

Click [here](#) for the 3D model.

General Information

类别	SMD Comm X7R FF
样式	SMD Chip
描述	SMD, MLCC, FF-CAP, Floating Electrode
特征	FF-CAP, Floating Electrode
RoHS	Yes
端子	Flexible Termination
标记	No
典型元件重量	13 mg
保质期	78 Weeks
MSL	1

Dimensions

L	2mm +/-0.3mm
W	1.25mm +/-0.3mm
T	0.78mm +/-0.20mm
S	0.7mm MIN
B	0.5mm +/-0.25mm
Chip Size / Footprint	0805 / 2012

Packaging Specifications

包装	T&R, 180mm, Plastic Tape
包装数量	4000

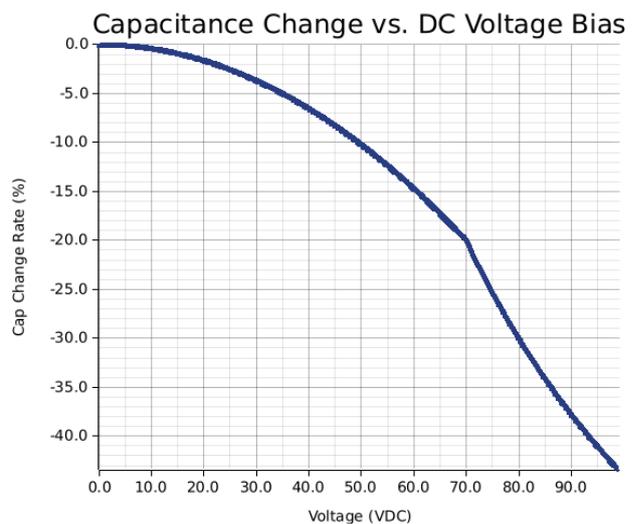
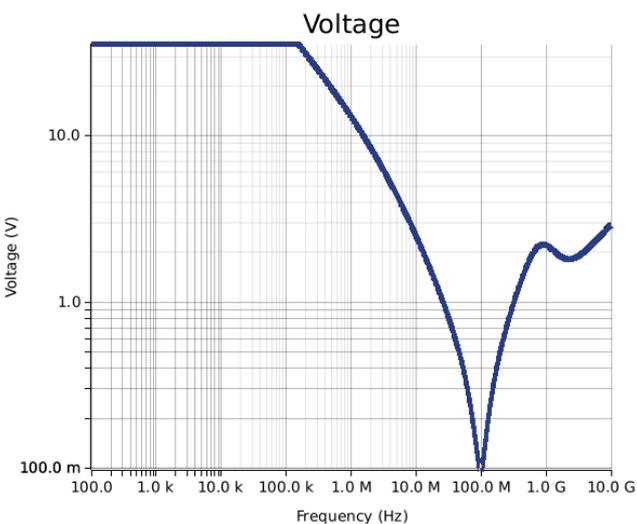
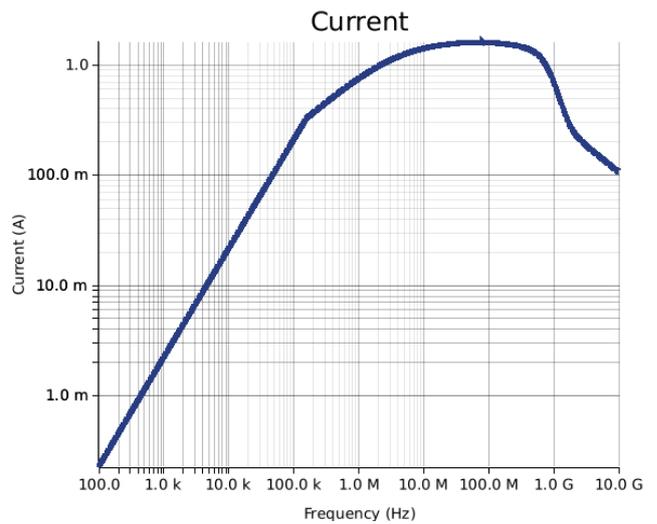
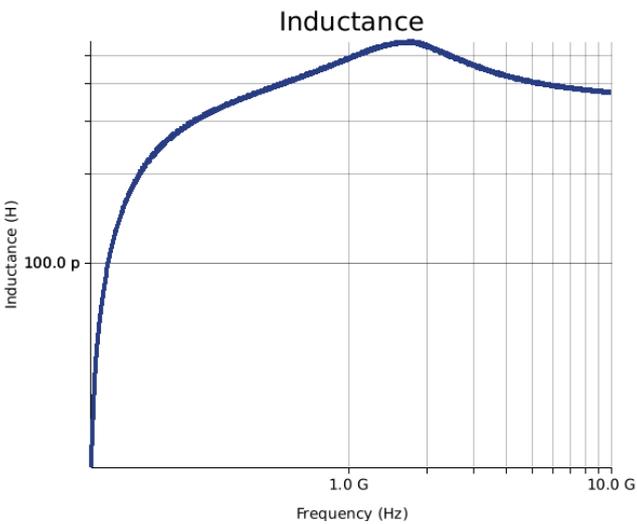
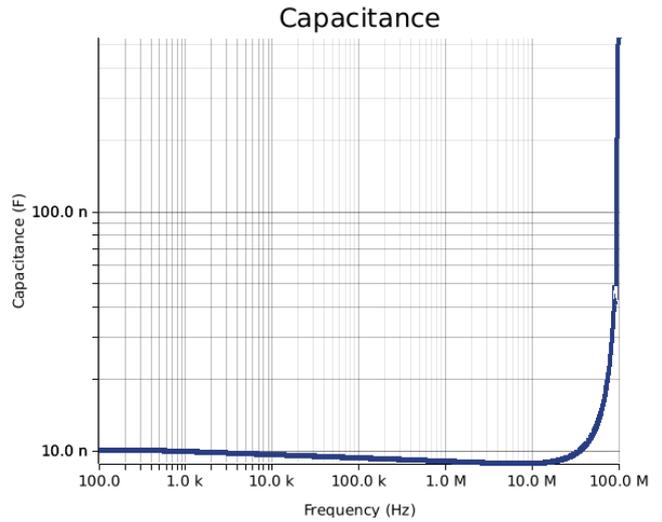
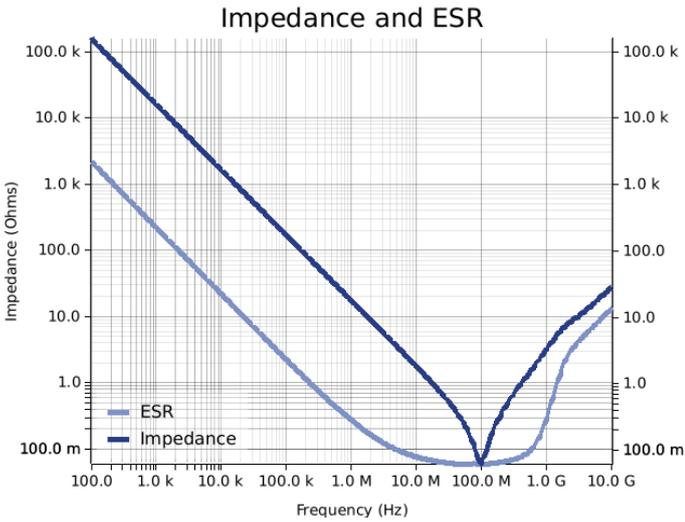
Specifications

