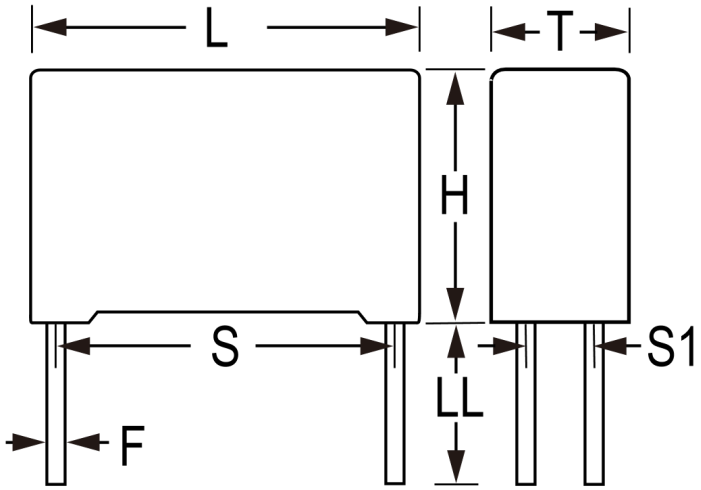
C4AQNBW5120M3FJ

C4AQ-M, Film, Metallized Polypropylene, Automotive DC Link, 12 uF, 5%, 1000 VDC, 85°C, 37.5mm



Click here for the 3D model.

Dimensions	
L	42mm +0.6/-0.7mm
H	40mm +0.2/-0.7mm
T	20mm +0.4/-0.7mm
S	37.5mm +/-0.4mm
S1	10.2mm +/-0.4mm
LL	6mm +0/-2mm
F	1.2mm +/-0.05mm

Packaging Specifications	
Packaging	Bulk, Box
Packaging Quantity	58

General Information	
Series	C4AQ-M
Dielectric	Metallized Polypropylene
Style	Radial
RoHS	Yes
Lead	4 Wire Leads
Qualifications	AEC-Q200, IEC61071, EN61071, VDE0560
AEC-Q200	Yes
Typical Component Weight	48.2 g
Miscellaneous	Rth = 20 C/W.

Specifications	
Capacitance	12 uF
Capacitance Tolerance	5%
Voltage DC	1000 VDC
Temperature Range	-55/+105°C
Rated Temperature	85°C
Insulation Resistance	2.5 GOhms
Max dV/dt	37 V/us
ESR	6.3 mOhms (10kHz 70C)
Ripple Current	14.4 Amps Irms (10kHz 70C), 444 Amps Ipkr
Inductance	12 nH

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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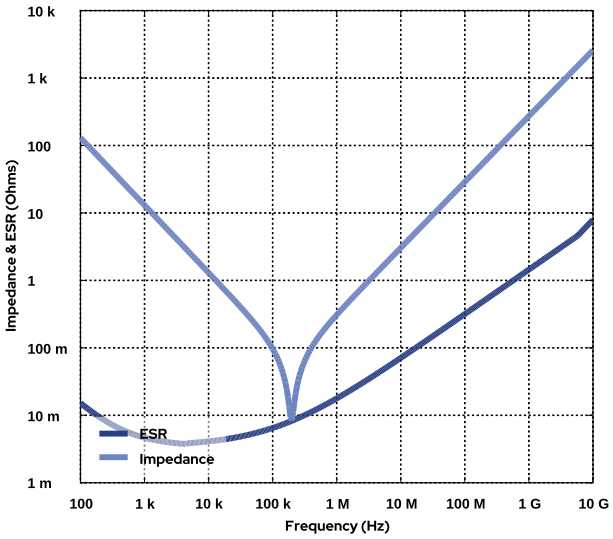
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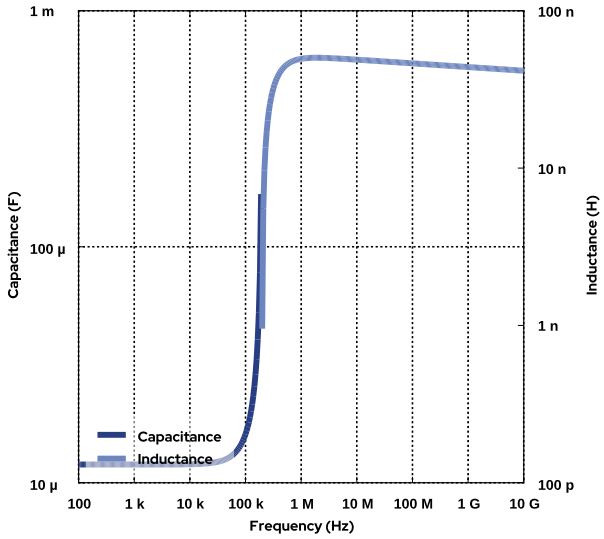
Simulations

