

MULTILAYER CERAMIC CHIP CAPACITORS

Commercial grade, general (Up to 75V)

C series

C0402	0402 [CC01005]
C0603	0603 [CC0201]
C1005	1005 [CC0402]
C1608	1608 [CC0603]
C2012	2012 [CC0805]
C3216	3216 [CC1206]
C3225	3225 [CC1210]
C4532	4532 [CC1812]
C5750	5750 [CC2220]

Dimensions code: JIS [EIA]



REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using this products.

REMINDERS

1. The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition. The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property. If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.

- | | |
|---|--|
| (1) Aerospace/aviation equipment | (8) Public information-processing equipment |
| (2) Transportation equipment (cars, electric trains, ships, etc.) | (9) Military equipment |
| (3) Medical equipment (excepting Pharmaceutical Affairs) | (10) Electric heating apparatus, burning equipment |
| (4) Power-generation control equipment | (11) Disaster prevention/crime prevention equipment |
| (5) Atomic energy-related equipment | (12) Safety equipment |
| (6) Seabed equipment | (13) Other applications that are not considered general-purpose applications |
| (7) Transportation control equipment | |

When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.

2. We may modify products or discontinue production of a product listed in this catalog without prior notification.
3. We provide "Delivery Specification" that explain precautions for the specifications and safety of each product listed in this catalog. We strongly recommend that you exchange these delivery specifications with customers that use one of these products.
4. If you plan to export a product listed in this catalog, keep in mind that it may be a restricted item according to the "Foreign Exchange" and "Foreign Trade Control Law". In such cases, it is necessary to acquire export permission in harmony with this law.
5. Any reproduction or transferring of the contents of this catalog is prohibited without prior permission from our company.
6. We are not responsible for problems that occur related to the intellectual property rights or other rights of our company or a third party when you use a product listed in this catalog. We do not grant license of these rights.
7. This catalog only applies to products purchased through our company or one of our company's official agencies. This catalog does not apply to products that are purchased through other third parties.

- Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.
- Please note that the contents may change without any prior notice due to reasons such as upgrading.

C series

General (Up to 75V)

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



SERIES OVERVIEW

General type C series is a surface-mounted component, which multilayer dielectrics and inner electrodes are stacked alternately. The monolithic structure ensures superior mechanical strength and high reliability. Also, outstanding frequency characteristics such as low ESR and low ESL are provided owing to the simpler structure than other capacitors. The capacitance range is up to 220 μ F and the lineup has been expanding to a range of the film capacitor and electrolytic capacitor.

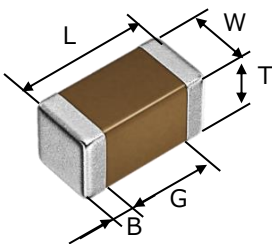
FEATURES

- Superior mechanical strength and high reliability due to the monolithic structure
- Outstanding frequency characteristics such as low ESR and low ESL by the simple structure
- Low self-heating value and high resistance to ripple on account of the low ESR
- No polarity

APPLICATIONS

- General electronic equipment
- Mobile devices
- Servers, PCs, tablets
- Power supply circuit

SHAPE & DIMENSIONS



L Product length

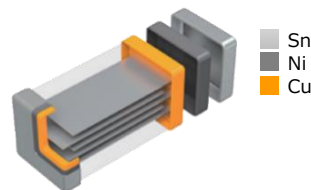
W Product width

T Product thickness

B Terminal width

G Terminal spacing

PRODUCT STRUCTURE



The structure which multilayer dielectrics and inner electrodes are stacked alternately.

The monolithic and simple structure contributes to superior mechanical strength and excellent frequency characteristics.

Dimensions in mm

Type	L	W	T	B	G
C0402	0.40 $\pm$ 0.02	0.20 $\pm$ 0.02	0.20 $\pm$ 0.02	0.07 min.	0.14 min.
C0603	0.60 $\pm$ 0.03	0.30 $\pm$ 0.03	0.30 $\pm$ 0.03	0.10 min.	0.20 min.
C1005	1.00 $\pm$ 0.05	0.50 $\pm$ 0.05	0.50 $\pm$ 0.05		0.30 min.
C1608	1.60 $\pm$ 0.10	0.80 $\pm$ 0.10	0.80 $\pm$ 0.10		0.30 min.
C2012	2.00 $\pm$ 0.20	1.25 $\pm$ 0.20	1.25 $\pm$ 0.20		0.50 min.
C3216	3.20 $\pm$ 0.20	1.60 $\pm$ 0.20	1.60 $\pm$ 0.20	0.20 min.	1.00 min.
C3225	3.20 $\pm$ 0.40	2.50 $\pm$ 0.30	2.50 $\pm$ 0.30		
C4532	4.50 $\pm$ 0.40	3.20 $\pm$ 0.40	3.20 $\pm$ 0.40		---
C5750	5.70 $\pm$ 0.40	5.00 $\pm$ 0.40	2.80 $\pm$ 0.30		

Dimensional tolerances are typical values. Please check the actual values on the product page of the website.

- Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.
- Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



■ CATALOG NUMBER CONSTRUCTION

C	3225	X7T	0E	227	M	250	A	C
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

(1) Series

(2) Dimensions code

Dimensions code	EIA	Length	Width	Terminal width
0402	CC01005	0.40	0.20	0.07
0603	CC0201	0.60	0.30	0.10
1005	CC0402	1.00	0.50	
1608	CC0603	1.60	0.80	
2012	CC0805	2.00	1.25	0.20
3216	CC1206	3.20	1.60	
3225	CC1210	3.20	2.50	
4532	CC1812	4.50	3.20	
5750	CC2220	5.70	5.00	

Dimensions are typical values.

(3) Temperature characteristics

Temperature characteristics	Temperature coefficient or capacitance change	Temperature range
C0G	0±30 ppm/°C	-55 to +125 °C
X7R	±15 %	
X7S	±22 %	
X7T	+22,-33 %	-55 to +105 °C
X6S	±22 %	
X5R	±15 %	-55 to +85 °C
X5S	±22 %	

(4) Rated voltage (DC)

Code	Voltage (DC)
0E	2.5 V
0G	4 V
0J	6.3 V
1A	10 V
1C	16 V
1E	25 V
1V	35 V
1H	50 V
1N	75 V

(5) 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.

(Example) 0R5 = 0.5 pF

101 = 100 pF

225 = 2,200,000 pF = 2.2 μF

(6) Capacitance tolerance

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

(7) Nominal thickness

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

(8) Packaging style

Code	Style
A	178 mm reel, 4 mm pitch
B	178 mm reel, 2 mm pitch
K	178 mm reel, 8 mm pitch

(9) Special reserved code

Code	Description
A,B,C	TDK internal code
T	Special temperature characteristic

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

• Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range chart

C0402 [CC01005]

Capacitance		C0G	X5R				X6S			X7R		
(pF)	Code	1C (16V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)	1A (10V)	0J (6.3V)	0G (4V)	1A (10V)	0J (6.3V)	0G (4V)
1	010											
2	020											
3	030											
4	040											
5	050											
6	060											
7	070											
8	080											
9	090											
10	100											
15	150											
22	220											
33	330											
47	470											
68	680											
100	101											
150	151											
220	221											
330	331											
470	471											
680	681											
1,000	102											
1,500	152											
2,200	222											

Nominal thickness  0.20 mm

- Background gray: NRND (Not Recommended for New Designs)
- Click the charts for details.
- For details such as the catalog numbers, please refer to the capacitance range table on page 15 and after.

- Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.
- Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range chart

C0603 [CC0201]

Capacitance		C0G		X5R				X6S				
(pF)	Code	1H (50V)	1E (25V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)
1	010											
2	020											
3	030											
4	040											
5	050											
6	060											
7	070											
8	080											
9	090											
10	100											
15	150											
22	220											
33	330											
47	470											
68	680											
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											
47,000	473											
100,000	104											
150,000	154											
220,000	224											
330,000	334											
470,000	474											

Capacitance		X7R						X7S				
(pF)	Code	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)
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											
10,000	103											
22,000	223											
47,000	473											
100,000	104											
150,000	154											
220,000	224											

Nominal thickness 0.30 mm

- Background gray: NRND (Not Recommended for New Designs)
- Click the charts for details.
- For details such as the catalog numbers, please refer to the capacitance range table on page 15 and after.

- Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.
- Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range chart

C1005 [CC0402]

Capacitance		COG		X5R							X6S						
(pF)	Code	1H (50V)	1E (25V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)
1	010																
2	020																
3	030																
4	040																
5	050																
6	060																
7	070																
8	080																
9	090																
10	100																
15	150																
22	220																
33	330																
47	470																
68	680																
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																
680,000	684																
1,000,000	105																
1,500,000	155																
2,200,000	225																
3,300,000	335																
4,700,000	475																

Nominal thickness  0.50 mm

- Background gray: NRND (Not Recommended for New Designs)
- Click the charts for details.
- For details such as the catalog numbers, please refer to the capacitance range table on page 15 and after.

- Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.
- Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range chart

C1005 [CC0402]

Capacitance		X7R						X7S						
(pF)	Code	1N (75V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)
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													
680,000	684													
1,000,000	105													
1,500,000	155													
2,200,000	225													

Nominal thickness 0.50 mm

- Background gray: NRND (Not Recommended for New Designs)
- Click the charts for details.
- For details such as the catalog numbers, please refer to the capacitance range table on page 15 and after.

- Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.
- Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range chart

C1608 [CC0603]

Capacitance		C0G			X5R						
(pF)	Code	1H (50V)	1V (35V)	1E (25V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)
1	010										
2	020										
3	030										
4	040										
5	050										
6	060										
7	070										
8	080										
9	090										
10	100										
15	150										
22	220										
33	330										
47	470										
68	680										
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										
18,000	183										
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										

Nominal thickness 0.80 mm

- Background gray: NRND (Not Recommended for New Designs)
- Click the charts for details.
- For details such as the catalog numbers, please refer to the capacitance range table on page 15 and after.

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

• Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range chart

C1608 [CC0603]

Capacitance		X6S							X7R						
(pF)	Code	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)	1N (75V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)
1,000	102														
2,200	222														
4,700	472														
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														
6,800,000	685														
10,000,000	106														
22,000,000	226														

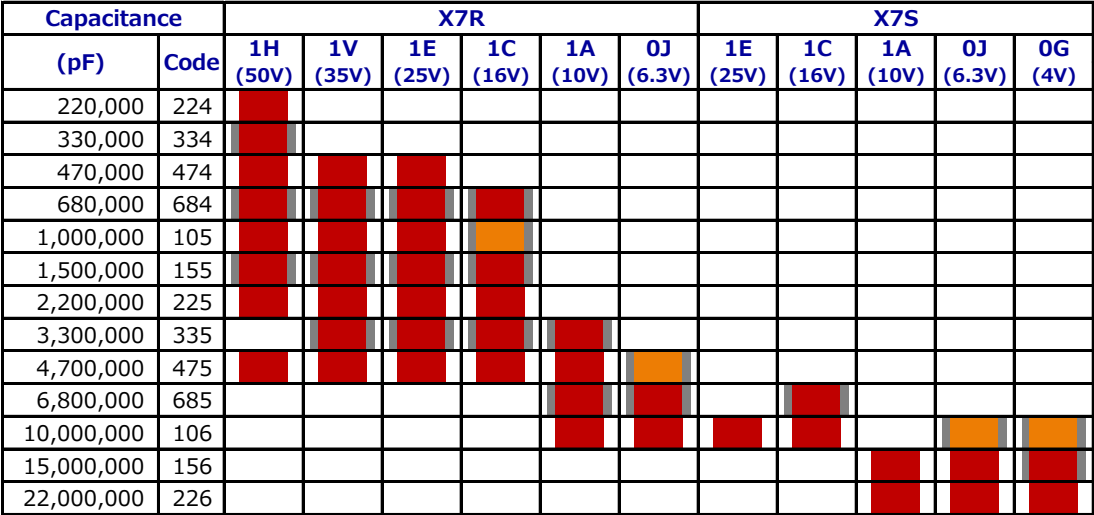
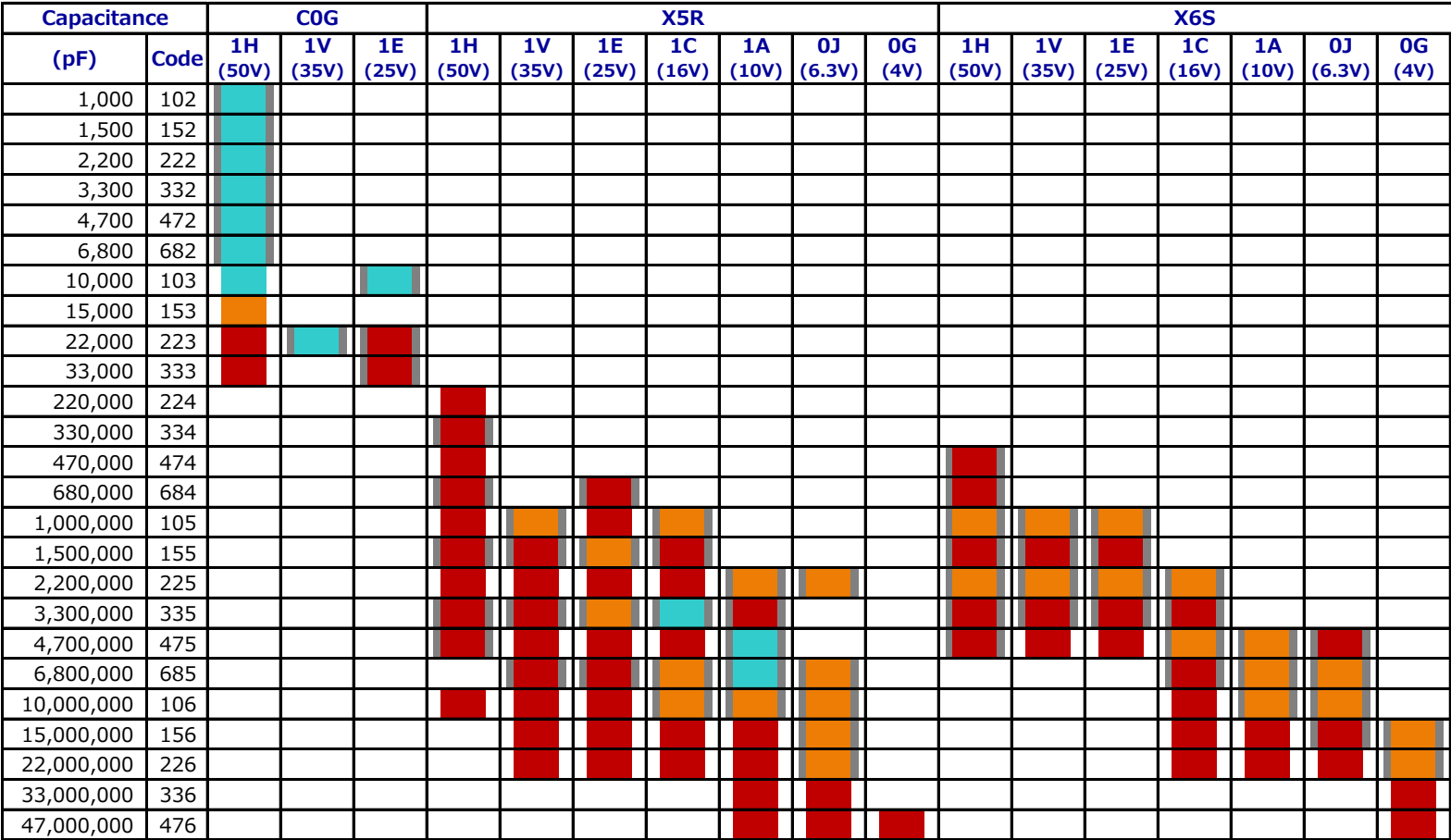
Capacitance		X7S					X7T
(pF)	Code	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)	1A (10V)
1,500,000	155						
2,200,000	225						
3,300,000	335						
4,700,000	475						
6,800,000	685						
10,000,000	106						

