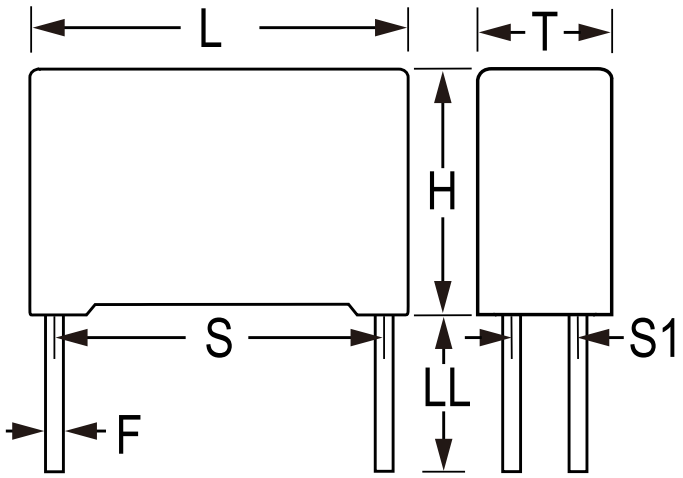
C4AKJBW5450A3MJ

C4AK, Film, Metallized Polypropylene, Automotive DC Link, 45 uF, 5%, 700 VDC, 52.5 mm



Click here for the 3D model.

General Information	
Series	C4AK
Dielectric	Metallized Polypropylene
Style	Radial
Features	DC Filtering
RoHS	Yes
Lead	4 Wire Leads
Qualifications	AEC-Q200, IEC61071, EN61071, VDE0560
Typical Component Weight	128.4 g
Miscellaneous	Rth = 12 C/W.

Dimensions	
L	57.5mm +/-1.2mm
H	45mm +/-1.2mm
T	30mm +/-1.2mm
S	52.5mm +/-0.4mm
S1	20.3mm +/-0.4mm
LL	6mm -2mm
F	1.2mm +/-0.05mm

Packaging Specifications	
Packaging	Bulk, Box
Packaging Quantity	27

Specifications	
Capacitance	45 uF
Tolerance	5%
Voltage DC	700 VDC
Temperature Range	-55/+135°C
Insulation Resistance	670 MOhms
Max dV/dt	10 V/us
ESR	4.8 mOhms (10kHz 70C)
Ripple Current	19.5 Amps Irms (10kHz 95C), 450 Amps Ipkr
Inductance	13 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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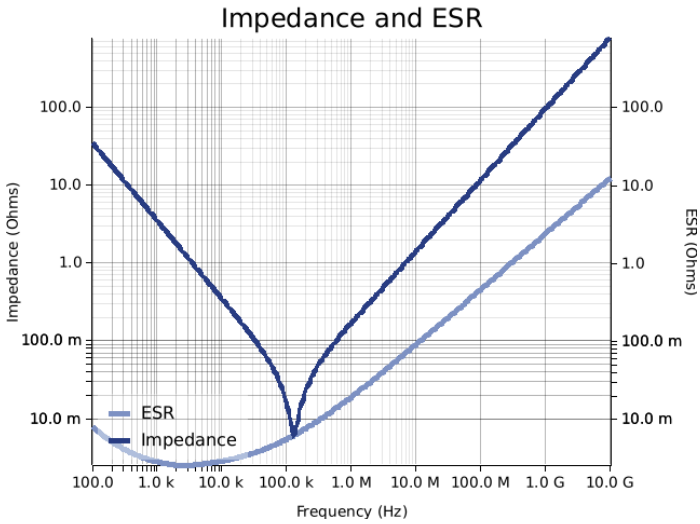
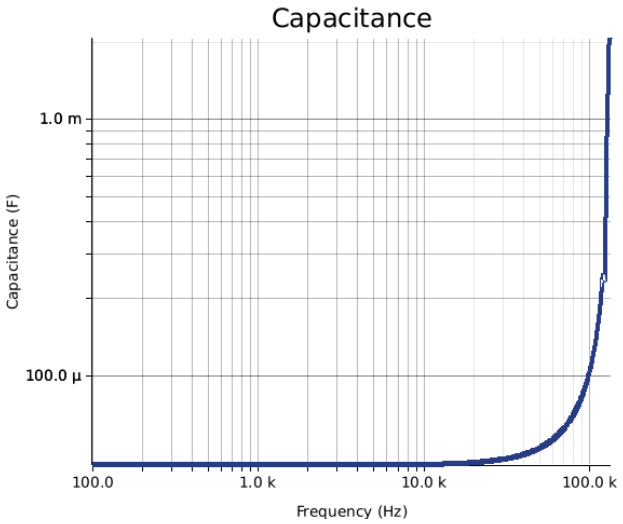
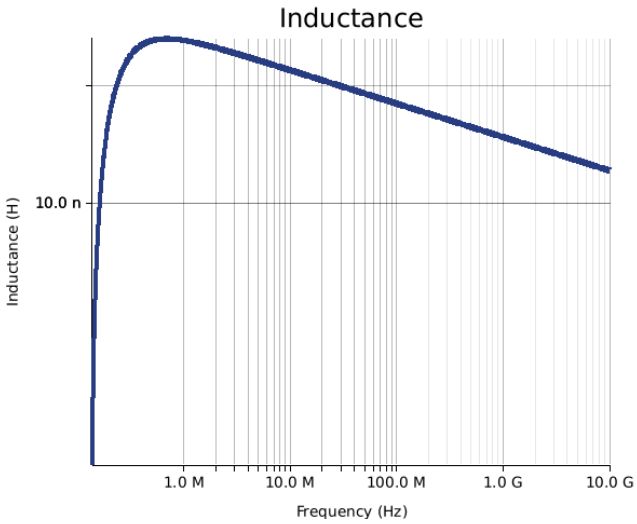
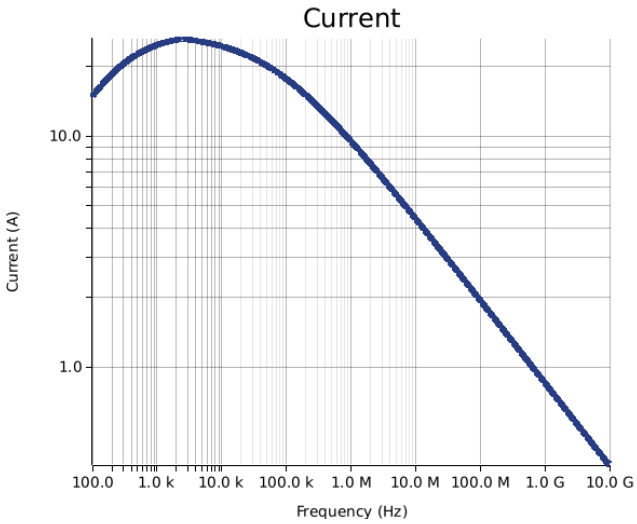
Simulations

