

MULTILAYER CERAMIC CHIP CAPACITORS

CKG Series Commercial Grade MEGACAP Type

Type:

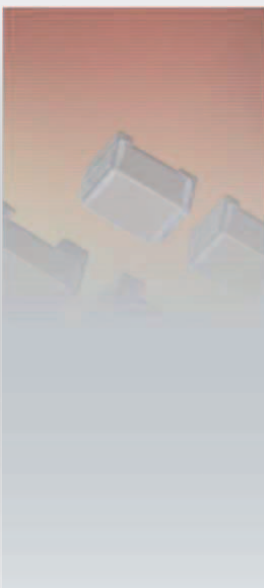
CKG32K [EIA CC1210]

CKG45K [EIA CC1812]

CKG45N [EIA CC1812]

CKG57K [EIA CC2220]

CKG57N [EIA CC2220]



REMINDERS

Please read before using this product

SAFETY REMINDERS

REMINDERS

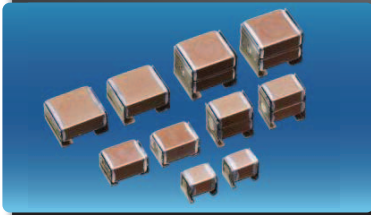
1. If you intend to use a product listed in this catalog for a purpose that may cause loss of life or other damage, you must contact our company's sales window.
2. We may modify products or discontinue production of a product listed in this catalog without prior notification.
3. We provide "Delivery Specification" that explain precautions for the specifications and safety of each product listed in this catalog. We strongly recommend that you exchange these delivery specifications with customers that use one of these products.
4. If you plan to export a product listed in this catalog, keep in mind that it may be a restricted item according to the "Foreign Exchange and Foreign Trade Control Law". In such cases, it is necessary to acquire export permission in harmony with this law.
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

MULTILAYER CERAMIC CHIP CAPACITORS



CKG Series MEGACAP Type

Type:CKG32K [EIA CC1210], CKG45K [EIA CC1812],
CKG45N [EIA CC1812], CKG57K [EIA CC2220], CKG57N [EIA CC2220]

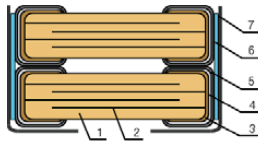
Features

- Higher mechanical endurance is realized by metal frame connected to termination of MLCC.
- Twice capacitance is realized by double-stacked structure without changing footprint.
- Lower ESR and ESL than Al caps.
- Capable of absorbing thermal and mechanical stress.
- Improved vibration performance.

Applications

- Smoothing circuits
- DC-DC converters, inverters, battery chargers
- LED, HID
- Temperature variable applications
- Piezoelectric-effect countermeasure

Design Structure



No.	Name	Material	
		class 1	class 2
(1)	Ceramic dielectric	CaZrO ₃	BaTiO ₃
(2)	Inner electrode	Nickel (Ni)	
(3)		Copper (Cu)	
(4)	Terminal	Nickel (Ni)	
(5)		Tin (Sn)	
(6)	Metal frame joint	High temp solder	
(7)	Metal frame	42 alloy	

Shape & Dimensions

Single Type



L	Body Length
W	Body Width
T	Body Height
E	Metal Terminal Width

Stacked Type



L	Body Length
W	Body Width
T	Body Height
E	Metal Terminal Width

Catalog Number Construction

CKG • 57 • N • X7S • 1C • 107 • M • 500 • J • H

Series Name

Dimensions L x W (mm)

Code	Length	Width	Metal Terminal Width
32	3.60 ± 0.30	2.60 ± 0.30	0.80 ± 0.15
45	5.00 ± 0.50	3.50 ± 0.50	1.10 ± 0.30
57	6.00 ± 0.50	5.00 ± 0.50	1.60 ± 0.30

Structure

Code	Description
K	Single Type
N	Stacked Type

Temperature Characteristics

Temperature Characteristics	Temperature Coefficient or Capacitance Change	Temperature Range
C0G	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

Rated Voltage (DC)

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

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.

