Click here for the 3D model.

General Information

Series	KC-LINK Auto C0G
Style	SMD Chip
Description	SMD, MLCC, FT-CAP, Ultra-Stable, Automotive Grade
Features	FT-CAP, Ultra-Stable, Automotive Grade
RoHS	Yes
Termination	Flexible Termination
Marking	No
Qualifications	AEC-Q200
AEC-Q200	Yes
Component Weight	320 mg
Shelf Life	78 Weeks
MSL	1

Dimensions

Chip Size	2220
L	6.1mm +/-0.75mm
W	5mm +/-0.4mm
T	2.5mm +/-0.20mm
B	0.7mm +/-0.35mm

Packaging Specifications

Packaging	T&R, 180mm, Plastic Tape
Packaging Quantity	500

Specifications

|	
Capacitance	0.033 uF
Measurement Condition	1 kHz 1.0Vrms
Capacitance Tolerance	1%
Voltage DC	500 VDC
Dielectric Withstanding Voltage	750 VDC
Temperature Range	-55/+150°C
Temperature Coefficient	C0G
Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC)	30 ppm/C, 1kHz 1.0Vrms
Dissipation Factor	0.1% 1 kHz 1.0Vrms
Aging Rate	0% Loss/Decade Hour
Insulation Resistance	30.303 GOhms

Simulations

For the complete simulation environment please visit K-SIM.
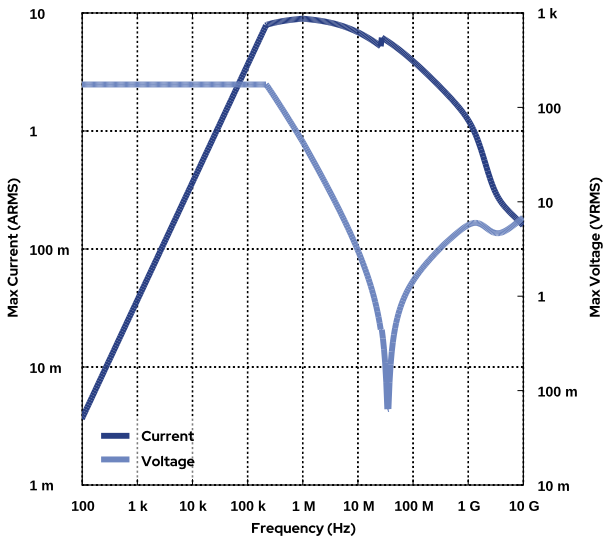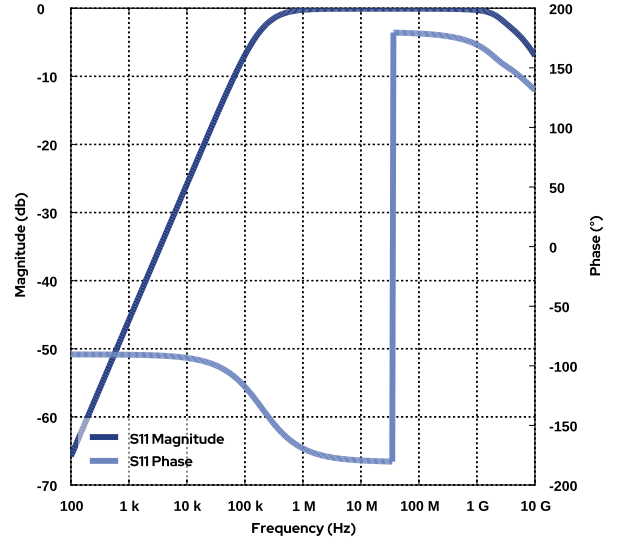

Impedance and ESR
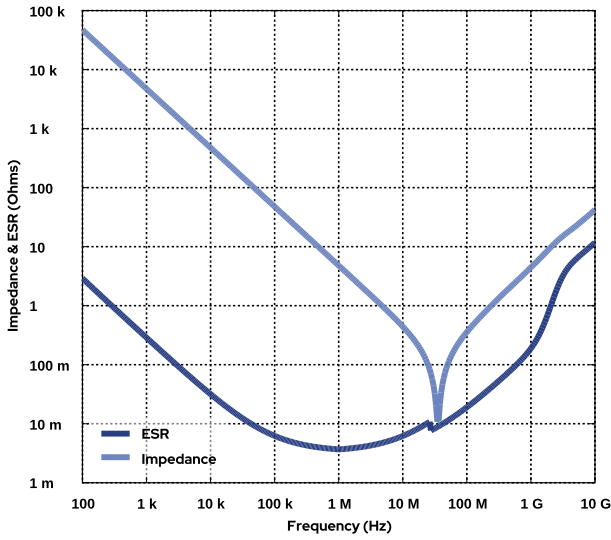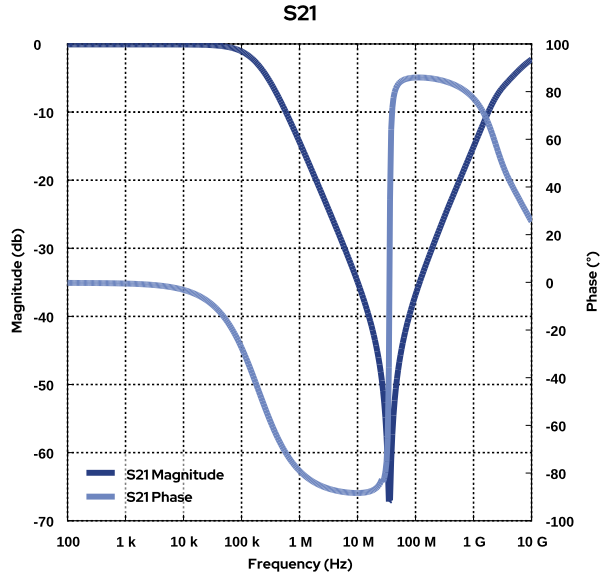

Capacitance and Inductance
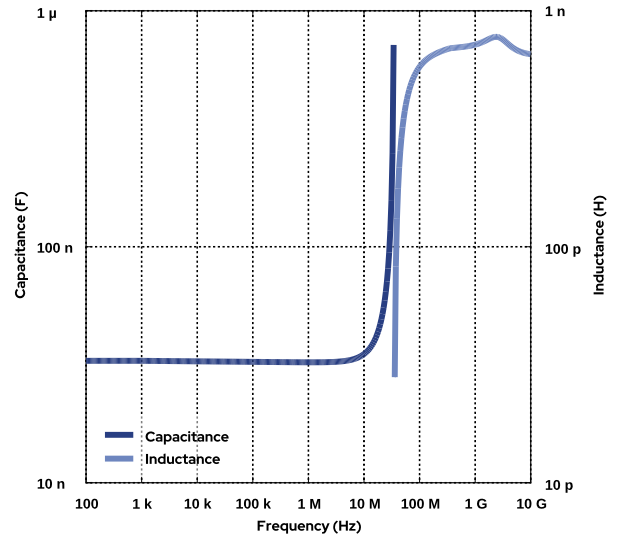
Current and Voltage

S11

S21

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.

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If you have any questions please contact K-SIM.