容值	0.01 uF
测量条件	1 kHz 1.0Vrms
容差	10%
直流电压	100 VDC
耐压电压	250 VDC
温度范围	-55/+125°C
温度系数	X7R
电容变化 (相对于+25°C, 0 VDC) (TCC)	15%, 1kHz 1.0Vrms
损耗因数	2.5% 1 kHz 1.0Vrms
老化率	3% Loss/Decade Hour: Referee Time is 1000 Hours
绝缘阻抗	100 GOhms

Statements of suitability for certain applications are based on our knowledge of typical operating conditions for such applications, but are not intended to constitute - and we specifically disclaim - any warranty concerning suitability for a specific customer application or use. This Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by us with reference to the use of our products is given gratis, and we assume no obligation or liability for the advice given or results obtained.

Simulations

For the complete simulation environment please visit [K-SIM](#).

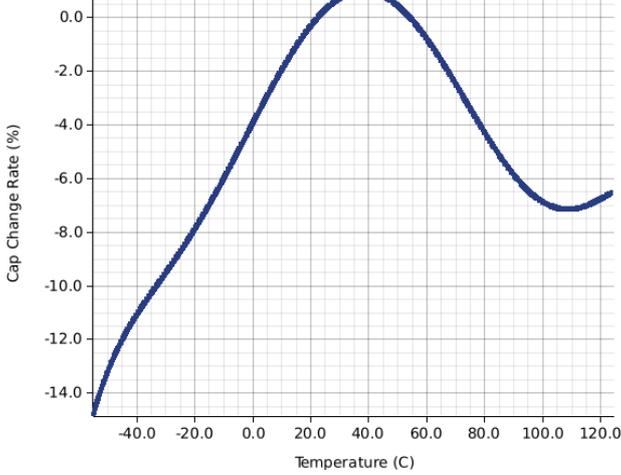


C0805Y103K1RACTU

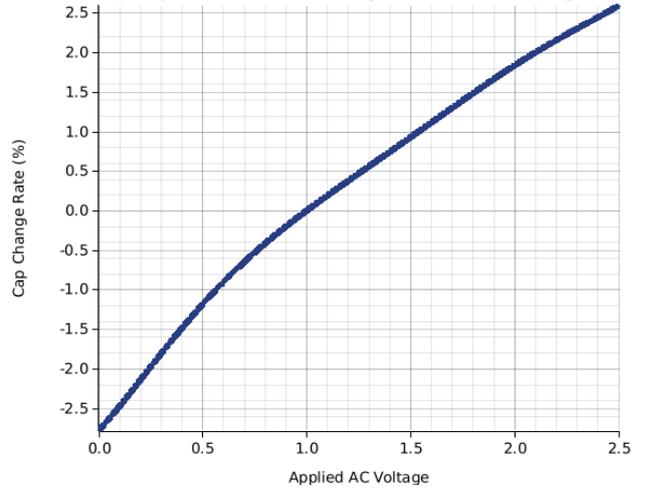
Aliases (C0805Y103K1RAC7800)

SMD Comm X7R FF, Ceramic, 0.01 uF, 10%, 100 VDC, X7R, SMD, MLCC, FF-CAP, Floating Electrode, 0.7 mm, 0805 / 2012

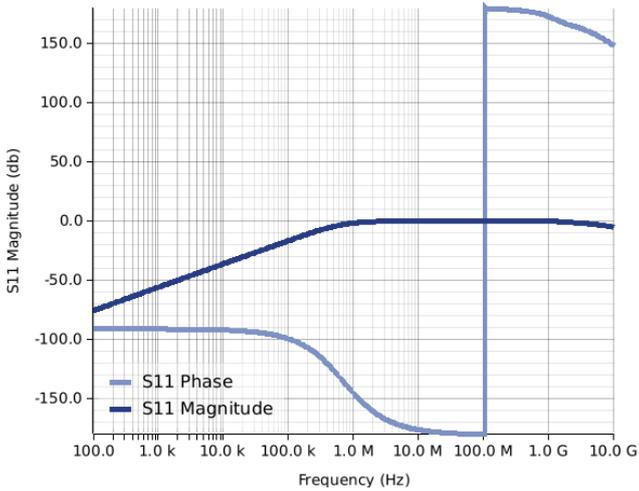
Capacitance Change vs. Temperature



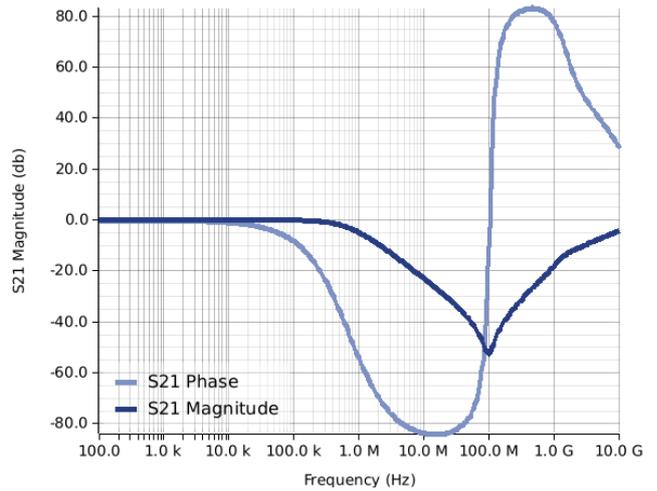
Capacitance Change vs. AC Voltage



S11



S21



These are simulations.

This is not a specification!

The responses shown represent the typical response for each part type. Specific responses may vary, depending on manufacturing variation effects of all parameters involved, including the specified tolerances applied to capacitance and unspecified variations of ESR, ESL, and leakage resistance.

The responses shown do not represent a specified or implied maximum capability of the device for all applications.

- The ESR used for ripple “Ripple Current/Voltage vs. Frequency” plots is the ESR at ambient temperature.
- The ESR in the “Temperature Rise vs. Ripple Current” plots is adjusted to each incremental temperature rise before the power and ripple current is calculated.
- The effects shown herein are based on measured data from a multiple part sample of the parts in question.
- Ripple capability of this device will be factored by thermal resistance (Rth) created by circuit traces (addi affects of all parameters involved, including the specified tolerances applied to capacitance and unspecified variations of ESR, ESL, and leakage resistance.
- The peak voltages generated in the “Temperature Rise vs. Combined Ripple Currents” plot are calculated for each frequency and are not combined with voltages generated at any other harmonics.
- Please consult with the catalog or field applications engineer for maximum capability of the device in specific applications.

All product information and data (collectively, the “Information”) are subject to change without notice.

KEMET K-SIM is designed to simulate behavior of components with respect to frequency, ambient temperature, and DC bias levels. The responses shown represent the typical response for each part type. Specific responses may vary, depending on manufacturing variation effects of all parameters involved, including the specified tolerances applied to capacitance and unspecified variations of ESR, ESL, and leakage resistance.

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If you have any questions please contact K-SIM.