

C1206C472MDRACTU

Aliases (C1206C472MDRAC7800)

SMD Comm X7R HV, Ceramic, 4700 pF, 20%, 1000 VDC, X7R, SMD, MLCC, High Voltage, Temperature Stable, 1206



Click here for the 3D model.

Dimensions		
Chip Size	1206	
L	3.2mm +/-0.2mm	
W	1.6mm +/-0.2mm	
Т	1mm +/-0.10mm	
В	0.5mm +/-0.25mm	

ackaging Specifications	
Packaging	T&R, 180mm, Plastic Tape
Packaging Quantity	2500

General Information			
Series	SMD Comm X7R HV		
Style	SMD Chip		
Description	SMD, MLCC, High Voltage, Temperature Stable		
Features	High Voltage		
RoHS	Yes		
Termination	Tin		
Marking	No		
AEC-Q200	No		
Component Weight	25 mg		
Shelf Life	78 Weeks		
MSL	1		

Specifications				
Capacitance	4700 pF			
Measurement Condition	1 kHz 1.0Vrms			
Capacitance Tolerance	20%			
Voltage DC	1000 VDC			
Dielectric Withstanding Voltage	1200 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	2.5% 1 kHz 1.0Vrms			
Aging Rate	3% Loss/Decade Hour: Referee Time is 1000 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.

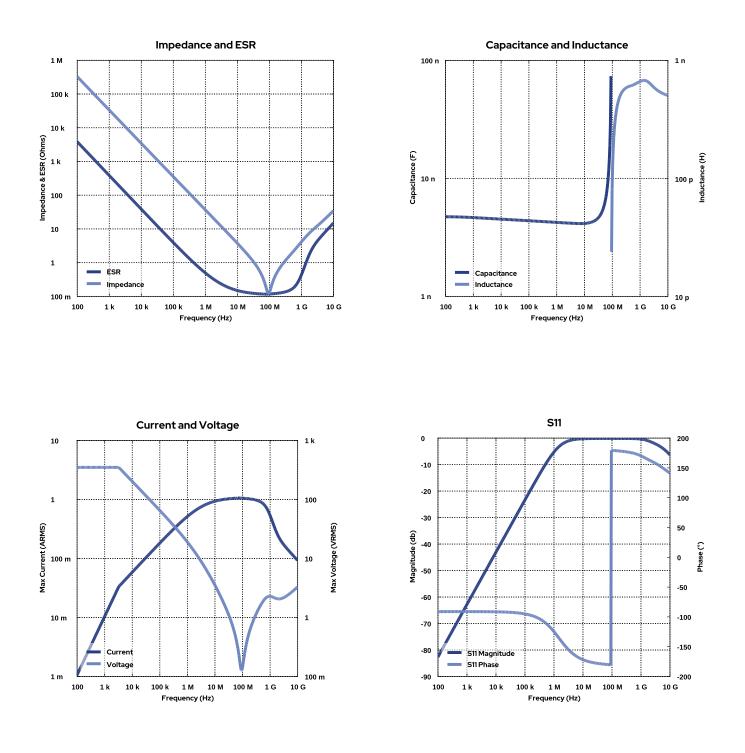


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## Simulations

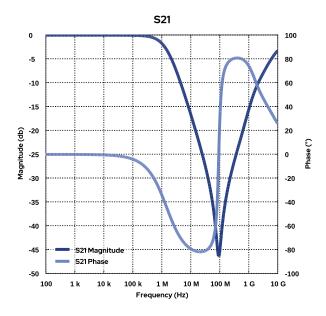
For the complete simulation environment please visit K-SIM.

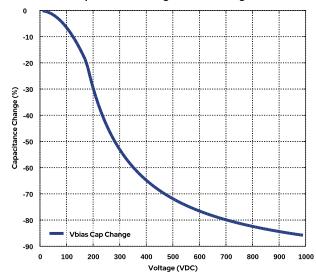




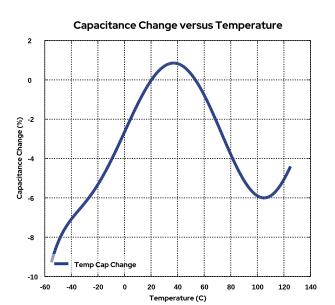
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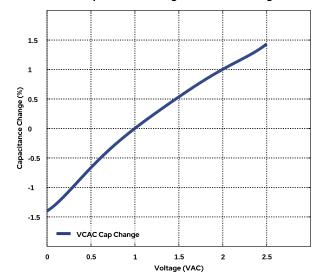




Capacitance Change vs. DC Voltage Bias



Capacitance Change versus AC Voltage





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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 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.