

# REMINDERS

Please read this before using the 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.
8. The descriptions in this catalog apply as of April 2007.

# High Voltage Multilayer Ceramic Chip Capacitors

## C Series C4520(EIA CC1808) Type

Conformity to RoHS Directive

### Temperature Characteristic CH, C0G

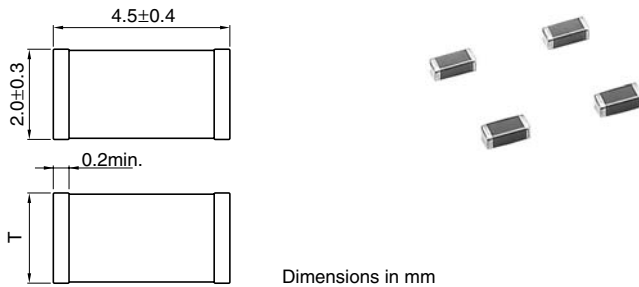
#### FEATURES

- Advanced design provides improved withstand voltage characteristics.
- TDK's proprietary internal electrode structure and the use of low-dielectric-strength material result in highly reliable performance in high-voltage applications.
- Complies with ISO8802-3 for LAN applications.
- Designed exclusively for reflow soldering.

#### APPLICATIONS

Inverter circuits with a liquid crystal backlight, LAN products, and general high voltage circuits.

#### SHAPES AND DIMENSIONS



#### PRECAUTIONS

- This product intended solely for reflow soldering.
- A slit of about 1mm on the circuit board is recommended to improve washability of the flux after soldering.
- Ensure that this product is completely dried following washing.
- Because this product will be subjected to high voltages, use only low-activity rosin flux (with 0.2% max. of chlorine).
- Using this product with aluminum circuit boards must be considered a special implementation. Due consideration must be given in such implementations because of the high heat stress levels involved.

#### PRODUCT IDENTIFICATION

C	4520	C0G	3F	101	K	□
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions L×W

4520	4.5×2.0mm
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(3) Capacitance temperature characteristics  
Class 1 (Temperature compensation)

Temperature characteristics	Temperature coefficient	Temperature range
CH	0±60ppm/°C	-25 to +85°C
C0G	0±30ppm/°C	-55 to +125°C

(4) Rated voltage E<sub>dc</sub>

3F	3kV
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(5) Nominal capacitance

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.

101	100pF
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(6) Capacitance tolerance

F	±1pF[10pF]
K	±10%[over 10pF]

(7) Packaging style

T	Taping (reel)
B	Bulk

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• All specifications are subject to change without notice.  
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**CAPACITANCE RANGES: CLASS 1 (TEMPERATURE COMPENSATION)**
**TEMPERATURE CHARACTERISTICS: CH(0±60ppm/°C), C0G(0±30ppm/°C)**

 RATED VOLTAGE E<sub>dc</sub>: 3000V

Capacitance (pF)	Tolerance	Thickness T (mm)	Part No.	
			Temperature characteristics: CH	Temperature characteristics: C0G
10	±1pF	0.85±0.15	C4520CH3F100F	C4520C0G3F100F
12	±10%	0.85±0.15	C4520CH3F120K	C4520C0G3F120K
15	±10%	1.10±0.20	C4520CH3F150K	C4520C0G3F150K
18	±10%	1.10±0.20	C4520CH3F180K	C4520C0G3F180K
22	±10%	1.10±0.20	C4520CH3F220K	C4520C0G3F220K
27	±10%	1.60±0.20	C4520CH3F270K	C4520C0G3F270K
33	±10%	1.60±0.20	C4520CH3F330K	C4520C0G3F330K
39	±10%	1.60±0.20	C4520CH3F390K	C4520C0G3F390K
47	±10%	1.60±0.20	C4520CH3F470K	C4520C0G3F470K
56	±10%	2.00±0.20	C4520CH3F560K	C4520C0G3F560K
68	±10%	2.00±0.20	C4520CH3F680K	C4520C0G3F680K
82	±10%	2.00±0.20	C4520CH3F820K	C4520C0G3F820K
100	±10%	2.00±0.20	C4520CH3F101K	C4520C0G3F101K

- For more information about the products of other capacitance or data, please contact us.

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# C Series C4532(EIA CC1812) Type

Conformity to RoHS Directive

## Temperature Characteristic CH, C0G

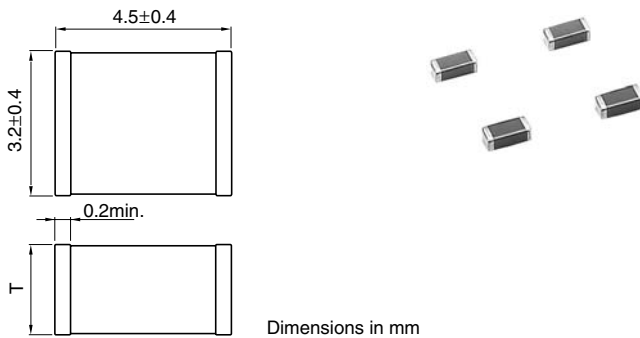
### FEATURES

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### CAPACITANCE RANGES: CLASS 1 (TEMPERATURE COMPENSATION)

#### TEMPERATURE CHARACTERISTICS: CH(0±60ppm/°C), C0G(0±30ppm/°C)

RATED VOLTAGE E<sub>dc</sub>: 3000V

Capacitance (pF)	Tolerance	Thickness T (mm)	Part No.	
			Temperature characteristics: CH	Temperature characteristics: C0G
100	±10%	1.60±0.20	C4532CH3F101K	C4532C0G3F101K
120	±10%	1.60±0.20	C4532CH3F121K	C4532C0G3F121K
150	±10%	1.60±0.20	C4532CH3F151K	C4532C0G3F151K
180	±10%	1.60±0.20	C4532CH3F181K	C4532C0G3F181K
220	±10%	2.00±0.20	C4532CH3F221K	C4532C0G3F221K
270	±10%	2.30±0.20	C4532CH3F271K	C4532C0G3F271K
330	±10%	2.50±0.30	C4532CH3F331K	C4532C0G3F331K

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