

MULTILAYER CERAMIC CHIP CAPACITORS



CGA Series Automotive Grade Open Mode

Type: CGA4 [EIA CC0805]

Issue date: Dec 2014





REMINDERS

Please read before using this product

SAFETY REMINDERS



REMINDERS

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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 | C1608C0G1E103JT000N | |
| January 2013 and Later | C1608C0G1E103J080AA | C1608C0G1E103JT000N | |

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CGA Series

Open Mode

Type: CGA4 [EIA CC0805]

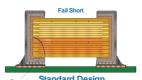








When a chip capacitor is cracked by mechanical stress such as board bending, open mode construction helps user reduce the risk of short circuits.





Fail Oper

Open Mode Design

- Open Mode capacitor is designed with wider gap between the terminal and the internal electrodes to help reduce the risk of short circuit in the event of capacitor cracking due to mechanical stress such as board bending.
- AEC-Q200 compliant.

Applications



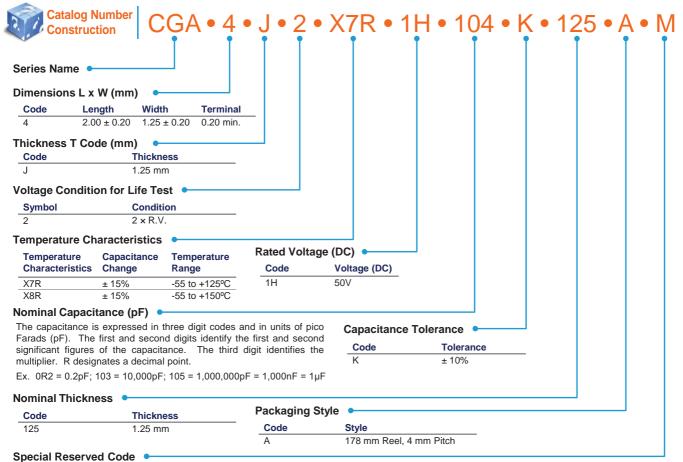




- High reliability and high mechanical stress applications
- Battery line circuit with high board flex stress
- · DC-DC Converter



- Body Length W Body Width T Body Height
- Terminal Width Terminal Spacing



Description

Open Mode Design М





CGA4(2012) [EIA CC0805]

Capacitance Range Chart

Temperature Characteristics: X7R (±15%), X8R (±15%) Rated Voltage: 50V (1H)

| 0 | | | X7R | X8R |
|------------------|------|-----------|-------|-------|
| Capacitance (pF) | Code | Tolerance | 1H | 1H |
| (pi) | | | (50V) | (50V) |
| 47,000 | 473 | K: ± 10% | | |
| 68,000 | 683 | | | |
| 100,000 | 104 | | | |

Standard Thickness





Class 2 (Temperature Stable)

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

| | Capacitance Size | Size | Thickness | Capacitance Tolerance | Catalog Number | |
|--|------------------|------|------------------|--------------------------|------------------------|--|
| | | Size | (mm) | | Rated Voltage Edc: 50V | |
| | 100 nF | 2012 | 1.25 +0.25/-0.20 | ± 10% | CGA4J2X7R1H104K125AM | |

Class 2 (Temperature Stable)

Temperature Characteristics: X8R (-55 to +150°C, ±15%)

| Capacitance S | Size | Thickness | Capacitance | Catalog Number | |
|---------------|------|-------------|-------------|------------------------|--|
| | Size | (mm) | Tolerance | Rated Voltage Edc: 50V | |
| 47 nF | 2012 | 1.25 ± 0.20 | ± 10% | CGA4J2X8R1H473K125AM | |
| 68 nF | 2012 | 1.25 ± 0.20 | ± 10% | CGA4J2X8R1H683K125AM | |