



## Capacitance Range Chart

## C2012 [EIA CC0805]

### Capacitance Range Chart

Temperature Characteristics: C0G ( $0 \pm 30\text{ppm}/^\circ\text{C}$ )  
 Rated Voltage: 50V (1H), 25V (1E)

Capacitance (pF)	Cap Code	Tolerance	C0G	
			1H (50V)	1E (25V)
10	100	J: $\pm 5\%$		
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			
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			
22,000	223			
33,000	333			

• Standard capacitance is shown. Please refer to Capacitance Range Table for additional capacitance values.

### Capacitance Range Chart

Temperature Characteristics: X6S ( $\pm 22\%$ )  
 Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

Capacitance (pF)	Cap Code	Tolerance	X6S						
			1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	0G (4V)
1,000,000	105	K: $\pm 10\%$ M: $\pm 20\%$							
2,200,000	225								
4,700,000	475								
10,000,000	106								
22,000,000	226								
47,000,000	476								

• Standard thickness is shown. Please refer to Capacitance Range Table for additional thicknesses.

#### Standard Thickness

- 0.60 mm
- 0.85 mm
- 1.25 mm



## Capacitance Range Chart

## C2012 [EIA CC0805]

### Capacitance Range Chart

Temperature Characteristics: X7R ( $\pm 15\%$ ), X5R ( $\pm 15\%$ ), Y5V (+22/-82%)  
 Rated Voltage: 50V (1H), 35V (1V), 25V (1E), 16V (1C), 10V (1A), 6.3V (0J), 4V (0G)

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

Capacitance (pF)	Cap Code	Tolerance	X7R					
			1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)
1,000	102	K: $\pm 10\%$ M: $\pm 20\%$	█					
2,200	222							
4,700	472							
10,000	103							
22,000	223							
47,000	473							
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							
10,000,000	106						█	

Capacitance (pF)	Cap Code	Tolerance	Y5V				
			1H (50V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)
100,000	104	Z: +80/-20%	█				
470,000	474						
1,000,000	105						
2,200,000	225						
4,700,000	475						
10,000,000	106						
22,000,000	226					█	

### Standard Thickness

- 0.60 mm
- 0.85 mm
- 1.25 mm

• Standard thickness is shown. Please refer to Capacitance Range Table for additional thicknesses.