Ex. 105 = 1,000,000pF = 1,000nF = 1μF; 107 = 100,000,000pF = 100,000nF = 100μF

Capacitance Tolerance

Code	Tolerance
J	± 5%
K	± 10%
M	± 20%

Nominal Thickness

Code	Thickness
290	2.90mm
335	3.35mm
500	5.00mm

Packaging Style

Code	Style
A	178mm Reel, 4mm Pitch
J	330mm Reel, 8mm Pitch

Special Reserved Code

Code	Description
H	MEGACAP

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

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance Range Chart

CKG32K [EIA CC1210]

Capacitance Range Chart

Temperature Characteristics: C0G (0±30ppm/°C), X7R (±15%), X7S (±22%), X7T (+22,-33%)

Rated voltage: 1KV (3A), 630V (2J), 450V (2W), 250V (2E), 100V (2A), 50V (1H), 25V (1E)

Capacitance		Tolerance	C0G					X7R					X7S		X7T		
(pF)	Code		3A (1KV)	2J (630V)	2W (450V)	2E (250V)	2A (100V)	2J (630V)	2E (250V)	2A (100V)	1H (50V)	1E (25V)	2A (100V)	1H (50V)	2J (630V)	2W (450V)	2E (250V)
1,000	102	C0G ; J:±5%	■														
1,200	122																
1,500	152																
1,800	182																
2,200	222																
2,700	272																
3,300	332	X7R, X7S X7T ; K:± 10% M:± 20%		■	■												
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																
100,000	104													■			
150,000	154																
220,000	224																
330,000	334																
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																

Standard thickness ■ 3.35 mm

Capacitance Range Chart

CKG45K [EIA CC1812]

Capacitance Range Chart

Temperature Characteristics: X7R (±15%), X7S (±22%), X7T (+22,-33%)

Rated voltage: 630V (2J), 450V (2W), 250V (2E), 100V (2A), 50V (1H), 25V (1E), 16V (1C)

Capacitance		Tolerance	X7R						X7S			X7T		
(pF)	Code		2J (630V)	2E (250V)	2A (100V)	1H (50V)	1E (25V)	1C (16V)	2A (100V)	1H (50V)	1C (16V)	2J (630V)	2W (450V)	2E (250V)
100,000	104	K:±10% M:±20%	■											
150,000	154											■		
220,000	224													
330,000	334													
470,000	474													
680,000	684													
1,000,000	105													
1,500,000	155													
2,200,000	225													
3,300,000	335													
4,700,000	475													
10,000,000	106													
22,000,000	226	M:±20%												

Standard thickness ■ 2.90 mm

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

MULTILAYER CERAMIC CHIP CAPACITORS























Capacitance Range Chart


CKG57K [EIA CC2220]

Capacitance Range Chart

Temperature Characteristics: X7R ($\pm 15\%$), X7S ($\pm 22\%$), X7T (+22, -33%)

Rated voltage: 630V (2J), 450V (2W), 250V (2E), 100V (2A), 50V (1H), 25V (1E), 16V (1C)

Capacitance		Tolerance	X7R						X7S			X7T			
(pF)	Code		2J (630V)	2E (250V)	2A (100V)	1H (50V)	1E (25V)	1C (16V)	2A (100V)	1H (50V)	1C (16V)	2J (630V)	2W (450V)	2E (250V)	
220,000	224	K: $\pm 10\%$													
330,000	334														
470,000	474														
680,000	684														
1,000,000	105														
1,500,000	155														
2,200,000	225														
3,300,000	335														
4,700,000	475														
6,800,000	685														
10,000,000	106	M: $\pm 20\%$													
15,000,000	156														
22,000,000	226														
47,000,000	476														

Standard thickness  3.35 mm

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance Range Chart

CKG45N [EIA CC1812]

Capacitance Range Chart

Temperature Characteristics: X5R ($\pm 15\%$), X7R ($\pm 15\%$), X7S ($\pm 22\%$), X7T (+22,-33%)

