 1V | 35V |
| 1H | 50V |
| 2A | 100V |
| 2E | 250V |
| 2W | 450V |
| 2J | 630V |
| 3A | 1000V |
| 3D | 2000V |
| 3F | 3000V |

**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

**Capacitance Tolerance**

| Code | Tolerance |
|---|---|
| J | ± 5% |
| K | ± 10% |
| M | ± 20% |

**Nominal Thickness**

| Code | Thickness |
|---|---|
| 050 | 0.50 mm |
| 080 | 0.80 mm |
| 085 | 0.85 mm |
| 115 | 1.15 mm |
| 125 | 1.25 mm |
| 130 | 1.30 mm |
| 160 | 1.60 mm |
| 200 | 2.00 mm |
| 230 | 2.30 mm |
| 250 | 2.50 mm |
| 280 | 2.80 mm |

**Packaging Style**

| Code | Style |
|---|---|
| A | 178mm Reel, 4mm Pitch |
| B | 178mm Reel, 2mm Pitch |
| K | 178mm Reel, 8mm Pitch |
| L | 330mm Reel, 12mm Pitch |

**Special Reserved Code**

| Code | Description |
|---|---|
| E | Soft Termination |

⚠ Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.

# MULTILAYER CERAMIC CHIP CAPACITORS

## Capacitance Range Chart

## EIA CC0402[C1005]

**Capacitance Range Chart**

Temperature Characteristics : C0G(0±30ppm/℃), X7R(±15%), X8R(±15%)

Rated Voltage : 100V(2A), 50V(1H), 35V(1V), 25V(1E), 16V(1C)

| Capacitance | | Tolerance | C0G | X7R | | | | X8R | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (pF) | Code | | 1H (50V) | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 2A (100V) | 1H (50V) | 1E (25V) | 1C (16V) |
| 100 | 101 | J:±5% | | | | | | | | | |
| 150 | 151 | K:±10% | | | | | | | | | |
| 220 | 221 | 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 | | | | | | | | | | |
| 100,000 | 104 | | | | | | | | | | |
| 220,000 | 224 | | | | | | | | | | |

Standard Thickness

0.50 mm

## Capacitance Range Chart

## EIA CC0603 [C1608]

**Capacitance Range Chart**

Temperature Characteristics : C0G(0±30ppm/℃), X7R(±15%), X7S(±22%), X8R(±15%)

Rated Voltage : 100V(2A), 50V(1H), 35V(1V), 25V(1E), 16V(1C), 10V(1A)

| Capacitance | | Tolerance | C0G | X7R | | | | | X7S | X8R | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (pF) | Code | | 1H (50V) | 2A (100V) | 1H (50V) | 1V (35V) | 1E (25V) | 1A (10V) | 2A (100V) | 2A (100V) | 1H (50V) | 1E (25V) | 1C (16V) |
| 100 | 101 | J:±5% | | | | | | | | | | | |
| 1,000 | 102 | K:±10% | | | | | | | | | | | |
| 1,500 | 152 | M:±20% | | | | | | | | | | | |
| 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 | | | | | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | | | | | |

Standard Thickness 0.80 mm

# MULTILAYER CERAMIC CHIP CAPACITORS

## Capacitance Range Chart

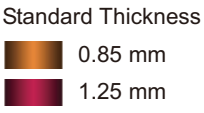
## EIA CC0805 [C2012]

**Capacitance Range Chart**

Temperature Characteristics : X7R(±15%), X7S(±22%), X7T(+22/-33%)

Rated Voltage : 450V(2W), 250V(2E), 100V(2A), 50V(1H), 35V(1V), 25V(1E), 16V(1C), 10V(1A)

| Capacitance | | Tolerance | X7R | | | | | | | X7S | X7T | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (pF) | Code | | 2E (250V) | 2A (100V) | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 1A (10V) | 2A (100V) | 2W (450V) | 2E (250V) |
| 1,000 | 102 | K: ±10% | | | | | | | | | | |
| 2,200 | 222 | M: ±20% | | | | | | | | | | |
| 4,700 | 472 | | | | | | | | | | | |
| 10,000 | 103 | | | | | | | | | | | |
| 22,000 | 223 | | | | | | | | | | | |
| 47,000 | 473 | | | | | | | | | | | |
| 100,000 | 104 | | | | | | | | | | | |
| 220,000 | 224 | | | | | | | | | | | |
| 470,000 | 474 | | | | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | | | | |

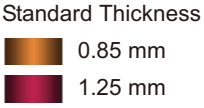



**Capacitance Range Chart**

Temperature Characteristics : X8R(±15%)

Rated Voltage : 100V(2A), 50V(1H), 25V(1E), 16V(1C)

| Capacitance | | Tolerance | X8R | | | |
|---|---|---|---|---|---|---|
| (pF) | Code | | 2A (100V) | 1H (50V) | 1E (25V) | 1C (16V) |
| 22,000 | 223 | K: ±10% | | | | |
| 33,000 | 333 | M: ±20% | | | | |
| 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 | | | | | |



## Capacitance Range Chart

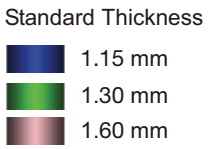
# EIA CC1206 [C3216]