## Capacitance Range Table

## C2012 [EIA CC0805]

### Class 1 (Temperature Compensating)

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

TDK Part Number (Ordering Code)	Temperature Characteristics	Rated Voltage	Capacitance (pF)	Capacitance Tolerance	Thickness (mm)
C2012C0G1H100D	C0G	50V	10	± 0.50pF	0.60 ± 0.10
C2012C0G1H101J	C0G	50V	100	± 5%	0.60 ± 0.10
C2012C0G1H121J	C0G	50V	120	± 5%	0.60 ± 0.10
C2012C0G1H151J	C0G	50V	150	± 5%	0.60 ± 0.10
C2012C0G1H181J	C0G	50V	180	± 5%	0.60 ± 0.10
C2012C0G1H221J	C0G	50V	220	± 5%	0.60 ± 0.10
C2012C0G1H271J	C0G	50V	270	± 5%	0.60 ± 0.10
C2012C0G1H331J	C0G	50V	330	± 5%	0.60 ± 0.10
C2012C0G1H391J	C0G	50V	390	± 5%	0.60 ± 0.10
C2012C0G1H471J	C0G	50V	470	± 5%	0.60 ± 0.10
C2012C0G1H561J	C0G	50V	560	± 5%	0.60 ± 0.10
C2012C0G1H681J	C0G	50V	680	± 5%	0.60 ± 0.10
C2012C0G1H821J	C0G	50V	820	± 5%	0.60 ± 0.10
C2012C0G1H102J	C0G	50V	1,000	± 5%	0.60 ± 0.10
C2012C0G1H122J	C0G	50V	1,200	± 5%	0.60 ± 0.10
C2012C0G1H152J	C0G	50V	1,500	± 5%	0.60 ± 0.10
C2012C0G1H182J/0.60	C0G	50V	1,800	± 5%	0.60 ± 0.10
C2012C0G1H182J/0.85	C0G	50V	1,800	± 5%	0.85 ± 0.10
C2012C0G1H222J/0.60	C0G	50V	2,200	± 5%	0.60 ± 0.10
C2012C0G1H222J/0.85	C0G	50V	2,200	± 5%	0.85 ± 0.10
C2012C0G1H272J/0.60	C0G	50V	2,700	± 5%	0.60 ± 0.10
C2012C0G1H272J/1.25	C0G	50V	2,700	± 5%	1.25 ± 0.20
C2012C0G1H332J/0.60	C0G	50V	3,300	± 5%	0.60 ± 0.10
C2012C0G1H332J/1.25	C0G	50V	3,300	± 5%	1.25 ± 0.20
C2012C0G1H392J/0.60	C0G	50V	3,900	± 5%	0.60 ± 0.10
C2012C0G1H392J/0.85	C0G	50V	3,900	± 5%	0.85 ± 0.10
C2012C0G1H472J/0.60	C0G	50V	4,700	± 5%	0.60 ± 0.10
C2012C0G1H472J/0.85	C0G	50V	4,700	± 5%	0.85 ± 0.10
C2012C0G1H562J/0.60	C0G	50V	5,600	± 5%	0.60 ± 0.10
C2012C0G1H562J/0.85	C0G	50V	5,600	± 5%	0.85 ± 0.10
C2012C0G1H682J/0.60	C0G	50V	6,800	± 5%	0.60 ± 0.10
C2012C0G1H682J/1.25	C0G	50V	6,800	± 5%	1.25 ± 0.20
C2012C0G1H822J/0.60	C0G	50V	8,200	± 5%	0.60 ± 0.10
C2012C0G1H822J/1.25	C0G	50V	8,200	± 5%	1.25 ± 0.20
C2012C0G1H103J/0.60	C0G	50V	10,000	± 5%	0.60 ± 0.10
C2012C0G1H103J/1.25	C0G	50V	10,000	± 5%	1.25 ± 0.20
C2012C0G1H153J	C0G	50V	15,000	± 5%	0.85 ± 0.10
C2012C0G1H223J	C0G	50V	22,000	± 5%	1.25 ± 0.20
C2012C0G1H333J	C0G	50V	33,000	± 5%	1.25 ± 0.20
C2012C0G1E392J	C0G	25V	3,900	± 5%	0.60 ± 0.10
C2012C0G1E472J	C0G	25V	4,700	± 5%	0.60 ± 0.10
C2012C0G1E562J	C0G	25V	5,600	± 5%	0.60 ± 0.10
C2012C0G1E682J	C0G	25V	6,800	± 5%	0.60 ± 0.10
C2012C0G1E822J	C0G	25V	8,200	± 5%	0.60 ± 0.10



## Capacitance Range Table

# C2012 [EIA CC0805]

### Class 1 (Temperature Compensating)

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

TDK Part Number (Ordering Code)	Temperature Characteristics	Rated Voltage	Capacitance (pF)	Capacitance Tolerance	Thickness (mm)
C2012C0G1E103J	C0G	25V	10,000	± 5%	0.60 ± 0.10
C2012C0G1E153J	C0G	25V	15,000	± 5%	0.85 ± 0.10
C2012C0G1E223J	C0G	25V	22,000	± 5%	1.25 ± 0.20
C2012C0G1E333J	C0G	25V	33,000	± 5%	1.25 ± 0.20

