

MULTILAYER CERAMIC CHIP CAPACITORS

Commercial grade, MEGACAP type

CKG series

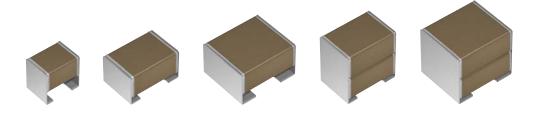
Single type

CKG32K 3225 [1210 inch] CKG45K 4532 [1812 inch] CKG57K 5750 [2220 inch]

Stacked type

CKG45N 4532 [1812 inch] CKG57N 5750 [2220 inch]

* Dimensions code: JIS[EIA]





REMINDERS FOR USING THESE PRODUCTS

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

SAFETY REMINDERS

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



REMINDERS

1. The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.

The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.

If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.

- (1) Aerospace/aviation equipment
- (2) Transportation equipment (cars, electric trains, ships, etc.)
- (3) Medical equipment
- (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 even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.

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

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



CKG series

MEGACAP type









Type: CKG32K/ 3225 [1210 inch], CKG45K/ 4532 [1812 inch], CKG57K/5750 [2220 inch], CKG45N/ 4532 [1812 inch], CKG57N/ 5750 [2220 inch]

SERIES OVERVIEW

TDK multilayer ceramic chip capacitor CKG series is a product which metal frames are connected to terminations of MLCC, and it is also called MEGACAP

MEGACAP has higher mechanical endurance by the flexible metal frame structure which absorbs thermal and mechanical stress. Also the stacked type is effective in mounting area reduction because twice capacitance is realized by double-stacked structure without changing footprint.

FEATURES

- Higher mechanical endurance is realized by metal frame structure.
- Twice capacitance is realized by double-stacked structure without changing footprint.
- · Lower ESR and ESL than Al caps.
- COG temperature characteristic which has excellent stable temperature and DC-bias characteristics is applicable.
- Mounting on Al board is applicable.

APPLICATIONS

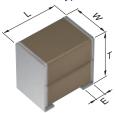
- · Smoothing circuits
- DC-DC converters, inverters, battery chargers
- The places where Al electrolytic or Film capacitor is not suitable because of higher ESR/ESL, heat resistivity, or its size.
- Areas where electrolytic capacitors or film capacitors cannot be placed due to high temperatures (e.g., IGBT) around them.
- The COG temperature characteristic is suitable for the high-reliability circuits such as time constant, filter, resonance, oscillation and snubber circuits.

SHAPE & DIMENSIONS

Single type

L	Body length
W	Body width
Т	Body height
Е	Metal-frame width

Stacked type



L	Body length
W	Body width
Т	Body height
F	Metal-frame width

Dimensions in mm

Туре	L	W	Т	E
CKG32K	3.60±0.30	2.60±0.30	3.35±0.10	0.80±0.15
CKG45K	5.00±0.50	3.50±0.50	2.90±0.10	1.10±0.30
CKG57K	6.00±0.50	5.00±0.50	3.35±0.15	1.60±0.30
CKG45N	5.00±0.50	3.50±0.50	5.00±0.50	1.10±0.30
CKG57N	6.00±0.50	5.00±0.50	5.00±0.50	1.60±0.30

^{*}Dimensional tolerances are typical values.

MULTILAYER CERAMIC CHIP CAPACITORS



CATALOG NUMBER CONSTRUCTION

CKG	57	N	X7R	1E	107	M	500	J	Н	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	

(1) Series

(2) Dimensions L x W (mm)

Code	EIA	Length	Width	Metal frame width
32	CC1210	3.60	2.60	0.80
45	CC1812	5.00	3.50	1.10
57	CC2220	6.00	5.00	1.60

(3) Structure

Code	Description
K	Single type
N	Stacked type

(4) Temperature characteristics

Temperature characteristics	Temperature coefficient or capacitance change	Temperature range
COG	0±30ppm/°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

(5) Rated voltage (DC)

Code	Voltage (DC)
1C	16V
1E	25V
1H	50V
2A	100V
2E	250V
2W	450V
2J	630V
3A	1000V

(6) 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 $225 = 2,200,000pF = 2.2\mu F$

