

MLCC for Automotive (POWERTRAIN, SAFETY) Applications

EMF105B7103MVHF



■ Features

- Item Summary
0.01 $\mu\text{F} \pm 20\%$, 16V,
X7R, 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 $\mu\text{F} \pm 20\%$
Case Size (EIA/JIS)	0402/1005
Rated Voltage	16 V
$\tan \delta$ (max)	3.5 %
Temperature Characteristic (EIA)	X7R
Operating Temp. Range (EIA)	-55 to +125 °C
High Temperature Loading (% Rated Voltage)	200 %
Insulation Resistance (min)	10 G Ω
RoHS Compliance (10 subst.)	Yes
REACH Compliance (209 subst.)	Yes
Halogen Free	Yes
Soldering	Reflow

■ External Dimensions

Dimension L	1.0 ± 0.05 mm
Dimension W	0.5 ± 0.05 mm
Dimension T	0.5 ± 0.05 mm
Dimension e	0.25 ± 0.10 mm

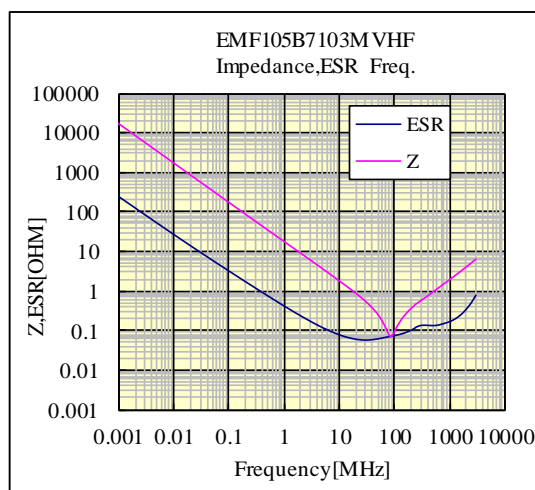
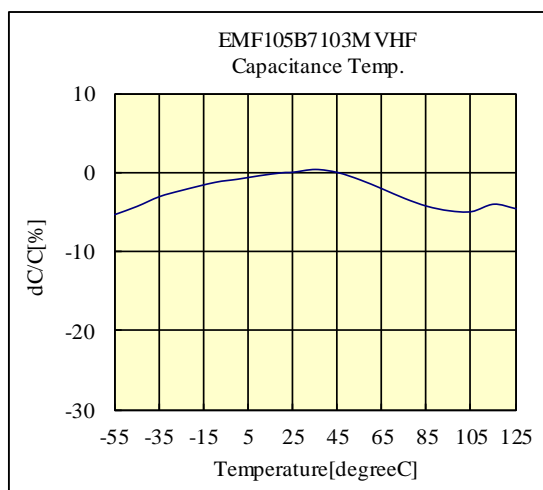
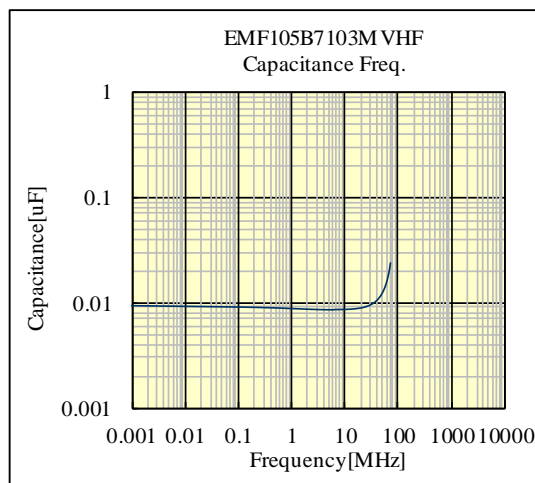
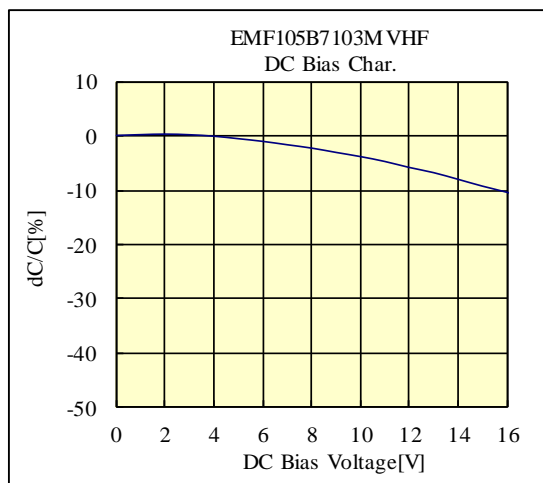
2021.06.20

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.

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16V 1005 X7R 0.01uF +/- 20% t=0.55mmMAX

16V 0402 X7R 0.01uF +/- 20% t=0.022inchMAX



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Please read this notice before using the TAIYO YUDEN products.



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- The product listed in this spec sheet is intended for use in general electronic equipment (e.g., AV equipment, OA equipment, home electric appliances, office equipment, information and communication equipment), medical equipment classified as Class I or II by IMDRF, industrial equipment, and automotive interior applications, etc. Please be sure to contact TAIYO YUDEN for further information before using the product for any equipment which may directly cause loss of human life or bodily injury (e.g., transportation equipment including, without limitation, automotive powertrain control system, train control system, and ship control system, traffic signal equipment, medical equipment classified as Class III by IMDRF).

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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