

Click [here](#) for the 3D model.

General Information

Series	SMD Mil PRF55681
Style	SMD Chip
Description	Ceramic Chips, MIL PRF 55681 Established Reliability
RoHS	No
Prop 65	WARNING: Cancer and reproductive harm - https://www.p65warnings.ca.gov/
Termination	Lead (SnPb)
Failure Rate	M (1%/1000 Hrs)
Testing and Reliability	MIL-PRF-55681
Qualifications	MIL-PRF-55681
AEC-Q200	No
Shelf Life	78 Weeks
MSL	1

Dimensions

Chip Size	1825
L	4.5mm +/-0.30mm
W	6.4mm +/-0.3mm
T	1.5mm MAX
B	0.5mm +/-0.30mm

Packaging Specifications

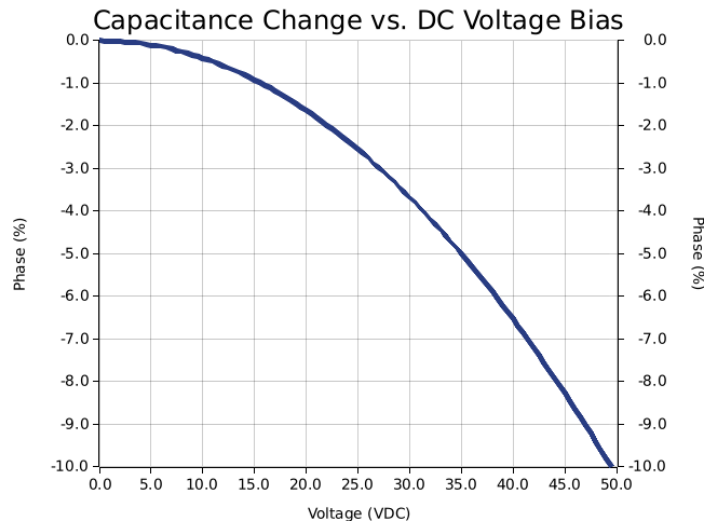
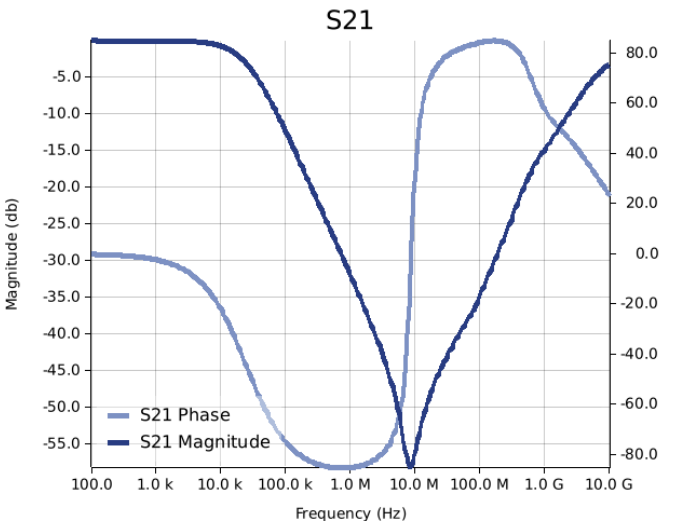
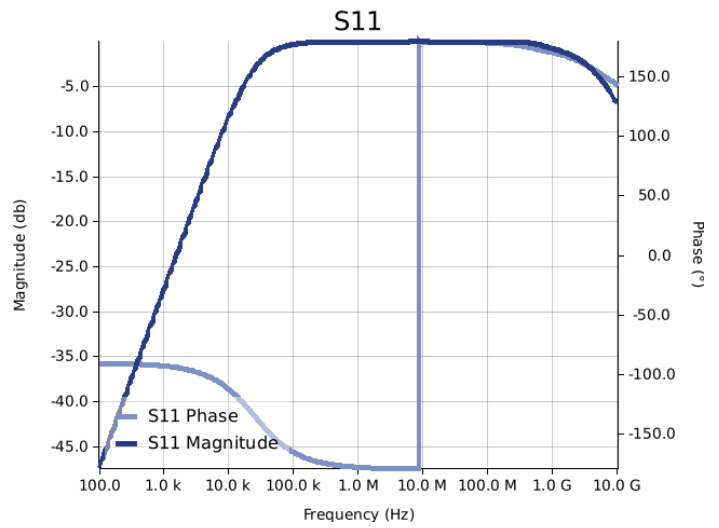
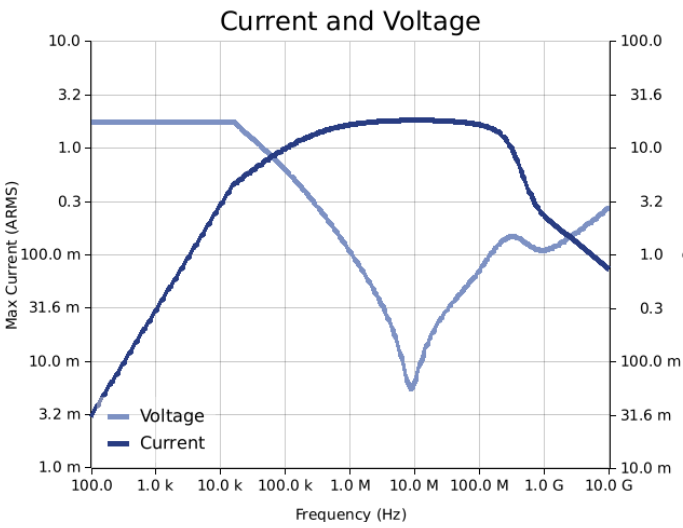
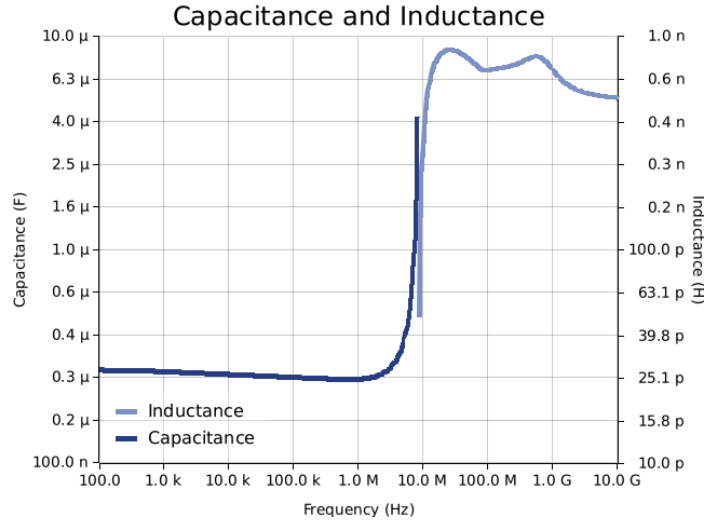