(7) Capacitance tolerance

Code	Tolerance
J	± 5%
K	± 10%
M	± 20%

(8) Thickness

Code	Thickness
290	2.90 mm
335	3.35 mm
500	5.00 mm

(9) Packaging style

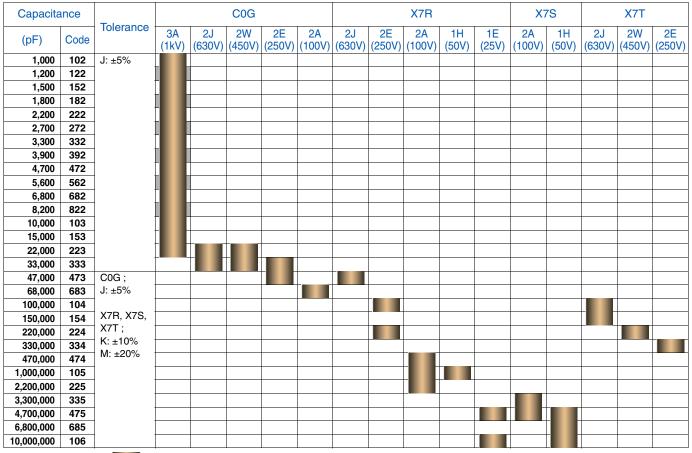
Code	Style
A	178mm reel, 4mm pitch
J	330mm reel, 8mm pitch

(10) Special reserved code

Code	Description	
Н	MEGACAP type	



CKG32K/ 3225 [1210 inch], Single type



Standard thickness 3.35 mm

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

■ Please refer to the capacitance range table at P-9 and after for the details such as product thickness and capacitance tolerance.

Capacitance range chart

CKG45K/ 4532 [1812 inch], Single type

Capacita	ince			C0G				X7	'R				X7S			X7T	
(pF)	Code	Tolerance	2J (630V)	2W (450V)	2E (250V)	2J (630V)	2E (250V)	2A (100V)	1H (50V)	1E (25V)	1C (16V)	2A (100V)	1H (50V)	1C (16V)	2J (630V)	2W (450V)	2E (250V)
33,000	333	J: ±5%		, ,				, ,		, ,	, ,					, , ,	
47,000	473																
68,000	683																
100,000	104	K: ±10%															
150,000	154	M: ±20%															
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																
22,000,000	226	M: ±20%									•						

Standard thickness 2.90 mm

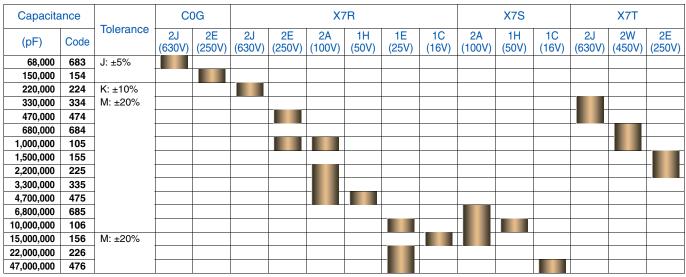
Background gray: The product which is not recommended to a new design.

■ Please refer to the capacitance range table at P-9 and after for the details such as product thickness and 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.



CKG57K/ 5750 [2220 inch], Single type



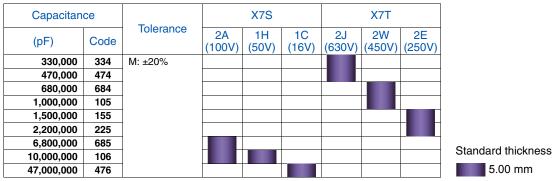
Standard thickness 3.35 mm

[■] Please refer to the capacitance range table at P-9 and after for the details such as product thickness and capacitance tolerance.



CKG45N/ 4532 [1812 inch], Stacked type

Capacitan	се	.		C0G		X5R		X7R					
(pF)	Code	Tolerance	2J (630V)	2W (450V)	2E (250V)	1H (50V)	1C (16V)	2J (630V)	2E (250V)	2A (100V)	1H (50V)	1E (25V)	1C (16V)
66,000	663	J: ±5%											
94,000	943												
140,000	144	K: ±10%											
220,000	224	M: ±20%											
470,000	474												
1,000,000	105												
2,200,000	225												
3,300,000	335												
4,700,000	475												
6,800,000	685												
10,000,000	106												
22,000,000	226												
47,000,000	476												



[■] Please refer to the capacitance range table at P-9 and after for the details such as product thickness and capacitance tolerance.



