Multilayer Ceramic Chip Capacitors

High voltage(Edc: 3kV)

C series

Type: **C4520[EIA CC1808]**
C4532[EIA CC1812]

Issue date: June 2009

- All specifications are subject to change without notice.
- 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.

REMINDERS

Please read this before using the product.

SAFETY REMINDERS

⚠ REMINDERS

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8. The descriptions in this catalog apply as of June 2009.

High Voltage Multilayer Ceramic Chip Capacitors
C Series C4520(EIA CC1808) Type

Conformity to RoHS Directive

Temperature Characteristic: C0G

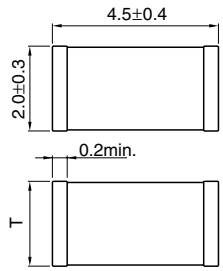
FEATURES

- 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



Dimensions in mm

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

(3) Capacitance temperature characteristics

Class 1 (Temperature compensation)

Temperature characteristics	Temperature coefficient	Temperature range
C0G	0±30ppm/°C	–55 to +125°C

(4) Rated voltage Edc

3F	3kV

(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

(6) Capacitance tolerance

F	±1pF[10pF]
K	±10%[over 10pF]

(7) Packaging style

T	Taping (reel)
B	Bulk

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CAPACITANCE RANGES: CLASS 1 (TEMPERATURE COMPENSATION)
TEMPERATURE CHARACTERISTICS: C0G(0±30ppm/°C)

RATED VOLTAGE Edc: 3000V

Capacitance (pF)	Tolerance	Thickness T (mm)	Part No.
			Temperature characteristics: C0G
10	±1pF	0.85±0.15	C4520C0G3F100F
12	±10%	0.85±0.15	C4520C0G3F120K
15	±10%	1.10±0.20	C4520C0G3F150K
18	±10%	1.10±0.20	C4520C0G3F180K
22	±10%	1.10±0.20	C4520C0G3F220K
27	±10%	1.60±0.20	C4520C0G3F270K
33	±10%	1.60±0.20	C4520C0G3F330K
39	±10%	1.60±0.20	C4520C0G3F390K
47	±10%	1.60±0.20	C4520C0G3F470K
56	±10%	2.00±0.20	C4520C0G3F560K
68	±10%	2.00±0.20	C4520C0G3F680K
82	±10%	2.00±0.20	C4520C0G3F820K
100	±10%	2.00±0.20	C4520C0G3F101K

C Series C4532(EIA CC1812) Type

Conformity to RoHS Directive

Temperature Characteristic: C0G

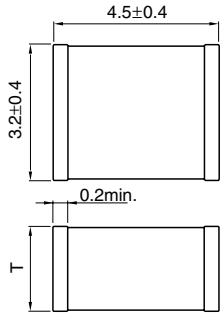
FEATURES

- 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



Dimensions in mm

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C	4532	C0G	3F	101	K	□
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions L× W

4532	4.5× 3.2mm

(3) Capacitance temperature characteristics

Class 1 (Temperature compensation)

Temperature characteristics	Temperature coefficient	Temperature range
C0G	0±30ppm/°C	–55 to +125°C

(4) Rated voltage Edc

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CAPACITANCE RANGES: CLASS 1 (TEMPERATURE COMPENSATION)

TEMPERATURE CHARACTERISTICS: C0G(0±30ppm/°C)

RATED VOLTAGE Edc: 3000V

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

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