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## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

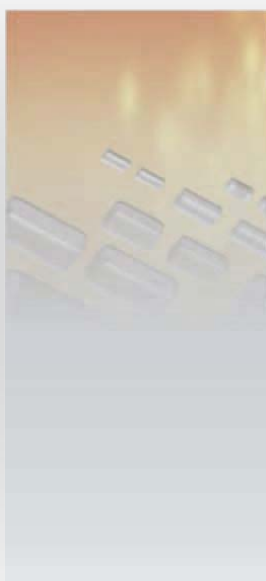


## MULTILAYER CERAMIC CHIP CAPACITORS



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

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



# REMINDERS

Please read before using this product

## SAFETY REMINDERS

### REMINDERS

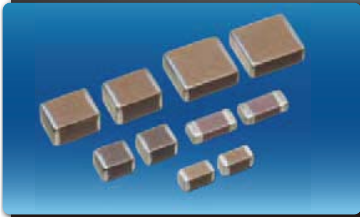
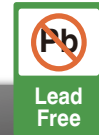
1. If you intend to use a product listed in this catalog for a purpose that may cause loss of life or other damage, you must contact our company’s sales window.
2. We may modify products or discontinue production of a product listed in this catalog without prior notification.
3. We provide “Delivery 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.
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Notice: Effective January 2013, TDK will use a new catalog number which adds product thickness and packaging specification detail. This new catalog number should be referenced on all catalog orders going forward, and is not applicable for OEM part number orders. Please be aware the last five digits of the catalog number will differ from the item description (internal control number) on the product label. Contact your local TDK Sales representative for more information.

(Example)

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

# MULTILAYER CERAMIC CHIP CAPACITORS



## C Series General (Up to 50V)

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

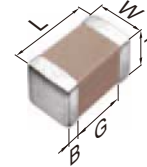
### Features

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

### Applications

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

### Shape & Dimensions



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

### Catalog Number Construction

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

#### Series Name

#### Dimensions L x W (mm)

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

\*Dimension tolerance are typical values

#### Temperature Characteristics

Temperature Characteristics	Temperature Coefficient of Capacitance Change	Temperature Range	Code	Rated Voltage (DC)
CH	0±60 ppm/°C	-25 to +85°C	0G	4V
C0G	0±30 ppm/°C	-55 to +125°C	0J	6.3V
JB	±10%	-25 to +85°C	1A	10V
X5R	±15%	-55 to +85°C	1C	16V
X6S	±22%	-55 to +105°C	1E	25V
X7R	±15%	-55 to +125°C	1V	35V
X7S	±22%	-55 to +125°C	1H	50V

#### Nominal Capacitance (pF)

The capacitance is expressed in three digit codes and in units of pico Farads (pF). The first and second digits identify the first and second significant figures of the capacitance. The third digit identifies the multiplier. R designates a decimal point.

Ex. 0R2 = 0.2pF; 103 = 10,000pF; 105 = 1,000,000pF = 1,000nF = 1µF

#### Capacitance Tolerance

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

#### Nominal Thickness

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

#### Packaging Style

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

#### Special Reserved Code

Code	Description
A, B, C	TDK Internal Code

⚠ 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 Chart

## EIA CC01005 [C0402]

### Capacitance Range Chart

Temperature Characteristics: C0G (0±30ppm/°C), CH (0±60ppm/°C), JB (±10%)

Rated Voltage: 16V (1C), 10V (1A), 6.3V (0J), 4.0V (0G)

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

Standard Thickness

█ 0.20 mm

█ Background gray: The product which is not recommended to a new design

█ Background red: The product which is planning to stop production \* Please confirm the schedule on product details information.

█ Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

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# MULTILAYER CERAMIC CHIP CAPACITORS



## Capacitance Range Chart

## EIA CC01005 [C0402]

### Capacitance Range Chart

Temperature Characteristics: X5R (±15%), X6S (±22%), X7R (±15%)

Rated Voltage: 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

Capacitance		Tolerance	X5R				X6S			X7R		
(pF)	Code		1C (16V)	1A (10V)	0J (6.3V)	0G (4V)	1A (10V)	0J (6.3V)	0G (4V)	1A (10V)	0J (6.3V)	0G (4V)
100	101	K:±10%	█				█	█	█	█	█	█
150	151		M:±20%	█				█	█	█	█	█
220	221			█				█	█	█	█	█
330	331			█				█	█	█	█	█
470	471			█				█	█	█	█	█
680	681			█				█	█	█	█	█
1,000	102	M:±20%		█	█	█				█		
1,500	152			█	█	█						
2,200	222			█	█	█						
3,300	332			█	█	█						
4,700	472			█	█	█						
6,800	682			█	█	█						
10,000	103			█	█	█						
22,000	223											
47,000	473											
100,000	104											
220,000	224											

Standard Thickness  
█ 0.20 mm

█ Background gray: The product which is not recommended to a new design

█ Background red: The product which is planning to stop production \* Please confirm the schedule on product details information.

█ Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

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# MULTILAYER CERAMIC CHIP CAPACITORS



## Capacitance Range Chart

## EIA CC0201 [C0603]

### Capacitance Range Chart

Temperature Characteristics: C0G (0±30ppm/°C), CH (0±60ppm/°C), JB (±10%), X5R (±15%)

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

Capacitance		Tolerance	C0G		CH		JB				X5R						
(pF)	Code		1H (50V)	1E (25V)	1H (50V)	1E (25V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)		
0.5	0R5	C:±0.25pF	█	█	█	█											
0.75	R75		█	█	█	█											
1	010		█	█	█	█											
1.5	1R5		█	█	█	█											
2	020		█	█	█	█											
2.2	2R2		█	█	█	█											
3	030		█	█	█	█											
3.3	3R3		█	█	█	█											
4	040		█	█	█	█											
4.7	4R7		█	█	█	█											
5	050	D:±0.50pF	█	█	█	█											
6	060		█	█	█	█											
6.8	6R8		█	█	█	█											
7	070		█	█	█	█											
8	080		█	█	█	█											
9	090		█	█	█	█											
10	100		█	█	█	█											
12	120		J:±5% K:±10% M:±20%	█	█	█	█										
15	150			█	█	█	█										
18	180			█	█	█	█										
22	220	█		█	█	█											
27	270	█		█	█	█											
33	330	█		█	█	█											
39	390	█		█	█	█											
47	470	█		█	█	█											
56	560	█		█	█	█											
68	680	█		█	█	█											
82	820	█	█	█	█												
100	101	K:±10% M:±20%					█				█						
150	151																
220	221																
330	331																
470	471																
680	681																
1,000	102																
1,500	152																
2,200	222																
3,300	332																
4,700	472																
6,800	682																
10,000	103																
15,000	153																
22,000	223																
33,000	333																
47,000	473																
68,000	683																
100,000	104																
150,000	154																
220,000	224																
330,000	334																
470,000	474																
1,000,000	105	M:±20%															
2,200,000	225																

Standard Thickness 0.30 mm

Background gray: The product which is not recommended to a new design

Background red: The product which is planning to stop production \* Please confirm the schedule on product details information.

Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

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# MULTILAYER CERAMIC CHIP CAPACITORS



## Capacitance Range Chart

## EIA CC0201 [C0603]

### Capacitance Range Chart

Temperature Characteristics: X6S (±22%), X7R (±15%), X7S (±22%)

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

Capacitance		Tolerance	X6S					X7R				X7S			
(pF)	Code		1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	1A (10V)	0J (6.3V)	0G (4V)	
100	101	K:±10% M:±20%						■							
150	151							■							
220	221							■							
330	331							■							
470	471							■							
680	681							■							
1,000	102							■							
1,500	152							■							
2,200	222			■	■	■	■		■	■	■				
3,300	332														
4,700	472			■	■	■	■		■	■	■				
10,000	103														
22,000	223			■	■	■	■	■				■	■		
47,000	473														
68,000	683														
100,000	104		■	■	■	■	■				■	■	■	■	
150,000	154											■	■		
220,000	224														
330,000	334														
470,000	474	M:±20%													

Standard Thickness 0.30 mm

Background gray: The product which is not recommended to a new design

Background red: The product which is planning to stop production \* Please confirm the schedule on product details information.

■ Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

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# MULTILAYER CERAMIC CHIP CAPACITORS



## Capacitance Range Chart

## EIA CC0402 [C1005]

### Capacitance Range Chart


Temperature Characteristics: C0G ( $0\pm 30\text{ppm}/^\circ\text{C}$ ), CH ( $0\pm 60\text{ppm}/^\circ\text{C}$ )

Rated Voltage: 50V (1H), 25V (1E)

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

Standard Thickness

 0.50 mm

 Background gray: The product which is not recommended to a new design

 Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

# MULTILAYER CERAMIC CHIP CAPACITORS



## Capacitance Range Chart

## EIA CC0402 [C1005]

### Capacitance Range Chart

Temperature Characteristics: JB ( $\pm 10\%$ )

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

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

Standard Thickness 0.50 mm

Background gray: The product which is not recommended to a new design

Background red: The product which is planning to stop production \* Please confirm the schedule on product details information.

Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

# MULTILAYER CERAMIC CHIP CAPACITORS TDK

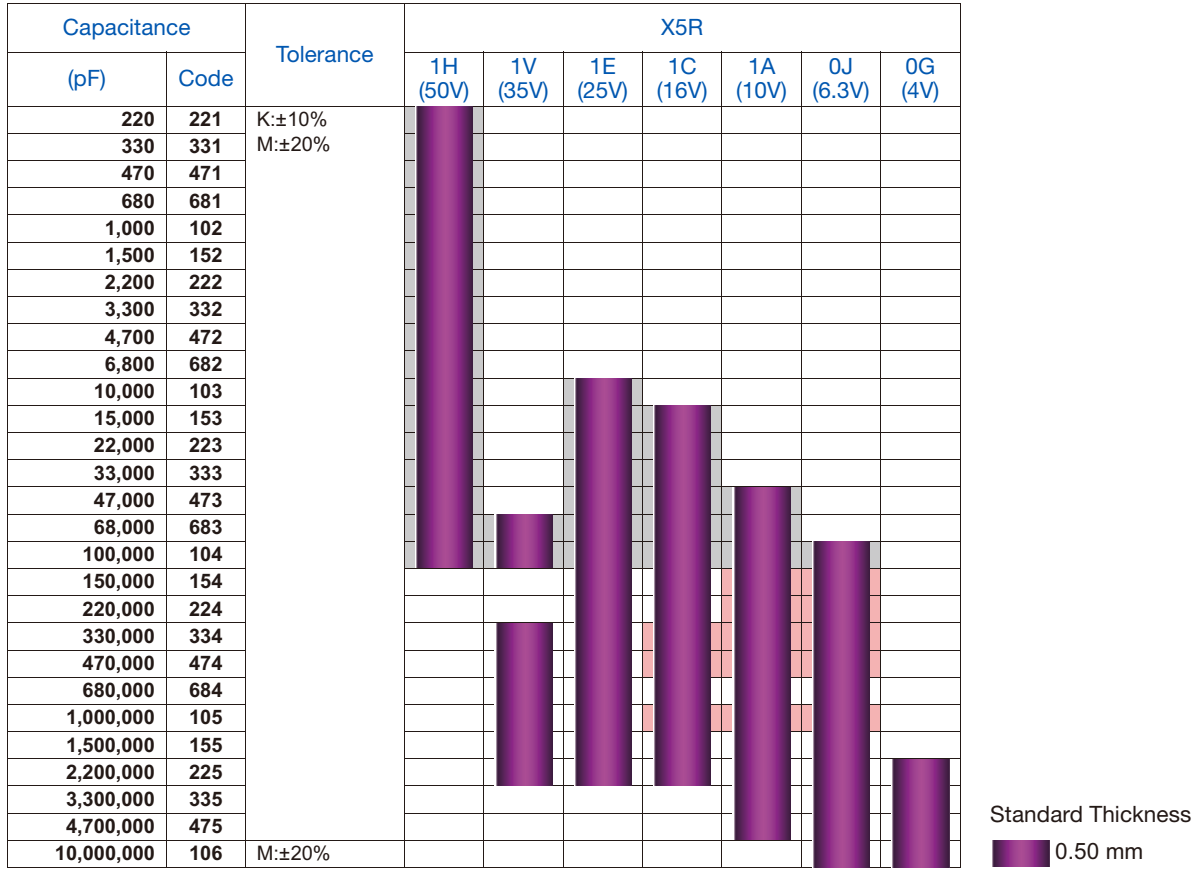
## Capacitance Range Chart

## EIA CC0402 [C1005]

### Capacitance Range Chart

Temperature Characteristics: X5R (±15%)

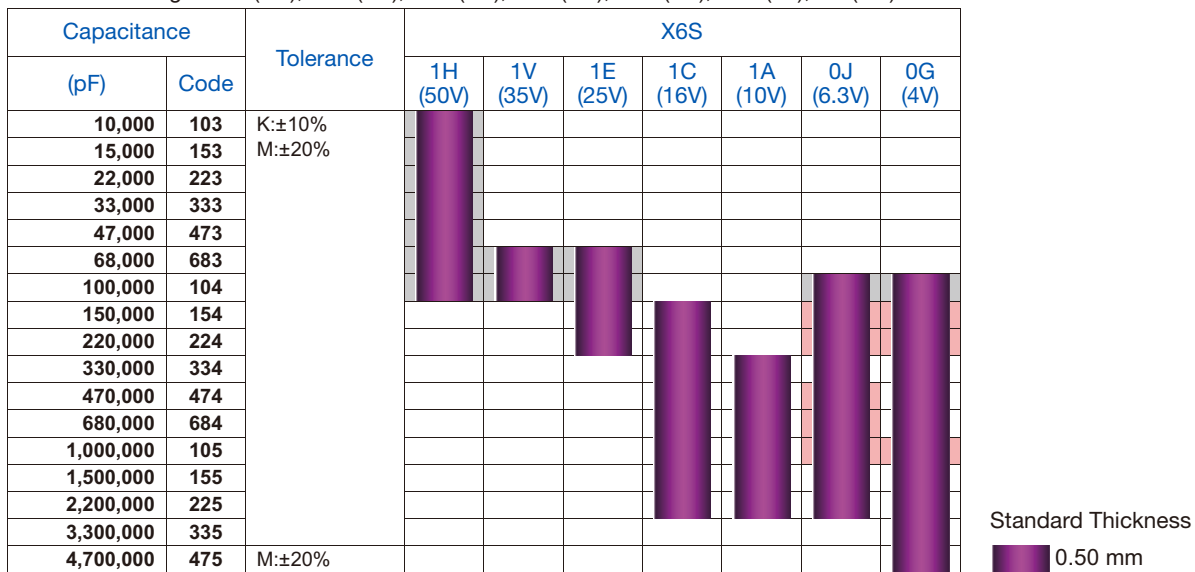
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V(0J), 4V (0G)



### Capacitance Range Chart

Temperature Characteristics: X6S (±22%)

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



Background gray: The product which is not recommended to a new design

Background red: The product which is planning to stop production \* Please confirm the schedule on product details information.

Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

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# MULTILAYER CERAMIC CHIP CAPACITORS



## Capacitance Range Chart

## EIA CC0402 [C1005]

### Capacitance Range Chart

Temperature Characteristics: X7R( $\pm 15\%$ ), X7S( $\pm 22\%$ )

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

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

Standard Thickness  
█ 0.50 mm

█ Background gray: The product which is not recommended to a new design

█ Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

# MULTILAYER CERAMIC CHIP CAPACITORS



## Capacitance Range Chart

## EIA CC0603 [C1608]

### Capacitance Range Chart

Temperature Characteristics: C0G (0±30ppm/°C), CH(0±60ppm/°C)

Rated Voltage: 50V (1H), 35V(1V), 25V (1E)

Capacitance		Tolerance	C0G			CH	
(pF)	Code		1H (50V)	1V (35V)	1E (25V)	1H (50V)	1V (35V)
0.5	0R5	C:±0.25pF					
0.75	R75						
1	010						
1.5	1R5						
2	020						
3	030						
4	040						
5	050						
6	060	C:±0.25pF D:±0.50pF					
7	070						
8	080						
9	090						
10	100						
12	120	F:±1% G:±2% J:±5% K:±10%					
15	150						
18	180						
22	220						
27	270						
33	330						
39	390						
47	470						
56	560						
68	680						
82	820						
100	101						
120	121						
150	151						
180	181						
220	221						
270	271						
330	331						
390	391						
470	471						
560	561						
680	681						
820	821						
1,000	102	J:±5% K:±10%					
1,200	122						
1,500	152						
1,800	182						
2,200	222						
2,700	272						
3,300	332						
3,900	392						
4,700	472						
5,600	562						
6,800	682						
8,200	822						
10,000	103						
15,000	153						
18,000	183						

Standard Thickness

0.80 mm

Background gray: The product which is not recommended to a new design

Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

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 Chart

## EIA CC0603 [C1608]

### Capacitance Range Chart

Temperature Characteristics: JB(±10%)

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

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

Standard Thickness  
█ 0.80 mm

### Capacitance Range Chart

Temperature Characteristics: X5R (±15%)

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

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

Standard Thickness  
█ 0.80 mm

█ Background gray: The product which is not recommended to a new design

█ Background red: The product which is planning to stop production \* Please confirm the schedule on product details information.

█ Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

⚠ 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



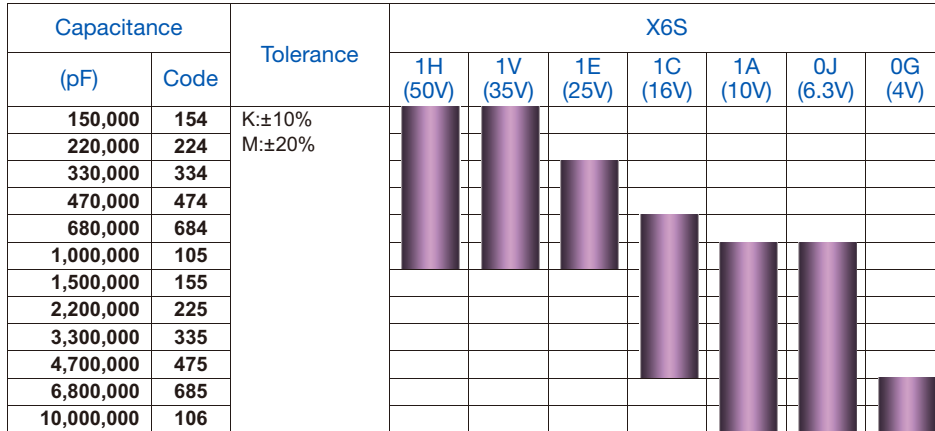
## Capacitance Range Chart

## EIA CC0603 [C1608]

### Capacitance Range Chart

Temperature Characteristics: X6S (±22%)