### Class 2 (Temperature Stable)

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

TDK Part Number (Ordering Code)	Temperature Characteristics	Rated Voltage	Capacitance (pF)	Capacitance Tolerance	Thickness (mm)
C2012X7R1H102K	X7R	50V	1,000	± 10%	0.60 ± 0.10
C2012X7R1H102M	X7R	50V	1,000	± 20%	0.60 ± 0.10
C2012X7R1H222K	X7R	50V	2,200	± 10%	0.60 ± 0.10
C2012X7R1H222M	X7R	50V	2,200	± 20%	0.60 ± 0.10
C2012X7R1H472K	X7R	50V	4,700	± 10%	0.60 ± 0.10
C2012X7R1H472M	X7R	50V	4,700	± 20%	0.60 ± 0.10
C2012X7R1H103K	X7R	50V	10,000	± 10%	0.60 ± 0.10
C2012X7R1H103M	X7R	50V	10,000	± 20%	0.60 ± 0.10
C2012X7R1H223K/0.60	X7R	50V	22,000	± 10%	0.60 ± 0.10
C2012X7R1H223M/0.60	X7R	50V	22,000	± 20%	0.60 ± 0.10
C2012X7R1H473K/1.25	X7R	50V	47,000	± 10%	1.25 ± 0.20
C2012X7R1H473M/1.25	X7R	50V	47,000	± 20%	1.25 ± 0.20
C2012X7R1H104K/0.85	X7R	50V	100,000	± 10%	0.85 ± 0.10
C2012X7R1H104M/0.85	X7R	50V	100,000	± 20%	0.85 ± 0.10
C2012X7R1H104K/1.25	X7R	50V	100,000	± 10%	1.25 ± 0.20
C2012X7R1H104M/1.25	X7R	50V	100,000	± 20%	1.25 ± 0.20
C2012X7R1H154K	X7R	50V	150,000	± 10%	1.25 ± 0.20
C2012X7R1H154M	X7R	50V	150,000	± 20%	1.25 ± 0.20
C2012X7R1H224K	X7R	50V	220,000	± 10%	1.25 ± 0.20
C2012X7R1H224M	X7R	50V	220,000	± 20%	1.25 ± 0.20
C2012X7R1H334K	X7R	50V	330,000	± 10%	1.25 ± 0.20
C2012X7R1H334M	X7R	50V	330,000	± 20%	1.25 ± 0.20
C2012X7R1H474K	X7R	50V	470,000	± 10%	1.25 ± 0.20
C2012X7R1H474M	X7R	50V	470,000	± 20%	1.25 ± 0.20
C2012X7R1H684K	X7R	50V	680,000	± 10%	1.25 ± 0.20
C2012X7R1H684M	X7R	50V	680,000	± 20%	1.25 ± 0.20
C2012X7R1H105K	X7R	50V	1,000,000	± 10%	1.25 ± 0.20
C2012X7R1H105M	X7R	50V	1,000,000	± 20%	1.25 ± 0.20
C2012X7R1H155K	X7R	50V	1,500,000	± 10%	1.25 ± 0.20
C2012X7R1H155M	X7R	50V	1,500,000	± 20%	1.25 ± 0.20
C2012X7R1H225K	X7R	50V	2,200,000	± 10%	1.25 ± 0.20
C2012X7R1H225M	X7R	50V	2,200,000	± 20%	1.25 ± 0.20
C2012X7R1V105K	X7R	35V	1,000,000	± 10%	1.25 ± 0.20
C2012X7R1V105M	X7R	35V	1,000,000	± 20%	1.25 ± 0.20
C2012X7R1V225K	X7R	35V	2,200,000	± 10%	1.25 ± 0.20
C2012X7R1V225M	X7R	35V	2,200,000	± 20%	1.25 ± 0.20