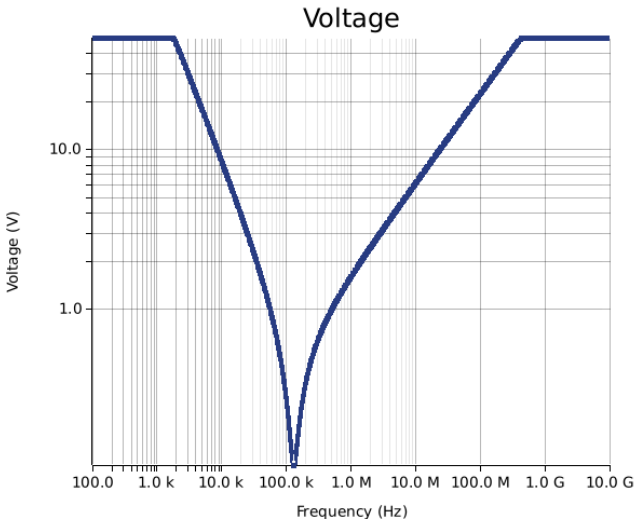
For the complete simulation environment please visit Y-SIM.

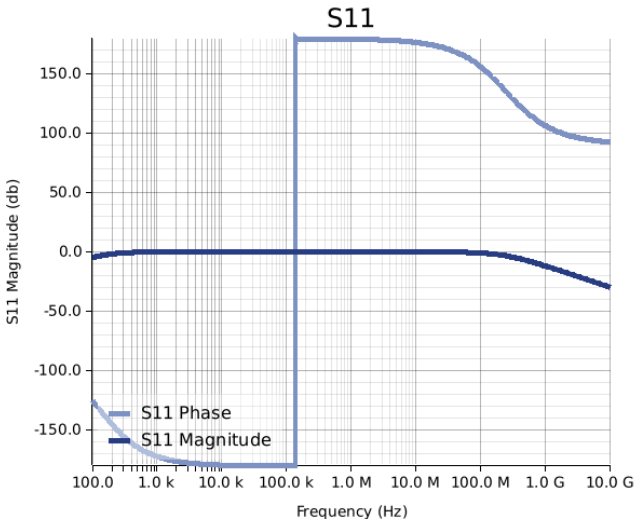












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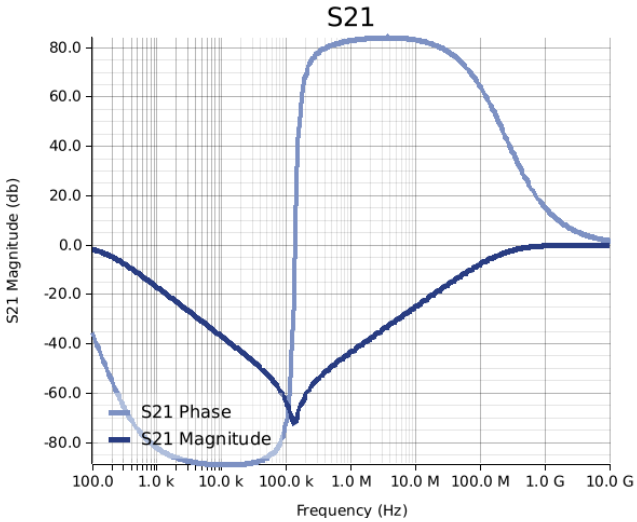

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These are simulations.
This is not a specification!

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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