

# Low Profile Multilayer Chip Ceramic Capacitors

## C Series

### FEATURES

- These capacitors are optimally suited for thin sets such as IC cards and LCD panels because they feature high capacities in a low profile configuration.

### PRODUCT IDENTIFICATION

$\frac{C}{(1)}$ 
 $\frac{1608}{(2)}$ 
 $\frac{JB}{(3)}$ 
 $\frac{1H}{(4)}$ 
 $\frac{104}{(5)}$ 
 $\frac{K}{(6)}$ 
 $\frac{\square}{(7)}$

#### (1)Series name

#### (2)DimensionsL×W

1608	1.6×0.8mm
2012	2.0×1.25mm
3216	3.2×1.6mm

#### (3)Capacitance temperature characteristics

##### Class 2

Temperature characteristics	Capacitance change	Temperature range
B(JB*)	±10%	-25 to +85°C
X7R	±15%	-55 to +125°C
X5R	±15%	-55 to +85°C

\*JB(JIS: BJ)

#### (4)Rated voltage E<sub>dc</sub>

0J	6.3V
1A	10V
1C	16V
1E	25V
1H	50V

#### (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.

104	100,000pF
106	10,000,000pF[10μF]

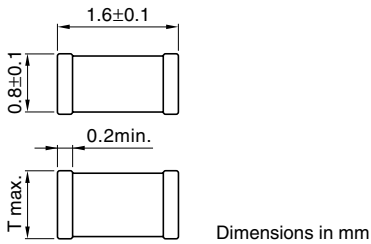
#### (6)Capacitance tolerance

Symbol	Tolerance
K	±10%
M	±20%

#### (7)Packaging style

T	Taping (reel)
B	Bulk

## C1608(EIA CC0603)TYPE SHAPES AND DIMENSIONS



### CAPACITANCE RANGES: CLASS 2 TEMPERATURE CHARACTERISTICS: JIS B(BJ)(±10%), EIA X5R/X7R(±15%)

RATED VOLTAGE Edc: 50V

Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
100,000	±10%	0.9	C1608JB1H104K
	±20%	0.9	C1608JB1H104M

RATED VOLTAGE Edc: 25V

Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
100,000	±10%	0.7	C1608JB1E104K
	±20%	0.7	C1608JB1E104M
150,000	±10%	0.7	C1608JB1E154K
	±20%	0.7	C1608JB1E154M
220,000	±10%	0.9	C1608JB1E224K
	±20%	0.9	C1608JB1E224M
330,000	±10%	0.9	C1608JB1E334K
	±20%	0.9	C1608JB1E334M
470,000	±10%	0.9	C1608JB1E474K
	±20%	0.9	C1608JB1E474M
680,000	±10%	0.9	C1608JB1E684K
	±20%	0.9	C1608JB1E684M
1,000,000	±10%	0.9	C1608JB1E105K
	±20%	0.9	C1608JB1E105M

RATED VOLTAGE Edc: 16V

Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
220,000	±10%	0.7	C1608JB1C224K
	±20%	0.7	C1608JB1C224M
330,000	±10%	0.7	C1608JB1C334K
	±20%	0.7	C1608JB1C334M

- Part number for temperature characteristic X5R or X7R  
Please substitute "X5R" or "X7R" for "JB" in the part number when ordering.

### TEMPERATURE CHARACTERISTICS:

JIS B(BJ)(±10%), EIA X5R(±15%)

RATED VOLTAGE Edc: 10V

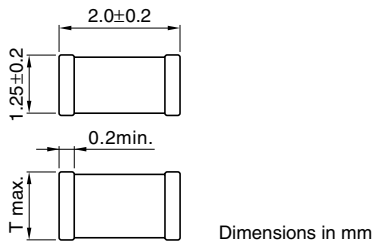
Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
1,000,000 [1μF]	±10%	0.55	C1608JB1A105K
	±20%	0.55	C1608JB1A105M

RATED VOLTAGE Edc: 6.3V

Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
1,500,000 [1.5μF]	±10%	0.9	C1608JB0J155K
	±20%	0.9	C1608JB0J155M
2,200,000	±10%	0.9	C1608JB0J225K
	±20%	0.9	C1608JB0J225M

- Part number for temperature characteristic X5R  
Please substitute "X5R" for "JB" in the part number when ordering.
- For more information about the products of other capacitance or data, please contact us.

## C2012(EIA CC0805)TYPE SHAPES AND DIMENSIONS



### CAPACITANCE RANGES: CLASS 2 TEMPERATURE CHARACTERISTICS: JIS B(BJ)(±10%), EIA X5R/X7R(±15%)

RATED VOLTAGE E<sub>dc</sub>: 50V

Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
100,000	±10%	0.9	C2012JB1H104K
	±20%	0.9	C2012JB1H104M
150,000	±10%	0.9	C2012JB1H154K
	±20%	0.9	C2012JB1H154M
220,000	±10%	0.95	C2012JB1H224K
	±20%	0.95	C2012JB1H224M