**Capacitance Range Chart**

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

Rated Voltage : 630V(2J), 250V(2E), 100V(2A), 50V(1H), 35V(1V), 25V(1E), 16V(1C)

| Capacitance | | Tolerance | X7R | | | | | | | X7S |
|---|---|---|---|---|---|---|---|---|---|---|
| (pF) | Code | | 2J (630V) | 2E (250V) | 2A (100V) | 1H (50V) | 1V (35V) | 1E (25V) | 1C (16V) | 2A (100V) |
| 1,000 | 102 | K: ±10% M: ±20% | | | | | | | | |
| 2,200 | 222 | | | | | | | | | |
| 3,300 | 332 | | | | | | | | | |
| 4,700 | 472 | | | | | | | | | |
| 10,000 | 103 | | | | | | | | | |
| 22,000 | 223 | | | | | | | | | |
| 33,000 | 333 | | | | | | | | | |
| 47,000 | 473 | | | | | | | | | |
| 100,000 | 104 | | | | | | | | | |
| 220,000 | 224 | | | | | | | | | |
| 470,000 | 474 | | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | | |

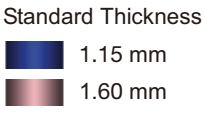



**Capacitance Range Chart**

Temperature Characteristics : X7T(+22/-33%), X8R(±15%)

Rated Voltage : 630V(2J), 450V(2W), 250V(2E), 100V(2A), 50V(1H), 25V(1E), 16V(1C)

| Capacitance | | Tolerance | X7T | | | X8R | | | |
|---|---|---|---|---|---|---|---|---|---|
| (pF) | Code | | 2J (630V) | 2W (450V) | 2E (250V) | 2A (100V) | 1H (50V) | 1E (25V) | 1C (16V) |
| 47,000 | 473 | K: ±10% M: ±20% | | | | | | | |
| 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 | | | | | | | | |



## Capacitance Range Chart

# EIA CC1210[C3225]

**Capacitance Range Chart**

Temperature Characteristics : X7R(±15%), X7S(±22%), X7T(+22/-33%), X8R(±15%)

Rated Voltage : 630V(2J), 450V(2W), 250V(2E), 100V(2A), 50V(1H), 25V(1E)

| Capacitance | | Tolerance | X7R | | | | X7S | | X7T | | | X8R | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (pF) | Code | | 2J (630V) | 2E (250V) | 2A (100V) | 1H (50V) | 2A (100V) | 1H (50V) | 2J (630V) | 2W (450V) | 2E (250V) | 2A (100V) | 1E (25V) |
| 47,000 | 473 | K: ± 10% M: ± 20% | | | | | | | | | | | |
| 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 | | | | | | | | | | | | |
| 2,200,000 | 225 | | | | | | | | | | | | |
| 3,300,000 | 335 | | | | | | | | | | | | |
| 4,700,000 | 475 | | | | | | | | | | | | |
| 10,000,000 | 106 | | | | | | | | | | | | |

Standard Thickness 1.60 mm 2.00 mm 2.30 mm 2.50 mm

## Capacitance Range Chart

# EIA CC1808 [C4520]

**Capacitance Range Chart**

Temperature Characteristics : X7R (±15%)

Rated Voltage : 2000V (3D)

| Capacitance | | Tolerance | X7R |
|---|---|---|---|
| (pF) | Code | | 3D (2000V) |
| 1,000 | 102 | K: ± 10% M: ± 20% | |

Standard Thickness 1.30 mm

## Capacitance Range Chart

# EIA CC1812 [C4532]

**Capacitance Range Chart**

Temperature Characteristics : C0G(0±30ppm/℃), X7R (±15%), X7T (+22/-33%)

Rated Voltage : 3000V(3F), 2000V(3D), 630V(2J), 450V(2W), 250V(2E)

| Capacitance | | Tolerance | C0G | X7R | | | X7T | | |
|---|---|---|---|---|---|---|---|---|---|
| (pF) | Code | | 3F (3000V) | 3D (2000V) | 2J (630V) | 2E (250V) | 2J (630V) | 2W (450V) | 2E (250V) |
| 330 | 331 | K: ± 10% | | | | | | | |
| 2,200 | 222 | K: ± 10% | | | | | | | |
| 100,000 | 104 | M: ± 20% | | | | | | | |
| 220,000 | 224 | | | | | | | | |
| 470,000 | 474 | | | | | | | | |
| 1,000,000 | 105 | | | | | | | | |

Standard Thickness
1.30 mm
2.00 mm
2.30 mm
2.50 mm

# MULTILAYER CERAMIC CHIP CAPACITORS

## Capacitance Range Chart

## EIA CC2220 [C5750]

**Capacitance Range Chart**

Temperature Characteristics : X7R (±15%), X7S (±22%), X7T (+22/-33%)

Rated Voltage : 630V (2J), 450V (2W), 250V (2E), 100V (2A)

| Capacitance | | Tolerance | X7R | | X7S | X7T | | |
|---|---|---|---|---|---|---|---|---|
| (pF) | Code | | 2J (630V) | 2E (250V) | 2A (100V) | 2J (630V) | 2W (450V) | 2E (250V) |
| **220,000** | **224** | K: ± 10% | | | | | | |
| **470,000** | **474** | M: ± 20% | | | | | | |
| **1,000,000** | **105** | | | | | | | |
| **2,200,000** | **225** | | | | | | | |
| **10,000,000** | **106** | | | | | | | |

Standard Thickness

2.30 mm

2.50 mm

## Capacitance Range Chart

## EIA CC3025 [C7563]

**Capacitance Range Chart**

Temperature Characteristics : X7S (±22%)

Rated Voltage : 50V (1H), 16V (1C)

| Capacitance | | Tolerance | X7S | |
|---|---|---|---|---|
| (pF) | Code | | 1H (50V) | 1C (16V) |
| **22,000,000** | **226** | M: ± 20% | | |
| **100,000,000** | **107** | | | |

Standard Thickness

2.30 mm

2.80 mm

EIS electronic components
Distributor of TDK Corporation: Excellent Integrated System Limited
Datasheet of C2012X7R1C475M125AE - CAP CER 4.7UF 16V X7R 0805
Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com





