



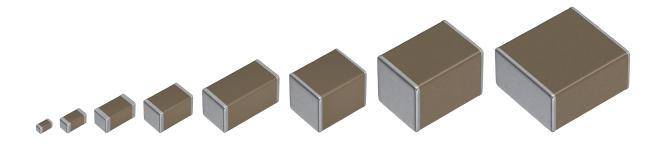
MULTILAYER CERAMIC CHIP CAPACITORS

Automotive grade, general (Up to 75V)

CGA series

CGA1	0603 [EIA 0201]
CGA2	1005 [EIA 0402]
CGA3	1608 [EIA 0603]
CGA4	2012 [EIA 0805]
CGA5	3216 [EIA 1206]
CGA6	3225 [EIA 1210]
CGA8	4532 [EIA 1812]
CGA9	5750 [EIA 2220]

^{*} 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 in this specification are intended for use in automotive applications under normal operation and usage conditions. The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality requires a more stringent level of safety or reliability, or whose failure, malfunction or defect could cause serious damage to society, person or property.

Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below or for any other use exceeding the range or conditions set forth in this specification sheet. 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 this specification, please contact us.

- (1) Aerospace/aviation equipment
- (2) Transportation equipment (electric trains, ships, etc.)
- (3) Medical equipment (excepting Pharmaceutical Affairs Law classification Class1,2)
- (4) Power-generation control equipment
- (5) Atomic energy-related equipment
- (6) Seabed equipment

- (7) Transportation control equipment
- (8) Public information-processing equipment
- (9) Military equipment
- (10) Electric heating apparatus, burning equipment
- (11) Disaster prevention/crime prevention equipment
- (12) Safety equipment
- (13) Other applications that are not considered general-purpose applications

When designing your equipment involving the Products, you are kindly requested to take into consideration securing protection circuit/equipment or providing backup circuits, etc. in your equipment, to ensure higher safety.

- 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.

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	



CGA series General (Up to 75V)









Type: CGA1/0603 [EIA 0201], CGA2/1005 [EIA 0402], CGA3/1608 [EIA 0603], CGA4/2012 [EIA 0805], CGA5/3216 [EIA 1206], CGA6/3225 [EIA 1210], CGA8/4532 [EIA 1812], CGA9/5750 [EIA 2220]

SERIES OVERVIEW

General type CGA 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 $100\mu F$ and the lineup has been expanding to a range of the film capacitor and electrolytic capacitor.

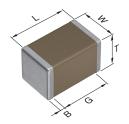
FEATURES

- 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
- Qualified based on AEC-Q200

APPLICATION

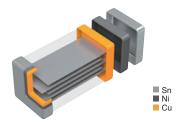
- Smoothing and decoupling use in power lines for automotive applications such as ADAS, autonomous driving system ECU
- LC resonance circuit (C0G type)
- Applications requiring high reliability

SHAPE & DIMENSIONS



L	Body length
W	Body width
Т	Body height
В	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.

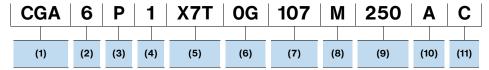
Dimensions in mm

Туре	L	W	Т	В	G
CGA1	0.60±0.03	0.30±0.03	0.30±0.03	0.10 min.	0.20 min.
CGA2	1.00±0.05	0.50±0.05	0.50±0.05	0.10 min.	0.30 min.
CGA3	1.60±0.10	0.80±0.10	0.80±0.10	0.20 min.	0.30 min.
CGA4	2.00±0.20	1.25±0.20	1.25±0.20	0.20 min.	0.50 min.
CGA5	3.20±0.20	1.60±0.20	1.60±0.20	0.20 min.	1.00 min.
CGA6	3.20±0.40	2.50±0.30	2.50±0.30	0.20 min.	-
CGA8	4.50±0.40	3.20±0.40	2.50±0.30	0.20 min.	-
CGA9	5.70±0.40	5.00±0.40	2.50±0.30	0.20 min.	-

Dimensional tolerances are typical values.



CATALOG NUMBER CONSTRUCTION



(1)Series

(2)Dimensions L x W (mm)

Code	EIA	Length	Width	Terminal width
1	0201	0.60	0.30	0.10
2	0402	1.00	0.50	0.10
3	0603	1.60	0.80	0.20
4	0805	2.00	1.25	0.20
5	1206	3.20	1.60	0.20
6	1210	3.20	2.50	0.20
8	1812	4.50	3.20	0.20
9	2220	5.70	5.00	0.20

(3)Thickness code

Code	Thickness	
A	0.30 mm	
В	0.50 mm	
С	0.60 mm	
Ē	0.80 mm	
F	0.85 mm	
Н	1.15 mm	
J	1.25 mm	
L	1.60 mm	
M	2.00 mm	
N	2.30 mm	
Р	2.50 mm	
Q	2.80 mm	
R	3.20 mm	

(4)Voltage condition for life test

Symbol	Condition
1	1 x R.V.
2	2 x R.V.
3	1.5 x R.V.

(5)Temperature characteristics

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

(6)Rated voltage (DC)

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

(7)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)
$$0R5 = 0.5pF$$

 $101 = 100pF$
 $225 = 2,200,000pF = 2.2\mu F$

(8)Capacitance tolerance

Code	Tolerance	
С	±0.25pF	
D	±0.50pF	
J	±5%	
K	±10%	
M	±20%	

(9)Thickness

Thickness
0.30 mm
0.50 mm
0.60 mm
0.80 mm
0.85 mm
1.15 mm
1.25 mm
1.60 mm
2.00 mm
2.30 mm
2.50 mm
2.80 mm
3.20 mm

(10)Packaging style

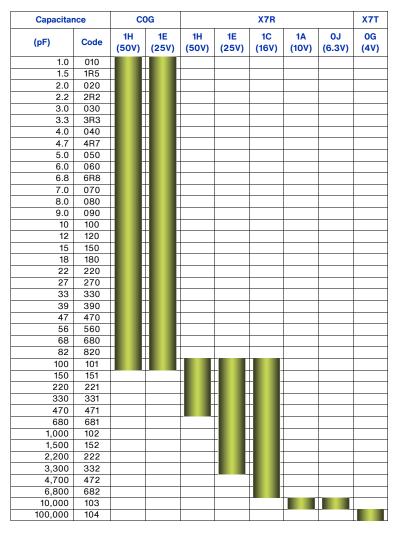
Code	Style
A	178mm reel, 4mm pitch
В	178mm reel, 2mm pitch
K	178mm reel, 8mm pitch

(11)Special reserved code

Code	Description
A,B,C	TDK internal code
U	Derating guarantee product



CGA1/0603 [EIA 0201]



Standard thickness 0.30 mm

■Click the charts for details.

■For details such as the catalog numbers, please refer to the capacitance range table on page 12 and after.



CGA2/1005 [EIA 0402]

Capacitar	nce	COG			X5R			X7R				X	7S	X7T		
(pF)	Code	1H (50V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	1C (16V)	1A (10V)	0G (4V)
1.0	010		, ,	, ,	, ,	. ,	, ,	, ,	, ,	, ,	. ,	. ,	, ,	. ,	. ,	<u> </u>
1.5	1R5															
2.0	020															
2.2	2R2															
3.0	030															
3.3	3R3															
4.0	040	•														
4.7	4R7	_														
5.0	050	•														
6.0 6.8	060 6R8	_														
7.0	070	•														
8.0	080															
9.0	090															
10	100	•														
12	120															
15	150															
18	180															
22	220															
27	270															
33	330															
39	390															
47	470															
56	560	_														
68	680	_														
82	820	_														
100 120	101 121	_														
150	151	_														
180	181															
220	221	_														
270	271															
330	331	_														
390	391															
470	471															
560	561															
680	681															
820	821	_														
1,000	102															
1,500	152															
2,200 3,300	222 332					-		-								-
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															
330,000 470,000	334 474					1										-
1,000,000	105					-										
1,000,000	100		l					l			l		l	l		

Standard thickness 0.50 mm

Background gray: These products are 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 12 and after.



CGA3/1608 [EIA 0603]

Capacitar	nce	COG	X5R	X7R
(pF)	Code	1H (50V)	1H (50V)	1H (50V)
1.0	010			
1.5	1R5			
2.0	020	_		
2.2	2R2			
3.0	030			
3.3	3R3			
4.0	040			
4.7	4R7	_		
5.0	050			
6.0	060			
6.8	6R8			
7.0	070			
8.0	080			
9.0	090			
10	100			
12	120			
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			
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			
47,000	473			
68,000	683			
•				

Standard thickness 0.80 mm

Background gray: These products are not recommended for new designs.

Click the charts for details.

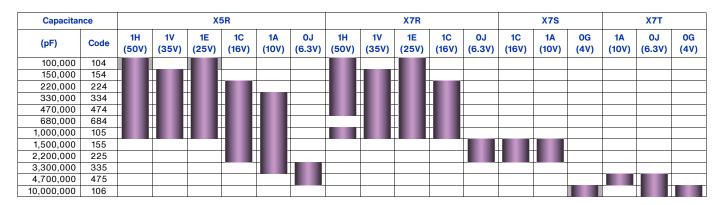
For details such as the catalog numbers, please refer to the capacitance range table on page 12 and after.

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance range chart

CGA3/1608 [EIA 0603]



Standard thickness 0.80 mm

Background gray: These products are 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 12 and after.



CGA4/2012 [EIA 0805]

Capacitar	ice	COG			X5R			X7R						X7S		X7T	
(pF)	Code	1H (50V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	1H (50V)	1V (35V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)	1E (25V)	1C (16V)	1A (10V)	0J (6.3V)
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																
150,000	154																
220,000	224																
330,000	334		i i														
470,000	474		i i														
680,000	684		i i	i i													
1,000,000	105			i i													
1,500,000	155			i i													
2,200,000	225					i i											
3,300,000	335																
4,700,000	475						-										
6,800,000	685																
10,000,000	106																
22,000,000	226																

Standard thickness 0.60 mm 0.85 mm 1.25 mm

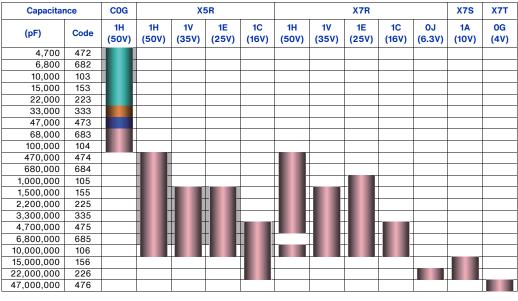
Background gray: These products are not recommended for new designs.

Click the charts for details.

■For details such as the catalog numbers, please refer to the capacitance range table on page 12 and after.



CGA5/3216 [EIA 1206]



Standard thickness

0.60 mm 0.85 mm

1.15 mm

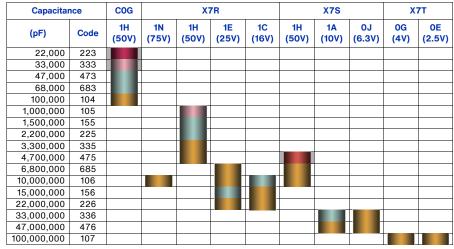
Background gray: These products are not recommended for new designs.

■Click the charts for details.

For details such as the catalog numbers, please refer to the capacitance range table on page 12 and after.

Capacitance range chart

CGA6/3225 [EIA 1210]



Standard thickness

1.25 mm

1.60 mm 2.00 mm

2.30 mm

Background gray: These products are 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 12 and after.



CGA8/4532 [EIA 1812]

Capacita	псе	COG		X7R	
(pF)	Code	1H (50V)	1H (50V)	1E (25V)	1C (16V)
47,000	473				
68,000	683				
100,000	104				
150,000	154				
220,000	224				
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				

Standard thickness 1.60 mm 2.00 mm 2.30 mm 2.50 mm 2.80 mm 3.20 mm Background gray: These products are 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 12 and after.

Capacitance range chart

CGA9/5750 [EIA 2220]

	Capacita	nce	X7R						
	(pF) Code			1H (50V)	1V (35V)	1E (25V)	1C (16V)		
Ī	4,700,000	475							
	6,800,000	685							
Ī	10,000,000	106							
	15,000,000	156							
Ī	22,000,000	226							
	47,000,000	476							

Standard thickness 2.00 mm 2.30 mm 2.50 mm

Background gray: These products are 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 12 and after.