Rated voltage: 630V (2J), 450V (2W), 250V (2E), 100V (2A), 50V (1H), 25V (1E), 16V (1C)

Capacitance		Tolerance	X5R		X7R					
(pF)	Code		1H (50V)	1C (16V)	2J (630V)	2E (250V)	2A (100V)	1H (50V)	1E (25V)	1C (16V)
220,000	224	M: $\pm 20\%$			■					
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			■						

Capacitance		Tolerance	X7S			X7T		
(pF)	Code		2A (100V)	1H (50V)	1C (16V)	2J (630V)	2W (450V)	2E (250V)
330,000	334	M: $\pm 20\%$				■		
470,000	474						■	
680,000	684							■
1,000,000	105							
1,500,000	155							■
2,200,000	225							
6,800,000	685		■					
10,000,000	106			■				
47,000,000	476				■			

Standard thickness

■ 5.00 mm

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance Range Chart

CKG57N [EIA CC2220]


Capacitance Range Chart

Temperature Characteristics: X5R ($\pm 15\%$), X7R ($\pm 15\%$), X7S ($\pm 22\%$), X7T ($+22, -33\%$)

Rated voltage: 630V (2J), 450V (2W), 250V (2E), 100V (2A), 50V (1H), 25V (1E), 16V (1C)

Capacitance		Tolerance	X5R				X7R					
(pF)	Code		2A (100V)	1H (50V)	1E (25V)	1C (16V)	2J (630V)	2E (250V)	2A (100V)	1H (50V)	1E (25V)	1C (16V)
470,000	474	M: $\pm 20\%$					■					
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					■					■	

Capacitance		Tolerance	X7S				X7T		
(pF)	Code		2A (100V)	1H (50V)	1E (25V)	1C (16V)	2J (630V)	2W (450V)	2E (250V)
680,000	684	M: $\pm 20\%$					■		
1,000,000	105							■	
1,500,000	155							■	
2,200,000	225								■
3,300,000	335								■
22,000,000	226		■	■					
47,000,000	476				■				
100,000,000	107					■			

Standard thickness
 5.00 mm

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance Range Table

Class 1 (Temperature Compensating)

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

Capacitance	Dimensions	Thickness (mm)	Capacitance Tolerance	Catalog number				
				Rated voltage Edc: 1KV	Rated voltage Edc: 630V	Rated voltage Edc: 450V	Rated voltage Edc: 250V	Rated voltage Edc: 100V
1 nF	3225	3.35±0.10	±5%	CKG32KC0G3A102J335AH				
1.2 nF	3225	3.35±0.10	±5%	CKG32KC0G3A122J335AH				
1.5 nF	3225	3.35±0.10	±5%	CKG32KC0G3A152J335AH				
1.8 nF	3225	3.35±0.10	±5%	CKG32KC0G3A182J335AH				
2.2 nF	3225	3.35±0.10	±5%	CKG32KC0G3A222J335AH				
2.7 nF	3225	3.35±0.10	±5%	CKG32KC0G3A272J335AH				
3.3 nF	3225	3.35±0.10	±5%	CKG32KC0G3A332J335AH				
3.9 nF	3225	3.35±0.10	±5%	CKG32KC0G3A392J335AH				
4.7 nF	3225	3.35±0.10	±5%	CKG32KC0G3A472J335AH				
5.6 nF	3225	3.35±0.10	±5%	CKG32KC0G3A562J335AH				
6.8 nF	3225	3.35±0.10	±5%	CKG32KC0G3A682J335AH				
8.2 nF	3225	3.35±0.10	±5%	CKG32KC0G3A822J335AH				
10 nF	3225	3.35±0.10	±5%	CKG32KC0G3A103J335AH				
15 nF	3225	3.35±0.10	±5%	CKG32KC0G3A153J335AH				
22 nF	3225	3.35±0.10	±5%	CKG32KC0G3A223J335AH	CKG32KC0G2J223J335AH	CKG32KC0G2W223J335AH		
33 nF	3225	3.35±0.10	±5%		CKG32KC0G2J333J335AH	CKG32KC0G2W333J335AH	CKG32KC0G2E333J335AH	
47 nF	3225	3.35±0.10	±5%				CKG32KC0G2E473J335AH	
68 nF	3225	3.35±0.10	±5%					CKG32KC0G2A683J335AH