## Capacitance Range Table

## C2012 [EIA CC0805]

### Class 2 (Temperature Stable)

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

TDK Part Number (Ordering Code)	Temperature Characteristics	Rated Voltage	Capacitance (pF)	Capacitance Tolerance	Thickness (mm)
C2012X7R1V335K	X7R	35V	3,300,000	± 10%	1.25 ± 0.20
C2012X7R1V335M	X7R	35V	3,300,000	± 20%	1.25 ± 0.20
C2012X7R1V475K	X7R	35V	4,700,000	± 10%	1.25 ± 0.20
C2012X7R1V475M	X7R	35V	4,700,000	± 20%	1.25 ± 0.20
C2012X7R1E104K/0.85	X7R	25V	100,000	± 10%	0.85 ± 0.10
C2012X7R1E104M/0.85	X7R	25V	100,000	± 20%	0.85 ± 0.10
C2012X7R1E104K/1.25	X7R	25V	100,000	± 10%	1.25 ± 0.20
C2012X7R1E104M/1.25	X7R	25V	100,000	± 20%	1.25 ± 0.20
C2012X7R1E224K	X7R	25V	220,000	± 10%	1.25 ± 0.20
C2012X7R1E224M	X7R	25V	220,000	± 20%	1.25 ± 0.20
C2012X7R1E334K	X7R	25V	330,000	± 10%	1.25 ± 0.20
C2012X7R1E334M	X7R	25V	330,000	± 20%	1.25 ± 0.20
C2012X7R1E474K	X7R	25V	470,000	± 10%	1.25 ± 0.20
C2012X7R1E474M	X7R	25V	470,000	± 20%	1.25 ± 0.20
C2012X7R1E684K	X7R	25V	680,000	± 10%	1.25 ± 0.20
C2012X7R1E684M	X7R	25V	680,000	± 20%	1.25 ± 0.20
C2012X7R1E105K	X7R	25V	1,000,000	± 10%	1.25 ± 0.20
C2012X7R1E105M	X7R	25V	1,000,000	± 20%	1.25 ± 0.20
C2012X7R1E155K	X7R	25V	1,500,000	± 10%	1.25 ± 0.20
C2012X7R1E155M	X7R	25V	1,500,000	± 20%	1.25 ± 0.20
C2012X7R1E225K	X7R	25V	2,200,000	± 10%	1.25 ± 0.20
C2012X7R1E225M	X7R	25V	2,200,000	± 20%	1.25 ± 0.20
C2012X7R1E335K	X7R	25V	3,300,000	± 10%	1.25 ± 0.20
C2012X7R1E335M	X7R	25V	3,300,000	± 20%	1.25 ± 0.20
C2012X7R1E475K	X7R	25V	4,700,000	± 10%	1.25 ± 0.20
C2012X7R1E475M	X7R	25V	4,700,000	± 20%	1.25 ± 0.20
C2012X7R1C224K	X7R	16V	220,000	± 10%	1.25 ± 0.20
C2012X7R1C224M	X7R	16V	220,000	± 20%	1.25 ± 0.20
C2012X7R1C334K/1.25	X7R	16V	330,000	± 10%	1.25 ± 0.20
C2012X7R1C334M/1.25	X7R	16V	330,000	± 20%	1.25 ± 0.20
C2012X7R1C474K	X7R	16V	470,000	± 10%	1.25 ± 0.20
C2012X7R1C474M	X7R	16V	470,000	± 20%	1.25 ± 0.20
C2012X7R1C684K	X7R	16V	680,000	± 10%	1.25 ± 0.20
C2012X7R1C684M	X7R	16V	680,000	± 20%	1.25 ± 0.20
C2012X7R1C105K/0.85	X7R	16V	1,000,000	± 10%	0.85 ± 0.10
C2012X7R1C105M/0.85	X7R	16V	1,000,000	± 20%	0.85 ± 0.10
C2012X7R1C105K/1.25	X7R	16V	1,000,000	± 10%	1.25 ± 0.20
C2012X7R1C105M/1.25	X7R	16V	1,000,000	± 20%	1.25 ± 0.20
C2012X7R1C155K	X7R	16V	1,500,000	± 10%	1.25 ± 0.20
C2012X7R1C155M	X7R	16V	1,500,000	± 20%	1.25 ± 0.20
C2012X7R1C225K	X7R	16V	2,200,000	± 10%	1.25 ± 0.20
C2012X7R1C225M	X7R	16V	2,200,000	± 20%	1.25 ± 0.20
C2012X7R1C335K	X7R	16V	3,300,000	± 10%	1.25 ± 0.20
C2012X7R1C335M	X7R	16V	3,300,000	± 20%	1.25 ± 0.20



## Capacitance Range Table

## C2012 [EIA CC0805]

### Class 2 (Temperature Stable)

Temperature Characteristics: X7R (-55 to +125°C, ±15%), X6S(-55 to 105°C, ±22%)