Temperature characteristic: COG (-55 to +125 $^{\circ}$ C ,0±30ppm/ $^{\circ}$ C)

	Canacitance	Dimensions	Thickness	Capacitance	Catalog	number
19F	Capacitance	Difficusions	(mm)	tolerance	Rated voltage Edc: 50V	Rated voltage Edc: 25V
1608		0603	0.30±0.03	±0.25pF		CGA1A2C0G1E010C030BA
0603	1pF				·	
1.5pF 1005						0011100001510500000
1608	1 5 5 5					CGA1A2C0G1E1R5C030BA
Dec	і.әрғ					
2-pF 1005						CGA1A2C0G1E020C030BA
1608	2nF					CONTRACTOR OF THE CONTRACTOR OF
2.2pF 0050	201					
2.2PF						CGA1A2C0G1E2R2C030B/
1608	2.2pF					
3pF	·	1608		±0.25pF	CGA3E2C0G1H2R2C080AA	
1608		0603	0.30±0.03	±0.25pF	CGA1A2C0G1H030C030BA	CGA1A2C0G1E030C030BA
0603	3pF	1005	0.50±0.05	±0.25pF	CGA2B2C0G1H030C050BA	
3.3PF						
1608						CGA1A2C0G1E3R3C030B
4pF 1005	3.3pF					
4PF						00444000450400000
1608	45					CGA1A2C0G1E040C030B
4.7pF 1005 0.50±0.03 ±0.25pF CGA122C0G1H4R7C030BA CGA1A2C0G1E4R7C030B 1608 0.80±0.10 ±0.25pF CGA32B2C0G1H4R7C030BA CGA1A2C0G1E050C030B CGA1A2C0G1E150C030B CGA1A2C0G1E	4pr					
4.7pF						CGA1A2C0G1E4B7C030B
1608	4 7nF					CGATAZCOGTE4H7 C030B/
5pF 1005 0.50±0.05 ±0.25pF CGA1A2C0GIH05DC030BA CGA1A2C0GIE050C030BA 1005 0.50±0.05 ±0.25pF CGA2B2C0GIH05DC050BA 1608 0.80±0.10 ±0.25pF CGA3B2C0GIH05DC08DAA 6pF 1005 0.50±0.05 ±0.50pF CGA1A2C0GIH06DD03DBA CGA1A2C0GIE060D030BA 6pF 1005 0.50±0.05 ±0.50pF CGA1A2C0GIH06DD08DAA CGA1A2C0GIE6RBD030BA 6003 0.30±0.03 ±0.50pF CGA1A2C0GIH6RBD030BA CGA1A2C0GIE6RBD030BA 6.8pF 1005 0.50±0.05 ±0.50pF CGA3B2C0GIH6RB0B03DAA 6.8pF 1005 0.50±0.05 ±0.50pF CGA3B2C0GIH6RB0B03DAA 6080 0.80±0.10 ±0.50pF CGA3B2C0GIH07D003DBA CGA1A2C0GIE6RD030BA 7pF 1005 0.50±0.05 ±0.50pF CGA3B2C0GIH07D0D08DAA 6063 0.30±0.03 ±0.50pF CGA3B2C0GIH08D003DBA CGA1A2C0GIE6B00030B 8pF 1005 0.50±0.05 ±0.50pF CGA3B2C0GIH08D003DBA CGA1A2C0GIE6B00030B 9pF 1005	4.7 pi					
SpF 1005 0.50±0.05 ±0.25pF CGA3B2COG1H050C080AA 0603 0.30±0.03 ±0.50pF CGA3B2COG1H050C080AA 6pF 1005 0.50±0.05 ±0.50pF CGA1A2C0G1H060D030BA CGA1A2C0G1E060D030BA 6003 0.30±0.03 ±0.50pF CGA3B2COG1H060D080AA 6.8pF 1005 0.50±0.05 ±0.50pF CGA3B2COG1H6RBD030BA 6.8pF 1005 0.50±0.05 ±0.50pF CGA3B2COG1H6RBD030BA 6.8pF 1005 0.50±0.05 ±0.50pF CGA3B2COG1H6RBD030BA 6063 0.30±0.03 ±0.50pF CGA3B2COG1H6RBD030BA 7pF 1005 0.50±0.05 ±0.50pF CGA3B2COG1H070D080BA 8pF 1006 0.80±0.10 ±0.50pF CGA3B2COG1H070D080BA 8pF 1005 0.50±0.05 ±0.50pF CGA3B2COG1H080D030BA CGA1A2COG1E080D030B 8pF 1005 0.50±0.05 ±0.50pF CGA3B2COG1H090D030BA CGA1A2COG1E090D030B 8pF 1005 0.50±0.05 ±0.50pF CGA3B2COG1H090D030BA CGA1A2COG1E				•		CGA1A2C0G1E050C030B
1608	5pF					<u></u>
6pF 1005 0.50±0.05 ±0.50pF CGA1A2COG1H06DD030BA CGA1A2COG1E06DD030B 1608 0.80±0.10 ±0.50pF CGA2B2COG1H06DD08DAA CGA1A2COG1E6R8D030B						
6pF 1005 0.50±0.05 ±0.50pF CGAZB2COG1H060D050BA 1608 0.80±0.10 ±0.50pF CGA3E2COG1H060D080AA 0603 0.30±0.03 ±0.50pF CGA3E2COG1H6RB0030BA CGA1A2COG1E6R8D030BA 1005 0.50±0.05 ±0.50pF CGA3E2COG1H6RB0D050BA 0603 0.30±0.03 ±0.50pF CGA3E2COG1H6RBD030BA 7pF 1005 0.50±0.05 ±0.50pF CGA3E2COG1H070D030BA 1608 0.80±0.10 ±0.50pF CGA3E2COG1H070D050BA 1608 0.80±0.10 ±0.50pF CGA3E2COG1H080D030BA 0603 0.30±0.03 ±0.50pF CGA3E2COG1H080D030BA 8pF 1005 0.50±0.05 ±0.50pF CGA3E2COG1H080D030BA 1608 0.80±0.10 ±0.50pF CGA3E2COG1H090D030BA CGA1A2COG1E080D030B 8pF 1005 0.50±0.05 ±0.50pF CGA3E2COG1H090D030BA CGA1A2COG1E090D030B 9pF 1005 0.50±0.05 ±0.50pF CGA3E2COG1H090D050BA CGA1A2COG1E100D030BA 10pF 1005 0.50±0.05						CGA1A2C0G1E060D030B/
0.803	6pF					
6.8pF		1608	0.80±0.10	±0.50pF	CGA3E2C0G1H060D080AA	
1608		0603	0.30±0.03	±0.50pF	CGA1A2C0G1H6R8D030BA	CGA1A2C0G1E6R8D030B
7pF 1005 0.50±0.05 ±0.50pF CGA1A2C0G1H070D050BA CGA1A2C0G1E070D030B 1005 0.50±0.05 ±0.50pF CGA3B2C0G1H070D050BA 0603 0.30±0.03 ±0.50pF CGA1A2C0G1H070D080AA 0603 0.30±0.03 ±0.50pF CGA1A2C0G1H080D050BA CGA1A2C0G1E080D030B 8pF 1005 0.50±0.05 ±0.50pF CGA2B2C0G1H080D050BA 1608 0.80±0.10 ±0.50pF CGA1B2C0G1H080D050BA 1608 0.80±0.03 ±0.50pF CGA1B2C0G1H090D050BA 1608 0.80±0.10 ±0.50pF CGA1B2C0G1H090D050BA 1608 0.80±0.10 ±0.50pF CGA1B2C0G1H090D050BA 1608 0.80±0.10 ±0.50pF CGA2B2C0G1H190D050BA 1608 0.80±0.10 ±0.50pF CGA2B2C0G1H100D050BA 1608 0.80±0.10 ±0.50pF CGA3E2C0G1H100D050BA 1608 0.80±0.10 ±5% CGA1B2C0G1H120J030BA CGA1A2C0G1E120J030BA 15pF 1005 0.50±0.05 ±5% CGA3E2C0G1H120J030BA CGA1A2C0G1E120J030BA 1	6.8pF	1005	0.50±0.05	±0.50pF	CGA2B2C0G1H6R8D050BA	
7pF 1005 0.50±0.05 ±0.50pF CGA2B2C0G1H070D050BA 1608 0.80±0.10 ±0.50pF CGA3B2C0G1H070D080AA 8pF 1005 0.50±0.05 ±0.50pF CGA1B2C0G1H080D030BA CGA1A2C0G1E080D030B 1608 0.80±0.10 ±0.50pF CGA2B2C0G1H080D050BA CGA1A2C0G1E090D030BA 1608 0.80±0.10 ±0.50pF CGA3B2C0G1H090D030BA CGA1A2C0G1E090D030B 1608 0.80±0.10 ±0.50pF CGA2B2C0G1H090D050BA CGA1A2C0G1E090D030B 1608 0.80±0.10 ±0.50pF CGA2B2C0G1H090D080AA CGA1A2C0G1E100D030B 10pF 1005 0.50±0.05 ±0.50pF CGA2B2C0G1H100D030BA CGA1A2C0G1E100D030B 10pF 1005 0.50±0.05 ±0.50pF CGA2B2C0G1H100D030BA CGA1A2C0G1E100D030B 10pF 1005 0.50±0.05 ±0.50pF CGA2B2C0G1H100D030BA CGA1A2C0G1E120J030BA 12pF 1005 0.50±0.05 ±5% CGA2B2C0G1H120J030BA CGA1A2C0G1E120J030BA 12pF 1005 0.50±0.05 ±5% CGA2B2C0G1H120J030BA			0.80±0.10	±0.50pF	CGA3E2C0G1H6R8D080AA	
1608				±0.50pF	CGA1A2C0G1H070D030BA	CGA1A2C0G1E070D030BA
8pF 1005 0.50±0.05 ±0.50pF CGA1A2C0G1H080D030BA CGA1A2C0G1E080D030B 1608 0.80±0.10 ±0.50pF CGA2B2C0G1H080D080AA 1608 0.80±0.10 ±0.50pF CGA12B2C0G1H080D030BA CGA1A2C0G1E090D030B 1608 0.80±0.03 ±0.50pF CGA12C0G1H090D030BA CGA1A2C0G1E090D030B 1608 0.80±0.10 ±0.50pF CGA12B2C0G1H090D030BA CGA1A2C0G1E090D030B 1608 0.80±0.10 ±0.50pF CGA1B2C0G1H090D030BA CGA1A2C0G1E100D030B 1608 0.80±0.10 ±0.50pF CGA1B2C0G1H090D080AA 1608 0.80±0.10 ±0.50pF CGA1B2C0G1H100D030BA CGA1A2C0G1E100D030B 1608 0.80±0.10 ±0.50pF CGA1B2C0G1H100D030BA CGA1A2C0G1E100D030B 1608 0.80±0.10 ±0.50pF CGA3B2C0G1H100D080AA 1608 0.80±0.10 ±0.50pF CGA3B2C0G1H100D080AA 1608 0.80±0.10 ±5% CGA1B2C0G1H120.030BA CGA1A2C0G1E120J030BA 1608 0.80±0.10 ±5% CGA2B2C0G1H120.030BA CGA1A2C0G1E120J030BA 1608 0.80±0.10 ±5% CGA3B2C0G1H120.030BA CGA1A2C0G1E120J030BA 1608 0.80±0.10 ±5% CGA3B2C0G1H120.030BA CGA1A2C0G1E150J030BA 1608 0.80±0.10 ±5% CGA3B2C0G1H150J030BA CGA1A2C0G1E150J030BA 1608 0.80±0.10 ±5% CGA2B2C0G1H150J030BA CGA1A2C0G1E150J030BA 1608 0.80±0.10 ±5% CGA2B2C0G1H150J030BA CGA1A2C0G1E180J030BA 1608 0.80±0.10 ±5% CGA3B2C0G1H180J030BA CGA1A2C0G1E220J030B 1608 0.80±0.10 ±5% CGA3B2C0G1H20J030BA CGA1A2C0G1E270J030B 1608 0.80±0.10 ±5% CGA3B2C0G1H20J030BA CGA1A2C0G1E330J030BA CGA1A2C0G1E300J030BA CGA1A2C0G1E300J030BA CGA1A2C0G1E300J030BA CGA1A2C0G1E300J030BA CGA1A2C0G1	7pF		0.50±0.05			
BPF						
1608						CGA1A2C0G1E080D030BA
9pF 1005 0.50±0.05 ±0.50pF CGA1A2C0G1H090D030BA CGA1A2C0G1E090D030B 1608 0.80±0.10 ±0.50pF CGA2B2C0G1H090D030BA 1608 0.80±0.10 ±0.50pF CGA3E2C0G1H090D030BA 1608 0.80±0.10 ±0.50pF CGA1A2C0G1H090D030BA 1608 0.80±0.10 ±0.50pF CGA1A2C0G1H100D030BA CGA1A2C0G1E100D030B 1608 0.80±0.10 ±0.50pF CGA2B2C0G1H100D030BA CGA1A2C0G1E100D030B 1608 0.80±0.10 ±0.50pF CGA3E2C0G1H100D030BA CGA1A2C0G1E120J030B 1608 0.80±0.10 ±5.50pF CGA3E2C0G1H100D030BA CGA1A2C0G1E120J030BA 1608 0.80±0.10 ±5.50pF CGA3E2C0G1H120J030BA CGA1A2C0G1E120J030BA 1608 0.80±0.10 ±5.50 CGA2B2C0G1H120J030BA CGA1A2C0G1E120J030BA 1608 0.80±0.10 ±5.50 CGA2B2C0G1H120J030BA CGA1A2C0G1E150J030BA 1608 0.80±0.10 ±5.50 CGA2B2C0G1H150J030BA CGA1A2C0G1E150J030BA 1608 0.80±0.10 ±5.50 CGA2B2C0G1H150J030BA CGA1A2C0G1E180J030BA 1608 0.80±0.10 ±5.50 CGA2B2C0G1H150J030BA CGA1A2C0G1E180J030BA 1608 0.80±0.10 ±5.50 CGA3E2C0G1H180J030BA CGA1A2C0G1E180J030BA 1608 0.80±0.10 ±5.50 CGA3E2C0G1H180J030BA CGA1A2C0G1E180J030BA 1608 0.80±0.10 ±5.50 CGA3E2C0G1H180J030BA CGA1A2C0G1E220J030B 22pF 1005 0.50±0.05 ±5.50 CGA2B2C0G1H1220J030BA CGA1A2C0G1E220J030B 1608 0.80±0.10 ±5.50 CGA3E2C0G1H220J030BA CGA1A2C0G1E220J030B 1608 0.80±0.10 ±5.50 CGA3E2C0G1H220J030BA CGA1A2C0G1E220J030B 1608 0.80±0.10 ±5.50 CGA3E2C0G1H270J030BA CGA1A2C0G1E270J030B 1608 0.80±0.10 ±5.50 CGA3E2C0G1H270J030BA CGA1A2C0G1E270J030B 1608 0.80±0.10 ±5.50 CGA3E2C0G1H270J030BA CGA1A2C0G1E270J030B 1608 0.80±0.10 ±5.50 CGA3E2C0G1H270J030BA CGA1A2C0G1E330J030BA CGA1A2C0G1E30	8р⊦					
Por						CC 414 0 C0 C1 F 0 0 0 D 0 2 0 D
1608	0.5					CGATA2CUGTEU90D030B/
10pF	эрг					
10pF						CGA1A2C0G1E100D030BA
1608	10pF					<u>OGATAZOOGILIOODOOODA</u>
12pF	торі					
12pF				•		CGA1A2C0G1E120J030BA
1608	12pF				-	
15pF	•	1608				
1608		0603	0.30±0.03	±5%	CGA1A2C0G1H150J030BA	CGA1A2C0G1E150J030BA
18pF	15pF	1005	0.50±0.05	±5%	CGA2B2C0G1H150J050BA	
18pF 1005 0.50±0.05 ±5% CGA2B2C0G1H180J050BA 1608 0.80±0.10 ±5% CGA3B2C0G1H180J080AA 0603 0.30±0.03 ±5% CGA1A2C0G1H220J030BA CGA1A2C0G1E220J030B 22pF 1005 0.50±0.05 ±5% CGA2B2C0G1H220J080AA CGA1A2C0G1E270J030B 1608 0.80±0.10 ±5% CGA3B2C0G1H270J030BA CGA1A2C0G1E270J030B 27pF 1005 0.50±0.05 ±5% CGA2B2C0G1H270J050BA CGA1A2C0G1E270J030B 1608 0.80±0.10 ±5% CGA3B2C0G1H270J030BA CGA1A2C0G1E330J030B 33pF 1005 0.50±0.05 ±5% CGA2B2C0G1H330J030BA CGA1A2C0G1E330J030B 3pF 1005 0.50±0.05 ±5% CGA2B2C0G1H330J030BA CGA1A2C0G1E390J030B 3pF 1005 0.50±0.05 ±5% CGA2B2C0G1H390J030BA CGA1A2C0G1E390J030B 3pF 1005 0.50±0.05 ±5% CGA2B2C0G1H390J030BA CGA1A2C0G1E390J030B 3pF 1005 0.50±0.05 ±5% CGA3E2C0G1H390J030BA CGA1A2C0G1E39		1608	0.80±0.10	±5%	CGA3E2C0G1H150J080AA	
1608		0603	0.30±0.03	±5%	CGA1A2C0G1H180J030BA	CGA1A2C0G1E180J030BA
22pF	18pF	1005	0.50±0.05	±5%	CGA2B2C0G1H180J050BA	
22pF 1005 0.50±0.05 ±5% CGA2B2C0G1H220J050BA 1608 0.80±0.10 ±5% CGA3E2C0G1H220J080AA 0603 0.30±0.03 ±5% CGA1A2C0G1H270J030BA CGA1A2C0G1E270J030B 27pF 1005 0.50±0.05 ±5% CGA2B2C0G1H270J080AA 1608 0.80±0.10 ±5% CGA1A2C0G1H270J080AA 0603 0.30±0.03 ±5% CGA1A2C0G1H330J030BA CGA1A2C0G1E330J030B 33pF 1005 0.50±0.05 ±5% CGA2B2C0G1H330J080AA CGA1A2C0G1E390J030B 1608 0.80±0.10 ±5% CGA3E2C0G1H390J030BA CGA1A2C0G1E390J030B 39pF 1005 0.50±0.05 ±5% CGA2B2C0G1H390J030BA CGA1A2C0G1E390J030B 1608 0.80±0.10 ±5% CGA2B2C0G1H390J080BA 1608 0.80±0.10 ±5% CGA3E2C0G1H390J080BA 0603 0.30±0.03 ±5% CGA1A2C0G1H390J080BA 0603 0.30±0.03 ±5% CGA1B2C0G1H470J030BA CGA1A2C0G1E470J030BA 47pF 1005 0.50±0.05						
1608						CGA1A2C0G1E220J030BA
27pF	22pF					
27pF 1005 0.50±0.05 ±5% CGA2B2C0G1H270J050BA 1608 0.80±0.10 ±5% CGA3E2C0G1H270J080AA 0603 0.30±0.03 ±5% CGA1A2C0G1H330J030BA CGA1A2C0G1E330J030B 33pF 1005 0.50±0.05 ±5% CGA2B2C0G1H330J050BA 1608 0.80±0.10 ±5% CGA3E2C0G1H330J080AA 0603 0.30±0.03 ±5% CGA1A2C0G1H390J030BA 1608 0.80±0.10 ±5% CGA2B2C0G1H390J050BA 1608 0.80±0.10 ±5% CGA3E2C0G1H390J080AA 0603 0.30±0.03 ±5% CGA1A2C0G1H470J030BA CGA1A2C0G1E470J030B 47pF 1005 0.50±0.05 ±5% CGA2B2C0G1H470J050BA						004440000:====:
1608	07. 5					CGA1A2CUG1E270J030BA
33pF	2/pF					
33pF						CC 414.0C0C4E000 1000B
1608	33nE					CGATAZOUGTE330J030B
39pF 0603 0.30±0.03 ±5% CGA1A2C0G1H390J030BA CGA1A2C0G1E390J030B 1005 0.50±0.05 ±5% CGA2B2C0G1H390J050BA 1608 0.80±0.10 ±5% CGA3E2C0G1H390J080AA 0603 0.30±0.03 ±5% CGA1A2C0G1H470J030BA CGA1A2C0G1E470J030B 47pF 1005 0.50±0.05 ±5% CGA2B2C0G1H470J050BA	оорг					
39pF 1005 0.50±0.05 ±5% CGA2B2C0G1H390J050BA 1608 0.80±0.10 ±5% CGA3E2C0G1H390J080AA 0603 0.30±0.03 ±5% CGA1A2C0G1H470J030BA CGA1A2C0G1E470J030B 47pF 1005 0.50±0.05 ±5% CGA2B2C0G1H470J050BA						CGA1A2C0G1E300 I020B
1608 0.80±0.10 ±5% CGA3E2C0G1H390J080AA 0603 0.30±0.03 ±5% CGA1A2C0G1H470J030BA CGA1A2C0G1E470J030B 47pF 1005 0.50±0.05 ±5% CGA2B2C0G1H470J050BA	39nF					OGNINZOUGIESSUJUSUBI
0603 0.30±0.03 ±5% CGA1A2C0G1H470J030BA CGA1A2C0G1E470J030B 47pF 1005 0.50±0.05 ±5% CGA2B2C0G1H470J050BA	oopi					
47pF 1005 0.50±0.05 ±5% <u>CGA2B2C0G1H470J050BA</u>						CGA1A2C0G1F470.I030B4
	47pF					<u>Janine Journal of Control of Con</u>
	٠٠ ٢٠	1608	0.80±0.10	±5%	CGA3E2C0G1H470J080AA	