CKG57N/ 5750 [2220 inch], Stacked type

Capacitan	се	- .	C)G		X5R				X7R				
(pF)	Code	Tolerance	2J (630V)	2E (250V)	2A (100V)	1H (50V)	1E (25V)	1C (16V)	2J (630V)	2E (250V)	2A (100V)	1H (50V)	1E (25V)	1C (16V)
140,000	144	K: ±10%												
300,000	304	J: ±5%												
470,000	474	M: ±20%												
1,000,000	105													
2,200,000	225													
4,700,000	475													
10,000,000	106										•	•		
22,000,000	226													
33,000,000	336													
47,000,000	476													
100,000,000	107													

Capacitan	ce	T. I.		X	7S					
(pF)	Code	Tolerance	2A (100V)	1H (50V)	1E (25V)	1C (16V)	2J (630V)	2W (450V)	2E (250V)	
680,000	684	M: ±20%								
1,000,000	105									
1,500,000	155									
2,200,000	225									
3,300,000	335									
22,000,000	226									Ctondou
47,000,000	476									Standard
100,000,000	107									5.

Standard thickness
5.00 mm

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

[■] Please refer to the capacitance range table at P-9 and after for the details such as product thickness and capacitance tolerance.



Capacitance range table Temperature characteristics: C0G (-55 to +125°C, 0±30ppm/°C)

0	Dimensione	Thickness	Capacitance	Catalog number				
Capacitance	Dimensions	(mm)	tolerance	Rated voltage Edc: 1kV	Rated voltage Edc: 630V	Rated voltage Edc: 450V	Rated voltage Edc: 250V	Rated voltage Edc: 100V
1nF	3225	3.35±0.10	±5%	CKG32KC0G3A102J335AH				
1.2nF	3225	3.35±0.10	±5%	CKG32KC0G3A122J335AH				
1.5nF	3225	3.35±0.10	±5%	CKG32KC0G3A152J335AH				
1.8nF	3225	3.35±0.10	±5%	CKG32KC0G3A182J335AH				
2.2nF	3225	3.35±0.10	±5%	CKG32KC0G3A222J335AH				
2.7nF	3225	3.35±0.10	±5%	CKG32KC0G3A272J335AH				
3.3nF	3225	3.35±0.10	±5%	CKG32KC0G3A332J335AH				_
3.9nF	3225	3.35±0.10	±5%	CKG32KC0G3A392J335AH				
4.7nF	3225	3.35±0.10	±5%	CKG32KC0G3A472J335AH				
5.6nF	3225	3.35±0.10	±5%	CKG32KC0G3A562J335AH				
6.8nF	3225	3.35±0.10	±5%	CKG32KC0G3A682J335AH				_
8.2nF	3225	3.35±0.10	±5%	CKG32KC0G3A822J335AH				
10nF	3225	3.35±0.10	±5%	CKG32KC0G3A103J335AH				
15nF	3225	3.35±0.10	±5%	CKG32KC0G3A153J335AH				_
22nF	3225	3.35±0.10	±5%	CKG32KC0G3A223J335AH	CKG32KC0G2J223J335AH	CKG32KC0G2W223J335AH		
33nF	3225	3.35±0.10	±5%		CKG32KC0G2J333J335AH	CKG32KC0G2W333J335AH	CKG32KC0G2E333J335AH	
3311	4532	2.90±0.10	±5%		CKG45KC0G2J333J290JH			
47nF	3225	3.35±0.10	±5%				CKG32KC0G2E473J335AH	
471115	4532	2.90±0.10	±5%			CKG45KC0G2W473J290JH		
66nF	4532	5.00±0.50	±5%		CKG45NC0G2J663J500JH			
	3225	3.35±0.10	±5%					CKG32KC0G2A683J335AH
68nF	4532	2.90±0.10	±5%				CKG45KC0G2E683J290JH	
	5750	3.35±0.15	±5%		CKG57KC0G2J683J335JH			
94nF	4532	5.00±0.50	±5%			CKG45NC0G2W943J500JH		
140nF	4532	5.00±0.50	±10%				CKG45NC0G2E144K500JH	
140115	5750	5.00±0.50	±10%		CKG57NC0G2J144K500JH			
150nF	5750	3.35±0.15	±5%				CKG57KC0G2E154J335JH	
300nF	5750	5.00±0.50	±5%	·			CKG57NC0G2E304J500JH	

[■] Gray item: The product which is not recommended to a new design.

