

Multilayer Ceramic Capacitors (Temperature compensating type)

EMK042CG0R5BD-W



■ Features

- Item Summary  
0.5pF±0.1pF, 16V,  
C0G/CG, 01005/0402 (EIA/JIS)
- Lifecycle Stage  
Mass Production (Preferred)
- Standard packaging quantity (minimum)  
Taping Embossed 40000pcs

■ Products characteristics table

|   |                |
|---|----------------|
| Capacitance                                   | 0.5 pF ± 0.1pF |
| Case Size (EIA/JIS)                           | 01005/0402     |
| Rated Voltage                                 | 16 V           |
| Q (min)                                       | 410 at 1MHz    |
| Temperature Characteristic (EIA)              | C0G            |
| Operating Temp. Range (EIA)                   | -55 to +125 °C |
| Temperature Characteristic (JIS)              | CG             |
| Operating Temp. Range (JIS)                   | -55 to +125 °C |
| Temperature Characteristic                    | 0 ±30 ppm/°C   |
| High Temperature Loading<br>(% Rated Voltage) | 200 %          |
| Insulation Resistance (min)                   | 10 GΩ          |
| RoHS Compliance (10 subst.)                   | Yes            |
| REACH Compliance (209 subst.)                 | Yes            |
| Halogen Free                                  | Yes            |
| Soldering                                     | Reflow         |

■ External Dimensions

|             |               |
|-------------|---------------|
| Dimension L | 0.4 ±0.02 mm  |
| Dimension W | 0.2 ±0.02 mm  |
| Dimension T | 0.2 ±0.02 mm  |
| Dimension e | 0.10 ±0.03 mm |

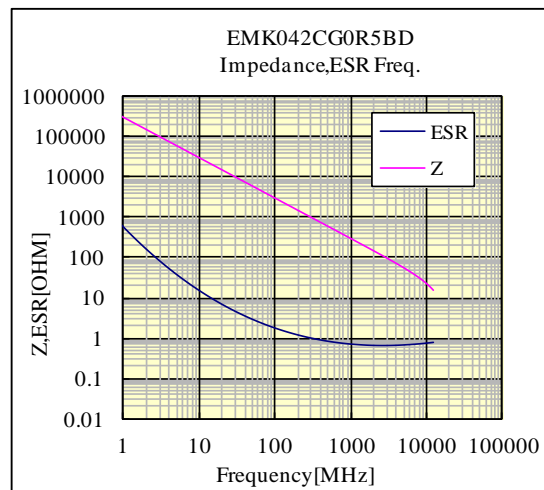
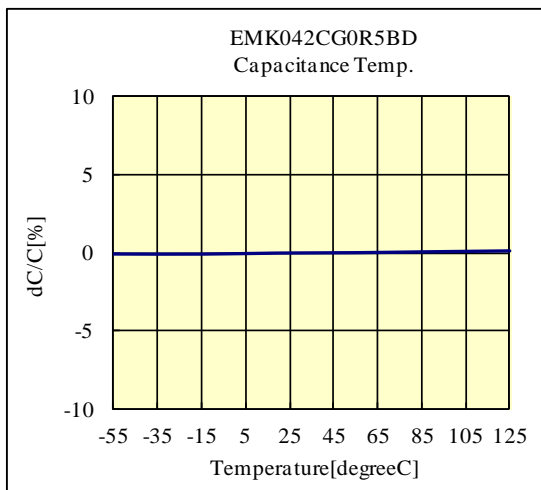
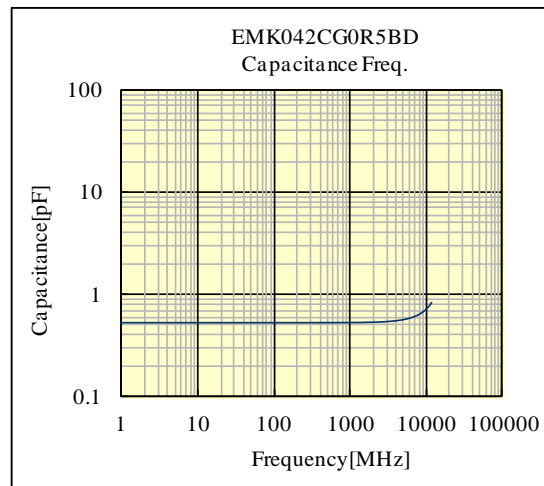
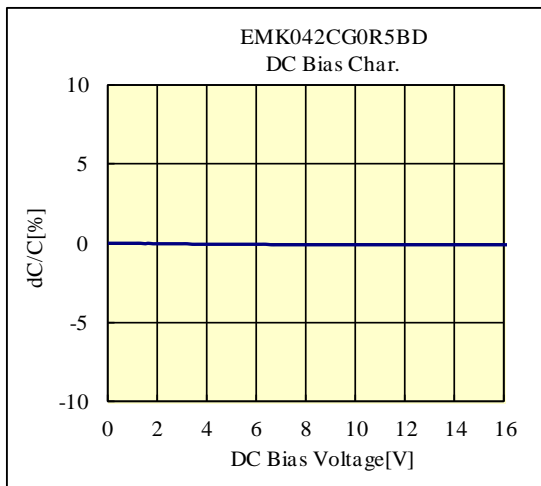
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The data is reference only. Electrical characteristics vary depending on environment or measurement condition.  
 TAIYO YUDEN reserves the right to make change to the data at any time without notice.  
 Before making final selection, please check product specification.

## ○EMK042CG0R5BD

16V 0402 CG/C0G 0.5pF +/- 0.1pF t=0.22mmMAX

16V 01005 CG/C0G 0.5pF +/- 0.1pF t=0.009inchMAX



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Please read this notice before using the TAIYO YUDEN products.



## REMINDERS

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Please do not incorporate our products into any equipment requiring high levels of safety and/or reliability (e.g., aerospace equipment, aviation equipment\*, medical equipment classified as Class IV by IMDRF, nuclear control equipment, undersea equipment, military equipment).

\*Note: There is a possibility that our products can be used only for aviation equipment that does not directly affect the safe operation of aircraft (e.g., in-flight entertainment, cabin light, electric seat, cooking equipment) if such use meets requirements specified separately by TAIYO YUDEN. Please be sure to contact TAIYO YUDEN for further information before using our products for such aviation equipment.

When our products are used even for high safety and/or reliability-required devices or circuits of general electronic equipment, it is strongly recommended to perform a thorough safety evaluation prior to use of our products and to install a protection circuit as necessary.

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[>>Taiyo Yuden\(太阳诱电\)](#)