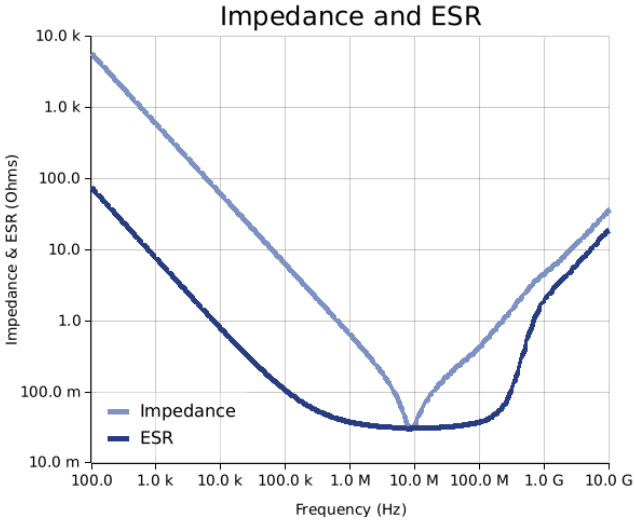
Packaging	Bulk, Bag
Packaging Quantity	1

Specifications

Capacitance	0.27 uF
Capacitance Tolerance	10%
Voltage DC	50 VDC
Dielectric Withstanding Voltage	125 VDC
Temperature Range	-55/+125°C
Temperature Coefficient	BP
Dissipation Factor	0.15%
Insulation Resistance	100 GOhms

Simulations

For the complete simulation environment please visit [K-SIM](#).



Aliases

(CDR35BX274AKUM, CDR35BX274AKZM, CDR35BX274AKWM)
SMD Mil PRF55681, Ceramic, 0.27 uF, 10%, 50 VDC, BP, Ceramic Chips, MIL
PRF 55681 Established Reliability, M (1%/1000 Hrs), 1825

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 effects 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.