Capacitance range table Temperature characteristics: X5R (-55 to +85°C, ±15%)

Consoitones	Dimensions	Thickness	Capacitance	Catalog number			
Capacitance	Diffierisions	(mm)	tolerance	Rated voltage Edc: 100V	Rated voltage Edc: 50V	Rated voltage Edc: 25V	Rated voltage Edc: 16V
10µF	4532	5.00±0.50	±20%		CKG45NX5R1H106M500JH		
ιυμε	5750	5.00±0.50	±20%	CKG57NX5R2A106M500JH			
22µF	5750	5.00±0.50	±20%		CKG57NX5R1H226M500JH		
47µF	4532	5.00±0.50	±20%				CKG45NX5R1C476M500JH
4/µr	5750	5.00±0.50	±20%			CKG57NX5R1E476M500JH	
100µF	5750	5.00±0.50	±20%				CKG57NX5R1C107M500JH

[■] Gray item: The product which is not recommended to a new design.



Capacitance range table

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

Capacitance Dimension Cimension C			Thickness	Capacitance	Catalog number			
1001F 3225 3.35±0.10 ±2.0% CKG32KX7R22J47SM33SAH 1001F 4532 2.90±0.10 ±1.0% CKG32KX7R2E104K33SAH 1002F 4532 2.90±0.10 ±1.0% CKG32KX7R2E104K39SAH 1002F 4532 2.90±0.10 ±1.0% CKG32KX7R2E104K39SAH 1002F 4532 2.90±0.10 ±1.0% CKG32KX7R2E3J4K3SAH 1002F 4532 2.90±0.10 ±1.0% CKG32KX7R2E3Z4K39SAH 1002F 4532 2.90±0.10 ±1.0% CKG32KX7R2E3Z4K39SAH 1002F 4532 2.90±0.10 ±1.0% CKG32KX7R2E3Z4K39SAH 1002F 4532 3.35±0.15 ±1.0% CKG32KX7R2E3Z4K3SAH 1002F 4532 3.35±0.15 ±2.0% CKG32KX7R2BZ3Z4K3SAH 1002F 4532 2.90±0.10 ±1.0% CKG57KX7R2JZ24K3SAH 1002F 4532 3.35±0.15 ±2.0% CKG57KX7R2JZ24K3SAH 1002F 4532 3.35±0.15 ±1.0% CKG57KX7R2JZ24K3SAH 1002F 4532 3.35±0.15 ±1.0% CKG57KX7R2JZ24X4M50AH 1002F 4532 3.35±0.15 ±2.0% CKG57KX7R2JZ24X3SAH 1002F 4532 2.90±0.10 ±1.0% CKG57KX7R2JZ24X3SAH 1002F 4532 3.35±0.15 ±2.0% CKG57KX7R2JZ24X3SAH 1002F 4532 3.35±0.15 ±2.0% CKG57KX7R2JZ24X3SAH 1002F 4532 3.35±0.15 ±2.0% CKG57KX7R2JZ35AH 1002F 4532 3.35±0.15 ±2.0% CKG57KX7R2Z35AH 1002F 4532 3.35±0.15 ±2.0% CKG57KX7	Capacitance	Dimensions			Rated voltage Edc: 630V	Rated voltage Edc: 250V	Rated voltage Edc: 100V	Rated voltage Edc: 50V
1001F 100	47nF	2005	2.25 . 0.10	±10%	CKG32KX7R2J473K335AH			
100nF 100nF 14532	4/11	3223	3.35±0.10	±20%	CKG32KX7R2J473M335AH			
100nF		2225	2 25 , 0 10	±10%		CKG32KX7R2E104K335AH		
	100nF	3223	3.35±0.10	±20%		CKG32KX7R2E104M335AH		
10% CKG3KX7R2E24K33SAH	100111	4522	2.00+0.10	±10%	CKG45KX7R2J104K290JH			
200F 4532 2.90±0.10 ±10% CKG32KX7R2E224M335AH		4552	2.90±0.10	±20%	CKG45KX7R2J104M290JH			
200		3225	3 35+0 10			CKG32KX7R2E224K335AH		
2-90-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		5225	3.33±0.10	±20%		CKG32KX7R2E224M335AH		
220h			2 00+0 10			CKG45KX7R2E224K290JH		
10	220nF	4532	2.90±0.10	±20%		CKG45KX7R2E224M290JH		
1575 3.35±0.15 ±20% CKG57KX7R2J224M33SJH CKG32KX7R2A474K33SAH CKG32KX7R2A474M33SAH CKG32KX7R2A474M33SJH CKG32KX7R2A474M30JH CKG32KX7R2A474M30JH CKG32KX7R2A474M30JH CKG32KX7R2A474M30JH CKG32KX7R2A474M33SAH CKG32KX7R1H105K33SAH CKG32KX7R1H105K33SAH CKG32KX7R1H105K33SAH CKG32KX7R1H105K33SAH CKG32KX7R1H105K33SAH CKG32KX7R1H105K33SAH CKG32KX7R1A40M3SAH CKG32KX7R1A42M3SAH CKG32KX7R1A42M3SAH			5.00±0.50	±20%	CKG45NX7R2J224M500JH			
1		5750	3 35+0 15		CKG57KX7R2J224K335JH			
1470F 100 1		3730	3.33±0.13	±20%	CKG57KX7R2J224M335JH			
10		3225	3 35+0 10	±10%			CKG32KX7R2A474K335AH	
470nF		3223	3.33±0.10	±20%			CKG32KX7R2A474M335AH	
