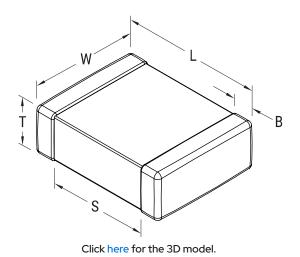


# C1206C510G3HACTU

Aliases (C1206C510G3HAC7800) SMD Comm X8R HT150C, Ceramic, 51 pF, 2%, 25 VDC, X8R, SMD, MLCC, High Temperature, Ultra-Stable, 1206, 1.5 mm



General Information	
Series	SMD Comm X8R HT150C
Style	SMD Chip
Description	SMD, MLCC, High Temperature, Ultra-Stable
Features	High Temperature, Ultra-Stable
RoHS	Yes
Termination	Tin
Marking	No
AEC-Q200	No
Typical Component Weight	17 mg
Shelf Life	78 Weeks
MSL	1

51pF

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

Packaging S Packaging Packaging Q

	3.2mm +/-0.2mm	Measurement Condition	1 MHz 1.0Vrms
	1.6mm +/-0.2mm	Tolerance	2%
	0.78mm +/-0.10mm	Voltage DC	25 VDC
	1.5mm MIN	Dielectric Withstanding Voltage	62.5 VDC
	0.5mm +/-0.25mm	Temperature Range	-55/+150°C
		Temp. Coefficient	X8R
ons	T&R, 180mm, Plastic Tape	Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC)	15%, 1MegaHz 1.0Vrms
	4000	Dissipation Factor	2.5% 1 MHz 1.0 Vrms
		Aging Rate	0% Loss/Decade Hour: Referee

**Specifications** 

Capacitance

	3.2mm +/-0.2mm	Measurement Condition	1 MHz 1.0Vrms
	1.6mm +/-0.2mm	Tolerance	2%
	0.78mm +/-0.10mm	Voltage DC	25 VDC
	1.5mm MIN	Dielectric Withstanding Voltage	62.5 VDC
	0.5mm +/-0.25mm	Temperature Range	-55/+150°C
		Temp. Coefficient	X8R
Specifications		C	150/ 1M L 1 O V /
	T&R, 180mm, Plastic Tape	Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC)	15%, 1MegaHz 1.0Vrms
Quantity	T&R, 180mm, Plastic Tape 4000	Reference to +25°C and 0 VDC	2.5%1 MHz 1.0Vrms
Quantity		Reference to +25°C and 0 VDC Applied (TCC)	. 3

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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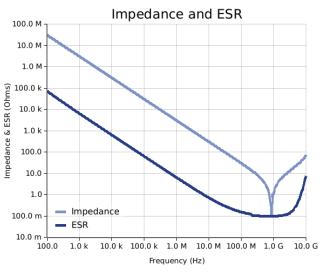


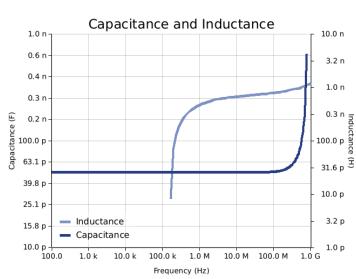
## C1206C510G3HACTU

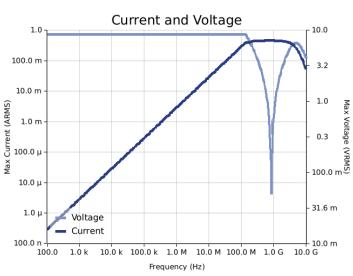
Aliases (C1206C510G3HAC7800) SMD Comm X8R HT150C, Ceramic, 51 pF, 2%, 25 VDC, X8R, SMD, MLCC, High Temperature, Ultra-Stable, 1206, 1.5 mm

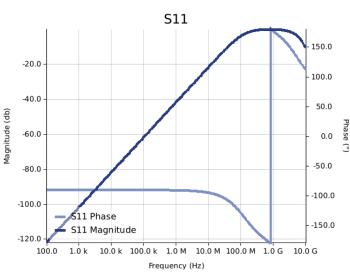
### **Simulations**

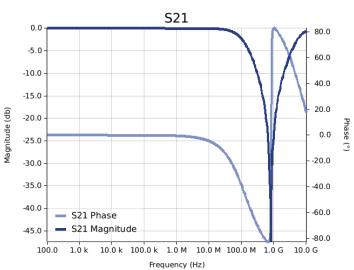
For the complete simulation environment please visit Y-SIM.











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### C1206C510G3HACTU

Aliases (C1206C510G3HAC7800) SMD Comm X8R HT150C, Ceramic, 51 pF, 2%, 25 VDC, X8R, SMD, MLCC, High Temperature, Ultra-Stable, 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.

All Information given herein is believed to be accurate and reliable, but is presented without guarantee, warranty, or responsibility of any kind, expressed or implied. 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.

If you have any questions please contact K-SIM.

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