

Ceramic Capacitors

C Series

For Mid Voltage

SMD

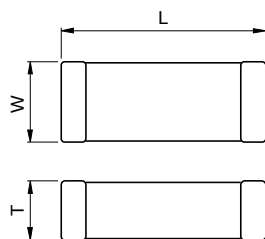
FEATURES

- The unique design structure for mid voltage enables a compact size with high voltage resistance.
- Rated voltage Edc: 100, 250 and 630V.
- C3225, C4532 and C5750 types are specific to reflow soldering.

APPLICATIONS

Snapper circuits for switching power supply, ringer circuits for telephone and modem, or other general high voltage circuits.

SHAPES AND DIMENSIONS



Dimensions in mm			
Type	L	W	T max.
C2012	2±0.2	1.25±0.2	1.45
C3216	3.2±0.2	1.6±0.2	1.8
C3225	3.2±0.4	2.5±0.3	2.3
C4532	4.5±0.4	3.2±0.4	2.6
C5750	5.7±0.4	5±0.4	5

PRODUCT IDENTIFICATION

C	2012	X7R	2E	102	K		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

(1) Series name

(2) Dimensions

2012	2.0×1.25mm
3216	3.2×1.6mm
3225	3.2×2.5mm
4532	4.5×3.2mm
5750	5.7×5.0mm

(3) Capacitance temperature characteristics

Temperature characteristics	Capacitance change	Temperature range
X7R	±15%	-55 ~ +125°C

(4) Rated voltage Edc

2A	100V
2E	250V
2J	630V

(5) Nominal capacitance

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.

102	1000pF
333	33000pF
474	470000pF

(6) Capacitance tolerance

K	±10%
M	±20%

(7) Packaging style

T	Taping (reel)
B	Bulk

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C2012 (EIA:CC0805) Type

CAPACITANCE RANGES

CLASS 2 (TEMPERATURE STABLE)

TEMPERATURE CHARACTERISTICS: X7R(±15%)

RATED VOLTAGE Edc:250V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
1000	±10%	1.45	C2012X7R2E102K
	±20%	1.45	C2012X7R2E102M
1500	±10%	1.45	C2012X7R2E152K
	±20%	1.45	C2012X7R2E152M
2200	±10%	1.45	C2012X7R2E222K
	±20%	1.45	C2012X7R2E222M
3300	±10%	1.45	C2012X7R2E332K
	±20%	1.45	C2012X7R2E332M
4700	±10%	1.45	C2012X7R2E472K
	±20%	1.45	C2012X7R2E472M
6800	±10%	1.45	C2012X7R2E682K
	±20%	1.45	C2012X7R2E682M
10000	±10%	1.45	C2012X7R2E103K
	±20%	1.45	C2012X7R2E103M

RATED VOLTAGE Edc: 100V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
1000	±10%	1.45	C2012X7R2A102K
	±20%	1.45	C2012X7R2A102M
1500	±10%	1.45	C2012X7R2A152K
	±20%	1.45	C2012X7R2A152M
2200	±10%	1.45	C2012X7R2A222K
	±20%	1.45	C2012X7R2A222M
3300	±10%	1.45	C2012X7R2A332K
	±20%	1.45	C2012X7R2A332M
4700	±10%	1.45	C2012X7R2A472K
	±20%	1.45	C2012X7R2A472M
6800	±10%	1.45	C2012X7R2A682K
	±20%	1.45	C2012X7R2A682M
10000	±10%	1.45	C2012X7R2A103K
	±20%	1.45	C2012X7R2A103M
15000	±10%	1.45	C2012X7R2A153K
	±20%	1.45	C2012X7R2A153M
22000	±10%	1.45	C2012X7R2A223K
	±20%	1.45	C2012X7R2A223M

C3216 (EIA:CC1206) Type

CAPACITANCE RANGES

CLASS 2 (TEMPERATURE STABLE)

TEMPERATURE CHARACTERISTICS: X7R(±15%)

RATED VOLTAGE Edc: 630V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
1000	±10%	1.8	C3216X7R2J102K
	±20%	1.8	C3216X7R2J102M
1500	±10%	1.8	C3216X7R2J152K
	±20%	1.8	C3216X7R2J152M
2200	±10%	1.8	C3216X7R2J222K
	±20%	1.8	C3216X7R2J222M
3300	±10%	1.8	C3216X7R2J332K
	±20%	1.8	C3216X7R2J332M
4700	±10%	1.8	C3216X7R2J472K
	±20%	1.8	C3216X7R2J472M
6800	±10%	1.8	C3216X7R2J682K
	±20%	1.8	C3216X7R2J682M
10000	±10%	1.8	C3216X7R2J103K
	±20%	1.8	C3216X7R2J103M
15000	±10%	1.8	C3216X7R2J153K
	±20%	1.8	C3216X7R2J153M