Temperature characteristic: COG (-55 to +125 ℃ ,0±30ppm/ ℃)

Canacitanco	Dimonsions	Thickness	Capacitance	Catalog	number
Сарасіталсе	Dimensions	(mm)	tolerance	Rated voltage Edc: 50V	Rated voltage Edc: 25V
	0603	0.30±0.03	±5%	CGA1A2C0G1H560J030BA	CGA1A2C0G1E560J030BA
56pF	1005	0.50±0.05	±5%	CGA2B2C0G1H560J050BA	
	1608	0.80±0.10	±5%	CGA3E2C0G1H560J080AA	
	0603	0.30±0.03	±5%	CGA1A2C0G1H680J030BA	CGA1A2C0G1E680J030BA
68pF	1005	0.50±0.05	±5%	CGA2B2C0G1H680J050BA	
	1608	0.80±0.10	±5%	CGA3E2C0G1H680J080AA	
	0603	0.30±0.03	±5%	CGA1A2C0G1H820J030BA	CGA1A2C0G1E820J030BA
82pF	1005	0.50±0.05	±5%	CGA2B2C0G1H820J050BA	
	1608	0.80±0.10	±5%	CGA3E2C0G1H820J080AA	
	0603	0.30±0.03	±5%	CGA1A2C0G1H101J030BA	CGA1A2C0G1E101J030BA
100pF	1005	0.50±0.05	±5%	CGA2B2C0G1H101J050BA	
	1608	0.80±0.10	±5%	CGA3E2C0G1H101J080AA	
120pF	1005	0.50±0.05	±5%	CGA2B2C0G1H121J050BA	
12001	1608	0.80±0.10	±5%	CGA3E2C0G1H121J080AA	
150pF	1005	0.50±0.05	±5%	CGA2B2C0G1H151J050BA	
ТООРГ	1608	0.80±0.10	±5%	CGA3E2C0G1H151J080AA	
180pF	1005	0.50±0.05	±5%	CGA2B2C0G1H181J050BA	
ТООРІ	1608	0.80±0.10	±5%	CGA3E2C0G1H181J080AA	
220pF	1005	0.50±0.05	±5%	CGA2B2C0G1H221J050BA	
22001	1608	0.80±0.10	±5%	CGA3E2C0G1H221J080AA	
270pF	1005	0.50±0.05	±5%	CGA2B2C0G1H271J050BA	
27001	1608	0.80±0.10	±5%	CGA3E2C0G1H271J080AA	
330pF	1005	0.50±0.05	±5%	CGA2B2C0G1H331J050BA	
озорі	1608	0.80±0.10	±5%	CGA3E2C0G1H331J080AA	
390pF	1005	0.50±0.05	±5%	CGA2B2C0G1H391J050BA	
Зэорі	1608	0.80±0.10	±5%	CGA3E2C0G1H391J080AA	
470pF	1005	0.50±0.05	±5%	CGA2B2C0G1H471J050BA	
47 UPF	1608	0.80±0.10	±5%	CGA3E2C0G1H471J080AA	
560pF	1005	0.50±0.05	±5%	CGA2B2C0G1H561J050BA	
эворг	1608	0.80±0.10	±5%	CGA3E2C0G1H561J080AA	
690nE	1005	0.50±0.05	±5%	CGA2B2C0G1H681J050BA	
680pF	1608	0.80±0.10	±5%	CGA3E2C0G1H681J080AA	
920nE	1005	0.50±0.05	±5%	CGA2B2C0G1H821J050BA	
820pF	1608	0.80±0.10	±5%	CGA3E2C0G1H821J080AA	
	1005	0.50±0.05	±5%	CGA2B2C0G1H102J050BA	
1nF	1608	0.80±0.10	±5%	CGA3E2C0G1H102J080AA	
	2012	0.60±0.15	±5%	CGA4C2C0G1H102J060AA	
1.2nF	1608	0.80±0.10	±5%	CGA3E2C0G1H122J080AA	
1.2111	2012	0.60±0.15	±5%	CGA4C2C0G1H122J060AA	
1.5nF	1608	0.80±0.10	±5%	CGA3E2C0G1H152J080AA	
1.5111	2012	0.60±0.15	±5%	CGA4C2C0G1H152J060AA	
1.8nF	1608	0.80±0.10	±5%	CGA3E2C0G1H182J080AA	
1.0111	2012	0.60±0.15	±5%	CGA4C2C0G1H182J060AA	
2.25	1608	0.80±0.10	±5%	CGA3E2C0G1H222J080AA	
2.2nF	2012	0.60±0.15	±5%	CGA4C2C0G1H222J060AA	
2.7nF	1608	0.80±0.10	±5%	CGA3E2C0G1H272J080AA	
2.7111	2012	0.60±0.15	±5%	CGA4C2C0G1H272J060AA	
3.3nF	1608	0.80±0.10	±5%	CGA3E2C0G1H332J080AA	
3.311	2012	0.60±0.15	±5%	CGA4C2C0G1H332J060AA	
3.9nF	1608	0.80±0.10	±5%	CGA3E2C0G1H392J080AA	
3.911	2012	0.60±0.15	±5%	CGA4C2C0G1H392J060AA	
	1608	0.80±0.10	±5%	CGA3E2C0G1H472J080AA	
4.7nF	2012	0.60±0.15	±5%	CGA4C2C0G1H472J060AA	
	3216	0.60±0.15	±5%	CGA5C2C0G1H472J060AA	
5.6nF	1608	0.80±0.10	±5%	CGA3E2C0G1H562J080AA	
J.01F	2012	0.60±0.15	±5%	CGA4C2C0G1H562J060AA	
	1608	0.80±0.10	±5%	CGA3E2C0G1H682J080AA	
6.8nF	2012	0.60±0.15	±5%	CGA4C2C0G1H682J060AA	
	3216	0.60±0.15	±5%	CGA5C2C0G1H682J060AA	
0.0-5	1608	0.80±0.10	±5%	CGA3E2C0G1H822J080AA	
8.2nF	2012	0.60±0.15	±5%	CGA4C2C0G1H822J060AA	
	1608	0.80±0.10	±5%	CGA3E2C0G1H103J080AA	
10nF	2012	0.60±0.15	±5%	CGA4C2C0G1H103J060AA	
	3216	0.60±0.15	±5%	CGA5C2C0G1H103J060AA	
15nF	2012	0.85±0.15	±5%	CGA4F2C0G1H153J085AA	



