

C1812C100JHGACTU

Specifications

Insulation Resistance

Aliases (C1812C100JHGAC7800) SMD Comm C0G HV, Ceramic, 10 pF, 5%, 3,000 VDC, C0G, SMD, MLCC, Ultra-Stable, Low Loss, Class I, 1812, 2.3 mm



General Information	
Series	SMD Comm COG HV
Style	SMD Chip
Description	SMD, MLCC, Ultra-Stable, Low Loss, Class I
Features	Ultra-Stable, Low Loss, Class I
RoHS	Yes
Termination	Tin
Marking	No
AEC-Q200	No
Typical Component Weight	67 mg
Shelf Life	78 Weeks
MSL	1

Dimensions	
Chip Size	1812
L	4.5mm +/-0.3mm
W	3.2mm +/-0.3mm
Т	1mm +/-0.10mm
S	2.3mm MIN
В	0.6mm +/-0.35mm

Capacitance 10 pF Measurement Condition 1 MHz 1.0Vrms Tolerance 5% Voltage DC 3000 VDC Dielectric Withstanding Voltage 3,600 VDC Temperature Range -55/+125°C Temp. Coefficient COG Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC) Dissipation Factor 0.1% 1 MHz 1.0Vrms Aging Rate 0% Loss/Decade Hour		
Tolerance 5% Voltage DC 3000 VDC Dielectric Withstanding Voltage 3,600 VDC Temperature Range -55/+125°C Temp. Coefficient COG Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC) Dissipation Factor 0.1% 1 MHz 1.0Vrms	Capacitance	10 pF
Voltage DC Dielectric Withstanding Voltage 3,600 VDC Temperature Range -55/+125°C Temp. Coefficient Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC) Dissipation Factor 3000 VDC 3,600 VDC 3,600 VDC 30 ppm/C, 1MegaHz 1.0Vrms	Measurement Condition	1 MHz 1.0Vrms
Dielectric Withstanding Voltage 3,600 VDC Temperature Range -55/+125°C Temp. Coefficient COG Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC) Dissipation Factor 0.1% 1 MHz 1.0Vrms	Tolerance	5%
Temperature Range -55/+125°C Temp. Coefficient COG Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC) Dissipation Factor 0.1% 1 MHz 1.0Vrms	Voltage DC	3000 VDC
Temp. Coefficient COG Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC) Dissipation Factor O.1% 1 MHz 1.0Vrms	Dielectric Withstanding Voltage	3,600 VDC
Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC) Dissipation Factor 30 ppm/C, 1MegaHz 1.0Vrms 0.1% 1 MHz 1.0Vrms	Temperature Range	-55/+125°C
Reference to +25°C and 0 VDC Applied (TCC) Dissipation Factor O.1% 1 MHz 1.0Vrms	Temp. Coefficient	COG
5177 T T T T T T T T T T T T T T T T T T	Reference to +25°C and 0 VDC	30 ppm/C, 1MegaHz 1.0Vrms
Aging Rate 0% Loss/Decade Hour	Dissipation Factor	0.1% 1 MHz 1.0Vrms
	Aging Rate	0% Loss/Decade Hour

100 GOhms

Packaging Specifications	
Packaging	T&R, 180mm, Plastic Tape
Packaging Quantity	1000

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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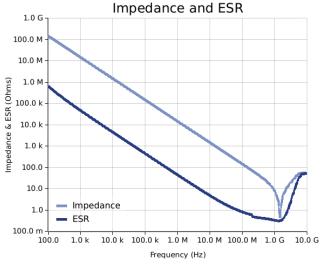


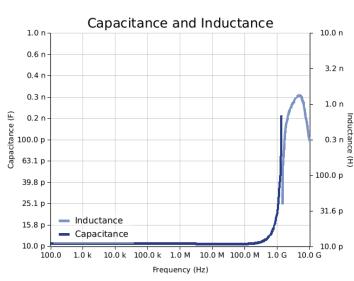
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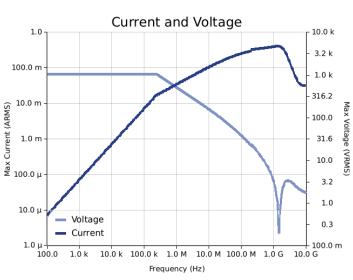
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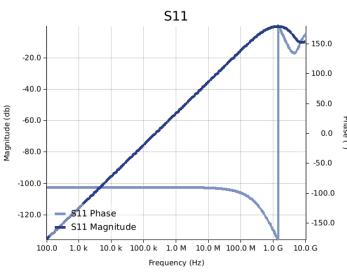
Simulations

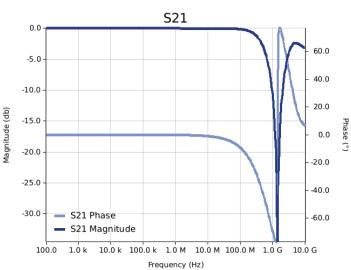
For the complete simulation environment please visit K-SIM.

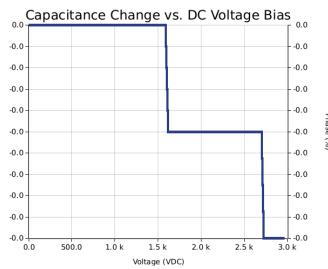












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These are simulations.

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 ripple Ripple Currenty votage vs. rrequency plots is adjusted to each incremental temperature rise before the power and ripple current is calculated.
 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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