TDK Part Number (Ordering Code)	Temperature Characteristics	Rated Voltage	Capacitance (pF)	Capacitance Tolerance	Thickness (mm)
C2012X7R1C475K	X7R	16V	4,700,000	± 10%	1.25 ± 0.20
C2012X7R1C475M	X7R	16V	4,700,000	± 20%	1.25 ± 0.20
C2012X7R1A105K	X7R	10V	1,000,000	± 10%	1.25 ± 0.20
C2012X7R1A105M	X7R	10V	1,000,000	± 20%	1.25 ± 0.20
C2012X7R1A155K	X7R	10V	1,500,000	± 10%	1.25 ± 0.20
C2012X7R1A155M	X7R	10V	1,500,000	± 20%	1.25 ± 0.20
C2012X7R1A225K	X7R	10V	2,200,000	± 10%	1.25 ± 0.20
C2012X7R1A225M	X7R	10V	2,200,000	± 20%	1.25 ± 0.20
C2012X7R1A335K	X7R	10V	3,300,000	± 10%	1.25 ± 0.20
C2012X7R1A335M	X7R	10V	3,300,000	± 20%	1.25 ± 0.20
C2012X7R1A475K	X7R	10V	4,700,000	± 10%	1.25 ± 0.20
C2012X7R1A475M	X7R	10V	4,700,000	± 20%	1.25 ± 0.20
C2012X7R1A106K	X7R	10V	10,000,000	± 10%	1.25 ± 0.20
C2012X7R1A106M	X7R	10V	10,000,000	± 20%	1.25 ± 0.20
C2012X7R0J106K	X7R	6.3V	10,000,000	± 10%	1.25 ± 0.20
C2012X7R0J106M	X7R	6.3V	10,000,000	± 20%	1.25 ± 0.20
C2012X6S1H105K	X6S	50V	1,000,000	± 10%	1.25 ± 0.20
C2012X6S1H105M	X6S	50V	1,000,000	± 20%	1.25 ± 0.20
C2012X6S1H225K	X6S	50V	2,200,000	± 10%	1.25 ± 0.20
C2012X6S1H225M	X6S	50V	2,200,000	± 20%	1.25 ± 0.20
C2012X6S1H475K	X6S	50V	4,700,000	± 10%	1.25 ± 0.20
C2012X6S1H475M	X6S	50V	4,700,000	± 20%	1.25 ± 0.20
C2012X6S1V475K	X6S	35V	4,700,000	± 10%	1.25 ± 0.20
C2012X6S1V475M	X6S	35V	4,700,000	± 20%	1.25 ± 0.20
C2012X6S1E225K	X6S	25V	2,200,000	± 10%	1.25 ± 0.20
C2012X6S1E225M	X6S	25V	2,200,000	± 20%	1.25 ± 0.20
C2012X6S1E475K	X6S	25V	4,700,000	± 10%	1.25 ± 0.20
C2012X6S1E475M	X6S	25V	4,700,000	± 20%	1.25 ± 0.20
C2012X6S1C225K	X6S	16V	2,200,000	± 10%	0.90 +0.05,-0.10
C2012X6S1C225M	X6S	16V	2,200,000	± 20%	0.90 +0.05,-0.10
C2012X6S1C475K	X6S	16V	4,700,000	± 10%	1.25 ± 0.20
C2012X6S1C475M	X6S	16V	4,700,000	± 20%	1.25 ± 0.20
C2012X6S1C106K	X6S	16V	10,000,000	± 10%	1.25 ± 0.20
C2012X6S1C106M	X6S	16V	10,000,000	± 20%	1.25 ± 0.20
C2012X6S1A106K/0.85	X6S	10V	10,000,000	± 10%	0.85 ± 0.10
C2012X6S1A106M/0.85	X6S	10V	10,000,000	± 20%	0.85 ± 0.10
C2012X6S1A226K	X6S	10V	22,000,000	± 10%	1.25 ± 0.20
C2012X6S1A226M	X6S	10V	22,000,000	± 20%	1.25 ± 0.20
C2012X6S0J106K	X6S	6.3V	10,000,000	± 10%	0.85 ± 0.10
C2012X6S0J106M	X6S	6.3V	10,000,000	± 20%	0.85 ± 0.10
C2012X6S0J226K	X6S	6.3V	22,000,000	± 10%	1.25 ± 0.20
C2012X6S0J226M	X6S	6.3V	22,000,000	± 20%	1.25 ± 0.20
C2012X6S0G226M	X6S	4V	22,000,000	± 20%	0.85 ± 0.10
C2012X6S0G476M	X6S	4V	47,000,000	± 20%	1.25 ± 0.20



## Capacitance Range Table

## C2012 [EIA CC0805]

### Class 2 (Temperature Stable)

Temperature Characteristics: X5R (-55 to +85°C, ±15%)