Class 2 (Temperature Stable)

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

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

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

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance Range Table

Class 2 (Temperature Stable)

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

Capacitance	Dimensions	Thickness (mm)	Capacitance Tolerance	Catalog number			
				Rated voltage Edc: 630V	Rated voltage Edc: 250V	Rated voltage Edc: 100V	Rated voltage Edc: 50V
47 nF	3225	3.35±0.10	±10%	CKG32KX7R2J473K335AH			
			±20%	CKG32KX7R2J473M335AH			
100 nF	3225	3.35±0.10	±10%		CKG32KX7R2E104K335AH		
			±20%		CKG32KX7R2E104M335AH		
	4532	2.90±0.10	±10%	CKG45KX7R2J104K290JH			
			±20%	CKG45KX7R2J104M290JH			
220 nF	3225	3.35±0.10	±10%		CKG32KX7R2E224K335AH		
			±20%		CKG32KX7R2E224M335AH		
	4532	2.90±0.10	±10%		CKG45KX7R2E224K290JH		
			±20%		CKG45KX7R2E224M290JH		
470 nF	3225	3.35±0.10	±10%			CKG32KX7R2A474K335AH	
			±20%			CKG32KX7R2A474M335AH	
	4532	2.90±0.10	±10%		CKG45KX7R2E474K290JH		
			±20%		CKG45KX7R2E474M290JH		
1 µF	3225	3.35±0.10	±10%			CKG32KX7R2A105K335AH	CKG32KX7R1H105K335AH
			±20%			CKG32KX7R2A105M335AH	CKG32KX7R1H105M335AH
	4532	2.90±0.10	±10%			CKG45KX7R2A105K290JH	
			±20%			CKG45KX7R2A105M290JH	
1.5 µF	3225	3.35±0.10	±10%		CKG45NX7R2E105M500JH		
			±20%		CKG45NX7R2E105M500JH		
	4532	2.90±0.10	±10%		CKG57KX7R2E105K335JH	CKG57KX7R2A105K335JH	
			±20%		CKG57KX7R2E105M335JH	CKG57KX7R2A105M335JH	
2.2 µF	3225	3.35±0.10	±10%			CKG32KX7R2A225K335AH	
			±20%			CKG32KX7R2A225M335AH	
	4532	2.90±0.10	±10%			CKG45KX7R2A225K290JH	
			±20%			CKG45KX7R2A225M290JH	
1.5 µF	3225	3.35±0.10	±10%			CKG45NX7R2A225M500JH	
			±20%			CKG45NX7R2A225M500JH	
	4532	2.90±0.10	±10%			CKG57KX7R2A225K335JH	
			±20%			CKG57KX7R2A225M335JH	
2.2 µF	3225	3.35±0.10	±10%			CKG57NX7R2E225M500JH	
			±20%			CKG57NX7R2E225M500JH	
	4532	2.90±0.10	±10%			CKG57NX7R2E225M500JH	
			±20%			CKG57NX7R2E225M500JH	

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

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance Range Table

Class 2 (Temperature Stable)

