

# C1206C152K2RACTU

Specifications

Insulation Resistance

Aliases (C1206C152K2RAC7800) SMD Comm X7R, Ceramic, 1,500 pF, 10%, 200 VDC, X7R, SMD, MLCC, Temperature Stable, Class II, 1206, 1.5 mm



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
Typical Component Weight	17 mg
Shelf Life	78 Weeks
MSL	1

Dimensions	
Chip Size	1206
L	3.2mm +/-0.2mm
W	1.6mm +/-0.2mm
Т	0.78mm +/-0.10mm
S	1.5mm MIN
В	0.5mm +/-0.25mm

Capacitance 1,500 pF  Measurement Condition 1 kHz 1.0Vrms  Tolerance 10%  Voltage DC 200 VDC  Dielectric Withstanding Voltage 500 VDC  Temperature Range -55/+125°C  Temp. Coefficient X7R  Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC)  Dissipation Factor 2.5% 1 kHz 1.0Vrms  Aging Rate 3% Loss/Decade Hour: Referee Time is 1000 Hours	•	
Tolerance 10%  Voltage DC 200 VDC  Dielectric Withstanding Voltage 500 VDC  Temperature Range -55/+125°C  Temp. Coefficient X7R  Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC)  Dissipation Factor 2.5% 1 kHz 1.0Vrms  Aging Rate 3% Loss/Decade Hour: Referee	Capacitance	1,500 pF
Voltage DC  Dielectric Withstanding Voltage  Temperature Range  -55/+125°C  Temp. Coefficient  X7R  Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC)  Dissipation Factor  Aging Rate  200 VDC  500 VDC  500 VDC  15%, 1kHz 1.0Vrms  2.5% 1 kHz 1.0Vrms  3% Loss/Decade Hour: Referee	Measurement Condition	1 kHz 1.0Vrms
Dielectric Withstanding Voltage 500 VDC  Temperature Range -55/+125°C  Temp. Coefficient X7R  Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC)  Dissipation Factor 2.5% 1 kHz 1.0Vrms  Aging Rate 3% Loss/Decade Hour: Referee	Tolerance	10%
Temperature Range -55/+125°C  Temp. Coefficient X7R  Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC)  Dissipation Factor 2.5%1kHz 1.0Vrms  Aging Rate 3% Loss/Decade Hour: Referee	Voltage DC	200 VDC
Temp. Coefficient X7R  Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC)  Dissipation Factor 2.5% 1 kHz 1.0Vrms  Aging Rate 3% Loss/Decade Hour: Referee	Dielectric Withstanding Voltage	500 VDC
Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC)  Dissipation Factor  Aging Rate  15%, 1kHz 1.0Vrms  2.5% 1 kHz 1.0Vrms  3% Loss/Decade Hour: Referee	Temperature Range	-55/+125°C
Reference to +25°C and 0 VDC Applied (TCC)  Dissipation Factor  2.5%1kHz 1.0Vrms  Aging Rate  3% Loss/Decade Hour: Referee	Temp. Coefficient	X7R
Aging Rate 3% Loss/Decade Hour: Referee	Reference to +25°C and 0 VDC	15%, 1kHz 1.0Vrms
	Dissipation Factor	2.5% 1 kHz 1.0 Vrms
	Aging Rate	

100 GOhms

Packaging Specifications	
Packaging	T&R, 180mm, Plastic Tape
Packaging Quantity	4000

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.

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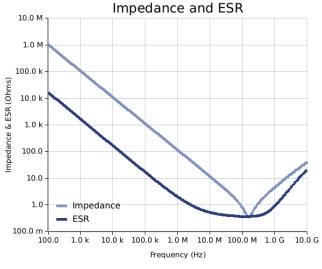


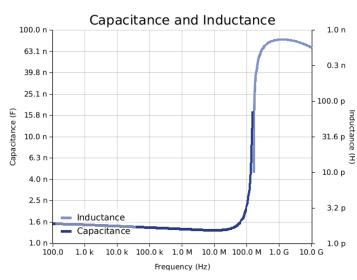
## C1206C152K2RACTU

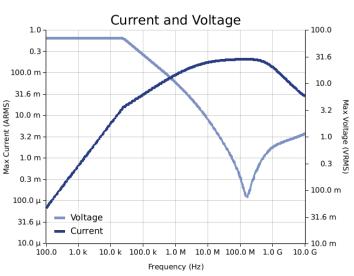
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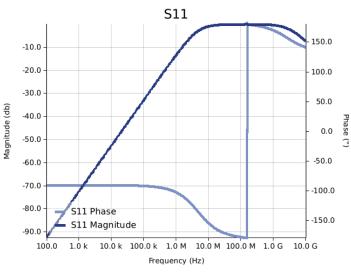
### **Simulations**

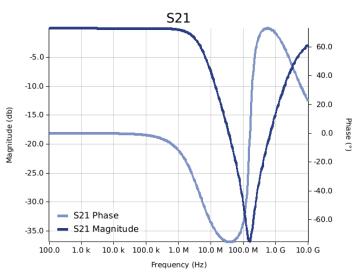
For the complete simulation environment please visit Y-SIM.

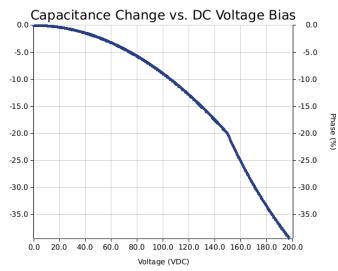












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Aliases (C1206C152K2RAC7800) SMD Comm X7R, Ceramic, 1,500 pF, 10%, 200 VDC, X7R, SMD, MLCC, Temperature Stable, Class II, 1206, 1.5 mm

#### 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 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.

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