TDK Part Number (Ordering Code)	Temperature Characteristics	Rated Voltage	Capacitance (pF)	Capacitance Tolerance	Thickness (mm)
C2012X5R1H105K	X5R	50V	1,000,000	± 10%	1.25 ± 0.20
C2012X5R1H105M	X5R	50V	1,000,000	± 20%	1.25 ± 0.20
C2012X5R1H155K	X5R	50V	1,500,000	± 10%	1.25 ± 0.20
C2012X5R1H155M	X5R	50V	1,500,000	± 20%	1.25 ± 0.20
C2012X5R1H225K	X5R	50V	2,200,000	± 10%	1.25 ± 0.20
C2012X5R1H225M	X5R	50V	2,200,000	± 20%	1.25 ± 0.20
C2012X5R1H335K	X5R	50V	3,300,000	± 10%	1.25 ± 0.20
C2012X5R1H335M	X5R	50V	3,300,000	± 20%	1.25 ± 0.20
C2012X5R1H475K	X5R	50V	4,700,000	± 10%	1.25 ± 0.20
C2012X5R1H475M	X5R	50V	4,700,000	± 20%	1.25 ± 0.20
C2012X5R1E105K/0.85	X5R	25V	1,000,000	± 10%	0.85 ± 0.10
C2012X5R1E105M/0.85	X5R	25V	1,000,000	± 20%	0.85 ± 0.10
C2012X5R1E105K/1.25	X5R	25V	1,000,000	± 10%	1.25 ± 0.20
C2012X5R1E105M/1.25	X5R	25V	1,000,000	± 20%	1.25 ± 0.20
C2012X5R1E155K	X5R	25V	1,500,000	± 10%	1.25 ± 0.20
C2012X5R1E155M	X5R	25V	1,500,000	± 20%	1.25 ± 0.20
C2012X5R1E225K	X5R	25V	2,200,000	± 10%	1.25 ± 0.20
C2012X5R1E225M	X5R	25V	2,200,000	± 20%	1.25 ± 0.20
C2012X5R1E475K	X5R	25V	4,700,000	± 10%	1.25 ± 0.20
C2012X5R1E475M	X5R	25V	4,700,000	± 20%	1.25 ± 0.20
C2012X5R1E685K	X5R	25V	6,800,000	± 10%	1.25 ± 0.20
C2012X5R1E685M	X5R	25V	6,800,000	± 20%	1.25 ± 0.20
C2012X5R1E106K	X5R	25V	10,000,000	± 10%	1.25 ± 0.20
C2012X5R1E106M	X5R	25V	10,000,000	± 20%	1.25 ± 0.20
C2012X5R1C105K/0.85	X5R	16V	1,000,000	± 10%	0.85 ± 0.10
C2012X5R1C105M/0.85	X5R	16V	1,000,000	± 20%	0.85 ± 0.10
C2012X5R1C105K/1.25	X5R	16V	1,000,000	± 10%	1.25 ± 0.20
C2012X5R1C105M/1.25	X5R	16V	1,000,000	± 20%	1.25 ± 0.20
C2012X5R1C225K/0.85	X5R	16V	2,200,000	± 10%	0.85 ± 0.10
C2012X5R1C225M/0.85	X5R	16V	2,200,000	± 20%	0.85 ± 0.10
C2012X5R1C225K/1.25	X5R	16V	2,200,000	± 10%	1.25 ± 0.20
C2012X5R1C225M/1.25	X5R	16V	2,200,000	± 20%	1.25 ± 0.20
C2012X5R1C475K/1.25	X5R	16V	4,700,000	± 10%	1.25 ± 0.20
C2012X5R1C475M/1.25	X5R	16V	4,700,000	± 20%	1.25 ± 0.20
C2012X5R1C685K	X5R	16V	6,800,000	± 10%	1.25 ± 0.20
C2012X5R1C685M	X5R	16V	6,800,000	± 20%	1.25 ± 0.20
C2012X5R1C106K/0.85	X5R	16V	10,000,000	± 10%	0.85 ± 0.10
C2012X5R1C106M/0.85	X5R	16V	10,000,000	± 20%	0.85 ± 0.10
C2012X5R1C106K/1.25	X5R	16V	10,000,000	± 10%	1.25 ± 0.20
C2012X5R1C106M/1.25	X5R	16V	10,000,000	± 20%	1.25 ± 0.20
C2012X5R1C226K	X5R	16V	22,000,000	± 10%	1.25 ± 0.20
C2012X5R1C226M	X5R	16V	22,000,000	± 20%	1.25 ± 0.20
C2012X5R1A105K/0.85	X5R	10V	1,000,000	± 10%	0.85 ± 0.10
C2012X5R1A105M/0.85	X5R	10V	1,000,000	± 20%	0.85 ± 0.10