450E 450E 450E 420% CKG45KX7R2E474M500JH CKG5TKX7R2E474M50DJH CKG5TKX7R2E474M50DJH CKG5TKX7R2E474M50DJH CKG5TKX7R2E474M335JH CKG3TKX7R2E474M335JH CKG3TKX7R2E474M335JH CKG3TKX7R2E474M335JH CKG3TKX7R2E474M335JH CKG3TKX7R2E474M335JH CKG3TKX7R2E474M335JH CKG3TKX7R2E474M335JH CKG3TKX7R2E476M335AH CKG3ZKX7R1H105K335AH CKG3ZKX7R1H105K335AH CKG3ZKX7R1H105K335AH CKG3ZKX7R2A105K335AH CKG3ZKX7R1H105K335AH CKG3ZKX7R1H105K335AH CKG3ZKX7R1H105K335AH CKG3ZKX7R2A105K335AH CKG3ZKX7R1H105K335AH CKG3TKX7R2E105K35AH CKG3TKX7R2A105K39DJH CKG45KX7R2A105K39DJH CKG45KX7R2A105K39DJH CKG45KX7R2A105K335JH CKG5TKX7R2A105K335JH CKG5TKX7R2A105K335JH CKG5TKX7R2A105K335JH CKG45KX7R1H155K29DJH CKG45KX7R1H155K29DJH CKG45KX7R1H155K29DJH CKG45KX7R2A105K335JH CKG45KX7R1H155K29DJH CKG45KX7R1A225K335AH CKG45KX7R1H155K29DJH CKG45KX7R1A225K335AH CKG45KX7R1H155K29DJH CKG45KX7R2A225K335AH CKG45KX7R2A225K335AH CKG45KX7R1H155K29DJH CKG45KX7R2A225K335AH CKG45KX7R2A225K			2 90+0 10			CKG45KX7R2E474K290JH		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	470nF	4532	2.90±0.10	±20%		CKG45KX7R2E474M290JH		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	470111		5.00±0.50			CKG45NX7R2E474M500JH		
1			3 35+0 15	±10%		CKG57KX7R2E474K335JH		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		5750	3.33±0.13	±20%		CKG57KX7R2E474M335JH		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			5.00±0.50	±20%	CKG57NX7R2J474M500JH			
$ \begin{array}{llllllllllllllllllllllllllllllllllll$		3225	3 35+0 10				CKG32KX7R2A105K335AH	CKG32KX7R1H105K335AH
$ \begin{array}{llllllllllllllllllllllllllllllllllll$		0225	0.00±0.10				CKG32KX7R2A105M335AH	CKG32KX7R1H105M335AH
$ \begin{array}{llllllllllllllllllllllllllllllllllll$			2 90+0 10				CKG45KX7R2A105K290JH	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1uF	4532	2.0020.10				CKG45KX7R2A105M290JH	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 121		5.00±0.50	±20%		CKG45NX7R2E105M500JH		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			3 35+0 15	±10%		CKG57KX7R2E105K335JH	CKG57KX7R2A105K335JH	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		5750	0.00±0.10			CKG57KX7R2E105M335JH	CKG57KX7R2A105M335JH	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			5.00±0.50			CKG57NX7R2E105M500JH		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 5uF	4532	2 90+0 10					CKG45KX7R1H155K290JH
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1.5μι	4302	2.30±0.10					CKG45KX7R1H155M290JH
$ 2.2 \mu F = \begin{bmatrix} \pm 20\% & \text{CKG32KX7R2A225M335AH} \\ \pm 10\% & \text{CKG45KX7R2A225K290JH} \\ \pm 20\% & \text{CKG45KX7R2A225M290JH} \\ \hline 5.00 \pm 0.50 & \pm 20\% & \text{CKG45NX7R2A225M00JH} \\ \hline 5750 & 3.35 \pm 0.15 & \pm 10\% & \text{CKG57KX7R2A225K335JH} \\ \pm 20\% & \text{CKG57KX7R2A225M335JH} \\ \hline $		3225	3 35+0 10	±10%			CKG32KX7R2A225K335AH	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		0225	0.00±0.10				CKG32KX7R2A225M335AH	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			2 90+0 10				CKG45KX7R2A225K290JH	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 2uF	4532					CKG45KX7R2A225M290JH	
5750 = 3.35±0.15 ±20% = CKG57KX7R2A225M335JH	<i>Δ.</i> Δμι		5.00±0.50				CKG45NX7R2A225M500JH	
5750 ±20% CKG57KX7R2A225M335JH			3 35+0 15				CKG57KX7R2A225K335JH	
5.00±0.50 ±20% CKG57NX7R2E225M500JH CKG57NX7R2A225M500JH		5750					CKG57KX7R2A225M335JH	
		5.00±0.50	±20%		CKG57NX7R2E225M500JH	CKG57NX7R2A225M500JH		