Temperature characteristic: COG (-55 to +125 ℃ ,0±30ppm/ ℃)

Capacitance	Dimensions	Thickness	Capacitance	Catalog number
Capacitance	Dimensions	(mm)	tolerance	Rated voltage Edc: 50V
	2012	1.25±0.20	±5%	CGA4J2C0G1H223J125AA
22nF	3216	0.60±0.15	±5%	CGA5C2C0G1H223J060AA
	3225	1.25±0.20	±5%	CGA6J2C0G1H223J125AA
	2012	1.25±0.20	±5%	CGA4J2C0G1H333J125AA
33nF	3216	0.85±0.15	±5%	CGA5F2C0G1H333J085AA
	3225	1.60±0.20	±5%	CGA6L2C0G1H333J160AA
	3216	1.15±0.15	±5%	CGA5H2C0G1H473J115AA
47nF	3225	2.00±0.20	±5%	CGA6M2C0G1H473J200AA
	4532	1.60±0.20	±5%	CGA8L2C0G1H473J160KA
	3216	1.60±0.20	±5%	CGA5L2C0G1H683J160AA
68nF	3225	2.00±0.20	±5%	CGA6M2C0G1H683J200AA
	4532	1.60±0.20	±5%	CGA8L2C0G1H683J160KA
	3216	1.60±0.20	±5%	CGA5L2C0G1H104J160AA
100nF	3225	2.50±0.30	±5%	CGA6P2C0G1H104J250AA
	4532	2.00±0.20	±5%	CGA8M2C0G1H104J200KA
150nF	4532	2.50±0.30	±5%	CGA8P2C0G1H154J250KA
220nF	4532	3.20±0.30	±5%	CGA8R2C0G1H224J320KA

[■]Gray items: These products are not recommended for new designs. Click the part numbers for details.



Temperature characteristic: X5R (-55 to +85 ℃ ,±15%)

Capacitance Dimensions		Thickness	Capacitance	Catalog number							
Capacitance	Dimensions	(mm)	tolerance	Rated voltage Edc: 50V	Rated voltage Edc: 35V	Rated voltage Edc: 25V					
220pF	1005	0.50+0.05	±10%	CGA2B2X5R1H221K050BA							
22001	1003	0.50±0.05	±20%	CGA2B2X5R1H221M050BA							
330pF	1005	0.50±0.05	±10%	CGA2B2X5R1H331K050BA							
ооорі	1003	0.50±0.05	±20%	CGA2B2X5R1H331M050BA							
470pF	1005	0.50±0.05	±10%	CGA2B2X5R1H471K050BA							
47 Opi	1000	0.0020.00	±20%	CGA2B2X5R1H471M050BA							
680pF	1005	0.50±0.05	±10%	CGA2B2X5R1H681K050BA							
осор.		0.0020.00	±20%	CGA2B2X5R1H681M050BA							
	1005	0.50±0.05	±10%	CGA2B2X5R1H102K050BA							
1nF			±20%	CGA2B2X5R1H102M050BA							
	1608	0.80±0.10	±10%	CGA3E2X5R1H102K080AA							
			±20%	CGA3E2X5R1H102M080AA							
	1005	0.50±0.05	±10%	CGA2B2X5R1H152K050BA							
1.5nF			±20%	CGA2B2X5R1H152M050BA							
	1608	0.80±0.10	±10%	CGA3E2X5R1H152K080AA							
			±20%	CGA3E2X5R1H152M080AA							
	1005	0.50±0.05	±10%	CGA2B2X5R1H222K050BA							
2.2nF			±20%	CGA2B2X5R1H222M050BA							
	1608	0.80±0.10	±10%	CGA3E2X5R1H222K080AA							
			±20%	CGA3E2X5R1H222M080AA							
	1005	0.50±0.05	±10%	CGA2B2X5R1H332K050BA							
3.3nF			±20%	CGA2B2X5R1H332M050BA							
	1608	0.80±0.10	±10%	CGA3E2X5R1H332K080AA							
			±20%	CGA3E2X5R1H332M080AA							
	1005	0.50±0.05	±10%	CGA2B2X5R1H472K050BA							
4.7nF			±20%	CGA2B2X5R1H472M050BA							
	1608	0.80±0.10	±10%	CGA3E2X5R1H472K080AA							
			±20%	CGA3E2X5R1H472M080AA							
	1005	0.50±0.05	±10%	CGA2B2X5R1H682K050BA							
6.8nF			±20%	CGA2B2X5R1H682M050BA							
	1608	0.80±0.10	±10%	CGA3E2X5R1H682K080AA							
			±20%	CGA3E2X5R1H682M080AA	004000000000000000000000000000000000000	004000000000000000000000000000000000000					
	1005	0.50±0.05	±10%	CGA2B3X5R1H103K050BB	CGA2B3X5R1V103K050BB	CGA2B2X5R1E103K050BA					
10nF			±20%	CGA2B3X5R1H103M050BB	CGA2B3X5R1V103M050BB	CGA2B2X5R1E103M050BA					
	1608	0.80±0.10	±10%	CGA3E2X5R1H103K080AA							
			±20%	CGA3E2X5R1H103M080AA	CCAODOVEDAVAEOROEODO	CC A OR OVER 1 F 1 F 2 K 0 F 0 R					
	1005	0.50±0.05	±10% ±20%	CGA2B3X5R1H153K050BB CGA2B3X5R1H153M050BB	CGA2B3X5R1V153K050BB CGA2B3X5R1V153M050BB	CGA2B2X5R1E153K050BA CGA2B2X5R1E153M050BA					
15nF			±10%	CGA3E2X5R1H153K080AA	CGAZBSXSITTV13SW030BB	CGAZBZXSITIETSSW030BA					
	1608	0.80 ± 0.10	±20%	CGA3E2X5R1H153M080AA							
			±10%	CGA2B3X5R1H223K050BB	CGA2B3X5R1V223K050BB	CGA2B2X5R1E223K050BA					
	1005	0.50±0.05	±20%		CGA2B3X5R1V223M050BB						
22nF			±10%	CGA3E2X5R1H223K080AA	OGAZBOXSHIVZZOWOSOBB	OGAZBZXSTTLZZSWOSOBA					
	1608	0.80±0.10	±20%	CGA3E2X5R1H223M080AA							
			±10%	CGA2B3X5R1H333K050BB	CGA2B3X5R1V333K050BB	CGA2B2X5R1E333K050BA					
	1005	0.50±0.05	±20%		CGA2B3X5R1V333M050BB						
33nF			±10%	CGA3E2X5R1H333K080AA	<u>CONEDONOTHY COCKNOODED</u>	<u>OGNEDE/KOTTLOGOMIGOOD/</u>					
	1608	0.80±0.10	±20%	CGA3E2X5R1H333M080AA							
			±10%	CGA2B3X5R1H473K050BB	CGA2B3X5R1V473K050BB	CGA2B2X5R1E473K050BA					
	1005	0.50±0.05	±20%		CGA2B3X5R1V473M050BB						
47nF			±10%	CGA3E2X5R1H473K080AA							
	1608	0.80±0.10	±20%	CGA3E2X5R1H473M080AA							
			±10%		CGA2B3X5R1V683K050BB	CGA2B3X5R1E683K050BE					
	1005	0.50±0.05	±20%		CGA2B3X5R1V683M050BB	CGA2B3X5R1E683M050BB					
68nF			±10%	CGA3E2X5R1H683K080AA							
	1608	0.80±0.10	±20%	CGA3E2X5R1H683M080AA							
			±10%	CGA2B3X5R1H104K050BB	CGA2B3X5R1V104K050BB	CGA2B3X5R1E104K050BE					
	1005	0.50±0.05	±20%	CGA2B3X5R1H104M050BB	CGA2B3X5R1V104M050BB	CGA2B3X5R1E104M050BE					
100nF			±10%	CGA3E2X5R1H104K080AA		CGA3E2X5R1E104K080AA					
	1608	0.80±0.10	±20%	CGA3E2X5R1H104M080AA		CGA3E2X5R1E104M080AA					
			±10%	CGA3E3X5R1H154K080AB	CGA3E3X5R1V154K080AB	CGA3E2X5R1E154K080AA					
150nF	1608	0.80±0.10	±20%	CGA3E3X5R1H154M080AB	CGA3E3X5R1V154M080AB	CGA3E2X5R1E154M080AA					



Temperature characteristic: X5R (-55 to +85 ℃ ,±15%)

