TDK

September 2020

MULTILAYER CERAMIC CHIP CAPACITORS

Commercial grade, MEGACAP type (Low resistance, inline type)

CA series

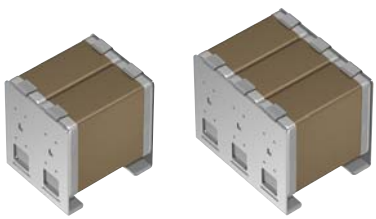
2-line type

CAA572	**5750 [2220 inch]**

3-line type

CAA573	**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 (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 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

CA series

MEGACAP type (Low resistance, inline type)

RoHS REACH SVHC-Free Halogen Free Lead Free

Type:CAA572/5750[2220 inch], CAA573/5750[2220 inch]

SERIES OVERVIEW

MEGACAP type CA series, commercial grade of TDK's multilayer ceramic chip capacitor, is a product which metal frames are connected to terminations of MLCC.
Unlike the conventional MEGACAP type CKG series which MLCCs are stacked vertically, it is possible to obtain large capacitance suppressing the product height and electrical resistance by inline structure which MLCCs are disposed abreast and optimization of metal frame composition.

FEATURES

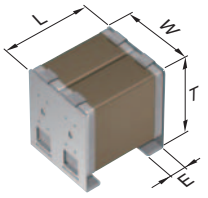
- Low height and low electric resistance with high capacitance by inline structure which MLCCs are disposed abreast and optimization of metal frame composition.
- Higher mechanical endurance by metal frame structure.
- Hybrid joints between the metal frames and MLCCs are both soldered and clamped mechanically to prevent the MLCCs from falling out even in high temperature reflow soldering.

APPLICATION

- Smoothing and decoupling applications that require large capacitance
- Resonant circuit of wireless power transfer

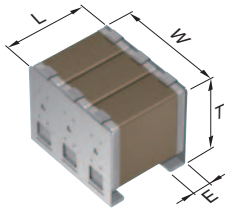
SHAPE & DIMENSIONS

2-line type



L	Body length
W	Body width
T	Body height
E	Metal frame width

3-line type



L	Body length
W	Body width
T	Body height
E	Metal frame width

Dimensions in mm

Type	L	W	T	E
CAA572	6.00±0.50	5.00±0.50	6.40±0.50	1.20±0.20
CAA573	6.00±0.50	7.50±0.50	6.40±0.50	1.20±0.20

∗ Dimensions are typical values.
Please refer to the web page for details (click the catalog part numbers on p-6 to move).

⚠ 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.

CATALOG NUMBER CONSTRUCTION

CA	A	57	3	X7S	2A	476	M	640	L	H
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

(1) Series

(2) Reserved code

(3) Dimensions L x W (mm), (4)Structure

Dimensions code	Structure code	EIA	Length	Width	Metal frame width
57	2	CC2220	6.00	5.00	1.20
57	3	CC2220	6.00	7.50	1.20

Dimensions are typical values.

(5) Temperature characteristic

Temperature characteristics	Temperature coefficient or capacitance change	Temperature range
C0G	0±30ppm/°C	–55 to +125°C
X7S	±22%	–55 to +125°C
X7T	+22%,–33%	–55 to +125°C

(6) Rated voltage (DC)

Code	Voltage (DC)
2A	100V
2V	350V
2J	630V
3A	1000V

(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 = 2.2µF

(8) Capacitance tolerance

Code	Tolerance
J	± 5%
M	±20%

(9) Thickness

Code	Thickness
640	6.40mm

(10) Packaging style

Code	Style
L	330mm reel, 12mm pitch

(11) Special reserved code

Code	Description
H	MEGACAP type

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Capacitance range chart

CAA572/5750[2220 inch], 2-line type

Capacitance		C0G		X7T		X7S
(pF)	Code	3A (1kV)	2J (630V)	2J (630V)	2V (350V)	2A (100V)
20,000	**203**					
30,000	**303**					
44,000	**443**					
66,000	**663**					
200,000	**204**					
1,000,000	**105**					
2,200,000	**225**					
33,000,000	**336**					

Standard thickness

6.40mm

■For details such as the catalog numbers and product size, please refer to the capacitance range table on page 6.

Capacitance range chart

CAA573/5750[2220 inch], 3-line type

Capacitance		C0G		X7T		X7S
(pF)	Code	3A (1kV)	2J (630V)	2J (630V)	2V (350V)	2A (100V)
99,000	**993**					
300,000	**304**					
1,500,000	**155**					
3,300,000	**335**					
47,000,000	**476**					

Standard thickness

6.40mm

■ For details such as the catalog numbers and product size, please refer to the capacitance range table on page 6.

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

Capacitance	Dimensions	Width (mm)	Thickness (mm)	Capacitance tolerance	Catalog number	
					Rated voltage Edc: 1kV	Rated voltage Edc: 630V
20nF	5750	5.60±0.50	6.40±0.50	±5%	CAA572C0G3A203J640LH	
30nF	5750	5.60±0.50	6.40±0.50	±5%	CAA572C0G3A303J640LH	
44nF	5750	5.60±0.50	6.40±0.50	±5%	CAA572C0G3A443J640LH	
66nF	5750	5.60±0.50	6.40±0.50	±5%	CAA572C0G3A663J640LH	
99nF	5750	5.60±0.50	6.40±0.50	±5%	CAA573C0G3A993J640LH	
200nF	5750	8.40±0.50	6.40±0.50	±5%		CAA572C0G2J204J640LH
300nF	5750	8.40±0.50	6.40±0.50	±5%		CAA573C0G2J304J640LH

Click the part numbers for details

Capacitance range table — Temperature characteristic: X7S (–55 to +125°C, ±22%)

Capacitance	Dimensions	Width (mm)	Thickness (mm)	Capacitance tolerance	Catalog number
					Rated voltage Edc: 100V
33µF	5750	5.00±0.50	6.40±0.50	±20%	CAA572X7S2A336M640LH
47µF	5750	7.50±0.50	6.40±0.50	±20%	CAA573X7S2A476M640LH

Click the part numbers for details

Capacitance range table — Temperature characteristic: X7T (–55 to +125°C, +22, –33%)

Capacitance	Dimensions	Width (mm)	Thickness (mm)	Capacitance tolerance	Catalog number	
					Rated voltage Edc: 630V	Rated voltage Edc: 350V
1µF	5750	5.00±0.50	6.40±0.50	±20%	CAA572X7T2J105M640LH	
1.5µF	5750	7.50±0.50	6.40±0.50	±20%	CAA573X7T2J155M640LH	
2.2µF	5750	5.00±0.50	6.40±0.50	±20%		CAA572X7T2V225M640LH
3.3µF	5750	7.50±0.50	6.40±0.50	±20%		CAA573X7T2V335M640LH

Click the part numbers for details

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