Nominal thickness  0.80 mm

- Background gray: NRND (Not Recommended for New Designs)
- Click the charts for details.
- For details such as the catalog numbers, please refer to the capacitance range table on page 15 and after.

Capacitance range chart

C2012 [CC0805]



- Nominal thickness 0.60 mm 0.85 mm 1.25 mm
- Background gray: NRND (Not Recommended for New Designs)
 - Click the charts for details.
 - For details such as the catalog numbers, please refer to the capacitance range table on page 15 and after.

- Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.
- Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range chart

C3216 [CC1206]

Capacitance		C0G	X5R							X6S						
(pF)	Code	1H (50V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)
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															
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															

Capacitance		X7R						X7S		
(pF)	Code	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	1A (10V)	0J (6.3V)	0G (4V)
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									

Nominal thickness  0.60 mm  0.85 mm  1.15 mm  1.60 mm

•Background gray: NRND (Not Recommended for New Designs)

•Click the charts for details.

•For details such as the catalog numbers, please refer to the capacitance range table on page 15 and after.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range chart

C3225 [CC1210]

Capacitance		C0G		X5R				X5S	X6S						
(pF)	Code	1H (50V)	1H (50V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0J (6.3V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)
22,000	223														
33,000	333														
47,000	473														
68,000	683														
100,000	104														
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														
100,000,000	107														
220,000,000	227														

Capacitance		X7R						X7S				X7T		
(pF)	Code	1N (75V)	1H (50V)	1E (25V)	1C (16V)	1A (10V)	1H (50V)	1E (25V)	1A (10V)	0J (6.3V)	1A (10V)	0J (6.3V)	0E (2.5V)	
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													
47,000,000	476													
100,000,000	107													
220,000,000	227													

Nominal thickness ■ 1.25 mm ■ 1.60 mm ■ 2.00 mm ■ 2.30 mm ■ 2.50 mm

- Background gray: NRND (Not Recommended for New Designs)
- Click the charts for details.
- For details such as the catalog numbers, please refer to the capacitance range table on page 15 and after.

Capacitance range chart

C4532 [CC1812]

Capacitance		C0G	X5R					X6S	X7R		
(pF)	Code	1H (50V)	1H (50V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0J (6.3V)	1H (50V)	1E (25V)	1C (16V)
47,000	473										
68,000	683										
100,000	104										
150,000	154										
220,000	224										
1,000,000	105										
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										

Nominal thickness 1.60 mm 2.00 mm 2.30 mm 2.50 mm 2.80 mm 3.20 mm

- Background gray: NRND (Not Recommended for New Designs)
- Click the charts for details.
- For details such as the catalog numbers, please refer to the capacitance range table on page 15 and after.

Capacitance range chart

C5750 [CC2220]

Capacitance		X5R					X7R			
(pF)	Code	1H (50V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)
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									

Nominal thickness 2.00 mm 2.30 mm 2.50 mm 2.80 mm

- Background gray: NRND (Not Recommended for New Designs)
- Click the charts for details.
- For details such as the catalog numbers, please refer to the capacitance range table on page 15 and after.

- Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.
- Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

C0G (-55 to +125°C, 0±30 ppm/°C)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC50V	Rated voltage: DC25V	Rated voltage: DC16V
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		
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		
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		
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		
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		
7 pF	0402	0.20±0.02	±0.50pF			C0402C0G1C070D020BC
			±0.25pF	C0603C0G1H070D030BA	C0603C0G1E070D030BA	
			±0.50pF	C1005C0G1H070C050BA		
	1005	0.50±0.05	±0.50pF	C1005C0G1H070D050BA		
			±0.25pF	C1608C0G1H070C080AA		
8 pF	0402	0.20±0.02	±0.50pF			C0402C0G1C080D020BC
			±0.50pF	C0603C0G1H080D030BA	C0603C0G1E080D030BA	
			±0.25pF	C1005C0G1H080C050BA		
	1005	0.50±0.05	±0.50pF	C1005C0G1H080D050BA		
			±0.25pF	C1608C0G1H080C080AA		
9 pF	0402	0.20±0.02	±0.50pF			C0402C0G1C090D020BC
			±0.50pF	C0603C0G1H090D030BA	C0603C0G1E090D030BA	
			±0.25pF	C1005C0G1H090C050BA		
	1005	0.50±0.05	±0.50pF	C1005C0G1H090D050BA		
			±0.25pF	C1608C0G1H090C080AA		
10 pF	1608	0.80±0.10	±0.50pF	C1608C0G1H090D080AA		

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

C0G (-55 to +125°C, 0±30 ppm/°C)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC50V	Rated voltage: DC25V	Rated voltage: DC16V
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		
15 pF	0402	0.20±0.02	±5%			C0402C0G1C150J020BC
			±10%			C0402C0G1C150K020BC
	0603	0.30±0.03	±5%	C0603C0G1H150J030BA	C0603C0G1E150J030BA	
			±10%	C0603C0G1H150K030BA	C0603C0G1E150K030BA	
	1005	0.50±0.05	±1%	C1005C0G1H150F050BA		
			±2%	C1005C0G1H150G050BA		
			±5%	C1005C0G1H150J050BA		
	1608	0.80±0.10	±1%	C1608C0G1H150F080AA		
			±2%	C1608C0G1H150G080AA		
			±5%	C1608C0G1H150J080AA		
22 pF	0402	0.20±0.02	±5%			C0402C0G1C220J020BC
			±10%			C0402C0G1C220K020BC
	0603	0.30±0.03	±5%	C0603C0G1H220J030BA	C0603C0G1E220J030BA	
			±10%	C0603C0G1H220K030BA	C0603C0G1E220K030BA	
	1005	0.50±0.05	±1%	C1005C0G1H220F050BA		
			±2%	C1005C0G1H220G050BA		
			±5%	C1005C0G1H220J050BA		
	1608	0.80±0.10	±1%	C1608C0G1H220F080AA		
			±2%	C1608C0G1H220G080AA		
			±5%	C1608C0G1H220J080AA		
33 pF	0402	0.20±0.02	±5%			C0402C0G1C330J020BC
			±10%			C0402C0G1C330K020BC
	0603	0.30±0.03	±5%	C0603C0G1H330J030BA	C0603C0G1E330J030BA	
			±10%	C0603C0G1H330K030BA	C0603C0G1E330K030BA	
	1005	0.50±0.05	±1%	C1005C0G1H330F050BA		
			±2%	C1005C0G1H330G050BA		
			±5%	C1005C0G1H330J050BA		
	1608	0.80±0.10	±1%	C1608C0G1H330F080AA		
			±2%	C1608C0G1H330G080AA		
			±5%	C1608C0G1H330J080AA		
47 pF	0402	0.20±0.02	±5%			C0402C0G1C470J020BC
			±10%			C0402C0G1C470K020BC
	0603	0.30±0.03	±5%	C0603C0G1H470J030BA	C0603C0G1E470J030BA	
			±10%	C0603C0G1H470K030BA	C0603C0G1E470K030BA	
	1005	0.50±0.05	±1%	C1005C0G1H470F050BA		
			±2%	C1005C0G1H470G050BA		
			±5%	C1005C0G1H470J050BA		
	1608	0.80±0.10	±1%	C1608C0G1H470F080AA		
			±2%	C1608C0G1H470G080AA		
			±5%	C1608C0G1H470J080AA		

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

C0G (-55 to +125°C, 0±30 ppm/°C)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC50V	Rated voltage: DC25V	Rated voltage: DC16V
68 pF	0402	0.20±0.02	±5%			C0402C0G1C680J020BC
			±10%			C0402C0G1C680K020BC
	0603	0.30±0.03	±5%	C0603C0G1H680J030BA	C0603C0G1E680J030BA	
			±10%	C0603C0G1H680K030BA	C0603C0G1E680K030BA	
	1005	0.50±0.05	±1%	C1005C0G1H680F050BA		
			±2%	C1005C0G1H680G050BA		
			±5%	C1005C0G1H680J050BA		
			±1%	C1608C0G1H680F080AA		
			±2%	C1608C0G1H680G080AA		
			±5%	C1608C0G1H680J080AA		
	1608	0.80±0.10	±1%			
			±2%			
100 pF	0402	0.20±0.02	±5%			C0402C0G1C101J020BC
			±10%			C0402C0G1C101K020BC
	0603	0.30±0.03	±5%	C0603C0G1H101J030BA	C0603C0G1E101J030BA	
			±10%	C0603C0G1H101K030BA	C0603C0G1E101K030BA	
	1005	0.50±0.05	±1%	C1005C0G1H101F050BA		
			±2%	C1005C0G1H101G050BA		
			±5%	C1005C0G1H101J050BA		
			±10%	C1005C0G1H101K050BA		
			±1%	C1608C0G1H101F080AA		
			±2%	C1608C0G1H101G080AA		
	1608	0.80±0.10	±5%	C1608C0G1H101J080AA		
			±10%	C1608C0G1H101K080AA		
150 pF	1005	0.50±0.05	±1%	C1005C0G1H151F050BA		
			±2%	C1005C0G1H151G050BA		
			±5%	C1005C0G1H151J050BA		
			±10%	C1005C0G1H151K050BA		
			±1%	C1608C0G1H151F080AA		
			±2%	C1608C0G1H151G080AA		
	1608	0.80±0.10	±5%	C1608C0G1H151J080AA		
			±10%	C1608C0G1H151K080AA		
220 pF	1005	0.50±0.05	±1%	C1005C0G1H221F050BA		
			±2%	C1005C0G1H221G050BA		
			±5%	C1005C0G1H221J050BA		
			±10%	C1005C0G1H221K050BA		
			±1%	C1608C0G1H221F080AA		
			±2%	C1608C0G1H221G080AA		
	1608	0.80±0.10	±5%	C1608C0G1H221J080AA		
			±10%	C1608C0G1H221K080AA		
330 pF	1005	0.50±0.05	±1%	C1005C0G1H331F050BA		
			±2%	C1005C0G1H331G050BA		
			±5%	C1005C0G1H331J050BA		
			±10%	C1005C0G1H331K050BA		
			±1%	C1608C0G1H331F080AA		
			±2%	C1608C0G1H331G080AA		
	1608	0.80±0.10	±5%	C1608C0G1H331J080AA		
			±10%	C1608C0G1H331K080AA		