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

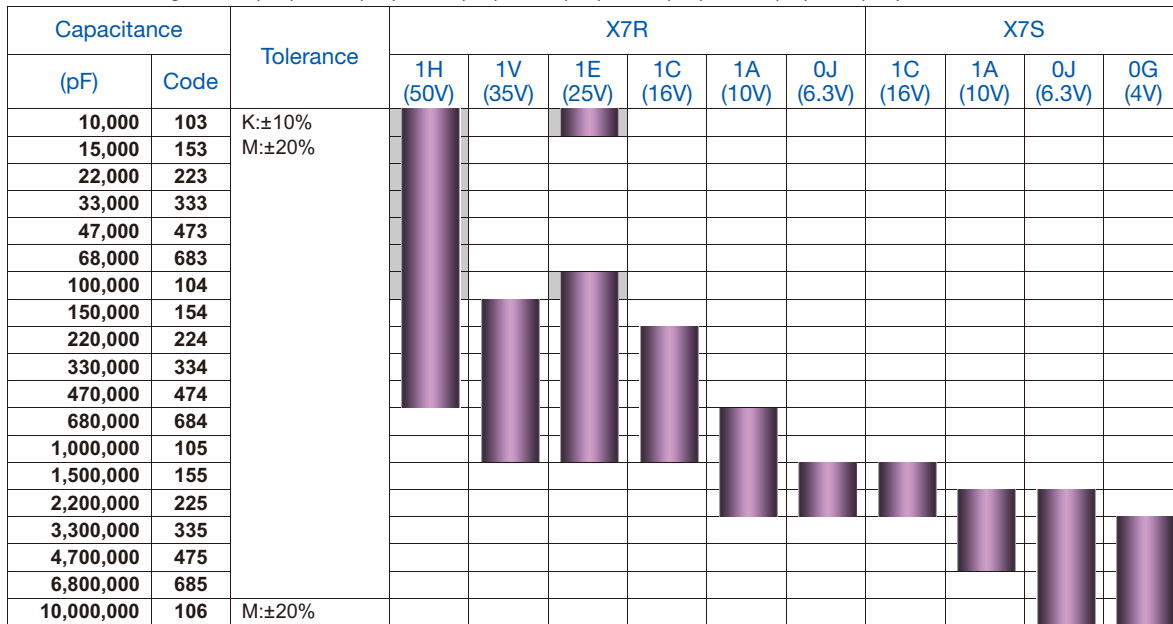


Standard Thickness  
█ 0.80 mm

### Capacitance Range Chart

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

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



Standard Thickness  
█ 0.80 mm

█ Background gray: The product which is not recommended to a new design

█ Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

⚠ 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 Chart

## EIA CC0805 [C2012]

### Capacitance Range Chart

Temperature Characteristics: C0G (0±30ppm/°C), CH (0±60ppm/°C), JB (±10%)

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

Capacitance		Tolerance	C0G			CH		JB					
(pF)	Code		1H (50V)	1V (35V)	1E (25V)	1H (50V)	1V (35V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)
1,000	102	J:±5% K:±10%	█			█							
1,200	122					█							
1,500	152					█							
1,800	182					█							
2,200	222					█							
2,700	272					█							
3,300	332					█							
3,900	392					█							
4,700	472					█							
5,600	562					█							
6,800	682					█							
8,200	822					█							
10,000	103					█							
15,000	153					█							
18,000	183		█			█							
22,000	223		█			█							
27,000	273												
30,000	303												
33,000	333		█			█							
100,000	104	K:±10% M:±20%						█					
150,000	154								█				
220,000	224								█				
330,000	334								█				
470,000	474								█				
680,000	684								█				
1,000,000	105								█				
1,500,000	155								█				
2,200,000	225								█				
3,300,000	335								█				
4,700,000	475							█					
6,800,000	685							█					
10,000,000	106	M:±20%											
15,000,000	156												
22,000,000	226												
33,000,000	336												
47,000,000	476												

Standard Thickness █ 0.60 mm █ 0.85 mm █ 1.25 mm

█ Background gray: The product which is not recommended to a new design

█ Background red: The product which is planning to stop production \* Please confirm the schedule on product details information.

█ Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

⚠ 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



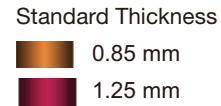
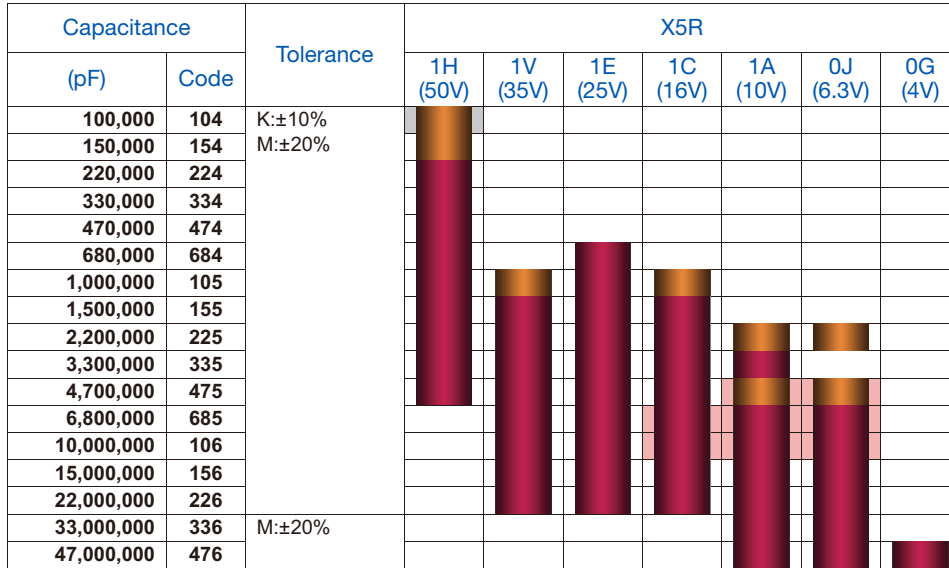
## Capacitance Range Chart