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

Capacitance	Dimensions	Thickness (mm)	Capacitance Tolerance	Catalog number				
				Rated voltage Edc: 100V	Rated voltage Edc: 50V	Rated voltage Edc: 25V	Rated voltage Edc: 16V	
3.3 μF	4532	2.90±0.10	±10%		CKG45KX7R1H335K290JH			
			±20%		CKG45KX7R1H335M290JH			
		5.00±0.50	±20%		CKG45NX7R1H335M500JH			
	5750	3.35±0.15	±10%	CKG57KX7R2A335K335JH				
			±20%	CKG57KX7R2A335M335JH				
4.7 μF	4532	2.90±0.10	±10%			CKG32KX7R1E475K335AH		
			±20%			CKG32KX7R1E475M335AH		
		5.00±0.50	±20%	CKG45NX7R2A475M500JH		CKG45KX7R1E475K290JH	CKG45KX7R1E475M290JH	
	5750	3.35±0.15	±10%	CKG57KX7R2A475K335JH	CKG57KX7R1H475K335JH			
			±20%	CKG57KX7R2A475M335JH	CKG57KX7R1H475M335JH			
		5.00±0.50	±20%	CKG57NX7R2A475M500JH				
6.8 μF	4532	5.00±0.50	±20%		CKG45NX7R1H685M500JH			
		3225	3.35±0.10	±10%			CKG32KX7R1E106K335AH	
				±20%			CKG32KX7R1E106M335AH	
							CKG45KX7R1C106K290JH	CKG45KX7R1C106M290JH
	5750	3.35±0.15	±10%			CKG45NX7R1E106M500JH		
			±20%			CKG57KX7R1E106K335JH		
		±20%			CKG57KX7R1E106M335JH			
15 μF	5750	3.35±0.15	±20%				CKG57KX7R1C156M335JH	
		2.90±0.10	±20%				CKG45KX7R1C226M290JH	
22 μF	4532	5.00±0.50	±20%				CKG45NX7R1C226M500JH	
		3.35±0.15	±20%			CKG57KX7R1E226M335JH		
33 μF	5750	5.00±0.50	±20%			CKG57NX7R1E226M500JH		
		5.00±0.50	±20%				CKG57NX7R1C336M500JH	
47 μF	5750	5.00±0.50	±20%				CKG57KX7R1E476M335JH	
100 μF	5750	5.00±0.50	±20%				CKG57NX7R1E107M500JH	

Class 2 (Temperature Stable)

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

Capacitance	Dimensions	Thickness (mm)	Capacitance Tolerance	Catalog number			
				Rated voltage Edc: 100V	Rated voltage Edc: 50V	Rated voltage Edc: 25V	Rated voltage Edc: 16V
3.3 μF	3225	3.35±0.10	±10%	CKG32KX7S2A335K335AH			
			±20%	CKG32KX7S2A335M335AH			
	4532	2.90±0.10	±10%	CKG45KX7S2A335K290JH			
			±20%	CKG45KX7S2A335M290JH			
4.7 μF	3225	3.35±0.10	±10%	CKG32KX7S2A475K335AH	CKG32KX7S1H475K335AH		
			±20%	CKG32KX7S2A475M335AH	CKG32KX7S1H475M335AH		
	4532	2.90±0.10	±10%	CKG45KX7S2A475K290JH	CKG45KX7S1H475K290JH		
			±20%	CKG45KX7S2A475M290JH	CKG45KX7S1H475M290JH		
6.8 μF	3225	3.35±0.10	±10%		CKG32KX7S1H685K335AH		
			±20%		CKG32KX7S1H685M335AH		
	4532	5.00±0.50	±20%	CKG45NX7S2A685M500JH			
5750	3.35±0.15	±10%	CKG57KX7S2A685K335JH				
		±20%	CKG57KX7S2A685M335JH				
10 μF	3225	3.35±0.10	±10%		CKG32KX7S1H106K335AH		
			±20%		CKG32KX7S1H106M335AH		
	4532	5.00±0.50	±20%	CKG45NX7S2A106M500JH	CKG45NX7S1H106M500JH		
5750	3.35±0.15	±10%	CKG57KX7S2A106K335JH	CKG57KX7S1H106K335JH			
		±20%	CKG57KX7S2A106M335JH	CKG57KX7S1H106M335JH			
15 μF	5750	3.35±0.15	±20%	CKG57KX7S2A156M335JH			
22 μF	4532	5.00±0.50	±20%				CKG45KX7S1C226M290JH
47 μF	5750	5.00±0.50	±20%	CKG57NX7S2A226M500JH	CKG57NX7S1H226M500JH		
100 μF	5750	5.00±0.50	±20%			CKG57NX7S1E476M500JH	
							CKG57NX7S1C107M500JH