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

C0G (-55 to +125°C, 0±30 ppm/°C)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers	
				Rated voltage: DC50V	Rated voltage: DC25V
470 pF	1005	0.50±0.05	±1%	C1005C0G1H471F050BA	
			±2%	C1005C0G1H471G050BA	
			±5%	C1005C0G1H471J050BA	
			±10%	C1005C0G1H471K050BA	
	1608	0.80±0.10	±1%	C1608C0G1H471F080AA	
			±2%	C1608C0G1H471G080AA	
			±5%	C1608C0G1H471J080AA	
			±10%	C1608C0G1H471K080AA	
680 pF	1005	0.50±0.05	±1%	C1005C0G1H681F050BA	
			±2%	C1005C0G1H681G050BA	
			±5%	C1005C0G1H681J050BA	
			±10%	C1005C0G1H681K050BA	
	1608	0.80±0.10	±1%	C1608C0G1H681F080AA	
			±2%	C1608C0G1H681G080AA	
			±5%	C1608C0G1H681J080AA	
			±10%	C1608C0G1H681K080AA	
1 nF	1005	0.50±0.05	±1%	C1005C0G1H102F050BA	
			±2%	C1005C0G1H102G050BA	
			±5%	C1005C0G1H102J050BA	C1005C0G1E102J050BA
			±10%	C1005C0G1H102K050BA	
	1608	0.80±0.10	±1%	C1608C0G1H102F080AA	
			±2%	C1608C0G1H102G080AA	
			±5%	C1608C0G1H102J080AA	
			±10%	C1608C0G1H102K080AA	
	2012	0.60±0.15	±5%	C2012C0G1H102J060AA	
			±10%	C2012C0G1H102K060AA	
	1608	0.80±0.10	±5%	C1608C0G1H152J080AA	
			±10%	C2012C0G1H152K060AA	
1.5 nF	2012	0.60±0.15	±5%	C2012C0G1H152J060AA	
			±10%	C2012C0G1H152K060AA	
	1608	0.80±0.10	±5%	C1608C0G1H222J080AA	
			±10%	C1608C0G1H222K080AA	
2.2 nF	2012	0.60±0.15	±5%	C2012C0G1H222J060AA	
			±10%	C2012C0G1H222K060AA	
	1608	0.80±0.10	±5%	C1608C0G1H332J080AA	
			±10%	C1608C0G1H332K080AA	
3.3 nF	2012	0.60±0.15	±5%	C2012C0G1H332J060AA	
			±10%	C2012C0G1H332K060AA	
	1608	0.80±0.10	±5%	C1608C0G1H472J080AA	C1608C0G1E472J080AA
			±10%	C1608C0G1H472K080AA	
4.7 nF	2012	0.60±0.15	±5%	C2012C0G1H472J060AA	
			±10%	C2012C0G1H472K060AA	
	3216	0.60±0.15	±5%	C3216C0G1H472J060AA	
			±10%	C3216C0G1H472K060AA	
6.8 nF	2012	0.60±0.15	±5%	C2012C0G1H682J060AA	
			±10%	C2012C0G1H682K060AA	
	3216	0.60±0.15	±5%	C3216C0G1H682J060AA	
			±10%	C3216C0G1H682K060AA	

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

C0G (-55 to +125°C, 0±30 ppm/°C)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC50V	Rated voltage: DC35V	Rated voltage: DC25V
10 nF	1608	0.80±0.10	±5%	C1608C0G1H103J080AA	C1608C0G1V103J080AC	C1608C0G1E103J080AA
			±10%	C1608C0G1H103K080AA	C1608C0G1V103K080AC	
	2012	0.60±0.15	±5%	C2012C0G1H103J060AA		C2012C0G1E103J060AA
			±10%	C2012C0G1H103K060AA		
	3216	0.60±0.15	±5%	C3216C0G1H103J060AA		
			±10%	C3216C0G1H103K060AA		
15 nF	1608	0.80±0.10	±5%		C1608C0G1V153J080AC	
			±10%		C1608C0G1V153K080AC	
	2012	0.85±0.15	±5%	C2012C0G1H153J085AA		
			±10%	C2012C0G1H153K085AA		
	3216	0.60±0.15	±5%	C3216C0G1H153J060AA		
			±10%	C3216C0G1H153K060AA		
18 nF	1608	0.80±0.10	±5%		C1608C0G1V183J080AC	
			±10%		C1608C0G1V183K080AC	
	2012	0.60±0.15	±5%		C2012C0G1V223J060AC	
			±10%		C2012C0G1V223K060AC	
	3216	0.60±0.15	±5%	C3216C0G1H223J125AA		C2012C0G1E223J125AA
			±10%	C3216C0G1H223K125AA		
22 nF	3216	0.60±0.15	±5%	C3216C0G1H223J060AA		
			±10%	C3216C0G1H223K060AA		
	3225	1.25±0.20	±5%	C3225C0G1H223J125AA		
			±10%	C3225C0G1H223K125AA		
	2012	1.25±0.20	±5%	C2012C0G1H333J125AA		C2012C0G1E333J125AA
			±10%	C2012C0G1H333K125AA		
33 nF	3216	0.85±0.15	±5%	C3216C0G1H333J085AA		
			±10%	C3216C0G1H333K085AA		
	3225	1.60±0.20	±5%	C3225C0G1H333J160AA		
			±10%	C3225C0G1H333K160AA		
	3216	1.15±0.15	±5%	C3216C0G1H473J115AA		
			±10%	C3216C0G1H473K115AA		
47 nF	3225	2.00±0.20	±5%	C3225C0G1H473J200AA		
			±10%	C3225C0G1H473K200AA		
	4532	1.60±0.20	±5%	C4532C0G1H473J160KA		
			±10%	C4532C0G1H473K160KA		
	3216	1.60±0.20	±5%	C3216C0G1H683J160AA		
			±10%	C3216C0G1H683K160AA		
68 nF	3225	2.00±0.20	±5%	C3225C0G1H683J200AA		
			±10%	C3225C0G1H683K200AA		
	4532	1.60±0.20	±5%	C4532C0G1H683J160KA		
			±10%	C4532C0G1H683K160KA		
	3216	1.60±0.20	±5%	C3216C0G1H104J160AA		
			±10%	C3216C0G1H104K160AA		
100 nF	3225	2.50±0.30	±5%	C3225C0G1H104J250AA		
			±10%	C3225C0G1H104K250AA		
	4532	2.00±0.20	±5%	C4532C0G1H104J200KA		
			±10%	C4532C0G1H104K200KA		
	150 nF	2.50±0.30	±5%	C4532C0G1H154J250KA		
			±10%	C4532C0G1H154K250KA		
220 nF	4532	3.20±0.30	±5%	C4532C0G1H224J320KA		
			±10%	C4532C0G1H224K320KA		

• Gray: NRND (Not Recommended for New Designs)

• Click the catalog numbers for details.

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

• Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range table

X5R (-55 to +85°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers	
				Rated voltage: DC50V	Rated voltage: DC25V
100 pF	0603	0.30±0.03	±10%		C0603X5R1E101K030BA
			±20%		C0603X5R1E101M030BA
150 pF	0603	0.30±0.03	±10%		C0603X5R1E151K030BA
			±20%		C0603X5R1E151M030BA
220 pF	0603	0.30±0.03	±10%		C0603X5R1E221K030BA
			±20%		C0603X5R1E221M030BA
	1005	0.50±0.05	±10%	C1005X5R1H221K050BA	
			±20%	C1005X5R1H221M050BA	
330 pF	0603	0.30±0.03	±10%		C0603X5R1E331K030BA
			±20%		C0603X5R1E331M030BA
	1005	0.50±0.05	±10%	C1005X5R1H331K050BA	
			±20%	C1005X5R1H331M050BA	
470 pF	0603	0.30±0.03	±10%		C0603X5R1E471K030BA
			±20%		C0603X5R1E471M030BA
	1005	0.50±0.05	±10%	C1005X5R1H471K050BA	
			±20%	C1005X5R1H471M050BA	
680 pF	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	
	1608	0.80±0.10	±10%	C1608X5R1H102K080AA	
1.5 nF	0603	0.30±0.03	±10%		C0603X5R1E152K030BA
			±20%		C0603X5R1E152M030BA
	1005	0.50±0.05	±10%	C1005X5R1H152K050BA	
			±20%	C1005X5R1H152M050BA	
2.2 nF	0603	0.30±0.03	±10%		C0603X5R1E222K030BA
			±20%		C0603X5R1E222M030BA
	1005	0.50±0.05	±10%	C1005X5R1H222K050BA	
			±20%	C1005X5R1H222M050BA	
	1608	0.80±0.10	±10%	C1608X5R1H222K080AA	
3.3 nF	0603	0.30±0.03	±10%		C0603X5R1E332K030BA
			±20%		C0603X5R1E332M030BA
	1005	0.50±0.05	±10%	C1005X5R1H332K050BA	
			±20%	C1005X5R1H332M050BA	
4.7 nF	1005	0.50±0.05	±10%	C1005X5R1H472K050BA	
			±20%	C1005X5R1H472M050BA	
	1608	0.80±0.10	±10%	C1608X5R1H472K080AA	
			±20%		
6.8 nF	1005	0.50±0.05	±10%	C1005X5R1H682K050BA	
			±20%	C1005X5R1H682M050BA	
	1005	0.50±0.05	±10%	C1005X5R1H103K050BB	C1005X5R1E103K050BA
			±20%	C1005X5R1H103M050BB	C1005X5R1E103M050BA
10 nF	1608	0.80±0.10	±10%	C1608X5R1H103K080AA	
			±20%	C1608X5R1H103M080AA	
	1005	0.50±0.05	±10%	C1005X5R1H153K050BB	C1005X5R1E153K050BA
			±20%	C1005X5R1H153M050BB	C1005X5R1E153M050BA
15 nF	1608	0.80±0.10	±10%	C1608X5R1H153K080AA	
			±20%	C1608X5R1H153M080AA	

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

X5R (-55 to +85°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC50V	Rated voltage: DC35V	Rated voltage: DC25V
22 nF	0603	0.30±0.03	±10%			C0603X5R1E223K030BB
			±20%			C0603X5R1E223M030BB
	1005	0.50±0.05	±10%	C1005X5R1H223K050BB		C1005X5R1E223K050BA
			±20%	C1005X5R1H223M050BB		C1005X5R1E223M050BA
	1608	0.80±0.10	±10%	C1608X5R1H223K080AA		
			±20%	C1608X5R1H223M080AA		
33 nF	1005	0.50±0.05	±10%	C1005X5R1H333K050BB		C1005X5R1E333K050BA
			±20%	C1005X5R1H333M050BB		C1005X5R1E333M050BA
	1608	0.80±0.10	±10%	C1608X5R1H333K080AA		
			±20%	C1608X5R1H333M080AA		
47 nF	0603	0.30±0.03	±10%			C0603X5R1E473K030BB
			±20%			C0603X5R1E473M030BB
	1005	0.50±0.05	±10%	C1005X5R1H473K050BB		C1005X5R1E473K050BA
			±20%	C1005X5R1H473M050BB		C1005X5R1E473M050BA
	1608	0.80±0.10	±10%	C1608X5R1H473K080AA		
			±20%	C1608X5R1H473M080AA		
68 nF	1005	0.50±0.05	±10%	C1005X5R1H683K050BB	C1005X5R1V683K050BB	C1005X5R1E683K050BC
			±20%	C1005X5R1H683M050BB	C1005X5R1V683M050BB	C1005X5R1E683M050BC
	1608	0.80±0.10	±10%	C1608X5R1H683K080AA		
			±20%	C1608X5R1H683M080AA		
100 nF	0603	0.30±0.03	±10%			C0603X5R1E104K030BB
			±20%			C0603X5R1E104M030BB
	1005	0.50±0.05	±10%	C1005X5R1H104K050BB	C1005X5R1V104K050BB	C1005X5R1E104K050BC
			±20%	C1005X5R1H104M050BB	C1005X5R1V104M050BB	C1005X5R1E104M050BC
	1608	0.80±0.10	±10%	C1608X5R1H104K080AA		
			±20%	C1608X5R1H104M080AA		
150 nF	0603	0.30±0.05	±10%			C0603X5R1E154K030BC
			±20%			C0603X5R1E154M030BC
	1005	0.50±0.05	±10%			C1005X5R1E154K050BC
			±20%			C1005X5R1E154M050BC
	1608	0.80±0.10	±10%	C1608X5R1H154K080AB	C1608X5R1V154K080AB	C1608X5R1E154K080AA
			±20%	C1608X5R1H154M080AB	C1608X5R1V154M080AB	C1608X5R1E154M080AA
220 nF	0603	0.30±0.05	±10%			C0603X5R1E224K030BC
			±20%			C0603X5R1E224M030BC
	1005	0.50±0.05	±10%			C1005X5R1E224K050BC
			±20%			C1005X5R1E224M050BC
	1608	0.80±0.10	±10%	C1608X5R1H224K080AB	C1608X5R1V224K080AB	C1608X5R1E224K080AA
			±20%	C1608X5R1H224M080AB	C1608X5R1V224M080AB	C1608X5R1E224M080AA
330 nF	2012	1.25±0.20	±10%	C2012X5R1H224K125AA		
			±20%	C2012X5R1H224M125AA		
	1005	0.50±0.05	±10%		C1005X5R1V334K050BC	C1005X5R1E334K050BB
			±20%		C1005X5R1V334M050BC	C1005X5R1E334M050BB
	1608	0.80±0.10	±10%	C1608X5R1H334K080AB	C1608X5R1V334K080AB	C1608X5R1E334K080AC
			±20%	C1608X5R1H334M080AB	C1608X5R1V334M080AB	C1608X5R1E334M080AC
470 nF	2012	1.25±0.20	±10%	C2012X5R1H334K125AA		
			±20%	C2012X5R1H334M125AA		
	1005	0.50±0.05	±10%		C1005X5R1V474K050BC	C1005X5R1E474K050BB
			±20%		C1005X5R1V474M050BC	C1005X5R1E474M050BB
	1608	0.80±0.10	±10%	C1608X5R1H474K080AB	C1608X5R1V474K080AB	C1608X5R1E474K080AC
			±20%	C1608X5R1H474M080AB	C1608X5R1V474M080AB	C1608X5R1E474M080AC
	2012	1.25±0.20	±10%	C2012X5R1H474K125AB		
			±20%	C2012X5R1H474M125AB		