RATED VOLTAGE Edc: 250V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
15000	±10%	1.8	C3216X7R2E153K
	±20%	1.8	C3216X7R2E153M
22000	±10%	1.8	C3216X7R2E223K
	±20%	1.8	C3216X7R2E223M
33000	±10%	1.8	C3216X7R2E333K
	±20%	1.8	C3216X7R2E333M
47000	±10%	1.8	C3216X7R2E473K
	±20%	1.8	C3216X7R2E473M

RATED VOLTAGE Edc: 100V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
33000	±10%	1.8	C3216X7R2A333K
	±20%	1.8	C3216X7R2A333M
47000	±10%	1.8	C3216X7R2A473K
	±20%	1.8	C3216X7R2A473M
68000	±10%	1.8	C3216X7R2A683K
	±20%	1.8	C3216X7R2A683M
100000	±10%	1.8	C3216X7R2A104K
	±20%	1.8	C3216X7R2A104M

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C3225 (EIA:CC1210) Type

CAPACITANCE RANGES

CLASS 2 (TEMPERATURE STABLE)

TEMPERATURE CHARACTERISTICS: X7R(±15%)

RATED VOLTAGE Edc:630V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
22000	±10%	2.3	C3225X7R2J223K
	±20%	2.3	C3225X7R2J223M
33000	±10%	2.3	C3225X7R2J333K
	±20%	2.3	C3225X7R2J333M
47000	±10%	2.3	C3225X7R2J473K
	±20%	2.3	C3225X7R2J473M

RATED VOLTAGE Edc:250V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
68000	±10%	2.3	C3225X7R2E683K
	±20%	2.3	C3225X7R2E683M
100000	±10%	2.3	C3225X7R2E104K
	±20%	2.3	C3225X7R2E104M

RATED VOLTAGE Edc:100V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
100000	±10%	2.3	C3225X7R2A104K
	±20%	2.3	C3225X7R2A104M
150000	±10%	2.3	C3225X7R2A154K
	±20%	2.3	C3225X7R2A154M
220000	±10%	2.3	C3225X7R2A224K
	±20%	2.3	C3225X7R2A224M

C4532 (EIA:CC1812) Type

CAPACITANCE RANGES

CLASS 2 (TEMPERATURE STABLE)

TEMPERATURE CHARACTERISTICS: X7R(±15%)

RATED VOLTAGE Edc:630V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
68000	±10%	2.6	C4532X7R2J683K
	±20%	2.6	C4532X7R2J683M
100000	±10%	2.6	C4532X7R2J104K
	±20%	2.6	C4532X7R2J104M

RATED VOLTAGE Edc:250V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
150000	±10%	2.6	C4532X7R2E154K
	±20%	2.6	C4532X7R2E154M
220000	±10%	2.6	C4532X7R2E224K
	±20%	2.6	C4532X7R2E224M

RATED VOLTAGE Edc:100V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
330000	±10%	2.6	C4532X7R2A334K
	±20%	2.6	C4532X7R2A334M
470000	±10%	2.6	C4532X7R2A474K
	±20%	2.6	C4532X7R2A474M



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C5750 (EIA:CC2320) Type
CAPACITANCE RANGES
CLASS 2 (TEMPERATURE STABLE)
TEMPERATURE CHARACTERISTICS: X7R(±15%)
RATED VOLTAGE Edc:630V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
150000	±10%	4.5	C5750X7R2J154K
	±20%	4.5	C5750X7R2J154M
220000	±10%	4.5	C5750X7R2J224K
	±20%	4.5	C5750X7R2J224M

RATED VOLTAGE Edc:250V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
330000	±10%	4.5	C5750X7R2E334K
	±20%	4.5	C5750X7R2E334M
470000	±10%	4.5	C5750X7R2E474K
	±20%	4.5	C5750X7R2E474M

RATED VOLTAGE Edc:100V

Capacitance (pF)	Tolerance	Thickness (mm)max.	Part No
680000	±10%	4.5	C5750X7R2A684K
	±20%	4.5	C5750X7R2A684M
1000000 [1μF]	±10%	4.5	C5750X7R2A105K
	±20%	4.5	C5750X7R2A105M



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