RATED VOLTAGE E<sub>dc</sub>: 25V

Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
330,000	±10%	0.7	C2012JB1E334K
	±20%	0.7	C2012JB1E334M
470,000	±10%	0.7	C2012JB1E474K
	±20%	0.7	C2012JB1E474M
680,000	±10%	0.95	C2012JB1E684K
	±20%	0.95	C2012JB1E684M
1,000,000 [1μF]	±10%	0.95	C2012JB1E105K
	±20%	0.95	C2012JB1E105M
1,500,000	±10%	0.95	C2012JB1E155K
	±20%	0.95	C2012JB1E155M
2,200,000	±10%	0.95	C2012JB1E225K
	±20%	0.95	C2012JB1E225M

RATED VOLTAGE E<sub>dc</sub>: 16V

Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
680,000	±10%	0.7	C2012JB1C684K
	±20%	0.7	C2012JB1C684M
1,000,000 [1μF]	±10%	0.9	C2012JB1C105K
	±20%	0.9	C2012JB1C105M

- Part number for temperature characteristic X5R or X7R  
Please substitute "X5R" or "X7R" for "JB" in the part number when ordering.

### TEMPERATURE CHARACTERISTICS:

JIS B(BJ)(±10%), EIA X5R(±15%)

RATED VOLTAGE E<sub>dc</sub>: 10V

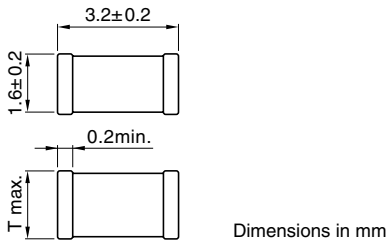
Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
1,000,000 [1μF]	±10%	0.7	C2012JB1A105K
	±20%	0.7	C2012JB1A105M
1,500,000	±10%	0.9	C2012JB1A155K
	±20%	0.9	C2012JB1A155M
2,200,000	±10%	0.95	C2012JB1A225K
	±20%	0.95	C2012JB1A225M

RATED VOLTAGE E<sub>dc</sub>: 6.3V

Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
3,300,000 [3.3μF]	±10%	0.95	C2012JB0J335K
	±20%	0.95	C2012JB0J335M
4,700,000	±10%	0.95	C2012JB0J475K
	±20%	0.95	C2012JB0J475M
6,800,000	±10%	0.95	C2012JB0J685K
	±20%	0.95	C2012JB0J685M
10,000,000	±10%	0.95	C2012JB0J106K
	±20%	0.95	C2012JB0J106M

- Part number for temperature characteristic X5R  
Please substitute "X5R" for "JB" in the part number when ordering.
- For more information about the products of other capacitance or data, please contact us.

## C3216(EIA CC1206)TYPE SHAPES AND DIMENSIONS



### CAPACITANCE RANGES: CLASS 2 TEMPERATURE CHARACTERISTICS: JIS B(BJ)(±10%), EIA X5R/X7R(±15%)

RATED VOLTAGE Edc: 50V

Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
220,000	±10%	0.9	C3216JB1H224K
	±20%	0.9	C3216JB1H224M
330,000	±10%	0.95	C3216JB1H334K
	±20%	0.95	C3216JB1H334M
470,000	±10%	0.95	C3216JB1H474K
	±20%	0.95	C3216JB1H474M
680,000	±10%	1.25	C3216JB1H684K
	±20%	1.25	C3216JB1H684M

RATED VOLTAGE Edc: 25V

Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
680,000	±10%	0.9	C3216JB1E684K
	±20%	0.9	C3216JB1E684M
1,000,000 [1μF]	±10%	0.9	C3216JB1E105K
	±20%	0.9	C3216JB1E105M
1,500,000	±10%	0.9	C3216JB1E155K
	±20%	0.9	C3216JB1E155M
2,200,000	±10%	0.95	C3216JB1E225K
	±20%	0.95	C3216JB1E225M

RATED VOLTAGE Edc: 16V

Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
2,200,000	±10%	0.9	C3216JB1C225K
	±20%	0.9	C3216JB1C225M
3,300,000	±10%	0.95	C3216JB1C335K
	±20%	0.95	C3216JB1C335M
4,700,000	±10%	0.95	C3216JB1C475K
	±20%	0.95	C3216JB1C475M
6,800,000	±10%	1.25	C3216JB1C685K
	±20%	1.25	C3216JB1C685M

- Part number for temperature characteristic X5R or X7R  
Please substitute "X5R" or "X7R" for "JB" in the part number when ordering.

### TEMPERATURE CHARACTERISTICS:

JIS B(BJ)(±10%), EIA X5R(±15%)

RATED VOLTAGE Edc: 10V

Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
4,700,000 [4.7μF]	±10%	0.9	C3216JB1A475K
	±20%	0.9	C3216JB1A475M
6,800,000	±10%	0.9	C3216JB1A685K
	±20%	0.9	C3216JB1A685M

RATED VOLTAGE Edc: 6.3V

Capacitance (pF)	Tolerance	Thickness T (mm)max.	Part number
10,000,000 [10μF]	±10%	0.95	C3216JB0J106K
	±20%	0.95	C3216JB0J106M

- Part number for temperature characteristic X5R  
Please substitute "X5R" for "JB" in the part number when ordering.
- For more information about the products of other capacitance or data, please contact us.