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

X5R (-55 to +85°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC50V	Rated voltage: DC35V	Rated voltage: DC25V
680 nF	1005	0.50±0.05	±10%		C1005X5R1V684K050BC	C1005X5R1E684K050BC
			±20%		C1005X5R1V684M050BC	C1005X5R1E684M050BC
	1608	0.80±0.10	±10%	C1608X5R1H684K080AB	C1608X5R1V684K080AB	C1608X5R1E684K080AC
			±20%	C1608X5R1H684M080AB	C1608X5R1V684M080AB	C1608X5R1E684M080AC
	2012	1.25±0.20	±10%	C2012X5R1H684K125AB		C2012X5R1E684K125AA
			±20%	C2012X5R1H684M125AB		C2012X5R1E684M125AA
1 µF	1005	0.50±0.05	±10%		C1005X5R1V105K050BC	C1005X5R1E105K050BC
			±20%		C1005X5R1V105M050BC	C1005X5R1E105M050BC
	1608	0.80±0.10	±10%	C1608X5R1H105K080AB	C1608X5R1V105K080AB	C1608X5R1E105K080AC
			±20%	C1608X5R1H105M080AB	C1608X5R1V105M080AB	C1608X5R1E105M080AC
	2012	0.85±0.15	±10%	C2012X5R1H105K085AB	C2012X5R1V105K085AB	C2012X5R1E105K085AC
			±20%	C2012X5R1H105M085AB	C2012X5R1V105M085AB	C2012X5R1E105M085AC
		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±0.10	±10%			C1005X5R1E155K050BC
			±20%			C1005X5R1E155M050BC
	1608	0.80±0.10	±10%		C1608X5R1V155K080AC	C1608X5R1E155K080AB
			±20%		C1608X5R1V155M080AC	C1608X5R1E155M080AB
	2012	0.85±0.15	±10%			C2012X5R1E155K085AC
			±20%			C2012X5R1E155M085AC
		1.25±0.20	±10%	C2012X5R1H155K125AB	C2012X5R1V155K125AB	C2012X5R1E155K125AA
			±20%	C2012X5R1H155M125AB	C2012X5R1V155M125AB	C2012X5R1E155M125AA
	3216	1.60±0.20	±10%	C3216X5R1H155K160AB		C3216X5R1E155K160AA
			±20%	C3216X5R1H155M160AB		C3216X5R1E155M160AA
2.2 µF	1005	0.50+0.15,-0.10	±10%		C1005X5R1V225K050BC	
			±20%		C1005X5R1V225M050BC	
		0.50±0.10	±10%			C1005X5R1E225K050BC
			±20%			C1005X5R1E225M050BC
	1608	0.80±0.10	±10%		C1608X5R1V225K080AC	C1608X5R1E225K080AB
			±20%		C1608X5R1V225M080AC	C1608X5R1E225M080AB
	2012	0.85±0.15	±10%	C2012X5R1H225K085AB	C2012X5R1V225K085AB	C2012X5R1E225K085AC
			±20%	C2012X5R1H225M085AB	C2012X5R1V225M085AB	C2012X5R1E225M085AC
		1.25±0.20	±10%	C2012X5R1H225K125AB	C2012X5R1V225K125AB	C2012X5R1E225K125AC
			±20%	C2012X5R1H225M125AB	C2012X5R1V225M125AB	C2012X5R1E225M125AC
	3216	1.60±0.20	±10%	C3216X5R1H225K160AB		C3216X5R1E225K160AA
			±20%	C3216X5R1H225M160AB		C3216X5R1E225M160AA
	3225	2.50±0.30	±10%	C3225X5R1H225K250AB		
			±20%	C3225X5R1H225M250AB		

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

X5R (-55 to +85°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC50V	Rated voltage: DC35V	Rated voltage: DC25V
3.3 μ F	1608	0.80±0.10	±10%			C1608X5R1E335K080AC
			±20%			C1608X5R1E335M080AC
		0.80±0.20	±10%		C1608X5R1V335K080AC	
			±20%		C1608X5R1V335M080AC	
	2012	0.85±0.15	±10%			C2012X5R1E335K085AC
			±20%			C2012X5R1E335M085AC
		1.25±0.20	±10%	C2012X5R1H335K125AB	C2012X5R1V335K125AC	C2012X5R1E335K125AB
			±20%	C2012X5R1H335M125AB	C2012X5R1V335M125AC	C2012X5R1E335M125AB
	3216	1.60±0.20	±10%	C3216X5R1H335K160AB	C3216X5R1V335K160AB	C3216X5R1E335K160AA
			±20%	C3216X5R1H335M160AB	C3216X5R1V335M160AB	C3216X5R1E335M160AA
	3225	2.50±0.30	±10%	C3225X5R1H335K250AB		
			±20%	C3225X5R1H335M250AB		
4.7 μ F	1608	0.80±0.10	±10%			C1608X5R1E475K080AC
			±20%			C1608X5R1E475M080AC
		0.80±0.20	±10%		C1608X5R1V475K080AC	
			±20%		C1608X5R1V475M080AC	
	2012	0.85±0.15	±10%			C2012X5R1E475K085AC
			±20%			C2012X5R1E475M085AC
		1.25±0.20	±10%	C2012X5R1H475K125AB	C2012X5R1V475K125AC	C2012X5R1E475K125AB
			±20%	C2012X5R1H475M125AB	C2012X5R1V475M125AC	C2012X5R1E475M125AB
	3216	0.85±0.15	±10%	C3216X5R1H475K085AB	C3216X5R1V475K085AB	C3216X5R1E475K085AB
			±20%	C3216X5R1H475M085AB	C3216X5R1V475M085AB	C3216X5R1E475M085AB
		1.15±0.15	±10%			C3216X5R1E475K115AB
			±20%			C3216X5R1E475M115AB
	3225	1.60±0.20	±10%	C3216X5R1H475K160AB	C3216X5R1V475K160AB	C3216X5R1E475K160AA
			±20%	C3216X5R1H475M160AB	C3216X5R1V475M160AB	C3216X5R1E475M160AA
		2.50±0.30	±10%	C3225X5R1H475K250AB		
			±20%	C3225X5R1H475M250AB		
6.8 μ F	1608	0.80±0.20	±10%			C1608X5R1E685K080AC
			±20%			C1608X5R1E685M080AC
	2012	1.25±0.20	±10%		C2012X5R1V685K125AC	C2012X5R1E685K125AC
			±20%		C2012X5R1V685M125AC	C2012X5R1E685M125AC
	3216	1.60±0.20	±10%	C3216X5R1H685K160AB	C3216X5R1V685K160AB	C3216X5R1E685K160AB
			±20%	C3216X5R1H685M160AB	C3216X5R1V685M160AB	C3216X5R1E685M160AB
	3225	2.50±0.30	±10%	C3225X5R1H685K250AB		C3225X5R1E685K250AA
			±20%	C3225X5R1H685M250AB		C3225X5R1E685M250AA
	4532	2.50±0.30	±10%	C4532X5R1H685K250KA		
			±20%	C4532X5R1H685M250KA		

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

X5R (-55 to +85°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC50V	Rated voltage: DC35V	Rated voltage: DC25V
10 µF	1608	0.80±0.20	±20%			C1608X5R1E106M080AC
		0.85±0.15	±10%		C2012X5R1V106K085AC	C2012X5R1E106K085AC
	2012		±20%		C2012X5R1V106M085AC	C2012X5R1E106M085AC
		1.25±0.25, -0.15	±10%	C2012X5R1H106K125AC		
		1.25±0.20	±10%		C2012X5R1V106K125AC	C2012X5R1E106K125AB
			±20%		C2012X5R1V106M125AC	C2012X5R1E106M125AB
	3216	0.85±0.15	±10%			C3216X5R1E106K085AC
			±20%			C3216X5R1E106M085AC
		1.60±0.20	±10%	C3216X5R1H106K160AB	C3216X5R1V106K160AB	C3216X5R1E106K160AB
			±20%	C3216X5R1H106M160AB	C3216X5R1V106M160AB	C3216X5R1E106M160AB
	3225	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
	3216	1.60±0.20	±20%		C3216X5R1V156M160AC	C3216X5R1E156M160AB
	4532	2.50±0.30	±20%			C4532X5R1E156M250KA
		2.80±0.30	±20%			C4532X5R1E156M280KA
22 µF	2012	1.25±0.20	±20%		C2012X5R1V226M125AC	C2012X5R1E226M125AC
	3216	1.60±0.20	±20%		C3216X5R1V226M160AC	C3216X5R1E226M160AB
	4532	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
47 µF	3216	1.60±0.20	±20%			C3216X5R1E476M160AC

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range table

X5R (-55 to +85°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers			
				Rated voltage: DC16V	Rated voltage: DC10V	Rated voltage: DC6.3V	Rated voltage: DC4V
100 pF	0402	0.20±0.02	±10%	C0402X5R1C101K020BC			
			±20%	C0402X5R1C101M020BC			
150 pF	0402	0.20±0.02	±10%	C0402X5R1C151K020BC			
			±20%	C0402X5R1C151M020BC			
220 pF	0402	0.20±0.02	±10%	C0402X5R1C221K020BC			
			±20%	C0402X5R1C221M020BC			
330 pF	0402	0.20±0.02	±10%	C0402X5R1C331K020BC			
			±20%	C0402X5R1C331M020BC			
470 pF	0402	0.20±0.02	±10%	C0402X5R1C471K020BC			
			±20%	C0402X5R1C471M020BC			
680 pF	0402	0.20±0.02	±10%	C0402X5R1C681K020BC			
			±20%	C0402X5R1C681M020BC			
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
4.7 nF	0603	0.30±0.03	±10%	C0603X5R1C472K030BA			
			±20%	C0603X5R1C472M030BA			
6.8 nF	0603	0.30±0.03	±10%		C0603X5R1A682K030BA		
			±20%		C0603X5R1A682M030BA		
10 nF	0603	0.30±0.03	±10%	C0603X5R1C103K030BA	C0603X5R1A103K030BA		
			±20%	C0603X5R1C103M030BA	C0603X5R1A103M030BA		
15 nF	0603	0.30±0.03	±10%		C0603X5R1A153K030BC	C0603X5R0J153K030BA	
			±20%		C0603X5R1A153M030BC	C0603X5R0J153M030BA	
	1005	0.50±0.05	±10%	C1005X5R1C153K050BA			
			±20%	C1005X5R1C153M050BA			
22 nF	1005	0.50±0.05	±10%	C1005X5R1C223K050BA			
			±20%	C1005X5R1C223M050BA			
33 nF	1005	0.50±0.05	±10%	C1005X5R1C333K050BA			
			±20%	C1005X5R1C333M050BA			
47 nF	1005	0.50±0.05	±10%	C1005X5R1C473K050BA	C1005X5R1A473K050BA		
			±20%	C1005X5R1C473M050BA	C1005X5R1A473M050BA		
68 nF	1005	0.50±0.05	±10%	C1005X5R1C683K050BA	C1005X5R1A683K050BA		
			±20%	C1005X5R1C683M050BA	C1005X5R1A683M050BA		
100 nF	0603	0.30±0.03	±10%	C0603X5R1C104K030BC	C0603X5R1A104K030BC		
			±20%	C0603X5R1C104M030BC	C0603X5R1A104M030BC		
	1005	0.50±0.05	±10%	C1005X5R1C104K050BA	C1005X5R1A104K050BA	C1005X5R0J104K050BA	
			±20%	C1005X5R1C104M050BA	C1005X5R1A104M050BA		
150 nF	0603	0.30±0.03	±10%	C0603X5R1C154K030BC	C0603X5R1A154K030BB	C0603X5R0J154K030BB	
			±20%	C0603X5R1C154M030BC	C0603X5R1A154M030BB	C0603X5R0J154M030BB	
	1005	0.50±0.05	±10%	C1005X5R1C154K050BB			
			±20%	C1005X5R1C154M050BB			
220 nF	0603	0.30±0.03	±10%	C0603X5R1C224K030BC	C0603X5R1A224K030BB	C0603X5R0J224K030BB	
			±20%	C0603X5R1C224M030BC	C0603X5R1A224M030BB	C0603X5R0J224M030BB	
	1005	0.50±0.05	±10%	C1005X5R1C224K050BB			
			±20%	C1005X5R1C224M050BB			
	0603	0.30±0.03	±20%			C0603X5R0J334M030BC	
			±10%		C0603X5R1A334K030BC		
330 nF	0603	0.30±0.05	±20%		C0603X5R1A334M030BC		
			±10%	C1608X5R1C334K080AA			
	1608	0.80±0.10	±20%	C1608X5R1C334M080AA			
			±10%			C0603X5R0J474M030BC	
470 nF	0603	0.30±0.05	±20%		C0603X5R1A474M030BC		
			±10%		C1608X5R1A474K080AA		
	1608	0.80±0.10	±10%	C1608X5R1C474K080AA			
			±20%	C1608X5R1C474M080AA			