## Capacitance Range Table

## C2012 [EIA CC0805]

### Class 2 (Temperature Stable)

Temperature Characteristics: X5R (-55 to +85°C, ±15%)

TDK Part Number (Ordering Code)	Temperature Characteristics	Rated Voltage	Capacitance (pF)	Capacitance Tolerance	Thickness (mm)
C2012X5R1A105K/1.25	X5R	10V	1,000,000	± 10%	1.25 ± 0.20
C2012X5R1A105M/1.25	X5R	10V	1,000,000	± 20%	1.25 ± 0.20
C2012X5R1A225K/0.85	X5R	10V	2,200,000	± 10%	0.85 ± 0.10
C2012X5R1A225M/0.85	X5R	10V	2,200,000	± 20%	0.85 ± 0.10
C2012X5R1A225K/1.25	X5R	10V	2,200,000	± 10%	1.25 ± 0.20
C2012X5R1A225M/1.25	X5R	10V	2,200,000	± 20%	1.25 ± 0.20
C2012X5R1A335K	X5R	10V	3,300,000	± 10%	1.25 ± 0.20
C2012X5R1A335M	X5R	10V	3,300,000	± 20%	1.25 ± 0.20
C2012X5R1A475K/0.85	X5R	10V	4,700,000	± 10%	0.85 ± 0.10
C2012X5R1A475M/0.85	X5R	10V	4,700,000	± 20%	0.85 ± 0.10
C2012X5R1A475K/1.25	X5R	10V	4,700,000	± 10%	1.25 ± 0.20
C2012X5R1A475M/1.25	X5R	10V	4,700,000	± 20%	1.25 ± 0.20
C2012X5R1A106K/0.85	X5R	10V	10,000,000	± 10%	0.85 ± 0.10
C2012X5R1A106M/0.85	X5R	10V	10,000,000	± 20%	0.85 ± 0.10
C2012X5R1A106K/1.25	X5R	10V	10,000,000	± 10%	1.25 ± 0.20
C2012X5R1A106M/1.25	X5R	10V	10,000,000	± 20%	1.25 ± 0.20
C2012X5R1A156M	X5R	10V	15,000,000	± 20%	1.25 ± 0.20
C2012X5R1A226M/0.85	X5R	10V	22,000,000	± 20%	0.85 ± 0.10
C2012X5R1A226K/1.25	X5R	10V	22,000,000	± 10%	1.25 ± 0.20
C2012X5R1A226M/1.25	X5R	10V	22,000,000	± 20%	1.25 ± 0.20
C2012X5R0J225K/0.85	X5R	6.3V	2,200,000	± 10%	0.85 ± 0.10
C2012X5R0J225M/0.85	X5R	6.3V	2,200,000	± 20%	0.85 ± 0.10
C2012X5R0J225K/1.25	X5R	6.3V	2,200,000	± 10%	1.25 ± 0.20
C2012X5R0J225M/1.25	X5R	6.3V	2,200,000	± 20%	1.25 ± 0.20
C2012X5R0J335K/1.25	X5R	6.3V	3,300,000	± 10%	1.25 ± 0.20
C2012X5R0J335M/1.25	X5R	6.3V	3,300,000	± 20%	1.25 ± 0.20
C2012X5R0J475K/0.85	X5R	6.3V	4,700,000	± 10%	0.85 ± 0.10
C2012X5R0J475M/0.85	X5R	6.3V	4,700,000	± 20%	0.85 ± 0.10
C2012X5R0J475K/1.25	X5R	6.3V	4,700,000	± 10%	1.25 ± 0.20
C2012X5R0J475M/1.25	X5R	6.3V	4,700,000	± 20%	1.25 ± 0.20
C2012X5R0J685K/1.25	X5R	6.3V	6,800,000	± 10%	1.25 ± 0.20
C2012X5R0J685M/1.25	X5R	6.3V	6,800,000	± 20%	1.25 ± 0.20
C2012X5R0J106K/0.85	X5R	6.3V	10,000,000	± 10%	0.85 ± 0.10
C2012X5R0J106M/0.85	X5R	6.3V	10,000,000	± 20%	0.85 ± 0.10
C2012X5R0J106K/1.25	X5R	6.3V	10,000,000	± 10%	1.25 ± 0.20
C2012X5R0J106M/1.25	X5R	6.3V	10,000,000	± 20%	1.25 ± 0.20
C2012X5R0J156M/0.85	X5R	6.3V	15,000,000	± 20%	0.85 ± 0.10
C2012X5R0J156M/1.25	X5R	6.3V	15,000,000	± 20%	1.25 ± 0.20
C2012X5R0J226M/0.85	X5R	6.3V	22,000,000	± 20%	0.85 ± 0.10
C2012X5R0J226K/1.25	X5R	6.3V	22,000,000	± 10%	1.25 ± 0.20
C2012X5R0J226M/1.25	X5R	6.3V	22,000,000	± 20%	1.25 ± 0.20
C2012X5R0J336M	X5R	6.3V	33,000,000	± 20%	1.25 ± 0.20