Capacitance range table Temperature characteristics: X7R (-55 to +125°C, ±15%)

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	oltage Edc: 16V
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
3.35±0.15	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
\$\frac{3.35\pmu_15}{5.00\pmu_50}	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
3225 3.35±0.10 ±10% CKG32KX7R1E106K335AH ±20% CKG32KX7R1E106M335AH	
3225 3.35±0.10 ±20% CKG32KX7R1E106M335AH	
±20% CKG32KX7R1E106M335AH	
1109/	
2.90±0.10 ±10% CKG45K	K7R1C106K290JH
4532 ±20% CKG45Κ)	(7R1C106M290JH
5.00±0.50 ±20% CKG45NX7R1E106M500JH	
3.35±0.15 ±10% CKG57KX7R1E106K335JH	
5750 5.33±0.15 ±20% CKG57KX7R1E106M335JH	
5.00±0.50 ±20% CKG57NX7R2A106M500JH CKG57NX7R1H106M500JH	
15μF 5750 3.35±0.15 ±20% CKG57K	(7R1C156M335JH
4532 2.90±0.10 ±20% CKG45K3	(7R1C226M290JH
5 00+0 50 +20% CKG45N	(7R1C226M500JH
22μF 3.35±0.15 ±20% CKG57KX7R1E226M335JH	
5.00±0.50 ±20% CKG57NX7R1E226M500JH	
33μF 5750 5.00±0.50 ±20% CKG57N	(7R1C336M500JH
47μF 5750 3.35±0.15 ±20% CKG57KX7R1E476M335JH	
100μF 5750 5.00±0.50 ±20% CKG57NX7R1E107M500JH	

[■] Gray item: The product which is not recommended to a new design.