For the complete simulation environment please visit K-SIM.

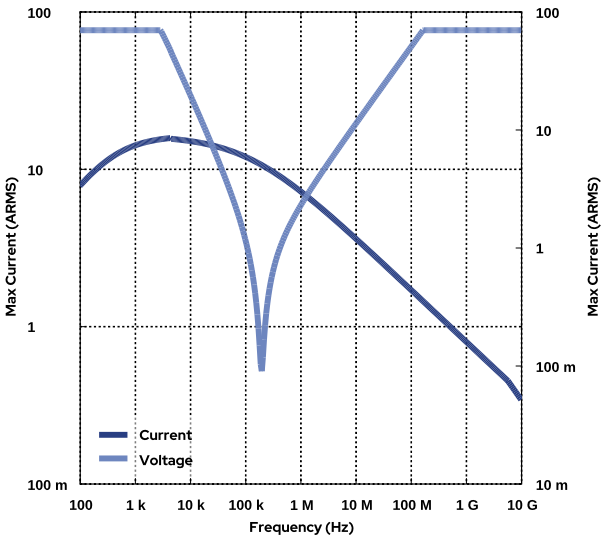
Impedance and ESR



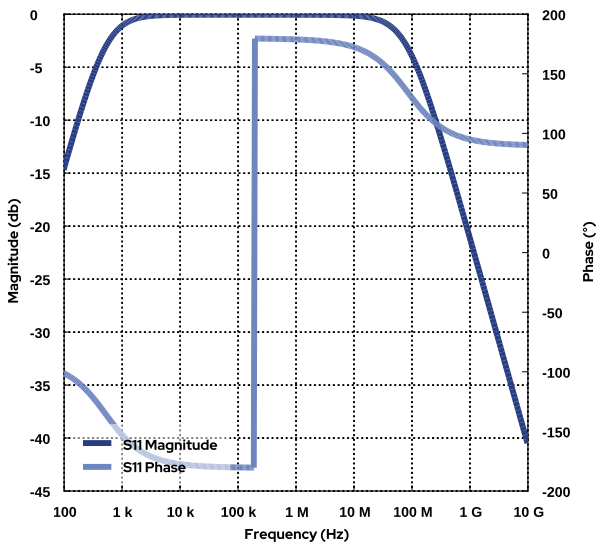
Capacitance and Inductance



Current and Voltage



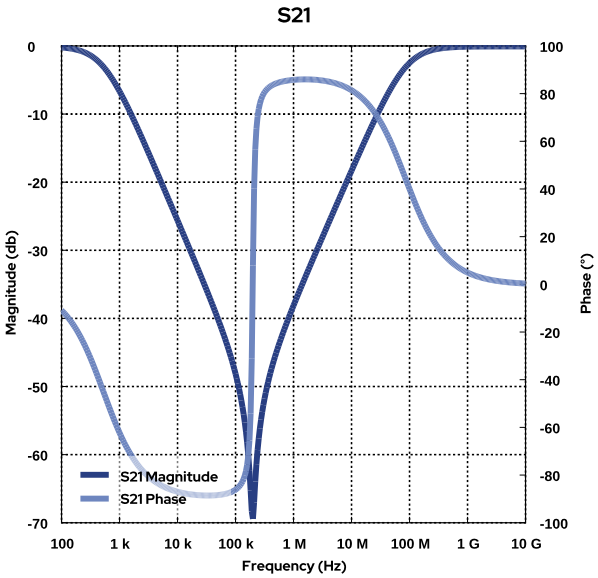
S11



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C4AQNBW5120M3FJ

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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.

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If you have any questions please contact K-SIM.

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