## EIA CC0805 [C2012]

### Capacitance Range Chart

Temperature Characteristics: X5R (±15%)

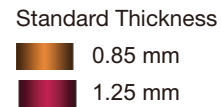
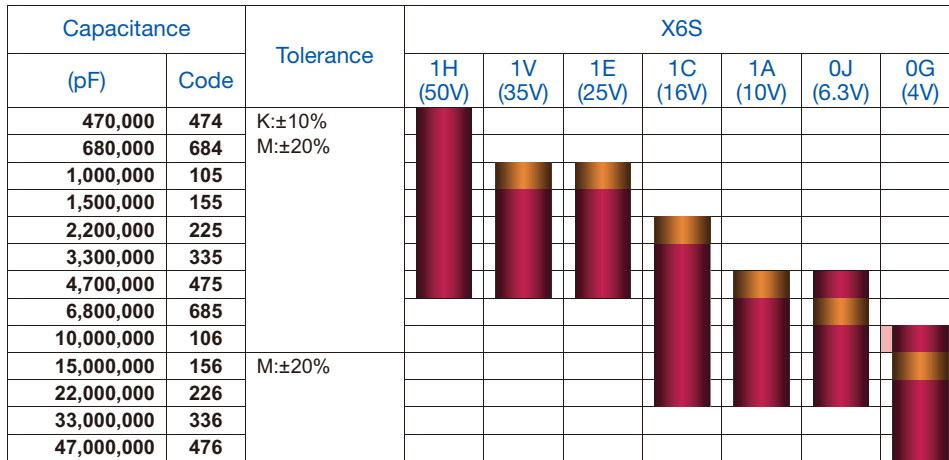
Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)



### Capacitance Range Chart

Temperature Characteristics: X6S (±22%)

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



- Background gray: The product which is not recommended to a new design
- Background red: The product which is planning to stop production \* Please confirm the schedule on product details information.
- Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

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 Chart

## EIA CC0805 [C2012]

### Capacitance Range Chart

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

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

Capacitance		Tolerance	X7R						X7S			
(pF)	Code		1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)
100,000	104	K:±10%	█									
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	M:±20%										
6,800,000	685											
10,000,000	106											
15,000,000	156											
22,000,000	226											

Standard Thickness

- █ 0.85 mm
- █ 1.25 mm

█ Background gray: The product which is not recommended to a new design

█ Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

# MULTILAYER CERAMIC CHIP CAPACITORS



## Capacitance Range Chart

## EIA CC1206 [C3216]

### Capacitance Range Chart

Temperature Characteristics: C0G (0±30ppm/°C), CH (0±60ppm/°C), JB (±10%)

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

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

Standard Thickness

- █ 0.60 mm
- █ 0.85 mm
- █ 1.15 mm
- █ 1.30 mm
- █ 1.60 mm

### Capacitance Range Chart

Temperature Characteristics: X5R (±15%)

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

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

Standard Thickness

- █ 0.85 mm
- █ 1.15 mm
- █ 1.30 mm
- █ 1.60 mm

█ Background red: The product which is planning to stop production \* Please confirm the schedule on product details information.

█ Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

⚠ 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 Chart

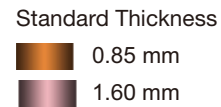
## EIA CC1206 [C3216]

### Capacitance Range Chart

Temperature Characteristics: X6S (±22%)

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

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

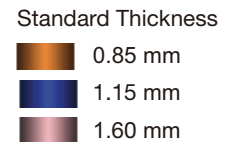


### Capacitance Range Chart

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

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

Capacitance		Tolerance	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	K:±10%	■	■	■	■	■	■	■	■	
330,000	334										
470,000	474										
680,000	684										
1,000,000	105										
1,500,000	155	M:±20%	■	■	■	■	■	■	■	■	
2,200,000	225										
3,300,000	335										
4,700,000	475										
6,800,000	685										
10,000,000	106		■	■	■	■	■	■	■	■	
15,000,000	156										
22,000,000	226										
47,000,000	476										



■ Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

⚠ 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 Chart

## EIA CC1210 [C3225]

### Capacitance Range Chart

Temperature Characteristics: C0G (0±30ppm/°C), CH (0±60ppm/°C), JB (±10%), X5R (±15%)

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

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

Standard Thickness ■ 1.25 mm ■ 1.60 mm ■ 2.00 mm ■ 2.30 mm ■ 2.50 mm

### Capacitance Range Chart

Temperature Characteristics: X6S (±22%), X7R (±15%), X7S (±22%)