Capacitance range table

Temperature characteristics: X7S (-55 to +125°C, ±22%)

Capacitance	Dimonsions	Thickness	Capacitance	Catalog number			
Capacitance	Difficitions	(mm)	tolerance	Rated voltage Edc: 100V	Rated voltage Edc: 50V	Rated voltage Edc: 25V	Rated voltage Edc: 16V
	3225	3.35±0.10	±10%	CKG32KX7S2A335K335AH			
2 2	3225	3.35±0.10	±20%	CKG32KX7S2A335M335AH			
3.3µF	4500	2.90±0.10	±10%	CKG45KX7S2A335K290JH			
	4532	2.90±0.10	±20%	CKG45KX7S2A335M290JH			
-	0005	0.05.0.10	±10%	CKG32KX7S2A475K335AH	CKG32KX7S1H475K335AH		
4.7	3225	3.35±0.10	±20%	CKG32KX7S2A475M335AH	CKG32KX7S1H475M335AH		
4.7µF	4500	0.00.040	±10%	CKG45KX7S2A475K290JH	CKG45KX7S1H475K290JH		
	4532	4532 2.90±0.10		CKG45KX7S2A475M290JH	CKG45KX7S1H475M290JH		
	0005	0.05.0.10	±10%		CKG32KX7S1H685K335AH		
	3225	3.35±0.10	±20%		CKG32KX7S1H685M335AH		
6.8µF	4532	5.00±0.50	±20%	CKG45NX7S2A685M500JH			
	5750	0.05.0.15	±10%	CKG57KX7S2A685K335JH			
	5750	3.35±0.15	±20%	CKG57KX7S2A685M335JH			
	2005	2.25 . 0.10	±10%		CKG32KX7S1H106K335AH		
	3225	3.35±0.10	±20%		CKG32KX7S1H106M335AH		
10μF	4532	5.00±0.50	±20%	CKG45NX7S2A106M500JH	CKG45NX7S1H106M500JH		
	5750	0.05.0.15	±10%	CKG57KX7S2A106K335JH	CKG57KX7S1H106K335JH		
	5750	3.35±0.15	±20%	CKG57KX7S2A106M335JH	CKG57KX7S1H106M335JH		
15µF	5750	3.35±0.15	±20%	CKG57KX7S2A156M335JH			
005	4532	2.90±0.10	±20%				CKG45KX7S1C226M290JH
22µF	5750	5.00±0.50	±20%	CKG57NX7S2A226M500JH	CKG57NX7S1H226M500JH		
	4532	5.00±0.50	±20%				CKG45NX7S1C476M500JH
47µF	E7E0	3.35±0.15	±20%				CKG57KX7S1C476M335JH
	5750 -	5.00±0.50	±20%			CKG57NX7S1E476M500JH	
100μF	5750	5.00±0.50	±20%				CKG57NX7S1C107M500JH

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



Capacitance range table Temperature characteristics: X7T (-55 to +125°C, +22, -33%)