## Capacitance Range Table

# C2012 [EIA CC0805]

### Class 2 (Temperature Stable)

Temperature Characteristics: X5R (-55 to +85°C, ±15%), Y5V (-30 to +85°C, +22/-82%)

TDK Part Number (Ordering Code)	Temperature Characteristics	Rated Voltage	Capacitance (pF)	Capacitance Tolerance	Thickness (mm)
C2012X5R0J476M	X5R	6.3V	47,000,000	± 20%	1.25 ± 0.20
C2012X5R0G476M	X5R	4V	47,000,000	± 20%	1.25 ± 0.20
C2012Y5V1H104Z/0.60	Y5V	50V	100,000	+80/-20%	0.60 ± 0.10
C2012Y5V1H104Z/0.85	Y5V	50V	100,000	+80/-20%	0.85 ± 0.10
C2012Y5V1H474Z/0.85	Y5V	50V	470,000	+80/-20%	0.85 ± 0.10
C2012Y5V1H105Z/0.85	Y5V	50V	1,000,000	+80/-20%	0.85 ± 0.10
C2012Y5V1H105Z/1.25	Y5V	50V	1,000,000	+80/-20%	1.25 ± 0.20
C2012Y5V1H225Z	Y5V	50V	2,200,000	+80/-20%	1.25 ± 0.20
C2012Y5V1E105Z/0.85	Y5V	25V	1,000,000	+80/-20%	0.85 ± 0.10
C2012Y5V1E105Z/1.25	Y5V	25V	1,000,000	+80/-20%	1.25 ± 0.20
C2012Y5V1E225Z	Y5V	25V	2,200,000	+80/-20%	1.25 ± 0.20
C2012Y5V1E475Z	Y5V	25V	4,700,000	+80/-20%	1.25 ± 0.20
C2012Y5V1C105Z/0.85	Y5V	16V	1,000,000	+80/-20%	0.85 ± 0.10
C2012Y5V1C105Z/1.25	Y5V	16V	1,000,000	+80/-20%	1.25 ± 0.20
C2012Y5V1C225Z/0.85	Y5V	16V	2,200,000	+80/-20%	0.85 ± 0.10
C2012Y5V1C225Z/1.25	Y5V	16V	2,200,000	+80/-20%	1.25 ± 0.20
C2012Y5V1C475Z/0.85	Y5V	16V	4,700,000	+80/-20%	0.85 ± 0.10
C2012Y5V1C475Z/1.25	Y5V	16V	4,700,000	+80/-20%	1.25 ± 0.20
C2012Y5V1C106Z	Y5V	16V	10,000,000	+80/-20%	1.25 ± 0.20
C2012Y5V1A475Z/0.85	Y5V	10V	4,700,000	+80/-20%	0.85 ± 0.10
C2012Y5V1A475Z/1.25	Y5V	10V	4,700,000	+80/-20%	1.25 ± 0.20
C2012Y5V1A106Z	Y5V	10V	10,000,000	+80/-20%	1.25 ± 0.20
C2012Y5V0J106Z	Y5V	6.3V	10,000,000	+80/-20%	1.25 ± 0.20
C2012Y5V0J226Z	Y5V	6.3V	22,000,000	+80/-20%	1.25 ± 0.20