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range table

X5R (-55 to +85°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers			
				Rated voltage: DC16V	Rated voltage: DC10V	Rated voltage: DC6.3V	Rated voltage: DC4V
680 nF	1005	0.50±0.05	±10%	C1005X5R1C684K050BC	C1005X5R1A684K050BB	C1005X5R0J684K050BB	
			±20%	C1005X5R1C684M050BC	C1005X5R1A684M050BB	C1005X5R0J684M050BB	
	1608	0.80+0.15,-0.10	±10%		C1608X5R1A684K080AC		
			±20%		C1608X5R1A684M080AC		
		0.80±0.10	±10%	C1608X5R1C684K080AA			
			±20%	C1608X5R1C684M080AA			
1 µF	1608	0.80+0.15,-0.10	±10%		C1608X5R1A105K080AC		
			±20%		C1608X5R1A105M080AC		
		0.80±0.10	±10%	C1608X5R1C105K080AA			
			±20%	C1608X5R1C105M080AA			
	2012	0.85±0.15	±10%	C2012X5R1C105K085AA			
			±20%	C2012X5R1C105M085AA			
1.5 µF	1005	0.50±0.05	±10%	C1005X5R1C155K050BC	C1005X5R1A155K050BC	C1005X5R0J155K050BB	
			±20%	C1005X5R1C155M050BC	C1005X5R1A155M050BC	C1005X5R0J155M050BB	
	1608	0.80±0.10	±10%	C1608X5R1C155K080AB			
			±20%	C1608X5R1C155M080AB			
	2012	1.25±0.20	±10%	C2012X5R1C155K125AA			
			±20%	C2012X5R1C155M125AA			
2.2 µF	1005	0.50±0.05	±10%	C1005X5R1C225K050BC	C1005X5R1A225K050BC	C1005X5R0J225K050BC	C1005X5R0G225K050BB
			±20%	C1005X5R1C225M050BC	C1005X5R1A225M050BC	C1005X5R0J225M050BC	C1005X5R0G225M050BB
	1608	0.80±0.10	±10%	C1608X5R1C225K080AB			
			±20%	C1608X5R1C225M080AB			
	2012	0.85±0.15	±10%	C2012X5R1C225K085AC	C2012X5R1A225K085AA	C2012X5R0J225K085AA	
			±20%	C2012X5R1C225M085AC	C2012X5R1A225M085AA	C2012X5R0J225M085AA	
3.3 µF	1005	0.50±0.10	±10%		C1005X5R1A335K050BC	C1005X5R0J335K050BC	C1005X5R0G335K050BB
			±20%		C1005X5R1A335M050BC	C1005X5R0J335M050BC	C1005X5R0G335M050BB
	1608	0.80±0.10	±10%	C1608X5R1C335K080AC			
			±20%	C1608X5R1C335M080AC			
	2012	0.60±0.15	±10%	C2012X5R1C335K060AC	C2012X5R1A335K060AB		
			±20%	C2012X5R1C335M060AC	C2012X5R1A335M060AB		
4.7 µF	1005	0.50+0.15,-0.10	±10%		C1005X5R1A475K050BC	C1005X5R0J475K050BC	C1005X5R0G475K050BB
			±20%		C1005X5R1A475M050BC	C1005X5R0J475M050BC	C1005X5R0G475M050BB
	1608	0.80±0.10	±10%	C1608X5R1C475K080AC			
			±20%	C1608X5R1C475M080AC			
	2012	0.60±0.15	±10%	C2012X5R1C475K060AC	C2012X5R1A475K060AB		
			±20%	C2012X5R1C475M060AC	C2012X5R1A475M060AB		
6.8 µF	1005	0.50+0.15,-0.10	±10%		C1005X5R1A475K085AB		
			±20%		C2012X5R1C475M085AB		
	1608	0.80±0.10	±10%	C1608X5R1C475K080AC	C1608X5R1A685K080AC	C1608X5R0J685K080AB	
			±20%	C1608X5R1C475M080AC	C1608X5R1A685M080AC	C1608X5R0J685M080AB	
	2012	0.60±0.15	±10%	C2012X5R1C685K080AB	C2012X5R1A685K060AC		
			±20%	C2012X5R1C685M080AB	C2012X5R1A685M060AC		
6.8 µF	1005	0.50+0.15,-0.10	±10%		C1005X5R1A475K085AB		
			±20%		C2012X5R1C475M085AB		
	1608	0.80±0.10	±10%	C1608X5R1C685K080AB	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C1608X5R1C685M080AB	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
	2012	0.85±0.15	±10%	C2012X5R1C685K085AC	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C2012X5R1C685M085AC	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
6.8 µF	1005	0.50+0.15,-0.10	±10%		C1005X5R1A475K085AB		
			±20%		C2012X5R1C475M085AB		
	1608	0.80±0.10	±10%	C1608X5R1C685K080AB	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C1608X5R1C685M080AB	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
	2012	0.85±0.15	±10%	C2012X5R1C685K085AC	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C2012X5R1C685M085AC	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
6.8 µF	1005	0.50+0.15,-0.10	±10%		C1005X5R1A475K085AB		
			±20%		C2012X5R1C475M085AB		
	1608	0.80±0.10	±10%	C1608X5R1C685K080AB	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C1608X5R1C685M080AB	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
	2012	0.85±0.15	±10%	C2012X5R1C685K085AC	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C2012X5R1C685M085AC	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
6.8 µF	1005	0.50+0.15,-0.10	±10%		C1005X5R1A475K085AB		
			±20%		C2012X5R1C475M085AB		
	1608	0.80±0.10	±10%	C1608X5R1C685K080AB	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C1608X5R1C685M080AB	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
	2012	0.85±0.15	±10%	C2012X5R1C685K085AC	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C2012X5R1C685M085AC	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
6.8 µF	1005	0.50+0.15,-0.10	±10%		C1005X5R1A475K085AB		
			±20%		C2012X5R1C475M085AB		
	1608	0.80±0.10	±10%	C1608X5R1C685K080AB	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C1608X5R1C685M080AB	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
	2012	0.85±0.15	±10%	C2012X5R1C685K085AC	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C2012X5R1C685M085AC	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
6.8 µF	1005	0.50+0.15,-0.10	±10%		C1005X5R1A475K085AB		
			±20%		C2012X5R1C475M085AB		
	1608	0.80±0.10	±10%	C1608X5R1C685K080AB	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C1608X5R1C685M080AB	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
	2012	0.85±0.15	±10%	C2012X5R1C685K085AC	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C2012X5R1C685M085AC	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
6.8 µF	1005	0.50+0.15,-0.10	±10%		C1005X5R1A475K085AB		
			±20%		C2012X5R1C475M085AB		
	1608	0.80±0.10	±10%	C1608X5R1C685K080AB	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C1608X5R1C685M080AB	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
	2012	0.85±0.15	±10%	C2012X5R1C685K085AC	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C2012X5R1C685M085AC	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
6.8 µF	1005	0.50+0.15,-0.10	±10%		C1005X5R1A475K085AB		
			±20%		C2012X5R1C475M085AB		
	1608	0.80±0.10	±10%	C1608X5R1C685K080AB	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C1608X5R1C685M080AB	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
	2012	0.85±0.15	±10%	C2012X5R1C685K085AC	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C2012X5R1C685M085AC	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
6.8 µF	1005	0.50+0.15,-0.10	±10%		C1005X5R1A475K085AB		
			±20%		C2012X5R1C475M085AB		
	1608	0.80±0.10	±10%	C1608X5R1C685K080AB	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C1608X5R1C685M080AB	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
	2012	0.85±0.15	±10%	C2012X5R1C685K085AC	C2012X5R1A685K085AB	C2012X5R0J685K085AB	
			±20%	C2012X5R1C685M085AC	C2012X5R1A685M085AB	C2012X5R0J685M085AB	
6.8 µF	1005	0.50+0.15,-0.10	±10%		C1005X5R1A475K085AB		
			±20%		C2012X5R1C475M085AB		
	1608	0.80±0.10	±10%	C1608X5R1C685K080AB	C2012X5R1A685K085AB	C2012X5R0J685K085AB	

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

X5R (-55 to +85°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers			
				Rated voltage: DC16V	Rated voltage: DC10V	Rated voltage: DC6.3V	Rated voltage: DC4V
10 µF	1608	0.80±0.10	±10%		C1608X5R1A106K080AC	C1608X5R0J106K080AB	
			±20%		C1608X5R1A106M080AC	C1608X5R0J106M080AB	
	2012	0.85±0.15	±10%	C2012X5R1C106K085AC	C2012X5R1A106K085AB	C2012X5R0J106K085AB	
			±20%	C2012X5R1C106M085AC	C2012X5R1A106M085AB	C2012X5R0J106M085AB	
	3216	1.60±0.20	±10%	C3216X5R1C106K160AA			
			±20%	C3216X5R1C106M160AA			
15 µF	3225	2.00±0.20	±10%	C3225X5R1C106K200AA			
			±20%	C3225X5R1C106M200AA			
	1608	0.80±0.20	±20%		C1608X5R1A156M080AC	C1608X5R0J156M080AC	C1608X5R0G156M080AA
			±20%		C2012X5R1A156M085AC	C2012X5R0J156M085AB	
	2012	0.85±0.15	±20%	C2012X5R1C156M125AC	C2012X5R1A156M125AB		
			±20%	C2012X5R1C156M125AC	C2012X5R1A156M125AB		
22 µF	3216	1.60±0.20	±20%	C3216X5R1C156M160AB			
			±20%				
	3225	2.30±0.20	±20%		C3225X5R1A156M230AA		
			±20%	C3225X5R1C156M250AA			
	1608	0.80±0.20	±20%		C1608X5R1A226M080AC	C1608X5R0J226M080AC	C1608X5R0G226M080AA
			±20%	C2012X5R1C226M085AC	C2012X5R1A226M085AC	C2012X5R0J226M085AB	
33 µF	2012	1.25±0.20	±10%	C2012X5R1C226K125AC	C2012X5R1A226K125AB	C2012X5R0J226K125AB	
			±20%	C2012X5R1C226M125AC	C2012X5R1A226M125AB		
	3216	1.60±0.20	±20%	C3216X5R1C226M160AB			
			±20%				
	3225	2.00±0.20	±10%			C3225X5R0J226K200AA	
			±20%			C3225X5R0J226M200AA	
47 µF	3225	2.30±0.20	±20%		C3225X5R1A226M230AA		
			±10%	C3225X5R1C226K250AA			
	4532	2.50±0.30	±20%	C3225X5R1C226M250AA			
			±20%	C4532X5R1C226M200KA			
	2012	1.25±0.20	±20%	C4532X5R1C226M230KA	C4532X5R1A226M230KA		
			±20%	C4532X5R1C226M230KA	C4532X5R1A226M230KA		
68 µF	3216	1.60±0.20	±20%	C3216X5R1C336M160AB	C3216X5R1A336M160AB		
			±20%	C3216X5R1C336M160AB	C3216X5R1A336M160AB		
	3225	2.00±0.20	±20%	C3225X5R1A336M200AC	C3225X5R0J336M200AA		
			±20%	C3225X5R1A336M200AC	C3225X5R0J336M200AA		
	4532	2.30±0.20	±20%		C4532X5R1A336M230KA		
			±20%	C4532X5R1C336M250KA			
100 µF	5750	2.00±0.20	±20%	C5750X5R1C336M200KA			
			±20%	C5750X5R1C336M200KA			
	2012	1.25±0.20	±20%		C2012X5R1A476M125AC	C2012X5R0J476M125AC	C2012X5R0G476M125AB
			±20%	C3216X5R1C476M160AB	C3216X5R1A476M160AB		
	3225	2.50±0.35,-0.30	±20%		C3225X5R1A476M250AC	C3225X5R0J476M250AA	
			±20%		C3225X5R1A476M250AC	C3225X5R0J476M250AA	
220 µF	4532	2.50±0.30	±20%		C4532X5R1A476M280KA		
			±20%				
	5750	2.80±0.30	±20%	C5750X5R1C476M230KA			
			±20%				
	3216	1.60±0.30,-0.10	±20%		C3216X5R1A686M160AC	C3216X5R0J686M160AB	
			±20%		C3216X5R1A686M160AC	C3216X5R0J686M160AB	
470 µF	4532	2.80±0.30	±20%			C4532X5R0J686M280KA	
			±20%				
	5750	2.30±0.20	±20%		C5750X5R1A686M230KA		
			±20%				
	3216	1.60±0.30,-0.10	±20%		C3216X5R1A107M160AC	C3216X5R0J107M160AB	C3216X5R0G107M160AB
			±20%		C3225X5R1A107M250AC	C3225X5R0J107M250AB	
1000 µF	4532	2.80±0.30	±20%		C4532X5R1A107M280KC	C4532X5R0J107M280KA	
			±20%		C5750X5R1A107M280KC	C5750X5R0J107M280KA	

Capacitance range table

X5S (-55 to +85°C, ±22%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers
				Rated voltage: DC6.3V
220 µF	3225	2.50±0.40,-0.30	±20%	C3225X5S0J227M250AC