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

MULTILAYER CERAMIC CHIP CAPACITORS



Capacitance Range Table

Class 2 (Temperature Stable)

Temperature Characteristics: X7T (-55 to +125°C, +22,-33%)

Capacitance	Dimensions	Thickness (mm)	Capacitance Tolerance	Catalog number			
				Rated voltage Edc: 630V	Rated voltage Edc: 450V	Rated voltage Edc: 250V	
100 nF	3225	3.35±0.10	±10%	CKG32KX7T2J104K335AH			
			±20%	CKG32KX7T2J104M335AH			
150 nF	3225	3.35±0.10	±10%	CKG32KX7T2J154K335AH			
			±20%	CKG32KX7T2J154M335AH			
	4532	2.90±0.10	±10%	CKG45KX7T2J154K290JH			
			±20%	CKG45KX7T2J154M290JH			
220 nF	3225	3.35±0.10	±10%	CKG32KX7T2W224K335AH		CKG32KX7T2E334K335AH	
			±20%	CKG32KX7T2W224M335AH		CKG32KX7T2E334M335AH	
	4532	2.90±0.10	±10%	CKG45KX7T2J224K290JH			
			±20%	CKG45KX7T2J224M290JH			
330 nF	3225	3.35±0.10	±10%	CKG32KX7T2E334K335AH			
			±20%	CKG32KX7T2E334M335AH			
	4532	2.90±0.10	±10%	CKG45KX7T2W334K290JH		CKG45KX7T2E334K290JH	
			±20%	CKG45KX7T2W334M290JH		CKG45KX7T2E334M290JH	
	5750	3.35±0.15	±10%	CKG45NX7T2J334M500JH			
			±20%	CKG57KX7T2J334K335JH			
470 nF	4532	2.90±0.10	±10%	CKG45KX7T2W474K290JH		CKG45KX7T2E684K290JH	
			±20%	CKG45KX7T2W474M290JH		CKG45KX7T2E684M290JH	
	5750	3.35±0.15	±10%	CKG45NX7T2J474M500JH			
			±20%	CKG57KX7T2J474K335JH			
	680 nF	4532	2.90±0.10	±10%	CKG45KX7T2E684K290JH		
				±20%	CKG45KX7T2E684M290JH		
5750		3.35±0.15	±10%	CKG45NX7T2W684M500JH		CKG45NX7T2E105K290JH	
			±20%	CKG57KX7T2W684K335JH		CKG45NX7T2E105M290JH	
1 µF	4532	2.90±0.10	±10%	CKG45NX7T2W105M500JH		CKG45NX7T2E155K335JH	
			±20%	CKG57KX7T2W105K335JH		CKG45NX7T2E155M335JH	
	5750	3.35±0.15	±10%	CKG57KX7T2W105M335JH			
			±20%	CKG57NX7T2J105M500JH			
	1.5 µF	4532	5.00±0.50	±10%	CKG45NX7T2E155M500JH		
				±20%	CKG57KX7T2E155K335JH		
5750		3.35±0.15	±10%	CKG57NX7T2W155M500JH		CKG57KX7T2E155M335JH	
			±20%	CKG45NX7T2E225M500JH		CKG57KX7T2E225K335JH	
2.2 µF	4532	5.00±0.50	±10%	CKG45NX7T2E225M500JH			
			±20%	CKG57KX7T2E225K335JH			
	5750	3.35±0.15	±10%	CKG57NX7T2W225M500JH		CKG57KX7T2E225M335JH	
			±20%	CKG45NX7T2W225M500JH		CKG57NX7T2E225M500JH	
3.3 µF	5750	5.00±0.50	±20%	CKG57NX7T2W225M500JH		CKG57NX7T2E335M500JH	

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.