

## Spec Sheet

MLCC (High dielectric type) for Automotive (BODY & CHASSIS, INFOTAINMENT) Applications

# UMK105BJ103KVHF



### ■ Features

- Item Summary  
0.01 $\mu$ F $\pm$ 10%, 50V,  
X5R, 0402/1005 (EIA/JIS)
- Lifecycle Stage  
Mass Production (Preferred)
- AEC-Q200 qualified
- Standard packaging quantity (minimum)  
Taping Paper 10000pcs

### ■ Products characteristics table

|   |                         |
|---|-------------------------|
| Capacitance                                   | 0.01 $\mu$ F $\pm$ 10 % |
| Case Size (EIA/JIS)                           | 0402/1005               |
| Rated Voltage                                 | 50 V                    |
| $\tan \delta$ (max)                           | 3.5 %                   |
| Temperature Characteristic (EIA)              | X5R                     |
| Operating Temp. Range (EIA)                   | -55 to +85 °C           |
| High Temperature Loading<br>(% Rated Voltage) | 200 %                   |
| Insulation Resistance (min)                   | 10 G $\Omega$           |
| RoHS Compliance (10 subst.)                   | Yes                     |
| REACH Compliance (209 subst.)                 | Yes                     |
| Halogen Free                                  | Yes                     |
| Soldering                                     | Reflow                  |

### ■ External Dimensions

|             |                    |
|-------------|--------------------|
| Dimension L | 1.0 $\pm$ 0.05 mm  |
| Dimension W | 0.5 $\pm$ 0.05 mm  |
| Dimension T | 0.5 $\pm$ 0.05 mm  |
| Dimension e | 0.25 $\pm$ 0.10 mm |

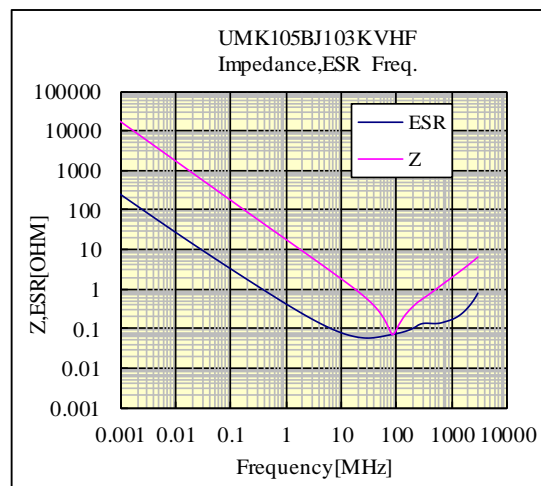
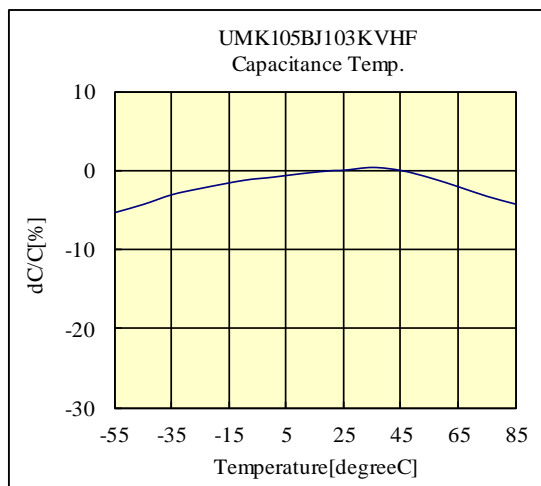
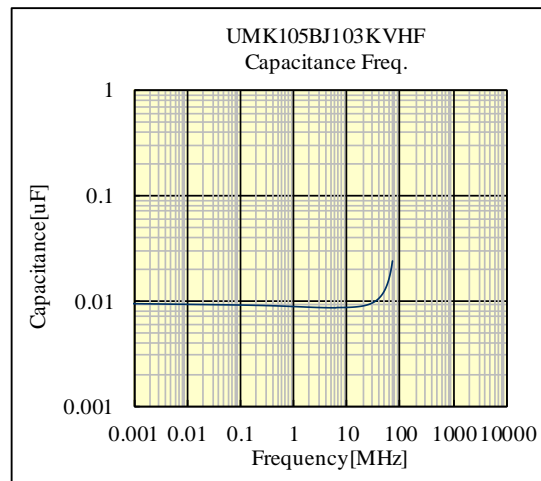
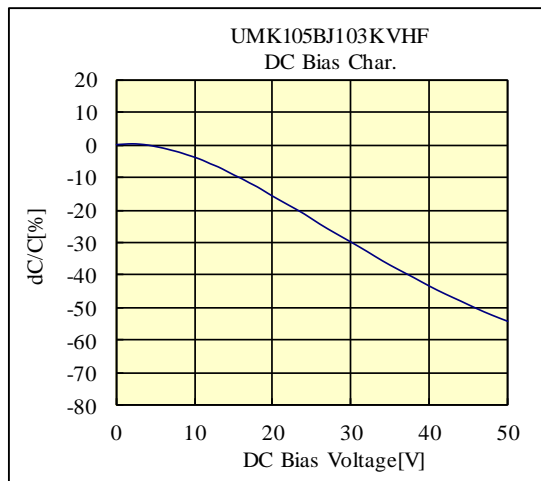
2021.07.01

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.

### ○UMK105BJ103KVHF

50V 1005 X5R 0.01 $\mu$ F +/- 10% t=0.55mmMAX

50V 0402 X5R 0.01 $\mu$ F +/- 10% t=0.022inchMAX



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Before making final selection, please check product specification.

Please read this notice before using the TAIYO YUDEN products.



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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).

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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\(太阳诱电\)](#)