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

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

Standard Thickness ■ 1.60 mm ■ 2.00 mm ■ 2.30 mm ■ 2.50 mm

■ Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

⚠ 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



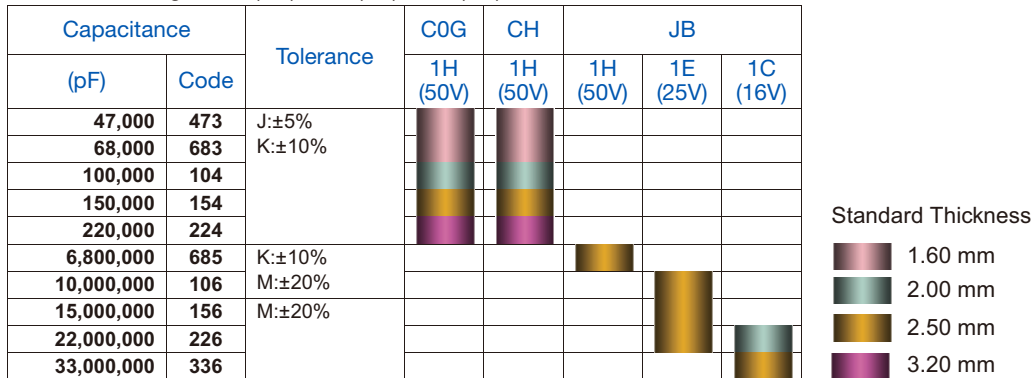
## Capacitance Range Chart

## EIA CC1812 [C4532]

### Capacitance Range Chart

Temperature Characteristics: C0G (0±30ppm/°C), CH (0±60ppm/°C), JB (±10%)

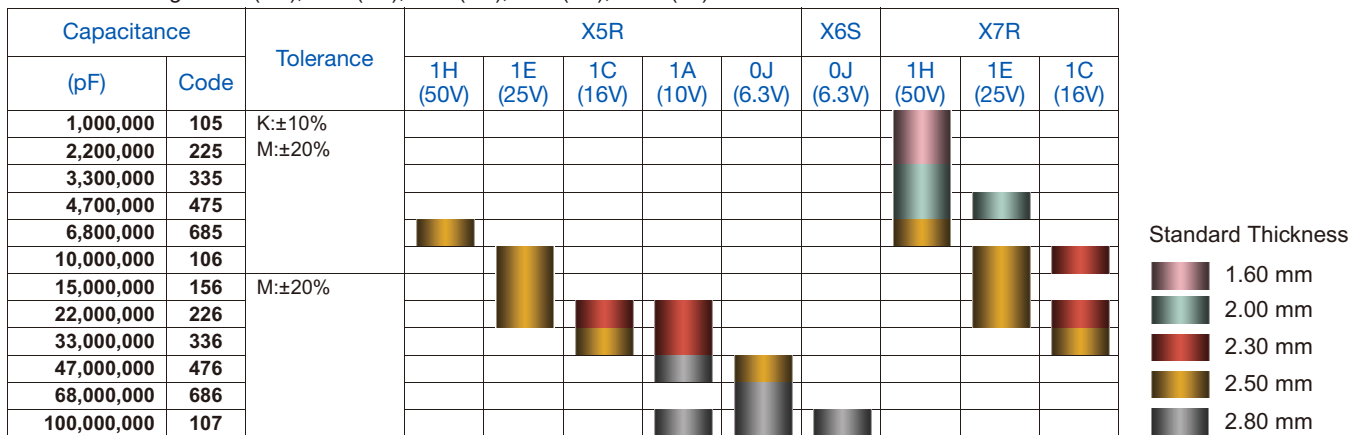
Rated Voltage: 50V (1H), 25V (1E), 16V (1C)



### Capacitance Range Chart

Temperature Characteristics: X5R (±15%), X6S (±22%), X7R (±15%)

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



■ Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

⚠ 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 TDK

## Capacitance Range Chart

## EIA CC2220 [C5750]

### Capacitance Range Chart

Temperature Characteristics: JB ( $\pm 10\%$ ), X5R ( $\pm 15\%$ ), X7R ( $\pm 15\%$ )

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

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

■ Please refer to a capacitance range table after P-21 for the details such as product thickness, a capacitance tolerance.