## Capacitance Range Table

### Class 1 (Temperature Compensating)

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

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | Catalog Number | |
|---|---|---|---|---|---|
| | | | | Rated Voltage Edc：3000V | Rated Voltage Edc：50V |
| 100pF | 1005 | 0.50+0.10/-0.05 | ±5% | | C1005C0G1H101J050BE |
| | 1608 | 0.80+0.15/-0.10 | ±5% | | C1608C0G1H101J080AE |
| 330pF | 4532 | 2.50 ± 0.20 | ± 10% | C4532C0G3F331K250KE | |

### Class 2 (Temperature Stable)

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

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | Catalog Number | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc：2000V | Rated Voltage Edc：630V | Rated Voltage Edc：250V | Rated Voltage Edc：100V | Rated Voltage Edc：50V |
| 1nF | 1005 | 0.50+0.10/-0.05 | ±10% | | | | | C1005X7R1H102K050BE |
| | | | ±20% | | | | | C1005X7R1H102M050BE |
| | 1608 | 0.80 +0.15/-0.10 | ±10% | | | | C1608X7R2A102K080AE | C1608X7R1H102K080AE |
| | | | ±20% | | | | C1608X7R2A102M080AE | C1608X7R1H102M080AE |
| | 2012 | 0.85±0.15 | ±10% | | | C2012X7R2E102K085AE | C2012X7R2A102K085AE | |
| | | | ±20% | | | C2012X7R2E102M085AE | C2012X7R2A102M085AE | |
| | 3216 | 1.15±0.15 | ±10% | | C3216X7R2J102K115AE | | | |
| | | | ±20% | | C3216X7R2J102M115AE | | | |
| | 4520 | 1.30±0.15 | ±10% | C4520X7R3D102K130KE | | | | |
| | | | ±20% | C4520X7R3D102M130KE | | | | |
| 2.2nF | 1005 | 0.50+0.10/-0.05 | ±10% | | | | | C1005X7R1H222K050BE |
| | | | ±20% | | | | | C1005X7R1H222M050BE |
| | 1608 | 0.80+0.15/-0.10 | ±10% | | | | C1608X7R2A222K080AE | C1608X7R1H222K080AE |
| | | | ±20% | | | | C1608X7R2A222M080AE | C1608X7R1H222M080AE |
| | 2012 | 0.85±0.15 | ±10% | | | C2012X7R2E222K085AE | C2012X7R2A222K085AE | |
| | | | ±20% | | | C2012X7R2E222M085AE | C2012X7R2A222M085AE | |
| | 3216 | 1.15±0.15 | ±10% | | C3216X7R2J222K115AE | | | |
| | | | ±20% | | C3216X7R2J222M115AE | | | |
| | 4532 | 1.30±0.15 | ±10% | C4532X7R3D222K130KE | | | | |
| | | | ±20% | C4532X7R3D222M130KE | | | | |
| 3.3nF | 3216 | 1.15±0.15 | ±10% | | C3216X7R2J332K115AE | | | |
| | | | ±20% | | C3216X7R2J332M115AE | | | |
| 4.7nF | 1005 | 0.50+0.10/-0.05 | ±10% | | | | | C1005X7R1H472K050BE |
| | | | ±20% | | | | | C1005X7R1H472M050BE |
| | 1608 | 0.80+0.15/-0.10 | ±10% | | | | C1608X7R2A472K080AE | C1608X7R1H472K080AE |
| | | | ±20% | | | | C1608X7R2A472M080AE | C1608X7R1H472M080AE |
| | 2012 | 0.85±0.15 | ±10% | | | C2012X7R2E472K085AE | C2012X7R2A472K085AE | |
| | | | ±20% | | | C2012X7R2E472M085AE | C2012X7R2A472M085AE | |
| | 3216 | 1.15±0.15 | ±10% | | C3216X7R2J472K115AE | | | |
| | | | ±20% | | C3216X7R2J472M115AE | | | |
| 10nF | 1005 | 0.50+0.10/-0.05 | ±10% | | | | | C1005X7R1H103K050BE |
| | | | ±20% | | | | | C1005X7R1H103M050BE |
| | 1608 | 0.80 +0.15/-0.10 | ±10% | | | | C1608X7R2A103K080AE | C1608X7R1H103K080AE |
| | | | ±20% | | | | C1608X7R2A103M080AE | C1608X7R1H103M080AE |
| | 2012 | 0.85±0.15 | ±10% | | | | C2012X7R2A103K085AE | |
| | | | ±20% | | | | C2012X7R2A103M085AE | |
| | | 1.25 +0.25/-0.20 | ±10% | | | C2012X7R2E103K125AE | | |
| | | | ±20% | | | C2012X7R2E103M125AE | | |
| | 3216 | 1.15±0.15 | ±10% | | C3216X7R2J103K115AE | | | |
| | | | ±20% | | C3216X7R2J103M115AE | | | |
| 22nF | 1005 | 0.50+0.10/-0.05 | ±10% | | | | | C1005X7R1H223K050BE |
| | | | ±20% | | | | | C1005X7R1H223M050BE |
| | 1608 | 0.80+0.15/-0.10 | ±10% | | | | C1608X7R2A223K080AE | C1608X7R1H223K080AE |
| | | | ±20% | | | | C1608X7R2A223M080AE | C1608X7R1H223M080AE |
| | 2012 | 1.25 +0.25/-0.20 | ±10% | | | C2012X7R2E223K125AE | C2012X7R2A223K125AE | |
| | | | ±20% | | | C2012X7R2E223M125AE | C2012X7R2A223M125AE | |
| | 3216 | 1.15±0.15 | ±10% | | | C3216X7R2E223K115AE | | |
| | | | ±20% | | | C3216X7R2E223M115AE | | |
| | | 1.30±0.20 | ±10% | | C3216X7R2J223K130AE | | | |
| | | | ±20% | | C3216X7R2J223M130AE | | | |
| 33nF | 3216 | 1.60+0.30/-0.20 | ±10% | | C3216X7R2J333K160AE | | | |
| | | | ±20% | | C3216X7R2J333M160AE | | | |
| 47nF | 1005 | 0.50+0.10/-0.05 | ±10% | | | | | C1005X7R1H473K050BE |
| | | | ±20% | | | | | C1005X7R1H473M050BE |
| | 1608 | 0.80+0.15/-0.10 | ±10% | | | | | C1608X7R1H473K080AE |
| | | | ±20% | | | | | C1608X7R1H473M080AE |
| | 2012 | 1.25+0.25/-0.20 | ±10% | | | | C2012X7R2A473K125AE | |
| | | | ±20% | | | | C2012X7R2A473M125AE | |
| | 3216 | 1.60+0.30/-0.20 | ±10% | | | C3216X7R2E473K160AE | | |
| | | | ±20% | | | C3216X7R2E473M160AE | | |
| | 3225 | 2.00 +0.30/-0.20 | ±10% | | C3225X7R2J473K200AE | | | |
| | | | ±20% | | C3225X7R2J473M200AE | | | |