Capacitance	Dimonsions	Thickness	Capacitance		Catalog number	
Capacitance	Dimensions	(mm)	tolerance	Rated voltage Edc: 50V	Rated voltage Edc: 35V	Rated voltage Edc: 25V
	1608	0.80±0.10	±10%	CGA3E3X5R1H224K080AB	CGA3E3X5R1V224K080AB	CGA3E2X5R1E224K080AA
220nF	1000	0.0020.10	±20%	CGA3E3X5R1H224M080AB	CGA3E3X5R1V224M080AB	CGA3E2X5R1E224M080AA
220111	2012	1.25±0.20	±10%	CGA4J2X5R1H224K125AA		
	2012	1.23±0.20	±20%	CGA4J2X5R1H224M125AA		
	1608	0.80±0.10	±10%	CGA3E3X5R1H334K080AB	CGA3E3X5R1V334K080AB	CGA3E3X5R1E334K080AB
330nF		0.0020.10	±20%	CGA3E3X5R1H334M080AB	CGA3E3X5R1V334M080AB	CGA3E3X5R1E334M080AB
000	2012	1.25±0.20	±10%	CGA4J2X5R1H334K125AA		
			±20%	CGA4J2X5R1H334M125AA		
	1608	0.80±0.10	±10%	CGA3E3X5R1H474K080AB	CGA3E3X5R1V474K080AB	CGA3E3X5R1E474K080AB
			±20%	CGA3E3X5R1H474M080AB	CGA3E3X5R1V474M080AB	CGA3E3X5R1E474M080AB
470nF	2012	1.25±0.20	±10%	CGA4J3X5R1H474K125AB	CGA4J3X5R1V474K125AB	CGA4J2X5R1E474K125AA
			±20%	CGA4J3X5R1H474M125AB	CGA4J3X5R1V474M125AB	CGA4J2X5R1E474M125AA
	3216	1.60+0.30,-0.10	±10%	CGA5L2X5R1H474K160AA		
			±20%	CGA5L2X5R1H474M160AA		
	1608	0.80±0.10	±10%	CGA3E3X5R1H684K080AB	CGA3E3X5R1V684K080AB	CGA3E3X5R1E684K080AB
			±20%	CGA3E3X5R1H684M080AB	CGA3E3X5R1V684M080AB	CGA3E3X5R1E684M080AB
680nF	2012	1.25±0.20	±10%	CGA4J3X5R1H684K125AB	CGA4J3X5R1V684K125AB	CGA4J2X5R1E684K125AA
			±20%	CGA4J3X5R1H684M125AB	CGA4J3X5R1V684M125AB	CGA4J2X5R1E684M125AA
	3216	1.60+0.30,-0.10	±10%	CGA5L2X5R1H684K160AA		
			±20%	CGA5L2X5R1H684M160AA		
	1608	0.80±0.10	±10%	CGA3E3X5R1H105K080AB	CGA3E3X5R1V105K080AB	CGA3E3X5R1E105K080AB
			±20%	CGA3E3X5R1H105M080AB	CGA3E3X5R1V105M080AB	CGA3E3X5R1E105M080AB
1μF	2012	1.25±0.20	±10%	CGA4J3X5R1H105K125AB	CGA4J3X5R1V105K125AB	CGA4J2X5R1E105K125AA
·			±20%	CGA4J3X5R1H105M125AB	CGA4J3X5R1V105M125AB	CGA4J2X5R1E105M125AA
	3216	1.60+0.30,-0.10	±10%	CGA5L2X5R1H105K160AA		
			±20%	CGA5L2X5R1H105M160AA		
	2012	1.25±0.20	±10%	CGA4J3X5R1H155K125AB	CGA4J3X5R1V155K125AB	CGA4J3X5R1E155K125AB
1.5µF			±20%	CGA4J3X5R1H155M125AB	CGA4J3X5R1V155M125AB	CGA4J3X5R1E155M125AB
·	3216	1.60+0.30,-0.10	±10%	CGA5L3X5R1H155K160AB	CGA5L3X5R1V155K160AB	CGA5L2X5R1E155K160AA
			±20%	CGA5L3X5R1H155M160AB	CGA5L3X5R1V155M160AB	CGA5L2X5R1E155M160AA
	2012	1.25±0.20	±10%	CGA4J3X5R1H225K125AB	CGA4J3X5R1V225K125AB	CGA4J3X5R1E225K125AB
2.2µF			±20%	CGA4J3X5R1H225M125AB	CGA4J3X5R1V225M125AB	CGA4J3X5R1E225M125AB
	3216	1.60+0.30,-0.10	±10%	CGA5L3X5R1H225K160AB	CGA5L3X5R1V225K160AB	CGA5L2X5R1E225K160AA
			±20%	CGA5L3X5R1H225M160AB	CGA5L3X5R1V225M160AB	CGA5L2X5R1E225M160AA
	2012	1.25±0.20	±10%	CGA4J3X5R1H335K125AB	CGA4J3X5R1V335K125AB	CGA4J3X5R1E335K125AB
3.3µF			±20%	CGA4J3X5R1H335M125AB	CGA4J3X5R1V335M125AB	CGA4J3X5R1E335M125AB
	3216	1.60+0.30,-0.10	±10%	CGA5L3X5R1H335K160AB	CGA5L3X5R1V335K160AB	CGA5L2X5R1E335K160AA
			±20%	CGA5L3X5R1H335M160AB	CGA5L3X5R1V335M160AB	CGA4 12VEP1E475K125AP
	2012	1.25±0.20	±10%	CGA4J3X5R1H475K125AB	CGA4J3X5R1V475K125AB	CGA4J3X5R1E475K125AB
4.7µF			±20%	CGA4J3X5R1H475M125AB	CGA4J3X5R1V475M125AB	CGA4J3X5R1E475M125AB
-	3216	1.60+0.30,-0.10	±10%	CGA5L3X5R1H475K160AB	CGA5L3X5R1V475K160AB	CGA5L2X5R1E475K160AA
			±20%	CGA5L3X5R1H475M160AB	CGA5L3X5R1V475M160AB	CGA5L2X5R1E475M160AA
6.8µF	3216	1.60+0.30,-0.10	±10%	CGA5L3X5R1H685K160AB	CGA5L3X5R1V685K160AB	CGA5L3X5R1E685K160AB
-		•	±20%	CGA5L3X5R1H685M160AB	CGA5L3X5R1V685M160AB	CGA5L3X5R1E685M160AB
10μF	3216	1.60+0.30,-0.10	±10%	CGA5L3X5R1H106K160AB	CGA5L3X5R1V106K160AB	CGA5L3X5R1E106K160AB
		•	±20%	CGA5L3X5R1H106M160AB	CGA5L3X5R1V106M160AB	CGA5L3X5R1E106M160AB



Temperature characteristic: X5R (-55 to +85 ℃ ,±15%)

0	Di	Thickness	Capacitance		Catalog number	
Capacitance	Dimensions	(mm)	tolerance	Rated voltage Edc: 16V	Rated voltage Edc: 10V	Rated voltage Edc: 6.3V
33nF	1005	0.50±0.05	±10%	CGA2B2X5R1C333K050BA		
John	1003	0.30±0.03	±20%	CGA2B2X5R1C333M050BA		
47nF	1005	0.50±0.05	±10%	CGA2B2X5R1C473K050BA		
47111	1003	0.30±0.03	±20%	CGA2B2X5R1C473M050BA		
68nF	1005	0.50±0.05	±10%	CGA2B2X5R1C683K050BA		
00111	1000	0.0020.00	±20%	CGA2B2X5R1C683M050BA		
100nF	1005	0.50±0.05	±10%	CGA2B2X5R1C104K050BA	CGA2B2X5R1A104K050BA	
		0.0020.00	±20%	CGA2B2X5R1C104M050BA	CGA2B2X5R1A104M050BA	
150nF	1005	0.50±0.05	±10%	CGA2B1X5R1C154K050BC	CGA2B3X5R1A154K050BB	
			±20%	CGA2B1X5R1C154M050BC	CGA2B3X5R1A154M050BB	
	1005	0.50±0.05	±10%	CGA2B1X5R1C224K050BC	CGA2B3X5R1A224K050BB	
220nF			±20%	CGA2B1X5R1C224M050BC	CGA2B3X5R1A224M050BB	
	1608	0.80±0.10	±10%	CGA3E2X5R1C224K080AA		
			±20%	CGA3E2X5R1C224M080AA		
330nF	1608	0.80±0.10	±10%	CGA3E2X5R1C334K080AA	CGA3E2X5R1A334K080AA	
			±20%	CGA3E2X5R1C334M080AA	CGA3E2X5R1A334M080AA	
470nF	1608	0.80±0.10	±10%	CGA3E2X5R1C474K080AA	CGA3E2X5R1A474K080AA	
			±20%	CGA3E2X5R1C474M080AA	CGA3E2X5R1A474M080AA	
	1608	0.80±0.10	±10%	CGA3E2X5R1C684K080AA	CGA3E2X5R1A684K080AA	
680nF			±20%	CGA3E2X5R1C684M080AA	CGA3E2X5R1A684M080AA	
	2012	1.25±0.20	±10%	CGA4J2X5R1C684K125AA		
			±20%	CGA4J2X5R1C684M125AA	00405075044405700044	
	1608	0.80±0.10	±10%	CGA3E1X5R1C105K080AC	CGA3E2X5R1A105K080AA	
1µF			±20%	CGA3E1X5R1C105M080AC	CGA3E2X5R1A105M080AA	
	2012	1.25±0.20	±10%	CGA4J2X5R1C105K125AA		
			±20%	CGA4J2X5R1C105M125AA	00405075044455700040	
	1608	0.80±0.10	±10%	CGA3E1X5R1C155K080AC	CGA3E3X5R1A155K080AB	
1.5µF			±20% ±10%	CGA3E1X5R1C155M080AC CGA4J2X5R1C155K125AA	CGA3E3X5R1A155M080AB CGA4J2X5R1A155K125AA	
	2012	1.25±0.20	±10%			
			±20%	CGA4J2X5R1C155M125AA CGA3E1X5R1C225K080AC	CGA4J2X5R1A155M125AA CGA3E3X5R1A225K080AB	
	1608	0.80±0.10	±20%	CGA3E1X5R1C225M080AC	CGA3E3X5R1A225M080AB	
2.2µF			±10%	CGA4J2X5R1C225K125AA	CGA4J2X5R1A225K125AA	
	2012	1.25±0.20	±20%	CGA4J2X5R1C225M125AA	CGA4J2X5R1A225M125AA	
			±10%	CGA402X3111C223W1123AA	CGA3E1X5R1A335K080AC	CGA3E3X5R0J335K080AE
	1608	0.80±0.10	±20%		CGA3E1X5R1A335M080AC	CGA3E3X5R0J335M080AE
3.3µF			±10%	CGA4J3X5R1C335K125AB	CGA4J2X5R1A335K125AA	CGASESASTIOSSSSWOOOAL
	2012	1.25±0.20	±20%	CGA4J3X5R1C335M125AB	CGA4J2X5R1A335M125AA	
			±10%	OGA-400X31110003W123AB	OGA-02/3111A003W1123AA	CGA3E1X5R0J475K080AC
	1608	0.80±0.10	±20%			CGA3E1X5R0J475M080AC
			±10%	CGA4J3X5R1C475K125AB	CGA4J2X5R1A475K125AA	OGAGE IX STICO 47 SINIO COAC
4.7µF	2012	1.25±0.20	±20%	CGA4J3X5R1C475M125AB	CGA4J2X5R1A475M125AA	
			±10%	CGA5L2X5R1C475K160AA	<u>GG/T-10E/TGTTT/T-17-GWTEG/T/T</u>	
	3216	1.60+0.30,-0.10	±20%	CGA5L2X5R1C475M160AA		
			±10%	CGA4J1X5R1C685K125AC	CGA4J3X5R1A685K125AB	
	2012	1.25±0.20	±20%	CGA4J1X5R1C685M125AC	CGA4J3X5R1A685M125AB	
6.8µF			±10%	CGA5L2X5R1C685K160AA		
	3216	1.60+0.30,-0.10	±20%	CGA5L2X5R1C685M160AA		
			±10%	CGA4J1X5R1C106K125AC	CGA4J3X5R1A106K125AB	
	2012	1.25±0.20	±20%	CGA4J1X5R1C106M125AC	CGA4J3X5R1A106M125AB	
10μF			±10%	CGA5L1X5R1C106K160AC	SECTIONALIZAD	
	3216	1.60+0.30,-0.10	±20%	CGA5L1X5R1C106M160AC		
15µF	3216	1.60+0.30,-0.10	±20%	CGA5L1X5R1C156M160AC		
22µF	3216	1.60+0.30,-0.10	±20%	CGA5L1X5R1C226M160AC		
ددµ۱	0210	1.00 10.00,-0.10	±2070	OGASETASTITOZZOWITOUAC		

■Gray items: These products are not recommended for new designs.



Temperature characteristic: X7R (-55 to +125 ℃ ,±15%)

		Thickness	Capacitance	Catalog number			
Capacitance	Dimensions	(mm)	tolerance	Rated voltage Edc: 50V	Rated voltage Edc: 35V	Rated voltage Edc: 25V	
100pF	0603	0.30±0.03	±10%	CGA1A2X7R1H101K030BA		CGA1A2X7R1E101K030BA	
		0.0010.00	±20%	CGA1A2X7R1H101M030BA		CGA1A2X7R1E101M030BA	
150pF	0603	0.30±0.03	±10%	CGA1A2X7R1H151K030BA		CGA1A2X7R1E151K030BA	
·			±20% ±10%	CGA1A2X7R1H151M030BA CGA1A2X7R1H221K030BA		CGA1A2X7R1E151M030BA	
	0603	0.30±0.03	±20%	CGA1A2X7R1H221M030BA		CGA1A2X7R1E221K030BA CGA1A2X7R1E221M030BA	
220pF			±10%	CGA2B2X7R1H221K050BA		OGATAZATTIEZZIWIOOOBA	
	1005	0.50±0.05	±20%	CGA2B2X7R1H221M050BA			
	0603	0.30±0.03	±10%	CGA1A2X7R1H331K030BA		CGA1A2X7R1E331K030BA	
330pF	0003	0.30±0.03	±20%	CGA1A2X7R1H331M030BA		CGA1A2X7R1E331M030BA	
осорі	1005	0.50±0.05	±10%	CGA2B2X7R1H331K050BA			
			±20%	CGA2B2X7R1H331M050BA		0044407784547470084	
	0603	0.30 ± 0.03	±10% ±20%	CGA1A2X7R1H471K030BA CGA1A2X7R1H471M030BA		CGA1A2X7R1E471K030BA CGA1A2X7R1E471M030BA	
470pF			±20%	CGA2B2X7R1H471W050BA		CGATAZAT NTE4T IMUSUBA	
	1005	0.50±0.05	±20%	CGA2B2X7R1H471M050BA			
-	0000	0.00.000	±10%			CGA1A2X7R1E681K030BA	
680pF	0603	0.30±0.03	±20%			CGA1A2X7R1E681M030BA	
ооорі	1005	0.50±0.05	±10%	CGA2B2X7R1H681K050BA			
	1000	0.0010.00	±20%	CGA2B2X7R1H681M050BA			
	0603	0.30±0.03	±10%			CGA1A2X7R1E102K030BA	
			±20% ±10%	CGA2B2X7R1H102K050BA		CGA1A2X7R1E102M030BA	
1nF	1005	0.50±0.05	±20%	CGA2B2X7R1H102M050BA			
			±10%	CGA3E2X7R1H102K080AA			
	1608	0.80±0.10	±20%	CGA3E2X7R1H102M080AA		-	
	0603 1005 1608	0.30±0.03 0.50±0.05 0.80±0.10	±10%			CGA1A2X7R1E152K030BA	
			±20%			CGA1A2X7R1E152M030BA	
1.5nF			±10%	CGA2B2X7R1H152K050BA			
			±20%	CGA2B2X7R1H152M050BA			
			±10%	CGA3E2X7R1H152K080AA			
	0603	0.30±0.03	±20% ±10%	CGA3E2X7R1H152M080AA		CGA1A2X7R1E222K030BA	
			±20%			CGA1A2X7R1E222M030BA	
	1005		±10%	CGA2B2X7R1H222K050BA		<u> </u>	
2.2nF			±20%	CGA2B2X7R1H222M050BA			
			±10%	CGA3E2X7R1H222K080AA			
			±20%	CGA3E2X7R1H222M080AA			
	0603	0.30±0.03	±10%			CGA1A2X7R1E332K030BA	
			±20%	0040007704110001705004		CGA1A2X7R1E332M030BA	
3.3nF	1005	0.50±0.05	±10% ±20%	CGA2B2X7R1H332K050BA CGA2B2X7R1H332M050BA			
			±10%	CGA3E2X7R1H332K080AA			
	1608	1608	0.80±0.10	±20%	CGA3E2X7R1H332M080AA		
-	1005	0.50+0.05	±10%	CGA2B2X7R1H472K050BA			
4.7nF	1005	0.50±0.05	±20%	CGA2B2X7R1H472M050BA			
4.7111	1608	0.80±0.10	±10%	CGA3E2X7R1H472K080AA			
			±20%	CGA3E2X7R1H472M080AA			
	1005	0.50±0.05	±10%	CGA2B2X7R1H682K050BA			
6.8nF			±20% ±10%	CGA2B2X7R1H682M050BA CGA3E2X7R1H682K080AA			
	1608	0.80±0.10	±20%	CGA3E2X7R1H682M080AA			
	1005	0.50, 0.05	±10%		CGA2B3X7R1V103K050BB	CGA2B2X7R1E103K050BA	
40 - F	1005	0.50±0.05	±20%		CGA2B3X7R1V103M050BB	CGA2B2X7R1E103M050BA	
10nF	1608	0.80±0.10	±10%	CGA3E2X7R1H103K080AA			
	1000	0.00±0.10	±20%	CGA3E2X7R1H103M080AA			
	1005	0.50±0.05	±10%		CGA2B3X7R1V153K050BB	CGA2B2X7R1E153K050BA	
15nF			±20%		CGA2B3X7R1V153M050BB	CGA2B2X7R1E153M050BA	
	1608	0.80±0.10	±10% ±20%	CGA3E2X7R1H153K080AA CGA3E2X7R1H153M080AA			
-			±20% ±10%		CGA2B3X7R1V223K050BB	CGA2B2X7R1E223K050BA	
	1005	0.50±0.05	±20%		CGA2B3X7R1V223R050BB	CGA2B2X7R1E223M050BA	
22nF	1000	0.00:0.10	±10%	CGA3E2X7R1H223K080AA			
	1608	1608	0.80±0.10	±20%	CGA3E2X7R1H223M080AA		



