

### C0402C150F4HACTU

Aliases (C0402C150F4HAC7867) SMD Comm X8R HT150C, Ceramic, 15 pF, 1%, 16 VDC, X8R, SMD, MLCC, High Temperature, Ultra-Stable, 0402, 0.3 mm



Click here for the 3D model.

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	1.21 mg		
Shelf Life	78 Weeks		
MSL	1		

2.5%1MHz1.0Vrms

Time is 1000 Hours

100 GOhms

0% Loss/Decade Hour: Referee

		Specifications		
	0402	Capacitance	15 pF	
	1mm +/-0.05mm	Measurement Condition	1 MHz 1.0Vrms	
	0.5mm +/-0.05mm	Tolerance	1%	
	0.5mm +/-0.05mm	Voltage DC	16 VDC	
	0.3mm MIN	Dielectric Withstanding Voltage	40 VDC	
	0.3mm +/-0.1mm	Temperature Range	-55/+150°C	
		Temp. Coefficient	X8R	
ons		Capacitance Change with	15%, 1MegaHz 1.0Vrms	
	T&R, 180mm, Paper Tape	Reference to +25°C and 0 VDC Applied (TCC)	-	

**Dissipation Factor** 

Insulation Resistance

Aging Rate

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 Specificatio**

Dimensions

Packaging	T&R, 180mm, Paper Tape
Packaging Quantity	10000

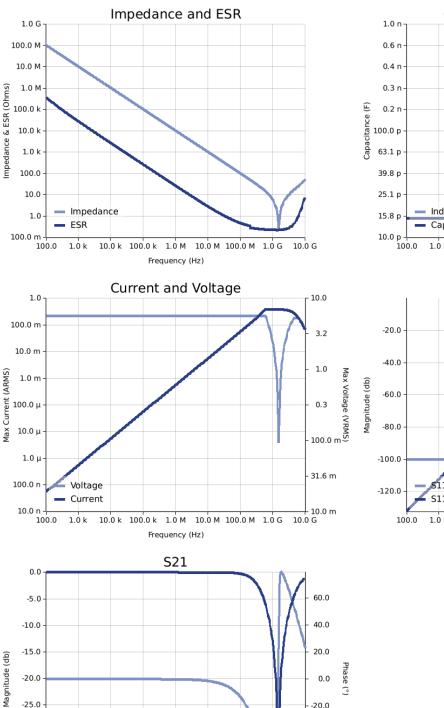
Statements of suitability for certain applications are based on our knowledge of typical operating conditions for such applications, but are not intended to constitute - and we specifically disclaim - any warranty concerning suitability for a specific customer application or use. This Information is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

For the complete simulation environment please visit K-SIM.



Phase

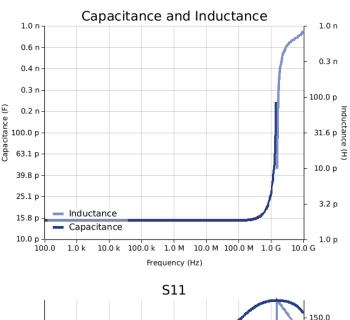
0.0 (°)

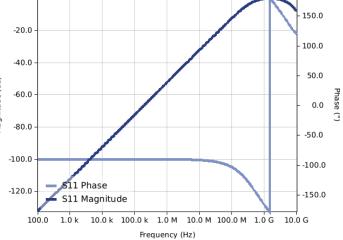
-20.0

-40.0

-60.0

10.0 G





100.0

-20.0

-25.0

-30.0

-35.0 -

-40.0

S21 Phase

S21 Magnitude

1.0 k 10.0 k 100.0 k 1.0 M 10.0 M 100.0 M 1.0 G

Frequency (Hz)



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#### 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 used for hipple klipple current younge vs. requericy plots is the ESR at an bient 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 and the part of the parts of the part of the
- 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.