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

X6S (-55 to +105°C, ±22%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC50V	Rated voltage: DC35V	Rated voltage: DC25V
2.2 nF	0603	0.30±0.03	±10%			C0603X6S1E222K030BA
			±20%			C0603X6S1E222M030BA
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
			±20%			C1005X6S1E154M050BC
150 nF	1608	0.80±0.10	±10%	C1608X6S1H154K080AB	C1608X6S1V154K080AB	
			±20%	C1608X6S1H154M080AB	C1608X6S1V154M080AB	
220 nF	1005	0.50±0.05	±10%			C1005X6S1E224K050BC
			±20%			C1005X6S1E224M050BC
220 nF	1608	0.80±0.10	±10%	C1608X6S1H224K080AB	C1608X6S1V224K080AB	
			±20%	C1608X6S1H224M080AB	C1608X6S1V224M080AB	
330 nF	1608	0.80±0.10	±10%	C1608X6S1H334K080AB	C1608X6S1V334K080AB	C1608X6S1E334K080AB
			±20%	C1608X6S1H334M080AB	C1608X6S1V334M080AB	C1608X6S1E334M080AB
470 nF	1608	0.80±0.10	±10%	C1608X6S1H474K080AB	C1608X6S1V474K080AB	C1608X6S1E474K080AB
			±20%	C1608X6S1H474M080AB	C1608X6S1V474M080AB	C1608X6S1E474M080AB
470 nF	2012	1.25±0.20	±10%	C2012X6S1H474K125AB		
			±20%	C2012X6S1H474M125AB		
680 nF	1608	0.80±0.10	±10%	C1608X6S1H684K080AC	C1608X6S1V684K080AB	C1608X6S1E684K080AB
			±20%	C1608X6S1H684M080AC	C1608X6S1V684M080AB	C1608X6S1E684M080AB
680 nF	2012	1.25±0.20	±10%	C2012X6S1H684K125AB		
			±20%	C2012X6S1H684M125AB		
1 µF	1608	0.80±0.10	±10%	C1608X6S1H105K080AC	C1608X6S1V105K080AB	C1608X6S1E105K080AB
			±20%	C1608X6S1H105M080AC	C1608X6S1V105M080AB	C1608X6S1E105M080AB
1 µF	2012	0.85±0.15	±10%	C2012X6S1H105K085AB	C2012X6S1V105K085AB	C2012X6S1E105K085AB
			±20%	C2012X6S1H105M085AB	C2012X6S1V105M085AB	C2012X6S1E105M085AB
1 µF	2012	1.25±0.20	±10%	C2012X6S1H105K125AB		
			±20%	C2012X6S1H105M125AB		
1.5 µF	2012	1.25±0.20	±10%	C2012X6S1H155K125AB	C2012X6S1V155K125AB	C2012X6S1E155K125AB
			±20%	C2012X6S1H155M125AB	C2012X6S1V155M125AB	C2012X6S1E155M125AB
1.5 µF	3216	1.60±0.20	±10%	C3216X6S1H155K160AB	C3216X6S1V155K160AB	
			±20%	C3216X6S1H155M160AB	C3216X6S1V155M160AB	
2.2 µF	2012	0.85±0.15	±10%	C2012X6S1H225K085AC	C2012X6S1V225K085AB	C2012X6S1E225K085AB
			±20%	C2012X6S1H225M085AC	C2012X6S1V225M085AB	C2012X6S1E225M085AB
2.2 µF	2012	1.25±0.20	±10%	C2012X6S1H225K125AB	C2012X6S1V225K125AB	C2012X6S1E225K125AC
			±20%	C2012X6S1H225M125AB	C2012X6S1V225M125AB	C2012X6S1E225M125AC
2.2 µF	3216	1.60±0.20	±10%	C3216X6S1H225K160AB	C3216X6S1V225K160AB	
			±20%	C3216X6S1H225M160AB	C3216X6S1V225M160AB	

• Gray: NRND (Not Recommended for New Designs)

• Click the catalog numbers for details.

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

• Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range table

X6S (-55 to +105°C, ±22%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC50V	Rated voltage: DC35V	Rated voltage: DC25V
3.3 µF	2012	1.25±0.20	±10%	C2012X6S1H335K125AC	C2012X6S1V335K125AB	C2012X6S1E335K125AC
			±20%	C2012X6S1H335M125AC	C2012X6S1V335M125AB	C2012X6S1E335M125AC
	3216	1.60±0.20	±10%	C3216X6S1H335K160AB	C3216X6S1V335K160AB	
			±20%	C3216X6S1H335M160AB	C3216X6S1V335M160AB	
4.7 µF	2012	1.25±0.20	±10%	C2012X6S1H475K125AC	C2012X6S1V475K125AB	C2012X6S1E475K125AC
			±20%	C2012X6S1H475M125AC	C2012X6S1V475M125AB	C2012X6S1E475M125AC
	3216	0.85±0.15	±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	3216	1.60±0.20	±10%		C3216X6S1V685K160AC	C3216X6S1E685K160AB
			±20%		C3216X6S1V685M160AC	C3216X6S1E685M160AB
	3225	2.50±0.30	±10%	C3225X6S1H685K250AC	C3225X6S1V685K250AC	C3225X6S1E685K250AB
			±20%	C3225X6S1H685M250AC	C3225X6S1V685M250AC	C3225X6S1E685M250AB
10 µF	3216	1.60±0.20	±10%		C3216X6S1V106K160AC	C3216X6S1E106K160AB
			±20%		C3216X6S1V106M160AC	C3216X6S1E106M160AB
	3225	2.50±0.30	±10%	C3225X6S1H106K250AC	C3225X6S1V106K250AC	C3225X6S1E106K250AC
			±20%	C3225X6S1H106M250AC	C3225X6S1V106M250AC	C3225X6S1E106M250AC
22 µF	3216	1.60+0.30,-0.10	±20%			C3216X6S1E226M160AC

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range table

X6S (-55 to +105°C, ±22%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers			
				Rated voltage: DC16V	Rated voltage: DC10V	Rated voltage: DC6.3V	Rated voltage: DC4V
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
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%	C0603X6S1C222K030BA	C0603X6S1A222K030BA	C0603X6S0J222K030BA	
			±20%	C0603X6S1C222M030BA	C0603X6S1A222M030BA	C0603X6S0J222M030BA	
4.7 nF	0603	0.30±0.03	±10%	C0603X6S1C472K030BA	C0603X6S1A472K030BA	C0603X6S0J472K030BA	
			±20%	C0603X6S1C472M030BA	C0603X6S1A472M030BA	C0603X6S0J472M030BA	
10 nF	0603	0.30±0.03	±10%		C0603X6S1A103K030BA	C0603X6S0J103K030BA	
			±20%		C0603X6S1A103M030BA	C0603X6S0J103M030BA	
22 nF	0603	0.30±0.03	±10%	C0603X6S1C223K030BC	C0603X6S1A223K030BB		
			±20%	C0603X6S1C223M030BC	C0603X6S1A223M030BB		
47 nF	0603	0.30±0.03	±10%	C0603X6S1C473K030BC	C0603X6S1A473K030BB		
			±20%	C0603X6S1C473M030BC	C0603X6S1A473M030BB		
100 nF	0603	0.30±0.03	±10%			C0603X6S0J104K030BC	
			±20%	C0603X6S1C104M030BC		C0603X6S0J104M030BC	
	1005	0.50±0.05	±10%			C1005X6S0J104K050BA	C1005X6S0G104K050BA
			±20%			C1005X6S0J104M050BA	C1005X6S0G104M050BA
150 nF	0603	0.30±0.03	±10%			C0603X6S0J154K030BC	C0603X6S0G154K030BB
			±20%			C0603X6S0J154M030BC	C0603X6S0G154M030BB
	1005	0.50±0.05	±10%	C1005X6S1C154K050BB			
			±20%	C1005X6S1C154M050BB			
220 nF	0603	0.30±0.03	±10%			C0603X6S0J224K030BC	C0603X6S0G224K030BB
			±20%			C0603X6S0J224M030BC	C0603X6S0G224M030BB
	1005	0.50±0.05	±10%	C1005X6S1C224K050BB	C0603X6S1A224K030BC		
			±20%	C1005X6S1C224M050BB			
330 nF	0603	0.30±0.05	±10%				C0603X6S0G334K030BC
			±20%				C0603X6S0G334M030BC
	1005	0.50±0.05	±10%	C1005X6S1C334K050BC	C1005X6S1A334K050BC	C1005X6S0J334K050BC	C1005X6S0G334K050BB
			±20%	C1005X6S1C334M050BC	C1005X6S1A334M050BC	C1005X6S0J334M050BC	C1005X6S0G334M050BB
470 nF	0603	0.30±0.05	±20%				C0603X6S0G474M030BC
	1005	0.50±0.05	±10%	C1005X6S1C474K050BC	C1005X6S1A474K050BC		C1005X6S0G474K050BB
680 nF	1005	0.50±0.05	±10%	C1005X6S1C684K050BC	C1005X6S1A684K050BC		C1005X6S0G684K050BB
			±20%	C1005X6S1C684M050BC	C1005X6S1A684M050BC		C1005X6S0G684M050BB
	1608	0.80±0.10	±10%	C1608X6S1C684K080AC			
			±20%	C1608X6S1C684M080AC			
1 µF	1005	0.50±0.05	±10%	C1005X6S1C105K050BC	C1005X6S1A105K050BC		
			±20%	C1005X6S1C105M050BC	C1005X6S1A105M050BC		
	1608	0.80±0.10	±10%		C1608X6S1A105K080AC	C1608X6S0J105K080AC	
			±20%	C1608X6S1C105K080AC	C1608X6S1A105M080AC	C1608X6S0J105M080AC	

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range table

X6S (-55 to +105°C, ±22%)

Capaci- tance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers					
				Rated voltage: DC16V	Rated voltage: DC10V	Rated voltage: DC6.3V	Rated voltage: DC4V		
1.5 µF	1005	0.50+0.15,-0.10	±10%	C1005X6S1C155K050BC					
			±20%	C1005X6S1C155M050BC					
		0.50±0.05	±10%				C1005X6S0J155K050BC	C1005X6S0G155K050BC	
			±20%				C1005X6S0J155M050BC	C1005X6S0G155M050BC	
		0.50±0.10	±10%	C1005X6S1A155K050BC					
			±20%	C1005X6S1A155M050BC					
1608	0.80±0.10	±10%	C1608X6S1C155K080AC	C1608X6S1A155K080AB	C1608X6S0J155K080AB				
		±20%	C1608X6S1C155M080AC	C1608X6S1A155M080AB	C1608X6S0J155M080AB				
2.2 µF	1005	0.50+0.15,-0.10	±10%	C1005X6S1C225K050BC					
			±20%	C1005X6S1C225M050BC					
		0.50±0.05	±10%				C1005X6S0J225K050BC	C1005X6S0G225K050BC	
			±20%				C1005X6S0J225M050BC	C1005X6S0G225M050BC	
		0.50±0.10	±10%	C1005X6S1A225K050BC					
			±20%	C1005X6S1A225M050BC					
1608	0.80±0.10	±10%	C1608X6S1C225K080AC	C1608X6S1A225K080AB	C1608X6S0J225K080AB				
		±20%	C1608X6S1C225M080AC	C1608X6S1A225M080AB	C1608X6S0J225M080AB				
2012	0.85±0.15	±10%	C2012X6S1C225K085AB						
		±20%	C2012X6S1C225M085AB						
3.3 µF	1005	0.50±0.10	±10%				C1005X6S0G335K050BC		
			±20%				C1005X6S0G335M050BC		
		0.80±0.10	±10%	C1608X6S1A335K080AC			C1608X6S0J335K080AB		
			±20%	C1608X6S1A335M080AC			C1608X6S0J335M080AB		
		0.80±0.20	±10%	C1608X6S1C335K080AC					
			±20%	C1608X6S1C335M080AC					
2012	1.25±0.20	±10%	C2012X6S1C335K125AC						
		±20%	C2012X6S1C335M125AC						
4.7 µF	1005	0.50+0.15,-0.10	±20%	C1005X6S0G475M050BC					
			±10%	C1608X6S1A475K080AC			C1608X6S0J475K080AB		
		0.80±0.10	±20%	C1608X6S1A475M080AC			C1608X6S0J475M080AB		
			±10%	C1608X6S1C475K080AC					
		0.80±0.20	±20%	C1608X6S1C475M080AC					
			±10%	C2012X6S1C475K085AC					
6.8 µF	1005	0.85±0.15	±20%	C2012X6S1C475M085AC					
			±10%	C2012X6S1C475K125AC					
		1.25±0.20	±20%	C2012X6S1C475M125AC					
			±10%	C2012X6S1C475K125AC					
		0.80±0.10	±20%				C1608X6S0G685K080AC		
			±10%				C1608X6S0G685M080AC		
10 µF	1608	0.80±0.20	±20%	C1608X6S1A685K080AC			C1608X6S0J685K080AB		
			±10%	C1608X6S1A685M080AC			C1608X6S0J685M080AB		
		0.85±0.15	±20%	C2012X6S1A685K085AC			C2012X6S0J685K085AB		
			±10%	C2012X6S1A685M085AC			C2012X6S0J685M085AB		
		1.25±0.20	±20%	C2012X6S1C685K125AC					
			±10%	C2012X6S1C685M125AC					
10 µF	3216	0.85±0.15	±20%	C3216X6S1A685K085AB					
			±10%	C3216X6S1A685M085AB					
		1.60±0.20	±20%	C3216X6S1C685K160AC					
			±10%	C3216X6S1C685M160AC					
		10 µF	1608	0.80±0.10	±20%	C1608X6S1A106M080AC			C1608X6S0J106M080AC
					±10%	C2012X6S1A106K085AC			C2012X6S0J106K085AC
0.85±0.15	±20%			C2012X6S1C106M085AC			C2012X6S0J106M085AC		
	±10%			C2012X6S1C106K125AC			C2012X6S0J106K125AB		
1.25±0.20	±20%			C2012X6S1C106M125AC			C2012X6S0J106M125AB		
	±10%			C2012X6S1C106K125AC			C2012X6S0J106M125AB		
10 µF	3216	0.85±0.15	±20%	C3216X6S1A106K085AB					
			±10%	C3216X6S1A106M085AB					
		1.60±0.20	±20%	C3216X6S1C106K160AB			C3216X6S0J106K160AC		
			±10%	C3216X6S1C106M160AB			C3216X6S0J106M160AC		