Temperature characteristic: X7R (-55 to +125 ℃ ,±15%)

		Thickness	Capacitance	Catalog number				
Capacitance	Dimensions	(mm)	tolerance	Rated voltage Edc: 50V	Rated voltage Edc: 35V	Rated voltage Edc: 25V		
	1005	0.50±0.05	±10%	CGA2B3X7R1H333K050BB	CGA2B3X7R1V333K050BB	CGA2B1X7R1E333K050BC		
33nF		0.0020.00	±20%	CGA2B3X7R1H333M050BB	CGA2B3X7R1V333M050BB	CGA2B1X7R1E333M050BC		
	1608	0.80±0.10	±10% ±20%	CGA3E2X7R1H333K080AA CGA3E2X7R1H333M080AA				
-			±10%	CGA2B3X7R1H473K050BB	CGA2B3X7R1V473K050BB	CGA2B1X7R1E473K050BC		
	1005	0.50±0.05	±20%	CGA2B3X7R1H473M050BB	CGA2B3X7R1V473M050BB	CGA2B1X7R1E473M050BC		
47nF	1000	0.00.040	±10%	CGA3E2X7R1H473K080AA				
	1608	0.80±0.10	±20%	CGA3E2X7R1H473M080AA				
	1005	0.50±0.05	±10%	CGA2B3X7R1H683K050BB	CGA2B3X7R1V683K050BB	CGA2B3X7R1E683K050BB		
68nF		0.0020.00	±20%	CGA2B3X7R1H683M050BB	CGA2B3X7R1V683M050BB	CGA2B3X7R1E683M050BB		
	1608	0.80±0.10	±10%	CGA3E2X7R1H683K080AA				
			±20% ±10%	CGA3E2X7R1H683M080AA CGA2B3X7R1H104K050BB	CGA2B3X7R1V104K050BB	CGA2B3X7R1E104K050BB		
	1005	0.50±0.05	±20%	CGA2B3X7R1H104M050BB	CGA2B3X7R1V104M050BB	CGA2B3X7R1E104M050BB		
100nF	1000	0.00:040	±10%	CGA3E2X7R1H104K080AA		CGA3E2X7R1E104K080AA		
	1608	0.80±0.10	±20%	CGA3E2X7R1H104M080AA		CGA3E2X7R1E104M080AA		
	2012	1.25±0.20	±10%	CGA4J2X7R1H104K125AA				
	1005	0.50±0.05	±10%		CGA2B1X7R1V154K050BC	CGA2B3X7R1E154K050BB		
			±20%	00405077541454700045	CGA2B1X7R1V154M050BC	CGA2B3X7R1E154M050BB		
150nF	1608	0.80±0.10	±10% ±20%	CGA3E3X7R1H154K080AB CGA3E3X7R1H154M080AB	CGA3E3X7R1V154K080AB CGA3E3X7R1V154M080AB	CGA3E2X7R1E154K080AA CGA3E2X7R1E154M080AA		
			±10%	CGA4J2X7R1H154K125AA	CGASESATHIVISAMOBOAD	CGASEZATTTETS4MIOOUAA		
	2012	1.25±0.20	±20%	CGA4J2X7R1H154M125AA				
	1005	0.50.005	±10%		CGA2B1X7R1V224K050BC	CGA2B3X7R1E224K050BB		
	1005	0.50±0.05	±20%		CGA2B1X7R1V224M050BC	CGA2B3X7R1E224M050BB		
220nF	1608	0.80±0.10	±10%	CGA3E3X7R1H224K080AB	CGA3E3X7R1V224K080AB	CGA3E1X7R1E224K080AC		
220111	1006	0.60±0.10	±20%	CGA3E3X7R1H224M080AB	CGA3E3X7R1V224M080AB	CGA3E1X7R1E224M080AC		
	2012	1.25±0.20	±10%	CGA4J2X7R1H224K125AA		CGA4J2X7R1E224K125AA		
			±20%	CGA4J2X7R1H224M125AA CGA3E3X7R1H334K080AB	CGA3E1X7R1V334K080AC	CCA2E2V7D1E224V090AB		
	1608	0.80±0.10	±10% ±20%	CGA3E3X7R1H334M080AB	CGA3E1X7R1V334K080AC	CGA3E3X7R1E334K080AB CGA3E3X7R1E334M080AB		
330nF			±10%	CGA4J2X7R1H334K125AA	OGAGETA/TITVOG-MIGGOAG	OGAGESKI III ESSAMOGOAD		
	2012	1.25±0.20	±20%	CGA4J2X7R1H334M125AA				
-	1000	0.00.040	±10%	CGA3E3X7R1H474K080AB	CGA3E1X7R1V474K080AC	CGA3E3X7R1E474K080AB		
	1608	0.80±0.10	±20%	CGA3E3X7R1H474M080AB	CGA3E1X7R1V474M080AC	CGA3E3X7R1E474M080AB		
470nF	2012	1.25±0.20	±10%	CGA4J3X7R1H474K125AB	CGA4J3X7R1V474K125AB	CGA4J2X7R1E474K125AA		
			±20%	CGA4J3X7R1H474M125AB	CGA4J3X7R1V474M125AB	CGA4J2X7R1E474M125AA		
	3216	1.60+0.30,-0.10	±10% ±20%	CGA5L2X7R1H474K160AA				
			±10%	CGA5L2X7R1H474M160AA	CGA3E1X7R1V684K080AC	CGA3E1X7R1E684K080AC		
	1608	0.80±0.10	±20%		CGA3E1X7R1V684M080AC	CGA3E1X7R1E684M080AC		
			±10%	CGA4J3X7R1H684K125AB	CGA4J3X7R1V684K125AB	CGA4J3X7R1E684K125AB		
680nF	2012	1.25±0.20	±20%	CGA4J3X7R1H684M125AB	CGA4J3X7R1V684M125AB	CGA4J3X7R1E684M125AB		
	3216	1.60+0.30,-0.10	±10%	CGA5L2X7R1H684K160AA				
	3210	1.00+0.30,-0.10	±20%	CGA5L2X7R1H684M160AA				
		0.80±0.10	±10%		CGA3E1X7R1V105K080AC	CGA3E1X7R1E105K080AC		
	1608		±20%	CC 4 2 F 2 V 7 P 4 I H 0 F K 0 2 0 A P	CGA3E1X7R1V105M080AC	CGA3E1X7R1E105M080AC		
		0.80+0.20,-0.10	±10% ±10%	CGA3E3X7R1H105K080AB CGA4J3X7R1H105K125AB	CGA4J3X7R1V105K125AB	CGA4J3X7R1E105K125AB		
1μF	2012	1.25±0.20	±10% ±20%	CGA4J3X7R1H105K125AB	CGA4J3X7R1V105K125AB	CGA4J3X7R1E105K125AB		
ıμı			±10%	CGA5L3X7R1H105K160AB	<u>GG/T-TOO/T/TTTTTGGMT20/TB</u>	CGA5L2X7R1E105K160AA		
	3216	1.60+0.30,-0.10	±20%	CGA5L3X7R1H105M160AB		CGA5L2X7R1E105M160AA		
	3225	1.60±0.20	±10%	CGA6L2X7R1H105K160AA				
	3223	1.00±0.20	±20%	CGA6L2X7R1H105M160AA				
	2012	1.25±0.20	±10%	CGA4J3X7R1H155K125AB	CGA4J1X7R1V155K125AC	CGA4J3X7R1E155K125AB		
			±20%	CGA4J3X7R1H155M125AB	CGA4J1X7R1V155M125AC	CGA4J3X7R1E155M125AB		
1 55	3216	1.60+0.30,-0.10	±10%	CGA5L3X7R1H155K160AB	CCA5L3X7R1V155K160AB	CCASL 2X7R1E155K160AA		
1.5µF			±20% ±10%	CGA5L3X7R1H155M160AB CGA6M2X7R1H155K200AA	CGA5L3X7R1V155M160AB	CGA5L2X7R1E155M160AA		
	3225	2.00±0.20	±20%	CGA6M2X7R1H155M200AA				
	4532	1.60±0.20	±10%	CGA8L2X7R1H155K160KA				
			±10%	CGA4J3X7R1H225K125AB	CGA4J1X7R1V225K125AC	CGA4J3X7R1E225K125AB		
	2012	1.25±0.20	±20%	CGA4J3X7R1H225M125AB	CGA4J1X7R1V225M125AC	CGA4J3X7R1E225M125AB		
	3216	1.60+0.30,-0.10	±10%	CGA5L3X7R1H225K160AB	CGA5L3X7R1V225K160AB	CGA5L2X7R1E225K160AA		
2.2µF			±20%	CGA5L3X7R1H225M160AB	CGA5L3X7R1V225M160AB	CGA5L2X7R1E225M160AA		
	3225	2.00±0.20	±10%	CGA6M3X7R1H225K200AB				
	4532	1.60±0.20	±20% ±10%	CGASI 2X7R1H225M200AB				
	4332	1.00±0.20	±1070	CGA8L2X7R1H225K160KA				



Temperature characteristic: X7R (-55 to +125 ℃ ,±15%)

