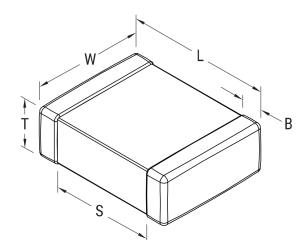


C0402C103M4RAC

SMD Comm X7R, Ceramic, 0.01 uF, 20%, 16 VDC, X7R, SMD, MLCC, Temperature Stable, Class II, 0402



Click here for the 3D model.

Dimensions	
Chip Size	0402
L	1mm +/-0.05mm
W	0.5mm +/-0.05mm
Т	0.5mm +/-0.05mm
S	0.3mm MIN
В	0.3mm +/-0.1mm

Packaging Specifications	
Packaging	Bulk, Bag
Packaging Quantity	1

General Information	
Series	SMD Comm X7R
Style	SMD Chip
Description	SMD, MLCC, Temperature Stable, Class II
Features	Temperature Stable, Class II
RoHS	Yes
Termination	Tin
Marking	No
AEC-Q200	No
Component Weight	1210 ug
Shelf Life	78 Weeks
MSL	1

Specifications	
Capacitance	0.01 uF
Measurement Condition	1 kHz 1.0Vrms
Capacitance Tolerance	20%
Voltage DC	16 VDC
Dielectric Withstanding Voltage	40 VDC
Temperature Range	-55/+125°C
Temperature Coefficient	X7R
Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC)	15%, 1kHz 1.0Vrms
Dissipation Factor	3.5%1kHz1.0Vrms
Aging Rate	3% Loss/Decade Hour: Referee Time is 48 Hours
Insulation Resistance	100 GOhms

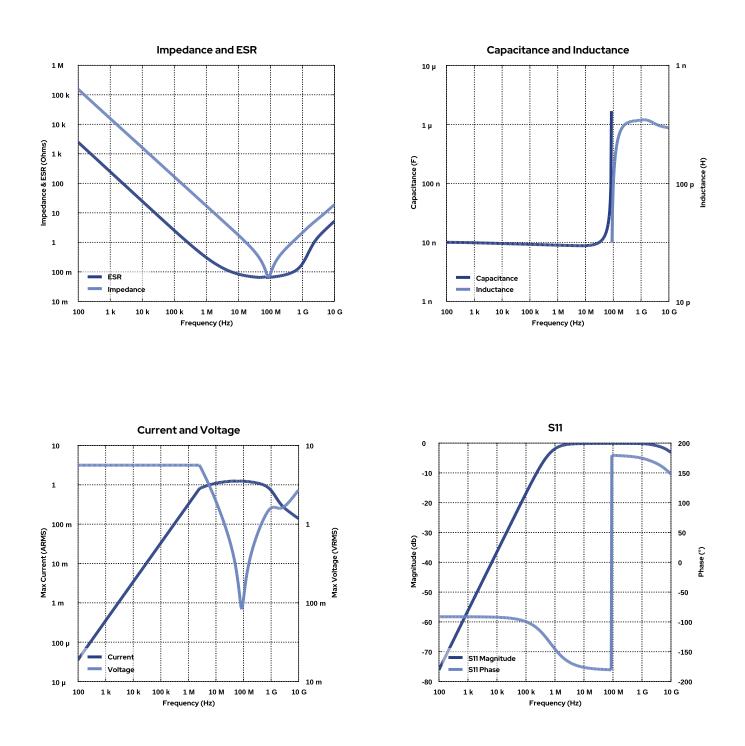
Statements of suitability for certain applications are based on our knowledge of typical operating conditions for such applications, but are not intended to constitute - and we specifically disclaim - any warranty concerning suitability for a specific customer application or use. This Information is 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.



CO402C103M4RAC SMD Comm X7R, Ceramic, 0.01 uF, 20%, 16 VDC, X7R, SMD, MLCC, Temperature Stable, Class II, 0402

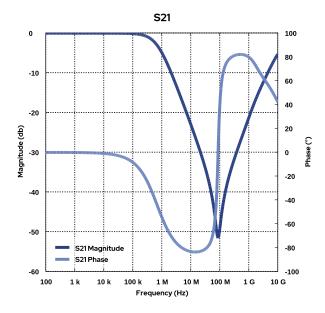
## Simulations

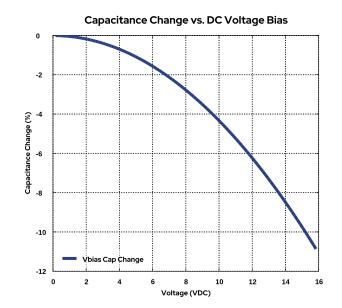
For the complete simulation environment please visit K-SIM.





CO402C103M4RAC SMD Comm X7R, Ceramic, 0.01 uF, 20%, 16 VDC, X7R, SMD, MLCC, Temperature Stable, Class II, 0402





**Capacitance Change versus Temperature** 0.5 0 -0.5 -1 Capacitance Change (%) -1.5 -2 -2.5 -3 -3.5 -4 -4.5 Temp Cap Change -60 -40 -20 0 20 40 60 80 100 120 140 Temperature (C)

Capacitance Change versus AC Voltage 4 3 2 Capacitance Change (%) 1 0 -1 -2 VCAC Cap Change -3 0.5 1.5 2 2.5 0 1 Voltage (VAC)



## 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 affects 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.

单击下面可查看定价,库存,交付和生命周期等信息

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