Capacitance range table

X6S (-55 to +105°C, ±22%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers			
				Rated voltage: DC16V	Rated voltage: DC10V	Rated voltage: DC6.3V	Rated voltage: DC4V
15 µF	2012	0.85±0.15	±20%				C2012X6S0G156M085AC
		1.25±0.20	±20%	C2012X6S1C156M125AC	C2012X6S1A156M125AC	C2012X6S0J156M125AB	
	3216	1.60±0.20	±20%	C3216X6S1C156M160AC	C3216X6S1A156M160AB	C3216X6S0J156M160AB	
	1608	0.80±0.20	±20%				C1608X6S0G226M080AC
22 µF	2012	0.85±0.15	±20%			C2012X6S0J226M085AC	C2012X6S0G226M085AC
		1.25±0.20	±20%	C2012X6S1C226M125AC	C2012X6S1A226M125AC	C2012X6S0J226M125AB	
	3216	1.60±0.20	±20%	C3216X6S1C226M160AC	C3216X6S1A226M160AB	C3216X6S0J226M160AB	
	3225	2.50±0.30	±20%	C3225X6S1C226M250AC			
33 µF	2012	1.25±0.20	±20%				C2012X6S0G336M125AC
	3216	1.60±0.20	±20%		C3216X6S1A336M160AC	C3216X6S0J336M160AB	
	2012	1.25±0.20	±20%				C2012X6S0G476M125AC
47 µF	3216	1.60±0.20	±20%		C3216X6S1A476M160AC	C3216X6S0J476M160AB	
	3225	2.50+0.35,-0.30	±20%			C3225X6S0J476M250AC	
68 µF	3216	1.60+0.30,-0.10	±20%				C3216X6S0G686M160AC
	3216	1.60+0.30,-0.10	±20%				C3216X6S0G107M160AC
100 µF	3225	2.50+0.40,-0.30	±20%		C3225X6S1A107M250AC	C3225X6S0J107M250AB	
	4532	2.80±0.30	±20%			C4532X6S0J107M280KC	
220 µF	3225	2.50+0.40,-0.30	±20%				C3225X6S0G227M250AC

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

X7R (-55 to +125°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC50V	Rated voltage: DC35V	Rated voltage: DC25V
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
	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
			±20%			C0603X7R1E222M030BA
	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	1005	0.50±0.05	±10%	C1005X7R1H472K050BA		
			±20%	C1005X7R1H472M050BA		
	1608	0.80±0.10	±10%	C1608X7R1H472K080AA		
			±20%	C1608X7R1H472M080AA		
6.8 nF	1005	0.50±0.05	±10%	C1005X7R1H682K050BA		
			±20%	C1005X7R1H682M050BA		
	1005	0.50±0.05	±10%	C1005X7R1H103K050BB	C1005X7R1V103K050BB	C1005X7R1E103K050BB
			±20%	C1005X7R1H103M050BB	C1005X7R1V103M050BB	C1005X7R1E103M050BB
10 nF	1608	0.80±0.10	±10%	C1608X7R1H103K080AA		C1608X7R1E103K080AA
			±20%	C1608X7R1H103M080AA		
	1005	0.50±0.05	±10%	C1005X7R1H153K050BB	C1005X7R1V153K050BB	
			±20%	C1005X7R1H153M050BB	C1005X7R1V153M050BB	
15 nF	1608	0.80±0.10	±10%	C1608X7R1H153K080AA		
			±20%	C1608X7R1H153M080AA		

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range table

X7R (-55 to +125°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers			
				Rated voltage: DC75V	Rated voltage: DC50V	Rated voltage: DC35V	Rated voltage: DC25V
22 nF	0603	0.30±0.05	±10%		C0603X7R1H223K030BB		
	1005	0.50±0.05	±10%		C1005X7R1H223K050BB	C1005X7R1V223K050BB	C1005X7R1E223K050BB
			±20%		C1005X7R1H223M050BB	C1005X7R1V223M050BB	C1005X7R1E223M050BB
33 nF	1608	0.80±0.10	±10%		C1608X7R1H223K080AA		
			±20%		C1608X7R1H223M080AA		
	1005	0.50±0.05	±10%		C1005X7R1H333K050BB	C1005X7R1V333K050BB	
47 nF			±20%		C1005X7R1H333M050BB	C1005X7R1V333M050BB	
	1608	0.80±0.10	±10%		C1608X7R1H333K080AA		
			±20%		C1608X7R1H333M080AA		
68 nF	0603	0.30±0.09,-0.03	±10%			C0603X7R1V473K030BC	C0603X7R1E473K030BB
	1005	0.50±0.05	±10%		C1005X7R1H473K050BB	C1005X7R1V473K050BB	C1005X7R1E473K050BC
			±20%		C1005X7R1H473M050BB	C1005X7R1V473M050BB	C1005X7R1E473M050BC
100 nF	1608	0.80±0.10	±10%		C1608X7R1H473K080AA		
			±20%		C1608X7R1H473M080AA		
	1005	0.50±0.05	±10%		C1005X7R1H683K050BB	C1005X7R1V683K050BB	C1005X7R1E683K050BB
150 nF			±20%		C1005X7R1H683M050BB	C1005X7R1V683M050BB	C1005X7R1E683M050BB
	1608	0.80±0.10	±10%		C1608X7R1H683K080AA		
			±20%		C1608X7R1H683M080AA		
220 nF	1005	0.50±0.05	±10%		C1005X7R1H104K050BB	C1005X7R1V104K050BB	C1005X7R1E104K050BB
			±20%		C1005X7R1H104M050BB	C1005X7R1V104M050BB	C1005X7R1E104M050BB
	1608	0.80±0.10	±10%		C1608X7R1H104K080AA		C1608X7R1E104K080AA
330 nF			±20%		C1608X7R1H104M080AA		C1608X7R1E104M080AA
	1005	0.50±0.05	±10%			C1005X7R1V154K050BC	C1005X7R1E154K050BB
			±20%			C1005X7R1V154M050BC	C1005X7R1E154M050BB
470 nF	1608	0.80±0.10	±10%		C1608X7R1H154K080AB	C1608X7R1V154K080AB	C1608X7R1E154K080AA
			±20%		C1608X7R1H154M080AB	C1608X7R1V154M080AB	C1608X7R1E154M080AA
	1005	0.50±0.15,-0.05	±10%	C1005X7R1N224K050BC	C1005X7R1H224K050BB		
680 nF	1005	0.50±0.05	±10%			C1005X7R1V224K050BC	C1005X7R1E224K050BB
			±20%			C1005X7R1V224M050BC	C1005X7R1E224M050BB
	1608	0.80±0.10	±10%		C1608X7R1H224K080AB	C1608X7R1V224K080AB	C1608X7R1E224K080AC
1000 nF			±20%		C1608X7R1H224M080AB	C1608X7R1V224M080AB	C1608X7R1E224M080AC
	2012	1.25±0.20	±10%		C2012X7R1H224K125AA		
			±20%		C2012X7R1H224M125AA		
1500 nF	3216	1.15±0.15	±10%		C3216X7R1H224K115AA		
			±20%		C3216X7R1H224M115AA		
	1608	0.80±0.10	±10%		C1608X7R1H334K080AC	C1608X7R1V334K080AB	C1608X7R1E334K080AC
2200 nF			±20%		C1608X7R1H334M080AC	C1608X7R1V334M080AB	C1608X7R1E334M080AC
	2012	1.25±0.20	±10%		C2012X7R1H334K125AA		
			±20%		C2012X7R1H334M125AA		
3300 nF	3216	1.60±0.20	±10%		C3216X7R1H334K160AA		
			±20%		C3216X7R1H334M160AA		
	1608	0.80±0.10	±10%		C1608X7R1H474K080AC	C1608X7R1V474K080AB	C1608X7R1E474K080AB
4700 nF			±20%		C1608X7R1H474M080AC	C1608X7R1V474M080AB	C1608X7R1E474M080AB
	2012	1.25±0.20	±10%		C2012X7R1H474K125AB	C2012X7R1V474K125AB	C2012X7R1E474K125AA
			±20%		C2012X7R1H474M125AB	C2012X7R1V474M125AB	C2012X7R1E474M125AA
6800 nF	3216	1.60±0.20	±10%		C3216X7R1H474K160AA		
			±20%		C3216X7R1H474M160AA		
	1608	0.80±0.10	±10%			C1608X7R1V684K080AC	C1608X7R1E684K080AB
10000 nF			±20%			C1608X7R1V684M080AC	C1608X7R1E684M080AB
	2012	1.25±0.20	±10%		C2012X7R1H684K125AB	C2012X7R1V684K125AB	C2012X7R1E684K125AB
			±20%		C2012X7R1H684M125AB	C2012X7R1V684M125AB	C2012X7R1E684M125AB
15000 nF	3216	1.60±0.20	±10%		C3216X7R1H684K160AA		
			±20%		C3216X7R1H684M160AA		
	1608	0.80±0.10	±10%				

• Gray: NRND (Not Recommended for New Designs)

• Click the catalog numbers for details.

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

• Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range table

X7R (-55 to +125°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers			
				Rated voltage: DC75V	Rated voltage: DC50V	Rated voltage: DC35V	Rated voltage: DC25V
1 µF	1608	0.80+0.20,-0.10	±10%	C1608X7R1N105K080AC	C1608X7R1H105K080AB		
		0.80±0.10	±10%			C1608X7R1V105K080AC	C1608X7R1E105K080AB
	2012	0.85±0.15	±10%		C2012X7R1H105K085AC	C2012X7R1V105K085AB	C2012X7R1E105K085AB
			±20%		C2012X7R1H105M085AC	C2012X7R1V105M085AB	C2012X7R1E105M085AB
		1.25±0.20	±10%		C2012X7R1H105K125AB	C2012X7R1V105K125AB	C2012X7R1E105K125AB
			±20%		C2012X7R1H105M125AB	C2012X7R1V105M125AB	C2012X7R1E105M125AB
	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	C2012X7R1E155K125AC
			±20%		C2012X7R1H155M125AC	C2012X7R1V155M125AB	C2012X7R1E155M125AC
	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	±10%			C2012X7R1V225K085AC	C2012X7R1E225K085AB
			±20%			C2012X7R1V225M085AC	C2012X7R1E225M085AB
		1.25±0.20	±10%		C2012X7R1H225K125AC	C2012X7R1V225K125AB	C2012X7R1E225K125AB
			±20%		C2012X7R1H225M125AC	C2012X7R1V225M125AB	C2012X7R1E225M125AB
	3216	1.60±0.20	±10%		C3216X7R1H225K160AB	C3216X7R1V225K160AB	C3216X7R1E225K160AA
			±20%		C3216X7R1H225M160AB	C3216X7R1V225M160AB	C3216X7R1E225M160AA
	3225	2.00±0.20	±10%		C3225X7R1H225K200AB		
			±20%		C3225X7R1H225M200AB		
	4532	2.50±0.30	±10%		C3225X7R1H225K250AB		
			±20%		C3225X7R1H225M250AB		
3.3 µF	2012	1.25±0.20	±10%			C2012X7R1V335K125AC	C2012X7R1E335K125AB
			±20%			C2012X7R1V335M125AC	C2012X7R1E335M125AB
	3216	1.60±0.20	±10%		C3216X7R1H335K160AC	C3216X7R1V335K160AB	C3216X7R1E335K160AC
			±20%		C3216X7R1H335M160AC	C3216X7R1V335M160AB	C3216X7R1E335M160AC
	3225	1.60±0.20	±10%				C3225X7R1E335K160AA
			±20%				C3225X7R1E335M160AA
	4532	2.00±0.20	±10%		C3225X7R1H335K250AB		
			±20%		C3225X7R1H335M250AB		
	4532	2.00±0.20	±10%		C4532X7R1H335K200KA		
			±20%		C4532X7R1H335M200KA		
4.7 µF	2012	1.25+0.25,-0.15	±10%	C2012X7R1H475K125AC			
		1.25±0.20	±10%			C2012X7R1V475K125AC	C2012X7R1E475K125AB
	3216	0.85±0.15	±10%			C3216X7R1V475K085AC	C3216X7R1E475K085AB
			±20%			C3216X7R1V475M085AC	C3216X7R1E475M085AB
		1.60±0.20	±10%		C3216X7R1H475K160AC	C3216X7R1V475K160AB	C3216X7R1E475K160AC
			±20%		C3216X7R1H475M160AC	C3216X7R1V475M160AB	C3216X7R1E475M160AC
	3225	2.00±0.20	±10%				C3225X7R1E475K200AA
			±20%				C3225X7R1E475M200AA
	4532	2.00±0.20	±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		

• Gray: NRND (Not Recommended for New Designs)

• Click the catalog numbers for details.