Care	Capacitance	Dimensions	Thickness (mm)	Capacitance		Catalog	number	
2012 1.25±0.20	Capacitance	Dimensions		tolerance	Rated voltage Edc: 75V	Rated voltage Edc: 50V	Rated voltage Edc: 35V	Rated voltage Edc: 25V
339F		2012	1.25+0.20	±10%			CGA4J1X7R1V335K125AC	CGA4J1X7R1E335K125AC
334F	3.3µF	2012	1.25±0.20	±20%			CGA4J1X7R1V335M125AC	CGA4J1X7R1E335M125AC
10		2016	160.000.010	±10%		CGA5L3X7R1H335K160AB	CGA5L1X7R1V335K160AC	CGA5L1X7R1E335K160AC
4532 2.00±0.20 ±10% CGABP3X7R1H4358M250AB 2012		3210	1.60+0.30,-0.10	±20%		CGA5L3X7R1H335M160AB	CGA5L1X7R1V335M160AC	CGA5L1X7R1E335M160AC
4532 2.00±0.20		2225	2 50+0 20	±10%		CGA6P3X7R1H335K250AB		
2012 1.25±0.20		3223	2.50±0.50	±20%		CGA6P3X7R1H335M250AB		
2012 1.25±0.20 ±20% CGA5_1X7R1475K160AB CGA4_J1X7R1475M125AC CGA4_J1X7R1E475M125AC CGA5_L3X7R1H475K160AB CGA5_L3X7R1H475M160AC CGA5		4532	2.00±0.20	±10%		CGA8M2X7R1H335K200KA		
1-60+0.30,-0.10 1-09% CGASL3X7R1H475K160AB CGASL1X7R1V475M160AC CGASL1X7R1E475K160AC CGASL1X7R1E475K160AC CGASL1X7R1E475K160AC CGASL1X7R1E475K160AC CGASL1X7R1E475K160AC CGASL1X7R1E475K160AC CGASL1X7R1E475M160AC CGASL1X7R1E685M160AC CGASL1X7R1E106M160AC CGASL1X7R1E106M20AC CGASL1X7R1E106M20A		2010	1.05 - 0.00	±10%		CGA4J1X7R1H475K125AC	CGA4J1X7R1V475K125AC	CGA4J1X7R1E475K125AC
4.7μF 3225 2.50±0.30 ±10% CGASE_3X7R1H475M150AB CGASE_1X7R1V475M160AC CGASE_1X7R1E475M160AC 4.7μF 3225 2.50±0.30 ±10% CGASE_3X7R1H475K250AB 4532 1.60±0.20 ±10% CGASE_3X7R1H475M250AB 5750 2.00±0.20 ±10% CGASE_3X7R1H475K250KB 5750 2.00±0.20 ±10% CGASE_3X7R1H475K250KB 5750 2.00±0.20 ±10% CGASE_3X7R1H475K250KB 6.8μF 3225 2.50±0.30 ±10% CGASE_3X7R1H475K250KB 5750 2.50±0.30 ±10% CGASE_3X7R1H475K250KB 6.8μF 3225 2.50±0.30 ±10% CGASE_3X7R1H685K250KB 4532 2.50±0.30 ±10% CGASE_3X7R1H685K250KB 5750 2.50±0.30 ±10% CGASE_3X7R1H06K250AC 5750 2.50±0.30 ±10% CGASE_3X7R1H06K250AC 5750 2.50±0.30 ±20% CGASE_3X7R1H06K250KB 5750 2.50±0.30 ±20% CGASE_3X7R1H156K250KB 5750 2.50±0.30 ±20% CGASE_3X7R1H256M250KB 5750 2.50±0.30 ±20% CGASE_3X7R1H256M250K		2012	1.25±0.20	±20%			CGA4J1X7R1V475M125AC	CGA4J1X7R1E475M125AC
4.7μF 3225 2.50±0.30 ±10% CGASP3X7R1H475M250AB CGASL1X7R1V475M160AC CGASL2X7R1E475M160AC ±20% CGASP3X7R1H475M250AB CGASL2X7R1E475M160AC ±20% CGASP3X7R1H475M250AB CGASL2X7R1E475M160AC ±20% CGASP3X7R1H475M250AB CGASL2X7R1E475M160AC ±20% CGASP3X7R1H475K200KB CGASL2X7R1E475M160AC ±10% CGASP3X7R1H475K200KB ±10% CGASP3X7R1H475K200AB ±10% CGASP3X7R1H475K200AB CGASL1X7R1V685K160AC ±20% CGASP3X7R1H685K250AB CGASL1X7R1V685K160AC ±20% CGASP3X7R1H685K250AB CGASP3X7R1H685K250AB ±20% CGASP3X7R1H685K250AB CGASP3X7R1H685K250AB ±10% CGASP3X7R1H685K250AB CGASP3X7R1H685K250AB ±10% CGASP3X7R1H106K160AC CGASL1X7R1V106K160AC CGASL1X7R1E106K160AC ±20% CGASP3X7R1H06K250AC CGASP1X7R1E106K250AC CGASP1X7R1E106K250AC ±20% CGASP3X7R1H06K250AC CGASP1X7R1E106K250AC CGASP1X7R1E106K250AC CGASP1X7R1E106K250AC CGASP1X7R1E106K250AC CGASP1X7R1E106K250AC CGASP1X7R1E106K250AC CGASP1X7R1E106K250AC CGASP1X7R1E106M250AC CGASP1X7R1E156M250AC CGASP1X7R1E126M250AC CGASP1X7R1E126M250AC CGASP1X7R1E126M250AC CGASP1X7R1E1		2016	160.000.010	±10%		CGA5L3X7R1H475K160AB	CGA5L1X7R1V475K160AC	CGA5L1X7R1E475K160AC
4.7μ 3225 2.50±0.30 ±20% CGA6P3X7R1H475M250AB 4532 1.60±0.20 ±10% CGA8M3X7R1H475K200KB 5750 2.00±0.20 ±10% CGA8M3X7R1H475K200KB 5750 2.00±0.20 ±10% CGA9M2X7R1H475K200KA		3210	1.60+0.30,-0.10	±20%		CGA5L3X7R1H475M160AB	CGA5L1X7R1V475M160AC	CGA5L1X7R1E475M160AC
\$\begin{array}{c c c c c c c c c c c c c c c c c c c	4 7.15	2225	2 50+0 20	±10%		CGA6P3X7R1H475K250AB		
4532 1.60±0.20 ±20% CGA8M3X7R1H475K200KB	4.7µF	3225	2.50±0.30	±20%		CGA6P3X7R1H475M250AB		
10		4532	1.60±0.20	±10%				CGA8L2X7R1E475K160KA
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				±20%				CGA8L2X7R1E475M160KA
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			2.00±0.20	±10%		CGA8M3X7R1H475K200KB		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		5750	2.00±0.20	±10%		CGA9M2X7R1H475K200KA		
6.8μF 3225 2.50±0.30 ±10% CGASL1X/RIV68SM160AC CGASL1X/RIL68SM160AC		3216	1.60+0.30,-0.10	±10%			CGA5L1X7R1V685K160AC	CGA5L1X7R1E685K160AC
CGA6P3X7R1E685M250AB E20% E20% EGA6P3X7R1E685M250AB ECGA6P3X7R1E685M250AB ECGA6P3X7R1E685M250AB E20% ECGA6P3X7R1E685M250KA ECGA6P3X7R1E685M250KA E20% ECGA6P1X7R1H106K160AC ECGA5L1X7R1V106K160AC ECGA5L1X7R1V106K160AC ECGA5L1X7R1E106K160AC ECGA5L1X7R1V106K160AC ECGA5L1X7R1E106K160AC ECGA6P1X7R1E106K160AC ECGA5L1X7R1V106K160AC ECGA5L1X7R1E106K160AC ECGA6P1X7R1E106K160AC E				±20%			CGA5L1X7R1V685M160AC	CGA5L1X7R1E685M160AC
4532 2.50±0.30 ±10% CGA8P3X7R1H685K250KB 5750 2.50±0.30 ±10% CGA9P2X7R1H685K250KA 3216 1.60±0.30,-0.10 ±10% CGA5L1X7R1H106K160AC CGA5L1X7R1V106K160AC CGA5L1X7R1E106K160AC 4532 2.50±0.30 ±10% CGA6P1X7R1N106K250AC CGA5L1X7R1V106M160AC CGA6P1X7R1E106M160AC 4532 2.50±0.30 ±10% CGA6P1X7R1N106M250AC CGA6P1X7R1E106M250AC 4532 2.50±0.30 ±10% CGA6P1X7R1N106M250AC CGA6P1X7R1E106M250AC 5750 2.00±0.20 ±20% CGA6P1X7R1H106K230KB 15μF 4532 2.80±0.30 ±20% CGA6P1X7R1H106K230KB 5750 2.30±0.20 ±20% CGA6P1X7R1H106K230KB 5750 2.30±0.20 ±20% CGA6P1X7R1E156M200AB 5750 2.30±0.20 ±20% CGA6P1X7R1E156M230KA 5750 2.30±0.20 ±20% CGA6P1X7R1E156M230KA 4532 2.50±0.30 ±20% CGA6P1X7R1E126M250KB 5750 2.50±0.30 ±20% CGA6P1X7R1E226M250KC 5750 CGA6P1X7R1E226M250KC CGA6P1X7R1E226M250KC 5750 CGA6P1X7R1E26M250KC CGA6P1X7R1E226M250KC 5750 CGA6P1X7R1E26M250KC CGA6P1X7R1E26M250KC CGA6P1X7R1E26M250KC 5750 CGA6P1X7R1E26M250KC CGA6P1X7R1E26M250KC CGA6P1X7R1E26M250KC CGA6P1X7R1	0.0	3225	2.50±0.30	±10%				CGA6P3X7R1E685K250AB
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	6.8µг			±20%				CGA6P3X7R1E685M250AB
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		4532	2.50±0.30	±10%		CGA8P3X7R1H685K250KB		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		5750	2.50±0.30	±10%		CGA9P2X7R1H685K250KA		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		0010	160.000.010	±10%		CGA5L1X7R1H106K160AC	CGA5L1X7R1V106K160AC	CGA5L1X7R1E106K160AC
		3210	1.60+0.30,-0.10	±20%			CGA5L1X7R1V106M160AC	CGA5L1X7R1E106M160AC
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		2005	0.50.0.00	±10%	CGA6P1X7R1N106K250AC			CGA6P1X7R1E106K250AC
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	10µF	3225	2.50±0.30	±20%	CGA6P1X7R1N106M250AC			CGA6P1X7R1E106M250AC
2.30±0.20 ±10% CGA9N3X7R1H106K230KB 3225		4532	2.50±0.30	±10%				CGA8P2X7R1E106K250KA
2.30±0.20 ±10% CGA9N3X/R1H106K230KB 3225 2.00±0.20 ±20% CGA6M3X7R1E156M220AB 4532 2.80±0.30 ±20% CGA9N2X7R1E156M280KB 5750 2.30±0.20 ±20% CGA9N2X7R1E156M230KA 3225 2.50±0.30 ±20% CGA9N2X7R1E226M250AB 22μF 4532 2.50±0.30 ±20% CGA9P3X7R1H226M250KB 5750 2.50±0.30 ±20% CGA9P3X7R1H226M250KB CGA9P2X7R1E226M250KA		E7E0	2.00±0.20	±20%				CGA9M2X7R1E106M200KA
15μF 4532 2.80±0.30 ±20% CGA8Q3X7R1E156M280KB 5750 2.30±0.20 ±20% CGA9N2X7R1E156M230KA 3225 2.50±0.30 ±20% CGA6P3X7R1E226M250AB 22μF 4532 2.50±0.30 ±20% CGA8P1X7R1E226M250KC 5750 2.50±0.30 ±20% CGA9P3X7R1H226M250KB CGA9P2X7R1E226M250KA		5/50	2.30±0.20	±10%		CGA9N3X7R1H106K230KB		
5750 2.30±0.20 ±20% CGA9N2X7R1E156M230KA 3225 2.50±0.30 ±20% CGA6P3X7R1E226M250AB 22μF 4532 2.50±0.30 ±20% CGA8P1X7R1E226M250KC 5750 2.50±0.30 ±20% CGA9P3X7R1H226M250KB CGA9P2X7R1E226M250KA		3225	2.00±0.20	±20%				CGA6M3X7R1E156M200AB
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	15µF	4532	2.80±0.30	±20%				CGA8Q3X7R1E156M280KB
22μF 4532 2.50±0.30 ±20% CGA8P1X7R1E226M250KC 5750 2.50±0.30 ±20% CGA9P3X7R1H226M250KB CGA9P2X7R1E226M250KA		5750	2.30±0.20	±20%				CGA9N2X7R1E156M230KA
5750 2.50±0.30 ±20% <u>CGA9P3X7R1H226M250KB</u> <u>CGA9P2X7R1E226M250KA</u>		3225	2.50±0.30	±20%				CGA6P3X7R1E226M250AB
	22µF	4532	2.50±0.30	±20%				CGA8P1X7R1E226M250KC
47μF 5750 2.30±0.20 ±20% <u>CGA9N1X7R1V476M230KC</u> <u>CGA9N3X7R1E476M230KB</u>		5750	2.50±0.30	±20%		CGA9P3X7R1H226M250KB		CGA9P2X7R1E226M250KA
	47µF	5750	2.30±0.20	±20%			CGA9N1X7R1V476M230KC	CGA9N3X7R1E476M230KB

■Gray items: These products are not recommended for new designs.