⚠ Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.

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## Capacitance Range Table

**Class 2 (Temperature Stable)**

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

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | Catalog Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc：630V | Rated Voltage Edc：250V | Rated Voltage Edc：100V | Rated Voltage Edc：50V |
| 68nF | 3225 | 2.00+0.30/-0.20 | ±10% | C3225X7R2J683K200AE | | | |
| | | | ±20% | C3225X7R2J683M200AE | | | |
| 100nF | 1005 | 0.50+0.10/-0.05 | ±10% | | | | C1005X7R1H104K050BE |
| | | | ±20% | | | | C1005X7R1H104M050BE |
| | 1608 | 0.80 +0.15/-0.10 | ±10% | | | | C1608X7R1H104K080AE |
| | | | ±20% | | | | C1608X7R1H104M080AE |
| | 2012 | 1.25 +0.25/-0.20 | ±10% | | | C2012X7R2A104K125AE | C2012X7R1H104K125AE |
| | | | ±20% | | | C2012X7R2A104M125AE | C2012X7R1H104M125AE |
| | 3216 | 1.60 +0.30/-0.20 | ±10% | | C3216X7R2E104K160AE | C3216X7R2A104K160AE | |
| | | | ±20% | | C3216X7R2E104M160AE | C3216X7R2A104M160AE | |
| | 3225 | 2.00 +0.30/-0.20 | ±10% | | C3225X7R2E104K200AE | | |
| | | | ±20% | | C3225X7R2E104M200AE | | |
| | 4532 | 2.30+0.30/-0.20 | ±10% | C4532X7R2J104K230KE | | | |
| | | | ±20% | C4532X7R2J104M230KE | | | |
| 220nF | 1608 | 0.80+0.15/-0.10 | ±10% | | | | C1608X7R1H224K080AE |
| | | | ±20% | | | | C1608X7R1H224M080AE |
| | 2012 | 1.25+0.25/-0.20 | ±10% | | | | C2012X7R1H224K125AE |
| | | | ±20% | | | | C2012X7R1H224M125AE |
| | 3216 | 1.15±0.15 | ±10% | | | C3216X7R2A224K115AE | |
| | | | ±20% | | | C3216X7R2A224M115AE | |
| | 3225 | 2.00 +0.30/-0.20 | ±10% | | C3225X7R2E224K200AE | | |
| | | | ±20% | | C3225X7R2E224M200AE | | |
| | 5750 | 2.30+0.30/-0.20 | ±10% | C5750X7R2J224K230KE | | | |
| | | | ±20% | C5750X7R2J224M230KE | | | |
| 470nF | 1608 | 0.80 +0.15/-0.10 | ±10% | | | | C1608X7R1H474K080AE |
| | | | ±20% | | | | C1608X7R1H474M080AE |
| | 2012 | 1.25 +0.25/-0.20 | ±10% | | | | C2012X7R1H474K125AE |
| | | | ±20% | | | | C2012X7R1H474M125AE |
| | 3216 | 1.60 +0.30/-0.20 | ±10% | | | C3216X7R2A474K160AE | |
| | | | ±20% | | | C3216X7R2A474M160AE | |
| | 3225 | 2.00+0.30/-0.20 | ±10% | | | C3225X7R2A474K200AE | |
| | | | ±20% | | | C3225X7R2A474M200AE | |
| | 4532 | 2.00 +0.30/-0.20 | ±10% | | C4532X7R2E474K230KE | | |
| | | | ±20% | | C4532X7R2E474M230KE | | |
| 1uF | 2012 | 1.25 +0.25/-0.20 | ±10% | | | | C2012X7R1H105K125AE |
| | | | ±20% | | | | C2012X7R1H105M125AE |
| | 3216 | 1.60 +0.30/-0.20 | ±10% | | | C3216X7R2A105K160AE | C3216X7R1H105K160AE |
| | | | ±20% | | | C3216X7R2A105M160AE | C3216X7R1H105M160AE |
| | 3225 | 2.00+0.30/-0.20 | ±10% | | | C3225X7R2A105K200AE | |
| | | | ±20% | | | C3225X7R2A105M200AE | |
| | 5750 | 2.00 +0.30/-0.20 | ±10% | | C5750X7R2E105K230KE | | |
| | | | ±20% | | C5750X7R2E105M230KE | | |
| 2.2uF | 2012 | 1.25 +0.25/-0.20 | ±10% | | | | C2012X7R1H225K125AE |
| | | | ±20% | | | | C2012X7R1H225M125AE |
| | 3216 | 1.60 +0.30/-0.20 | ±10% | | | | C3216X7R1H225K160AE |
| | | | ±20% | | | | C3216X7R1H225M160AE |
| | 3225 | 2.00+0.30/-0.20 | ±10% | | | | C3225X7R1H225K200AE |
| | | | ±20% | | | | C3225X7R1H225M200AE |
| | | 2.30 +0.30/-0.20 | ±10% | | | C3225X7R2A225K230AE | |
| | | | ±20% | | | C3225X7R2A225M230AE | |
| 4.7uF | 3216 | 1.60 +0.30/-0.20 | ±10% | | | | C3216X7R1H475K160AE |
| | | | ±20% | | | | C3216X7R1H475M160AE |