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

• Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range table

X7R (-55 to +125°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers			
				Rated voltage: DC75V	Rated voltage: DC50V	Rated voltage: DC35V	Rated voltage: DC25V
6.8 µF	3216	1.60±0.20	±10%			C3216X7R1V685K160AC	C3216X7R1E685K160AB
			±20%			C3216X7R1V685M160AC	C3216X7R1E685M160AB
	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+0.30,-0.10	±10%		C3216X7R1H106K160AC		
		1.60±0.20	±10%			C3216X7R1V106K160AC	C3216X7R1E106K160AB
			±20%			C3216X7R1V106M160AC	C3216X7R1E106M160AB
			±10%	C3225X7R1N106K250AC	C3225X7R1H106K250AC		C3225X7R1E106K250AC
			±20%	C3225X7R1N106M250AC	C3225X7R1H106M250AC		C3225X7R1E106M250AC
	4532	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	3216	1.60+0.30,-0.10	±10%				C3216X7R1E156K160AB
			±20%				C3216X7R1E156M160AB
	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	±20%		C3225X7R1H226M250AC		C3225X7R1E226M250AB
	4532	2.50±0.30	±20%				C4532X7R1E226M250KC
	5750	2.50±0.30	±20%		C5750X7R1H226M250KB		C5750X7R1E226M250KA
47 µF	5750	2.30±0.20	±20%			C5750X7R1V476M230KC	C5750X7R1E476M230KB

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

X7R (-55 to +125°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers			
				Rated voltage: DC16V	Rated voltage: DC10V	Rated voltage: DC6.3V	Rated voltage: DC4V
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
1 nF	0402	0.20±0.02	±10%		C0402X7R1A102K020BC		
			±20%		C0402X7R1A102M020BC		
1.5 nF	0402	0.20±0.02	±10%		C0402X7R1A152K020BC		
			±20%		C0402X7R1A152M020BC		
2.2 nF	0603	0.30±0.03	±10%	C0603X7R1C222K030BA	C0603X7R1A222K030BA	C0603X7R0J222K030BA	
			±20%	C0603X7R1C222M030BA	C0603X7R1A222M030BA	C0603X7R0J222M030BA	
4.7 nF	0603	0.30±0.03	±10%	C0603X7R1C472K030BA	C0603X7R1A472K030BA	C0603X7R0J472K030BA	
			±20%	C0603X7R1C472M030BA	C0603X7R1A472M030BA	C0603X7R0J472M030BA	
10 nF	0603	0.30±0.03	±10%		C0603X7R1A103K030BA	C0603X7R0J103K030BA	
			±20%		C0603X7R1A103M030BA	C0603X7R0J103M030BC	
47 nF	1005	0.50±0.05	±10%	C1005X7R1C103K050BA			
			±20%	C1005X7R1C103M050BC			
68 nF	1005	0.50±0.05	±10%	C1005X7R1C683K050BC			
			±20%	C1005X7R1C683M050BC			
100 nF	1005	0.50±0.05	±10%	C1005X7R1C104K050BC	C1005X7R1A104K050BB		
			±20%	C1005X7R1C104M050BC			
150 nF	1005	0.50±0.05	±10%	C1005X7R1C154K050BC	C1005X7R1A154K050BB		
			±20%	C1005X7R1C154M050BC	C1005X7R1A154M050BB		
220 nF	1005	0.50±0.05	±10%	C1005X7R1C224K050BC	C1005X7R1A224K050BB		
			±20%	C1005X7R1C224M050BC	C1005X7R1A224M050BB		
330 nF	1608	0.80±0.10	±10%	C1608X7R1C224K080AC			
			±20%	C1608X7R1C224M080AC			
470 nF	1608	0.80±0.10	±10%	C1608X7R1C334K080AC			
			±20%	C1608X7R1C334M080AC			
680 nF	1608	0.80±0.10	±10%	C1608X7R1C474K080AC			
			±20%	C1608X7R1C474M080AC			
680 nF	1608	0.80±0.15, -0.10	±10%		C1608X7R1A684K080AC		
			±20%		C1608X7R1A684M080AC		
680 nF	2012	1.25±0.20	±10%	C2012X7R1C684K125AA			
			±20%	C2012X7R1C684M125AA			
1 µF	1608	0.80±0.15, -0.10	±10%		C1608X7R1A105K080AC		
			±20%		C1608X7R1A105M080AC		
1 µF	1608	0.80±0.10	±10%	C1608X7R1C105K080AC			
			±20%	C1608X7R1C105M080AC			
1 µF	2012	0.85±0.15	±10%	C2012X7R1C105K085AC			
			±20%	C2012X7R1C105M085AC			
1.5 µF	2012	1.25±0.20	±10%	C2012X7R1C105K125AA			
			±20%	C2012X7R1C105M125AA			
1.5 µF	1608	0.80±0.10	±10%		C1608X7R1A155K080AC	C1608X7R0J155K080AB	
			±20%		C1608X7R1A155M080AC	C1608X7R0J155M080AB	
2.2 µF	1608	0.80±0.10	±10%	C2012X7R1C155K125AB			
			±20%	C2012X7R1C155M125AB			
2.2 µF	1608	0.80±0.10	±10%	C1608X7R1A225K080AC	C1608X7R0J225K080AB		
			±20%	C1608X7R1A225M080AC	C1608X7R0J225M080AB		
2.2 µF	2012	0.85±0.15	±10%	C2012X7R1C225K085AB			
			±20%	C2012X7R1C225M085AB			
2.2 µF	2012	1.25±0.20	±10%	C2012X7R1C225K125AB			
			±20%	C2012X7R1C225M125AB			

• Gray: NRND (Not Recommended for New Designs)

• Click the catalog numbers for details.

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

• Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

X7R (-55 to +125°C, ±15%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC16V	Rated voltage: DC10V	Rated voltage: DC6.3V
3.3 µF	2012	1.25±0.20	±10%	C2012X7R1C335K125AB	C2012X7R1A335K125AC	
			±20%	C2012X7R1C335M125AB	C2012X7R1A335M125AC	
4.7 µF	2012	0.85±0.15	±10%		C2012X7R1A475K085AC	C2012X7R0J475K085AB
			±20%		C2012X7R1A475M085AC	C2012X7R0J475M085AB
		1.25±0.20	±10%	C2012X7R1C475K125AB	C2012X7R1A475K125AC	
			±20%	C2012X7R1C475M125AB	C2012X7R1A475M125AC	
	3216	0.85±0.15	±10%	C3216X7R1C475K085AB		
			±20%	C3216X7R1C475M085AB		
		1.60±0.20	±10%	C3216X7R1C475K160AB		
			±20%	C3216X7R1C475M160AB		
6.8 µF	2012	1.25±0.20	±10%		C2012X7R1A685K125AC	C2012X7R0J685K125AB
			±20%		C2012X7R1A685M125AC	C2012X7R0J685M125AB
	3216	1.60±0.20	±10%	C3216X7R1C685K160AC		
			±20%	C3216X7R1C685M160AC		
10 µF	1608	0.80+0.30,-0.10	±20%		C1608X7R1A106M080AT	
	2012	1.25±0.20	±10%		C2012X7R1A106K125AC	C2012X7R0J106K125AB
			±20%		C2012X7R1A106M125AC	C2012X7R0J106M125AB
	3216	0.85±0.15	±10%		C3216X7R1A106K085AC	C3216X7R0J106K085AB
			±20%		C3216X7R1A106M085AC	C3216X7R0J106M085AB
		1.60±0.20	±10%	C3216X7R1C106K160AC	C3216X7R1A106K160AC	
			±20%	C3216X7R1C106M160AC	C3216X7R1A106M160AC	
	3225	2.00±0.20	±10%	C3225X7R1C106K200AB		
			±20%	C3225X7R1C106M200AB		
	4532	2.30±0.20	±10%	C4532X7R1C106K230KA		
			±20%	C4532X7R1C106M230KA		
15 µF	3225	2.50±0.30	±20%	C3225X7R1C156M250AB		
22 µF	3225	2.30±0.20	±10%		C3225X7R1A226K230AC	
			±20%		C3225X7R1A226M230AC	
		2.50±0.30	±10%	C3225X7R1C226K250AC		
	4532	2.00±0.20	±20%	C4532X7R1C226M200KC		
			±20%	C4532X7R1C226M230KB		
	5750	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		

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range table

X7S (-55 to +125°C, ±22%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC50V	Rated voltage: DC35V	Rated voltage: DC25V
100 nF	0603	0.30+0.09,-0.03	±10%			C0603X7S1E104K030BC
470 nF	1005	0.50+0.15,-0.05	±10%	C1005X7S1H474K050BC	C1005X7S1V474K050BC	C1005X7S1E474K050BB
2.2 µF	1608	0.80+0.20,-0.10	±10%			C1608X7S1E225K080AB
6.8 µF	3225	2.50±0.30	±10%	C3225X7S1H685K250AB		
			±20%	C3225X7S1H685M250AB		
10 µF	2012	1.25+0.25,-0.15	±10%			C2012X7S1E106K125AC
	3225	2.50±0.30	±10%	C3225X7S1H106K250AB		
			±20%	C3225X7S1H106M250AB		
47 µF	3225	2.50±0.30	±20%			C3225X7S1E476M250AC

•Gray: NRND (Not Recommended for New Designs)

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range table

X7S (-55 to +125°C, ±22%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		Catalog numbers		Catalog numbers			
				Rated voltage: DC16V		Rated voltage: DC10V		Rated voltage: DC6.3V		Rated voltage: DC4V	
22 nF	0603	0.30±0.03	±10%			C0603X7S1A223K030BC	C0603X7S0J223K030BB				
			±20%			C0603X7S1A223M030BC	C0603X7S0J223M030BB				
47 nF	0603	0.30±0.03	±10%			C0603X7S1A473K030BC	C0603X7S0J473K030BB				
			±20%			C0603X7S1A473M030BC	C0603X7S0J473M030BB				
100 nF	0603	0.30+0.10,-0.03	±10%	C0603X7S1C104K030BB							
		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	
		0.30±0.05	±20%							C0603X7S0G224M030BC	
				±10%					C0603X7S0J224K030BC		
			±20%					C0603X7S0J224M030BC			
330 nF	1005	0.50±0.05	±10%	C1005X7S1C334K050BC	C1005X7S1A334K050BC	C1005X7S0J334K050BC		C1005X7S0G334K050BC			
			±20%	C1005X7S1C334M050BC	C1005X7S1A334M050BC	C1005X7S0J334M050BC		C1005X7S0G334M050BC			
470 nF	1005	0.50±0.05	±10%	C1005X7S1C474K050BC	C1005X7S1A474K050BC	C1005X7S0J474K050BB		C1005X7S0G474K050BB			
			±20%	C1005X7S1C474M050BC	C1005X7S1A474M050BC	C1005X7S0J474M050BB		C1005X7S0G474M050BB			
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	±20%			C1005X7S1A155M050BC					C1005X7S0G155K050BC
											C1005X7S0G155M050BC
		0.50±0.10	±10%					C1005X7S0J155K050BC			
			±20%					C1005X7S0J155M050BC			
	1608	0.80±0.10	±10%	C1608X7S1C155K080AC							
			±20%	C1608X7S1C155M080AC							
2.2 µF	1005	0.50+0.15,-0.10	±10%			C1005X7S1A225K050BC					
		0.50±0.05	±20%			C1005X7S1A225M050BC					C1005X7S0G225K050BC
											C1005X7S0G225M050BC
		0.50±0.10	±10%					C1005X7S0J225K050BC			
			±20%					C1005X7S0J225M050BC			
	1608	0.80±0.10	±10%	C1608X7S1C225K080AC	C1608X7S1A225K080AC	C1608X7S0J225K080AB		C1608X7S0G225K080AB			
			±20%	C1608X7S1C225M080AC	C1608X7S1A225M080AC	C1608X7S0J225M080AB		C1608X7S0G225M080AB			
3.3 µF	1608	0.80±0.10	±10%			C1608X7S0J335K080AC		C1608X7S0G335K080AC			
			±20%			C1608X7S0J335M080AC		C1608X7S0G335M080AC			
4.7 µF	1608	0.80±0.20	±10%			C1608X7S1A335K080AC					
		0.80±0.10	±20%			C1608X7S1A335M080AC					
									C1608X7S0J475K080AC		C1608X7S0G475K080AC
6.8 µF	1608	0.80±0.20	±10%					C1608X7S0J685K080AC		C1608X7S0G685K080AB	
		0.80±0.10	±20%					C1608X7S0J685M080AC		C1608X7S0G685M080AB	
10 µF	2012	1.25±0.20	±10%	C2012X7S1C685K125AC							
			±20%	C2012X7S1C685M125AC							
15 µF	3216	0.80±0.20	±20%					C1608X7S0J106M080AC		C1608X7S0G106M080AB	
		0.85±0.15	±10%					C2012X7S0J106K085AC		C2012X7S0G106K085AC	
				±20%					C2012X7S0J106M085AC		C2012X7S0G106M085AC
		1.25±0.20	±10%	C2012X7S1C106K125AC							
22 µF	3216	1.25±0.20	±20%					C2012X7S0J156M125AC		C2012X7S0G156M125AC	
								C3216X7S0J156M160AB		C3216X7S0G156M160AB	
33 µF	3216	1.60±0.20	±20%					C2012X7S1A226M125AC		C2012X7S0G226M125AC	
								C3216X7S1A226M160AC		C3216X7S0J226M160AB	
47 µF	3225	2.50+0.35,-0.30	±20%					C3216X7S0J336M160AC		C3216X7S0G336M160AB	
		1.60±0.20	±20%					C3216X7S0J476M160AC		C3216X7S0G476M160AB	
									C3225X7S0J476M250AC		
		2.50±0.30	±20%			C3225X7S1A476M250AC					

• Gray: NRND (Not Recommended for New Designs)

• Click the catalog numbers for details.

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

• Please note that the contents may change without any prior notice due to reasons such as upgrading.

Capacitance range table

X7T (-55 to +125°C, +22,-33%)

Capacitance	Size	Thickness (mm)	Cap Tolerance	Catalog numbers		
				Rated voltage: DC10V	Rated voltage: DC6.3V	Rated voltage: DC2.5V
10 μ F	1608	0.80+0.30,-0.10	$\pm 20\%$	C1608X7T1A106M080AC		
100 μ F	3225	2.50+0.40,-0.30	$\pm 20\%$	C3225X7T1A107M250AC	C3225X7T0J107M250AB	
220 μ F	3225	2.50+0.40,-0.30	$\pm 20\%$			C3225X7T0E227M250AC

•Click the catalog numbers for details.

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

•Please note that the contents may change without any prior notice due to reasons such as upgrading.