Temperature characteristic: X7R (-55 to +125 ℃ ,±15%)

0	Di	rsions Thickness (mm)	Capacitance	Catalog number			
Capacitance	Dimensions		tolerance	Rated voltage Edc: 16V	Rated voltage Edc: 10V	Rated voltage Edc: 6.3V	
100pF	0603	0.30±0.03	±10%	CGA1A2X7R1C101K030BA			
			±20%	CGA1A2X7R1C101M030BA			
150pF	0603	0.30 ± 0.03	±10% ±20%	CGA1A2X7R1C151K030BA CGA1A2X7R1C151M030BA			
	2000	0.00.000	±10%	CGA1A2X7R1C221K030BA			
220pF	0603	0.30±0.03	±20%	CGA1A2X7R1C221M030BA			
330pF	0603	0.30±0.03	±10%	CGA1A2X7R1C331K030BA			
			±20%	CGA1A2X7R1C331M030BA			
470pF	0603	0.30±0.03	±10% ±20%	CGA1A2X7R1C471K030BA CGA1A2X7R1C471M030BA			
			±10%	CGA1A2X7R1C681K030BA			
680pF	0603	0.30±0.03	±20%	CGA1A2X7R1C681M030BA			
1nF	0603	0.30±0.03	±10%	CGA1A2X7R1C102K030BA			
			±20% ±10%	CGA1A2X7R1C102M030BA CGA1A2X7R1C152K030BA			
1.5nF	0603	0.30±0.03	±20%	CGA1A2X7R1C152R030BA			
0.0-5	0000	0.00.000	±10%	CGA1A2X7R1C222K030BA			
2.2nF	0603	0.30±0.03	±20%	CGA1A2X7R1C222M030BA			
3.3nF	0603	0.30±0.03	±10%	CGA1A2X7R1C332K030BA			
-			±20% ±10%	CGA1A2X7R1C332M030BA CGA1A2X7R1C472K030BA			
4.7nF	0603	0.30±0.03	±20%	CGA1A2X7R1C472M030BA			
6.0-5	0600	0.20+0.02	±10%	CGA1A2X7R1C682K030BA			
6.8nF	0603	0.30±0.03	±20%	CGA1A2X7R1C682M030BA			
10nF	0603	0.30±0.03	±10%		CGA1A2X7R1A103K030BA	CGA1A2X7R0J103K030BA	
-			±20% ±10%	CGA2B2X7R1C333K050BA	CGA1A2X7R1A103M030BA	CGA1A2X7R0J103M030BA	
33nF	1005	0.50±0.05	±20%	CGA2B2X7R1C333M050BA			
47nF	1005	0.50+0.05	±10%	CGA2B2X7R1C473K050BA			
47115	1005	0.50±0.05	±20%	CGA2B2X7R1C473M050BA			
68nF	1005	0.50±0.05	±10%	CGA2B1X7R1C683K050BC			
-			±20% ±10%	CGA2B1X7R1C683M050BC CGA2B1X7R1C104K050BC			
100nF	1005	0.50±0.05	±20%	CGA2B1X7R1C104M050BC			
150nF	1005	0.50±0.05	±10%	CGA2B2X7R1C154K050BA	CGA2B1X7R1A154K050BC	CGA2B3X7R0J154K050BB	
130111	1003	0.50±0.05	±20%	CGA2B2X7R1C154M050BA	CGA2B1X7R1A154M050BC	CGA2B3X7R0J154M050BB	
	1005	0.50±0.05	±10% ±20%	CGA2B2X7R1C224K050BA	CGA2B1X7R1A224K050BC	CGA2B3X7R0J224K050BB	
220nF			±10%	CGA2B2X7R1C224M050BA CGA3E2X7R1C224K080AA	CGA2B1X7R1A224M050BC	CGA2B3X7R0J224M050BB	
	1608	1608 0.80±0.10	±20%	CGA3E2X7R1C224M080AA			
330nF	1608	0.80±0.10	±10%	CGA3E1X7R1C334K080AC			
	1000	0.0010.10	±20%	CGA3E1X7R1C334M080AC			
470nF	1608	0.80±0.10	±10% ±20%	CGA3E1X7R1C474K080AC CGA3E1X7R1C474M080AC			
47 0111	2012	1.25±0.20	±10%	CGA4J2X7R1C474K125AA			
			±10%	CGA3E1X7R1C684K080AC			
680nF	1608	0.80±0.10	±20%	CGA3E1X7R1C684M080AC			
550111	2012	1.25±0.20	±10%	CGA4J2X7R1C684K125AA			
			±20% ±10%	CGA4J2X7R1C684M125AA CGA3E1X7R1C105K080AC			
4. =	1608	0.80±0.10	±20%	CGA3E1X7R1C105M080AC			
1µF	2012	1.25±0.20	±10%	CGA4J2X7R1C105K125AA			
	2012	1.23±0.20	±20%	CGA4J2X7R1C105M125AA			
	1608	0.80±0.10	±10% ±20%			CGA3E1X7R0J155K080AC CGA3E1X7R0J155M080AC	
1.5µF			±20% ±10%	CGA4J3X7R1C155K125AB		OGASEIA/ NUJISSIVIUOUAU	
	2012	1.25±0.20	±20%	CGA4J3X7R1C155M125AB			
2.2µF	1608	0.80±0.10	±10%			CGA3E1X7R0J225K080AC	
	1000	0.00±0.10	±20%	0044107777777777		CGA3E1X7R0J225M080AC	
	2012	1.25±0.20	±10%	CGA4J3X7R1C225K125AB			
			±20% ±10%	CGA4J3X7R1C225M125AB CGA4J3X7R1C335K125AB	CGA4J3X7R1A335K125AB		
3.3µF	2012	1.25±0.20	±20%	CGA4J3X7R1C335M125AB			
	2012	1.25±0.20	±10%	CGA4J3X7R1C475K125AB	CGA4J3X7R1A475K125AB		
4.7µF	2012	1.20-0.20	±20%	CGA4J3X7R1C475M125AB			
·	3216	1.60+0.30,-0.10	±10% ±20%	CGA5L3X7R1C475K160AB CGA5L3X7R1C475M160AB			
			±2070	OGASESATITIC47 SIVITOUAB			



Temperature characteristic: X7R (-55 to +125 ℃ ,±15%)

Capacitance	Dimensions	Thickness	Capacitance	Catalog number		
Сараспапсе	Dimensions	(mm)	tolerance	Rated voltage Edc: 16V	Rated voltage Edc: 6.3V	
	2012	1.25±0.20	±10%		CGA4J1X7R0J685K125AC	
6.8µF	2012	1.25±0.20	±20%		CGA4J1X7R0J685M125AC	
о.оµг	3216	1.60+0.300.10	±10%	CGA5L1X7R1C685K160AC	_	
	3210	1.00+0.30,-0.10	±20%	CGA5L1X7R1C685M160AC	_	
	2012	1.25±0.20	±10%		CGA4J1X7R0J106K125AC	
		1.23±0.20	±20%		CGA4J1X7R0J106M125AC	
10µF	3216	1.60+0.300.10	±10%	CGA5L1X7R1C106K160AC	_	
ΙΟμί		1.00+0.30,-0.10	±20%	CGA5L1X7R1C106M160AC		
	3225	2.00±0.20	±10%	CGA6M3X7R1C106K200AB		
		2.00±0.20	±20%	CGA6M3X7R1C106M200AB		
15µF	3225	2.50±0.30	±20%	CGA6P3X7R1C156M250AB	_	
	3216	1.60+0.30,-0.10	±20%		CGA5L1X7R0J226M160AC	
22µF	3225	2.50±0.30	±20%	CGA6P1X7R1C226M250AC		
	4532	2.30±0.20	±20%	CGA8N3X7R1C226M230KB	_	
33µF	4532	2.50±0.30	±20%	CGA8P1X7R1C336M250KC		
47µF	5750	2.30±0.20	±20%	CGA9N3X7R1C476M230KB		



Temperature characteristic: X7S (-55 to +125 ℃ ,±22%)

Capacitance	Dimensions	Thickness (mm)	Capacitance	Catalog number			
Сараспансе	Dilliciisions		tolerance	Rated voltage Edc: 50V	Rated voltage Edc: 25V	Rated voltage Edc: 16V	
330nF	1005	0.50±0.05	±10%			CGA2B1X7S1C334K050BC	
33011	1005	0.50±0.05	±20%			CGA2B1X7S1C334M050BC	
470nF	1005	0.50±0.05	±10%			CGA2B1X7S1C474K050BC	
47 011	1005	0.50±0.05	±20%			CGA2B1X7S1C474M050BC	
1.5µF	1608	0.80±0.10	±10%			CGA3E1X7S1C155K080AC	
1.5μ1			±20%			CGA3E1X7S1C155M080AC	
2.2µF	1608	0.80±0.10	±10%			CGA3E1X7S1C225K080AC	
Ζ.Ζμι			±20%			CGA3E1X7S1C225M080AC	
4.7μF	3225	2.30±0.20	±10%	CGA6N3X7S1H475K230AB			
	2012	1.25±0.20	±10%			CGA4J1X7S1C685K125AC	
6.8µF			±20%			CGA4J1X7S1C685M125AC	
о.оµг	3225	2.50±0.30	±10%	CGA6P3X7S1H685K250AB			
	3223	2.50±0.30	±20%	CGA6P3X7S1H685M250AB			
	2012	1.25±0.20	±10%		CGA4J1X7S1E106K125AC	CGA4J1X7S1C106K125AC	
10µF	2012	1.23±0.20	±20%			CGA4J1X7S1C106M125AC	
ιυμε	3225	2.50±0.30	±10%	CGA6P3X7S1H106K250AB			
	3225	2.50±0.30	±20%	CGA6P3X7S1H106M250AB			

Capacitance	Dimensions	Thickness	Capacitance	Catalog number			
Сараспансе	Dimensions	(mm)	tolerance	Rated voltage Edc: 10V	Rated voltage Edc: 6.3V	Rated voltage Edc: 4V	
330nF	1005	0.50±0.05	±10%	CGA2B3X7S1A334K050BB			
33011F	1005	0.50±0.05	±20%	CGA2B3X7S1A334M050BB			
470nF	1005	0.50±0.05	±10%	CGA2B3X7S1A474K050BB			
47 0111	1005	0.30±0.03	±20%	CGA2B3X7S1A474M050BB		_	
1.5µF	1608	0.80±0.10	±10%	CGA3E3X7S1A155K080AB			
1.5μΓ	1000	0.60±0.10	±20%	CGA3E3X7S1A155M080AB			
2.2µF	1608	0.80±0.10	±10%	CGA3E3X7S1A225K080AB			
2.2μΓ			±20%	CGA3E3X7S1A225M080AB		_	
6.8µF	2012	1.25±0.20	±10%	CGA4J3X7S1A685K125AB		_	
о.оµг			±20%	CGA4J3X7S1A685M125AB		_	
	1608	0.80+0.30,-0.10	±20%			CGA3E1X7S0G106M080AC	
10μF	2012	1.25±0.20	±10%	CGA4J3X7S1A106K125AB		_	
	2012	1.20±0.20	±20%	CGA4J3X7S1A106M125AB			
15µF	3216	1.60+0.30,-0.10	±20%	CGA5L1X7S1A156M160AC			
22µF	3216	1.60+0.30,-0.10	±20%	CGA5L1X7S1A226M160AC			
22E	3225	2.00±0.20	±20%	CGA6M1X7S1A336M200AC		_	
33µF	3225	2.50±0.30	±20%		CGA6P1X7S0J336M250AC		
47µF	3225	2.50±0.30	±20%	CGA6P1X7S1A476M250AC	CGA6P1X7S0J476M250AC		

 $\blacksquare \mbox{Gray}$ items: These products are not recommended for new designs.



Temperature characteristic: X7T (-55 to +125 ℃ ,+22,-33%)

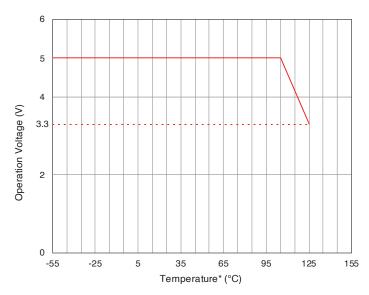
Capacitance	Dimensions	Thickness	Capacitance	Catalog number			
Capacitance Dinie	Dimensions	(mm)	tolerance	Rated voltage Edc: 10V	Rated voltage Edc: 6.3V	Rated voltage Edc: 4V	Rated voltage Edc: 2.5V
100nF	0603	0.30+0.10,-0.03	±20%			CGA1A1X7T0G104M030BC	
1µF	1005	0.50+0.10,-0.05	±20%			CGA2B1X7T0G105M050BC	
4.7µF	1608	0.80+0.30,-0.10	±10%	CGA3E1X7T1A475K080AC	CGA3E3X7T0J475K080AB		
10µF	1608	0.80+0.30,-0.10	±20%	CGA3EDX7T1A106M080AU	CGA3E1X7T0J106M080AC	CGA3E3X7T0G106M080AB	
22µF	2012	1.25+0.30,-0.15	±20%		CGA4J1X7T0J226M125AC		
47µF	3216	1.60+0.40,-0.10	±20%			CGA5L1X7T0G476M160AC	
100µF	3225	2.50+0.40,-0.30	±20%			CGA6P1X7T0G107M250AC	CGA6P3X7T0E107M250AB

Click the part numbers for details.

CGA3EDX7T1A106M080AU is a derating guarantee product.

When the product temperature exceeds 125°C, please use the product within the derated voltage/temperature condition in the figure below.

Rated voltage derating



* Including self-heating.