

Ceramic Capacitors

For High Voltage(Temp. Characteristic X7R)
SMD

C Series C4520, C4532 Type

FEATURES

- No polarity.
- Suits 100BASE-T LAN cards, LAN board, and HUB.
- Complies with ISO8802-3 for LAN applications.
- Designed exclusively for reflow soldering.

APPLICATIONS

Input signal filtering circuit of modem and LAN interface, and general high voltage circuits.

CAPACITANCE RANGE AND RATED VOLTAGE

| Type | Capacitance range | Rated voltage Edc (V) |
|-------------------|-------------------|-----------------------|
| C4520(EIA:CC1808) | 470pF to 1000pF | 1k to 2k |
| C4532(EIA:CC1812) | 2200pF to 10000pF | 1k to 2k |

PRODUCT IDENTIFICATION

C 4520 X7R 3A 471 K □
(1) (2) (3) (4) (5) (6) (7)

(1) Series name

(2) Dimensions L×W

| | |
|------|-----------|
| 4520 | 4.5×2.0mm |
| 4532 | 4.5×3.2mm |

(3) Capacitance temperature characteristics

Class 1

| Temperature characteristics | Temperature coefficient | Temperature range |
|-----------------------------|-------------------------|-------------------|
| X7R | ±15% | −55 to +125°C |

(4) Rated voltage Edc

| | |
|----|-----|
| 3A | 1kV |
| 3D | 2kV |

(5) Nominal capacitance

The capacitance is expressed in three digit codes and in units of pico farads(pF).

The first and second digits identity the first and second significant figures of the capacitance.

The third digit identifies the multiplier.

| | |
|-----|-------|
| 471 | 470pF |
|-----|-------|

(6) Capacitance tolerance

| | |
|---|-----------------|
| K | ±10%[10pF min.] |
|---|-----------------|

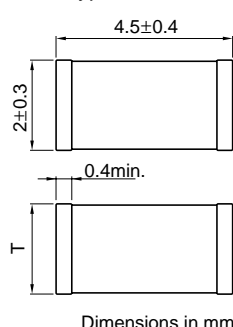
(7) Packaging style

| | |
|---|---------------|
| T | Taping (reel) |
| B | Bulk |



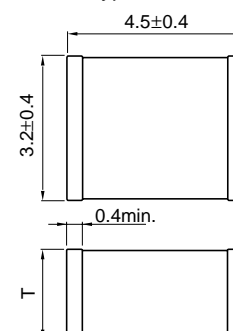
SHAPES AND DIMENSIONS

C4520 Type



Dimensions in mm

C4532 Type



CAPACITANCE RANGES:

CLASS1(TEMPERATURE COMPENSATION)

TEMPERATURE CHARACTERISTICS: X7R

RATED VOLTAGE Edc: 1kV

| Capacitance (pF) | Tolerance | Thickness (mm)max. | Part No |
|------------------|-----------|--------------------|----------------|
| 470 | ±10% | 1.3±0.2 | C4520X7R3A471K |
| 1000 | ±10% | 1.3±0.2 | C4520X7R3A102K |
| 4700 | ±10% | 1.6±0.3 | C4532X7R3A472K |
| 10000 | ±10% | 2±0.2 | C4532X7R3A103K |

RATED VOLTAGE Edc: 2kV

| Capacitance (pF) | Tolerance | Thickness (mm)max. | Part No |
|------------------|-----------|--------------------|----------------|
| 470 | ±10% | 1.3±0.2 | C4520X7R3D471K |
| 1000 | ±10% | 1.3±0.2 | C4520X7R3D102K |
| 2200 | ±10% | 1.3±0.2 | C4532X7R3D222K |

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 because the high heat stress levels are involved. In case of using aluminum circuit boards, please contact TDK.