⚠ 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

### Class 1 (Temperature Compensating)

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

Capacitance	Size	Thickness (mm)	Capacitance Tolerance	Catalog Number		
				Rated Voltage Edc: 50V	Rated Voltage Edc: 25V	Rated Voltage Edc: 16V
0.5 pF	0402	0.20±0.02	±0.25pF			C0402C0G1C0R5C020BC
	0603	0.30±0.03	±0.25pF	C0603C0G1H0R5C030BA	C0603C0G1E0R5C030BA	
	1005	0.50±0.05	±0.10pF	C1005C0G1H0R5B050BA		
			±0.25pF	C1005C0G1H0R5C050BA		
1608	0.80±0.10	±0.25pF	C1608C0G1H0R5C080AA			
0.75 pF	0402	0.20±0.02	±0.25pF			C0402C0G1CR75C020BC
	0603	0.30±0.03	±0.25pF	C0603C0G1HR75C030BA	C0603C0G1ER75C030BA	
	1005	0.50±0.05	±0.10pF	C1005C0G1HR75B050BA		
			±0.25pF	C1005C0G1HR75C050BA		
1608	0.80±0.10	±0.25pF	C1608C0G1HR75C080AA			
1 pF	0402	0.20±0.02	±0.25pF			C0402C0G1C010C020BC
	0603	0.30±0.03	±0.25pF	C0603C0G1H010C030BA	C0603C0G1E010C030BA	
	1005	0.50±0.05	±0.10pF	C1005C0G1H010B050BA		
			±0.25pF	C1005C0G1H010C050BA		
1608	0.80±0.10	±0.25pF	C1608C0G1H010C080AA			
1.5 pF	0402	0.20±0.02	±0.25pF			C0402C0G1C1R5C020BC
	0603	0.30±0.03	±0.25pF	C0603C0G1H1R5C030BA	C0603C0G1E1R5C030BA	
	1005	0.50±0.05	±0.10pF	C1005C0G1H1R5B050BA		
			±0.25pF	C1005C0G1H1R5C050BA		
1608	0.80±0.10	±0.25pF	C1608C0G1H1R5C080AA			
2 pF	0402	0.20±0.02	±0.25pF			C0402C0G1C020C020BC
	0603	0.30±0.03	±0.25pF	C0603C0G1H020C030BA	C0603C0G1E020C030BA	
	1005	0.50±0.05	±0.10pF	C1005C0G1H020B050BA		
			±0.25pF	C1005C0G1H020C050BA		
1608	0.80±0.10	±0.25pF	C1608C0G1H020C080AA			
2.2 pF	0402	0.20±0.02	±0.25pF			C0402C0G1C2R2C020BC
	0603	0.30±0.03	±0.25pF	C0603C0G1H2R2C030BA	C0603C0G1E2R2C030BA	
	1005	0.50±0.05	±0.10pF	C1005C0G1H030B050BA		
			±0.25pF	C1005C0G1H030C050BA		
1608	0.80±0.10	±0.25pF	C1608C0G1H030C080AA			
3 pF	0402	0.20±0.02	±0.25pF			C0402C0G1C030C020BC
	0603	0.30±0.03	±0.25pF	C0603C0G1H030C030BA	C0603C0G1E030C030BA	
	1005	0.50±0.05	±0.10pF	C1005C0G1H030B050BA		
			±0.25pF	C1005C0G1H030C050BA		
1608	0.80±0.10	±0.25pF	C1608C0G1H030C080AA			
3.3 pF	0402	0.20±0.02	±0.25pF			C0402C0G1C3R3C020BC
	0603	0.30±0.03	±0.25pF	C0603C0G1H3R3C030BA	C0603C0G1E3R3C030BA	
	1005	0.50±0.05	±0.10pF	C1005C0G1H040B050BA		
			±0.25pF	C1005C0G1H040C050BA		
1608	0.80±0.10	±0.25pF	C1608C0G1H040C080AA			
4 pF	0402	0.20±0.02	±0.25pF			C0402C0G1C040C020BC
	0603	0.30±0.03	±0.25pF	C0603C0G1H040C030BA	C0603C0G1E040C030BA	
	1005	0.50±0.05	±0.10pF	C1005C0G1H040B050BA		
			±0.25pF	C1005C0G1H040C050BA		
1608	0.80±0.10	±0.25pF	C1608C0G1H040C080AA			
4.7 pF	0402	0.20±0.02	±0.25pF			C0402C0G1C4R7C020BC
	0603	0.30±0.03	±0.25pF	C0603C0G1H4R7C030BA	C0603C0G1E4R7C030BA	
	1005	0.50±0.05	±0.10pF	C1005C0G1H050B050BA		
			±0.25pF	C1005C0G1H050C050BA		
1608	0.80±0.10	±0.25pF	C1608C0G1H050C080AA			
5 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			
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			
6.8 pF	0402	0.20±0.02	±0.50pF			C0402C0G1C6R8D020BC
	0603	0.30±0.03	±0.50pF	C0603C0G1H6R8D030BA	C0603C0G1E6R8D030BA	
	1005	0.50±0.05	±0.25pF	C1005C0G1H070D030BA		
			±0.50pF	C1005C0G1H070D050BA		
1608	0.80±0.10	±0.25pF	C1608C0G1H070D080AA			
7 pF	0402	0.20±0.02	±0.50pF			C0402C0G1C070D020BC
	0603	0.30±0.03	±0.50pF	C0603C0G1H070D030BA	C0603C0G1E070D030BA	
	1005	0.50±0.05	±0.25pF	C1005C0G1H070C050BA		
			±0.50pF	C1005C0G1H070D050BA		
1608	0.80±0.10	±0.25pF	C1608C0G1H070C080AA			
			±0.50pF	C1608C0G1H070D080AA		

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# MULTILAYER CERAMIC CHIP CAPACITORS



## Capacitance Range Table

### Class 1 (Temperature Compensating)

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

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

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# MULTILAYER CERAMIC CHIP CAPACITORS



## Capacitance Range Table

### Class 1 (Temperature Compensating)

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

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

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