0	Dimanaiana	Thickness	Capacitance	Catalog number		
Capacitance	Dimensions	(mm)	tolerance	Rated voltage Edc: 630V	Rated voltage Edc: 450V	Rated voltage Edc: 250V
100nF	3225	3.35±0.10	±10%	CKG32KX7T2J104K335AH		
100111	3223	3.33±0.10	±20%	CKG32KX7T2J104M335AH		
	3225	3.35±0.10	±10%	CKG32KX7T2J154K335AH		
150nF	3223	3.33±0.10	±20%	CKG32KX7T2J154M335AH		
130111	4532	2.90±0.10	±10%	CKG45KX7T2J154K290JH		
	4302	2.90±0.10	±20%	CKG45KX7T2J154M290JH		
	3225	3.35±0.10	±10%		CKG32KX7T2W224K335AH	
220nF	3223	3.33±0.10	±20%		CKG32KX7T2W224M335AH	
220111	4532	2.90±0.10	±10%	CKG45KX7T2J224K290JH		
	4302	2.90±0.10	±20%	CKG45KX7T2J224M290JH		
	3225	3.35±0.10	±10%			CKG32KX7T2E334K335AH
	3223	3.35±0.10	±20%			CKG32KX7T2E334M335AH
		2.90±0.10	±10%		CKG45KX7T2W334K290JH	
330nF	4532	2.90±0.10	±20%		CKG45KX7T2W334M290JH	
	-	5.00±0.50	±20%	CKG45NX7T2J334M500JH		
	5750	3.35±0.15	±10%	CKG57KX7T2J334K335JH		
	5/50	3.35±0.15	±20%	CKG57KX7T2J334M335JH		
		0.00.0.10	±10%		CKG45KX7T2W474K290JH	
	4532	2.90±0.10 - 5.00±0.50	±20%		CKG45KX7T2W474M290JH	
470nF	=		±20%	CKG45NX7T2J474M500JH		
	5750		±10%	CKG57KX7T2J474K335JH		
	5750	3.35±0.15	±20%	CKG57KX7T2J474M335JH		
		0.00.040	±10%			CKG45KX7T2E684K290JH
	4532	2.90±0.10	±20%			CKG45KX7T2E684M290JH
	-	5.00±0.50	±20%		CKG45NX7T2W684M500JH	
680nF		0.05.045	±10%		CKG57KX7T2W684K335JH	
	5750	3.35±0.15	±20%		CKG57KX7T2W684M335JH	
	-	5.00±0.50	±20%	CKG57NX7T2J684M500JH		
		0.00.040	±10%			CKG45KX7T2E105K290JH
	4532	2.90±0.10	±20%			CKG45KX7T2E105M290JH
4.5	-	5.00±0.50	±20%		CKG45NX7T2W105M500JH	
1µF			±10%		CKG57KX7T2W105K335JH	
	5750	3.35±0.15	±20%		CKG57KX7T2W105M335JH	
	-	5.00±0.50	±20%	CKG57NX7T2J105M500JH		
	4532	5.00±0.50	±20%			CKG45NX7T2E155M500JH
			±10%			CKG57KX7T2E155K335JH
1.5µF	5750	3.35±0.15	±20%			CKG57KX7T2E155M335JH
	-	5.00±0.50	±20%		CKG57NX7T2W155M500JH	
	4532	5.00±0.50	±20%			CKG45NX7T2E225M500JH
						CKG57KX7T2E225K335JH
2.2µF	5750	3.35±0.15				CKG57KX7T2E225M335JH
	5.00±0.50	±20%		CKG57NX7T2W225M500JH		
3.3uF	5750					CKG57NX7T2E335M500JH
2.2µF 3.3µF		5.00±0.50 3.35±0.15	±20% ±10% ±20%			CKG57KX7T2E225K335 CKG57KX7T2E225M335

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Multilayer Ceramic Capacitors MLCC - SMD/SMT category:

Click to view products by TDK manufacturer:

Other Similar products are found below:

M39014/01-1467 M39014/02-1218V M39014/02-1225V M39014/02-1262V M39014/02-1301 M39014/22-0631 1210J5000102JCT

1210J2K00102KXT 1210J5000103KXT 1210J5000223KXT D55342E07B379BR-TR D55342E07B523DR-T/R 1812J1K00103KXT

1812J1K00473KXT 1812J2K00680JCT 1812J4K00102MXT 1812J5000102JCT 1812J5000103JCT 1812J5000682JCT NIN-FB391JTRF

NIN-FC2R7JTRF NPIS27H102MTRF C1206C101J1GAC C1608C0G1E472JT000N C2012C0G2A472J 2220J2K00101JCT

KHC201E225M76N0T00 LRC-LRF1206LF-01R025FTR1K 1812J1K00222JCT 1812J2K00102KXT 1812J2K00222KXT

1812J2K00472KXT 2-1622820-7-CUT-TAPE 2220J3K00102KXT 2225J2500824KXT CCR07CG103KM CGA2B2C0G1H010C

CGA2B2C0G1H040C CGA2B2C0G1H050C CGA2B2C0G1H060D CGA2B2C0G1H070D CGA2B2C0G1H151J CGA2B2C0G1H1R5C

CGA2B2C0G1H2R2C CGA2B2C0G1H3R3C CGA2B2C0G1H680J CGA2B2C0G1H6R8D CGA2B2X8R1H221K CGA2B2X8R1H472K

CGA3E1X7R1C474K