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## Capacitance Range Table

### Class 2 (Temperature Stable)

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

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | Catalog Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc：35V | Rated Voltage Edc：25V | Rated Voltage Edc：16V | Rated Voltage Edc：10V |
| 220nF | 1005 | 0.50 +0.10/-0.05 | ±10% | C1005X7R1V224K050BE | C1005X7R1E224K050BE | C1005X7R1C224K050BE | |
| | | | ±20% | C1005X7R1V224M050BE | C1005X7R1E224M050BE | C1005X7R1C224M050BE | |
| 470nF | 1608 | 0.80 +0.15/-0.10 | ±10% | C1608X7R1V474K080AE | C1608X7R1E474K080AE | | |
| | | | ±20% | C1608X7R1V474M080AE | C1608X7R1E474M080AE | | |
| 1uF | 1608 | 0.80 +0.15/-0.10 | ±10% | C1608X7R1V105K080AE | C1608X7R1E105K080AE | | |
| | | | ±20% | C1608X7R1V105M080AE | C1608X7R1E105M080AE | | |
| | 2012 | 1.25 +0.25/-0.20 | ±10% | C2012X7R1V105K125AE | | | |
| | | | ±20% | C2012X7R1V105M125AE | | | |
| 2.2uF | 1608 | 0.80 +0.15/-0.10 | ±10% | | | | C1608X7R1A225K080AE |
| | | | ±20% | | | | C1608X7R1A225M080AE |
| | 2012 | 1.25 +0.25/-0.20 | ±10% | C2012X7R1V225K125AE | C2012X7R1E225K125AE | | |
| | | | ±20% | C2012X7R1V225M125AE | C2012X7R1E225M125AE | | |
| | 3216 | 1.60 +0.30/-0.20 | ±10% | C3216X7R1V225K160AE | C3216X7R1E225K160AE | | |
| | | | ±20% | C3216X7R1V225M160AE | C3216X7R1E225M160AE | | |
| 4.7uF | 2012 | 1.25 +0.25/-0.20 | ±10% | C2012X7R1V475K125AE | C2012X7R1E475K125AE | C2012X7R1C475K125AE | |
| | | | ±20% | C2012X7R1V475M125AE | C2012X7R1E475M125AE | C2012X7R1C475M125AE | |
| | 3216 | 1.60 +0.30/-0.20 | ±10% | C3216X7R1V475K160AE | C3216X7R1E475K160AE | | |
| | | | ±20% | C3216X7R1V475M160AE | C3216X7R1E475M160AE | | |
| 10uF | 2012 | 1.25 +0.25/-0.20 | ±10% | | | | C2012X7R1A106K125AE |
| | | | ±20% | | | | C2012X7R1A106M125AE |
| | 3216 | 1.60 +0.30/-0.20 | ±10% | C3216X7R1V106K160AE | C3216X7R1E106K160AE | C3216X7R1C106K160AE | |
| | | | ±20% | C3216X7R1V106M160AE | C3216X7R1E106M160AE | C3216X7R1C106M160AE | |

### Class 2 (Temperature Stable)

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

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | Catalog Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc：100V | Rated Voltage Edc：50V | Rated Voltage Edc：16V |
| 47nF | 1608 | 0.80 +0.15/-0.10 | ±10% | C1608X7S2A473K080AE | | |
| | | | ±20% | C1608X7S2A473M080AE | | |
| 100nF | 1608 | 0.80 +0.15/-0.10 | ±10% | C1608X7S2A104K080AE | | |
| | | | ±20% | C1608X7S2A104M080AE | | |
| 220nF | 2012 | 0.85±0.15 | ±10% | C2012X7S2A224K085AE | | |
| | | | ±20% | C2012X7S2A224M085AE | | |
| 470nF | 2012 | 1.25 +0.25/-0.20 | ±10% | C2012X7S2A474K125AE | | |
| | | | ±20% | C2012X7S2A474M125AE | | |
| 1uF | 2012 | 1.25 +0.25/-0.20 | ±10% | C2012X7S2A105K125AE | | |
| | | | ±20% | C2012X7S2A105M125AE | | |
| 2.2uF | 3216 | 1.60 +0.30/-0.20 | ±10% | C3216X7S2A225K160AE | | |
| | | | ±20% | C3216X7S2A225M160AE | | |
| 3.3uF | 3225 | 2.00 +0.30/-0.20 | ±10% | C3225X7S2A335K200AE | | |
| | | | ±20% | C3225X7S2A335M200AE | | |
| 4.7uF | 3225 | 2.00 +0.30/-0.20 | ±10% | C3225X7S2A475K200AE | | |
| | | | ±20% | C3225X7S2A475M200AE | | |
| | | 2.30 +0.30/-0.20 | ±10% | | C3225X7S1H475K230AE | |
| | | | ±20% | | C3225X7S1H475M230AE | |
| 10uF | 3225 | 2.50 ±0.30 | ±10% | | C3225X7S1H106K250AE | |
| | | | ±20% | | C3225X7S1H106M250AE | |
| | 5750 | 2.30 +0.30/-0.20 | ±10% | C5750X7S2A106K230KE | | |
| | | | ±20% | C5750X7S2A106M230KE | | |
| 22uF | 7563 | 2.30 (2.50max.) | ±20% | | C7563X7S1H226M230LE | |
| 100uF | 7563 | 2.80 (3.00max.) | ±20% | | | C7563X7S1C107M280LE |

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## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X7T(-55 to +125℃, +22/-33%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | Catalog Number | | |
|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc：630V | Rated Voltage Edc：450V | Rated Voltage Edc：250V |
| 10 nF | 2012 | 0.85 ± 0.15 | ± 10% | | C2012X7T2W103K085AE | |
| | | | ± 20% | | C2012X7T2W103M085AE | |
| 22 nF | 2012 | 1.25 +0.25/-0.20 | ± 10% | | C2012X7T2W223K125AE | |
| | | | ± 20% | | C2012X7T2W223M125AE | |
| 47 nF | 2012 | 1.25 +0.25/-0.20 | ± 10% | | C2012X7T2W473K125AE | C2012X7T2E473K125AE |
| | | | ± 20% | | C2012X7T2W473M125AE | C2012X7T2E473M125AE |
| | 3216 | 1.60 +0.30/-0.20 | ± 10% | C3216X7T2J473K160AE | | |
| | | | ± 20% | C3216X7T2J473M160AE | | |
| 100 nF | 2012 | 1.25 +0.25/-0.20 | ±10% | | | C2012X7T2E104K125AE |
| | | | ±20% | | | C2012X7T2E104M125AE |
| | 3216 | 1.60 +0.30/-0.20 | ±10% | | C3216X7T2W104K160AE | |
| | | | ±20% | | C3216X7T2W104M160AE | |
| | 3225 | 1.60 +0.30/-0.20 | ±10% | C3225X7T2J104K160AE | | |
| | | | ±20% | C3225X7T2J104M160AE | | |
| 150nF | 3225 | 2.00 +0.30/-0.20 | ±10% | C3225X7T2J154K200AE | | |
| | | | ±20% | C3225X7T2J154M200AE | | |
| 220 nF | 3216 | 1.60 +0.30/-0.20 | ±10% | | | C3216X7T2E224K160AE |
| | | | ±20% | | | C3216X7T2E224M160AE |
| | 3225 | 2.00 +0.30/-0.20 | ±10% | | C3225X7T2W224K200AE | |
| | | | ±20% | | C3225X7T2W224M200AE | |
| | 4532 | 2.00 +0.30/-0.20 | ±10% | C4532X7T2J224K200KE | | |
| | | | ±20% | C4532X7T2J224M200KE | | |
| 330nF | 3225 | 2.00 +0.30/-0.20 | ±10% | | | C3225X7T2E334K200AE |
| | | | ±20% | | | C3225X7T2E334M200AE |
| 470 nF | 4532 | 2.30 +0.30/-0.20 | ±10% | | C4532X7T2W474K230KE | |
| | | | ±20% | | C4532X7T2W474M230KE | |
| | 5750 | 2.50 ± 0.30 | ±10% | C5750X7T2J474K250KE | | |
| | | | ±20% | C5750X7T2J474M250KE | | |
| 1 µF | 4532 | 2.50 ± 0.30 | ± 10% | | | C4532X7T2E105K250KE |
| | | | ± 20% | | | C4532X7T2E105M250KE |
| | 5750 | 2.50 ± 0.30 | ± 10% | | C5750X7T2W105K250KE | |
| | | | ± 20% | | C5750X7T2W105M250KE | |
| 2.2 uF | 5750 | 2.50 ± 0.30 | ± 10% | | | C5750X7T2E225K250KE |
| | | | ± 20% | | | C5750X7T2E225M250KE |

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## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X8R (-55 to +150℃, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | Catalog Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc：100V | Rated Voltage Edc：50V | Rated Voltage Edc：25V | Rated Voltage Edc：16V |
| 150pF | 1005 | 0.50+0.10/-0.05 | ±10% | C1005X8R2A151K050BE | C1005X8R1H151K050BE | | |
| | | | ±20% | C1005X8R2A151M050BE | C1005X8R1H151M050BE | | |
| 220pF | 1005 | 0.50+0.10/-0.05 | ±10% | C1005X8R2A221K050BE | C1005X8R1H221K050BE | | |
| | | | ±20% | C1005X8R2A221M050BE | C1005X8R1H221M050BE | | |
| 330pF | 1005 | 0.50+0.10/-0.05 | ±10% | C1005X8R2A331K050BE | C1005X8R1H331K050BE | | |
| | | | ±20% | C1005X8R2A331M050BE | C1005X8R1H331M050BE | | |
| 470pF | 1005 | 0.50+0.10/-0.05 | ±10% | C1005X8R2A471K050BE | C1005X8R1H471K050BE | | |
| | | | ±20% | C1005X8R2A471M050BE | C1005X8R1H471M050BE | | |
| 680pF | 1005 | 0.50+0.10/-0.05 | ±10% | C1005X8R2A681K050BE | C1005X8R1H681K050BE | | |
| | | | ±20% | C1005X8R2A681M050BE | C1005X8R1H681M050BE | | |
| 1nF | 1005 | 0.50+0.10/-0.05 | ±10% | C1005X8R2A102K050BE | C1005X8R1H102K050BE | | |
| | | | ±20% | C1005X8R2A102M050BE | C1005X8R1H102M050BE | | |
| | 1608 | 0.80+0.15/-0.10 | ±10% | C1608X8R2A102K080AE | C1608X8R1H102K080AE | | |
| | | | ±20% | C1608X8R2A102M080AE | C1608X8R1H102M080AE | | |
| 1.5nF | 1005 | 0.50+0.10/-0.05 | ±10% | C1005X8R2A152K050BE | C1005X8R1H152K050BE | | |
| | | | ±20% | C1005X8R2A152M050BE | C1005X8R1H152M050BE | | |
| | 1608 | 0.80+0.15/-0.10 | ±10% | C1608X8R2A152K080AE | C1608X8R1H152K080AE | | |
| | | | ±20% | C1608X8R2A152M080AE | C1608X8R1H152M080AE | | |
| 2.2nF | 1005 | 0.50+0.10/-0.05 | ±10% | C1005X8R2A222K050BE | C1005X8R1H222K050BE | | |
| | | | ±20% | C1005X8R2A222M050BE | C1005X8R1H222M050BE | | |
| | 1608 | 0.80+0.15/-0.10 | ±10% | C1608X8R2A222K080AE | C1608X8R1H222K080AE | | |
| | | | ±20% | C1608X8R2A222M080AE | C1608X8R1H222M080AE | | |
| 3.3nF | 1005 | 0.50+0.10/-0.05 | ±10% | C1005X8R2A332K050BE | C1005X8R1H332K050BE | | |
| | | | ±20% | C1005X8R2A332M050BE | C1005X8R1H332M050BE | | |
| | 1608 | 0.80+0.15/-0.10 | ±10% | C1608X8R2A332K080AE | C1608X8R1H332K080AE | | |
| | | | ±20% | C1608X8R2A332M080AE | C1608X8R1H332M080AE | | |
| 4.7nF | 1005 | 0.50+0.10/-0.05 | ±10% | | C1005X8R1H472K050BE | | |
| | | | ±20% | | C1005X8R1H472M050BE | | |
| | 1608 | 0.80+0.15/-0.10 | ±10% | C1608X8R2A472K080AE | C1608X8R1H472K080AE | | |
| | | | ±20% | C1608X8R2A472M080AE | C1608X8R1H472M080AE | | |
| 6.8nF | 1005 | 0.50+0.10/-0.05 | ±10% | | C1005X8R1H682K050BE | C1005X8R1E682K050BE | |
| | | | ±20% | | C1005X8R1H682M050BE | C1005X8R1E682M050BE | |
| | 1608 | 0.80+0.15/-0.10 | ±10% | C1608X8R2A682K080AE | C1608X8R1H682K080AE | | |
| | | | ±20% | C1608X8R2A682M080AE | C1608X8R1H682M080AE | | |
| 10nF | 1005 | 0.50+0.10/-0.05 | ±10% | | C1005X8R1H103K050BE | C1005X8R1E103K050BE | |
| | | | ±20% | | C1005X8R1H103M050BE | C1005X8R1E103M050BE | |
| | 1608 | 0.80+0.15/-0.10 | ±10% | C1608X8R2A103K080AE | C1608X8R1H103K080AE | | |
| | | | ±20% | C1608X8R2A103M080AE | C1608X8R1H103M080AE | | |
| 15nF | 1005 | 0.50+0.10/-0.05 | ±10% | | | C1005X8R1E153K050BE | |
| | | | ±20% | | | C1005X8R1E153M050BE | |
| | 1608 | 0.80+0.15/-0.10 | ±10% | C1608X8R2A153K080AE | C1608X8R1H153K080AE | | |
| | | | ±20% | C1608X8R2A153M080AE | C1608X8R1H153M080AE | | |
| 22nF | 1005 | 0.50+0.10/-0.05 | ±10% | | | C1005X8R1E223K050BE | |
| | | | ±20% | | | C1005X8R1E223M050BE | |
| | 1608 | 0.80+0.15/-0.10 | ±10% | C1608X8R2A223K080AE | C1608X8R1H223K080AE | | |
| | | | ±20% | C1608X8R2A223M080AE | C1608X8R1H223M080AE | | |
| | 2012 | 1.25+0.25/-0.20 | ±10% | C2012X8R2A223K125AE | | | |
| | | | ±20% | C2012X8R2A223M125AE | | | |
| 33nF | 1005 | 0.50+0.10/-0.05 | ±10% | | | | C1005X8R1C333K050BE |
| | | | ±20% | | | | C1005X8R1C333M050BE |
| | 1608 | 0.80+0.15/-0.10 | ±10% | | C1608X8R1H333K080AE | | |
| | | | ±20% | | C1608X8R1H333M080AE | | |
| | 2012 | 1.25+0.25/-0.20 | ±10% | C2012X8R2A333K125AE | | | |
| | | | ±20% | C2012X8R2A333M125AE | | | |
| 47nF | 1005 | 0.50+0.10/-0.05 | ±10% | | | | C1005X8R1C473K050BE |
| | | | ±20% | | | | C1005X8R1C473M050BE |
| | 1608 | 0.80+0.15/-0.10 | ±10% | | C1608X8R1H473K080AE | | |
| | | | ±20% | | C1608X8R1H473M080AE | | |
| | 2012 | 1.25+0.25/-0.20 | ±10% | C2012X8R2A473K125AE | | | |
| | | | ±20% | C2012X8R2A473M125AE | | | |

EIS electronic components
Distributor of TDK Corporation: Excellent Integrated System Limited
Datasheet of C2012X7R1C475M125AE - CAP CER 4.7UF 16V X7R 0805
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## Capacitance Range Table

**Class 2 (Temperature Stable)**

Temperature Characteristics: X8R (-55 to +150℃, ±15%)

| Capacitance | Size | Thickness (mm) | Capacitance Tolerance | Catalog Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | Rated Voltage Edc：100V | Rated Voltage Edc：50V | Rated Voltage Edc：25V | Rated Voltage Edc：16V |
| 68nF | 1608 | 0.80+0.15/-0.10 | ±10% | | C1608X8R1H683K080AE | C1608X8R1E683K080AE | |
| | | | ±20% | | C1608X8R1H683M080AE | C1608X8R1E683M080AE | |
| | 2012 | 1.25+0.25/-0.20 | ±10% | C2012X8R2A683K125AE | C2012X8R1H683K125AE | | |
| | | | ±20% | C2012X8R2A683M125AE | C2012X8R1H683M125AE | | |
| 100nF | 1608 | 0.80+0.15/-0.10 | ±10% | | C1608X8R1H104K080AE | C1608X8R1E104K080AE | |
| | | | ±20% | | C1608X8R1H104M080AE | C1608X8R1E104M080AE | |
| | 2012 | 1.25+0.25/-0.20 | ±10% | | C2012X8R1H104K125AE | | |
| | | | ±20% | | C2012X8R1H104M125AE | | |
| | 3216 | 1.15±0.15 | ±10% | C3216X8R2A104K115AE | | | |
| | | | ±20% | C3216X8R2A104M115AE | | | |
| 150nF | 1608 | 0.80+0.15/-0.10 | ±10% | | | C1608X8R1E154K080AE | |
| | | | ±20% | | | C1608X8R1E154M080AE | |
| | 2012 | 0.85±0.15 | ±10% | | | C2012X8R1E154K085AE | |
| | | | ±20% | | | C2012X8R1E154M085AE | |
| | | 1.25+0.25/-0.20 | ±10% | | C2012X8R1H154K125AE | | |
| | | | ±20% | | C2012X8R1H154M125AE | | |
| | 3216 | 1.60+0.30/-0.20 | ±10% | C3216X8R2A154K160AE | | | |
| | | | ±20% | C3216X8R2A154M160AE | | | |
| 220nF | 1608 | 0.80+0.15/-0.10 | ±10% | | | C1608X8R1E224K080AE | |
| | | | ±20% | | | C1608X8R1E224M080AE | |
| | 2012 | 1.25+0.25/-0.20 | ±10% | | C2012X8R1H224K125AE | C2012X8R1E224K125AE | |
| | | | ±20% | | C2012X8R1H224M125AE | C2012X8R1E224M125AE | |
| | 3216 | 1.60+0.30/-0.20 | ±10% | C3216X8R2A224K160AE | | | |
| | | | ±20% | C3216X8R2A224M160AE | | | |
| 330nF | 1608 | 0.80+0.15/-0.10 | ±10% | | | | C1608X8R1C334K080AE |
| | | | ±20% | | | | C1608X8R1C334M080AE |
| | 2012 | 1.25+0.25/-0.20 | ±10% | | | C2012X8R1E334K125AE | |
| | | | ±20% | | | C2012X8R1E334M125AE | |
| | 3216 | 1.60+0.30/-0.20 | ±10% | C3216X8R2A334K160AE | C3216X8R1H334K160AE | | |
| | | | ±20% | C3216X8R2A334M160AE | C3216X8R1H334M160AE | | |
| 470nF | 1608 | 0.80+0.15/-0.10 | ±10% | | | | C1608X8R1C474K080AE |
| | | | ±20% | | | | C1608X8R1C474M080AE |
| | 2012 | 1.25+0.25/-0.20 | ±10% | | | C2012X8R1E474K125AE | |
| | | | ±20% | | | C2012X8R1E474M125AE | |
| | 3216 | 1.60+0.30/-0.20 | ±10% | | C3216X8R1H474K160AE | | |
| | | | ±20% | | C3216X8R1H474M160AE | | |
| | 3225 | 2.00+0.30/-0.20 | ±10% | C3225X8R2A474K200AE | | | |
| | | | ±20% | C3225X8R2A474M200AE | | | |
| 680nF | 2012 | 1.25+0.25/-0.20 | ±10% | | | | C2012X8R1C684K125AE |
| | | | ±20% | | | | C2012X8R1C684M125AE |
| | 3216 | 1.60+0.30/-0.20 | ±10% | | C3216X8R1H684K160AE | | |
| | | | ±20% | | C3216X8R1H684M160AE | | |
| | 3225 | 2.50±0.30 | ±10% | C3225X8R2A684K250AE | | | |
| | | | ±20% | C3225X8R2A684M250AE | | | |
| 1uF | 2012 | 1.25+0.25/-0.20 | ±10% | | | | C2012X8R1C105K125AE |
| | | | ±20% | | | | C2012X8R1C105M125AE |
| | 3216 | 1.60+0.30/-0.20 | ±10% | | C3216X8R1H105K160AE | C3216X8R1E105K160AE | |
| | | | ±20% | | C3216X8R1H105M160AE | C3216X8R1E105M160AE | |
| 1.5uF | 3216 | 1.60+0.30/-0.20 | ±10% | | | C3216X8R1E155K160AE | |
| | | | ±20% | | | C3216X8R1E155M160AE | |
| 2.2uF | 3216 | 1.60+0.30/-0.20 | ±10% | | | C3216X8R1E225K160AE | |
| | | | ±20% | | | C3216X8R1E225M160AE | |
| 3.3uF | 3216 | 1.60+0.30/-0.20 | ±10% | | | | C3216X8R1C335K160AE |
| | | | ±20% | | | | C3216X8R1C335M160AE |
| 4.7uF | 3216 | 1.60+0.30/-0.20 | ±10% | | | | C3216X8R1C475K160AE |
| | | | ±20% | | | | C3216X8R1C475M160AE |
| | 3225 | 2.50±0.30 | ±10% | | | C3225X8R1E475K250AE | |
| | | | ±20% | | | C3225X8R1E475M250AE | |