


[Click here for the 3D model.](#)
**CATHODE (-) END VIEW**
**SIDE VIEW**
**ANODE (+) END VIEW**
**BOTTOM VIEW**
**General Information**

Series	T521
Dielectric	Polymer Tantalum
Style	SMD Chip
Description	SMD, Polymer, Molded, Low ESR, Non-Combustible
Features	Low ESR, High Voltage
RoHS	Yes
Termination	Tin
AEC-Q200	No
Typical Component Weight	434.83 mg
Shelf Life	52 Weeks
MSL	3

**Dimensions**

L	7.3mm +/-0.3mm	Capacitance	22 uF
W	4.3mm +/-0.3mm	Tolerance	20%
H	2.8mm +/-0.3mm	Voltage DC	35 VDC (105C), 23.45 VDC (125C)
T	0.13mm REF	Temperature Range	-55/+125°C
S	1.3mm +/-0.3mm	Rated Temperature	105°C
F	2.4mm +/-0.1mm	Life	2000 Hrs (125C)
A	3.8mm MIN	Humidity	60C, 90% RH, 500 Hours, No Load
B	0.5mm +/-0.15mm	Dissipation Factor	10% 120Hz 25C
P	0.9mm REF	Failure Rate	N/A
R	1mm REF	ESR	40 mOhms (100kHz 25C)
X	0.1mm +/-0.1mm REF	Ripple Current	2810 mA (rms, 100kHz 45/85C), 1967 mA (rms, 105C), 702.5 mA (rms, 125C)
		Leakage Current	77 uA (5min 25°C)

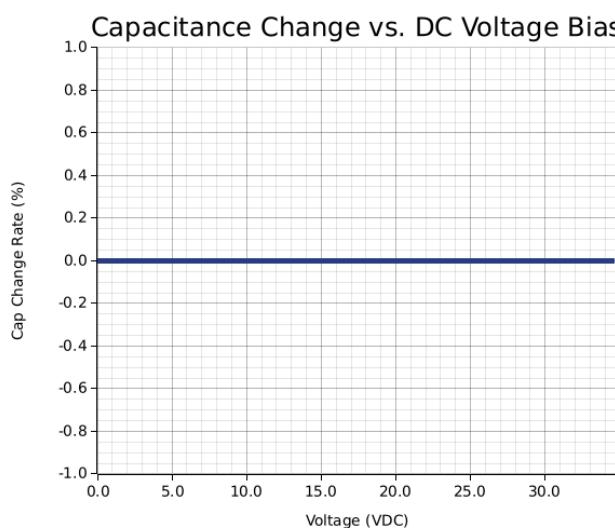
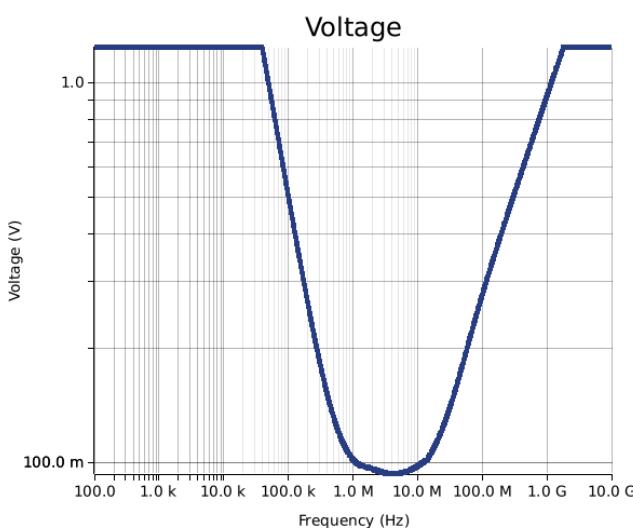
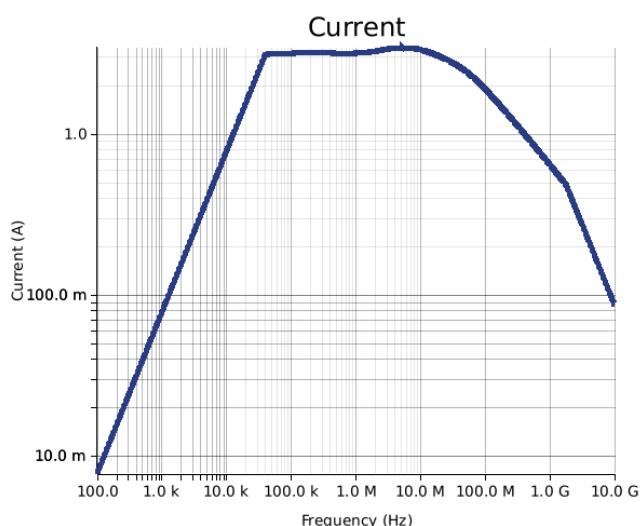
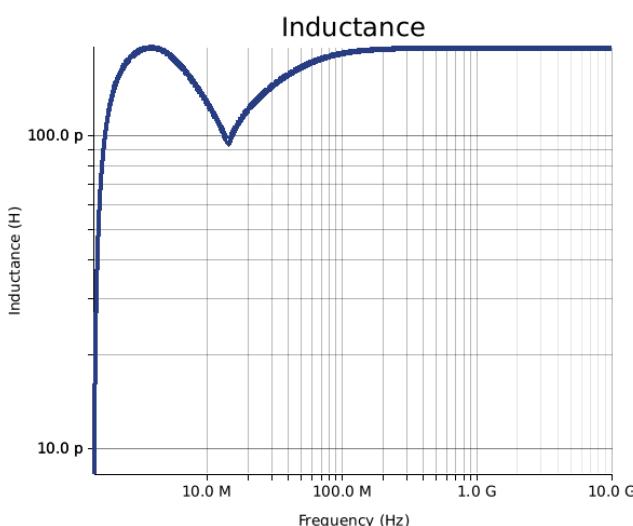
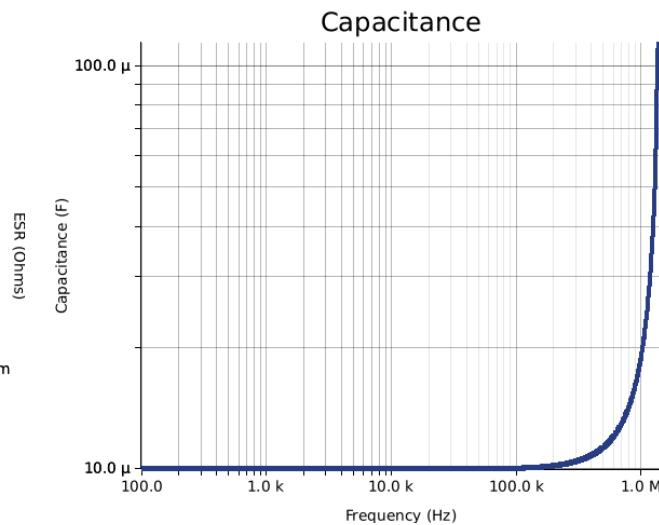
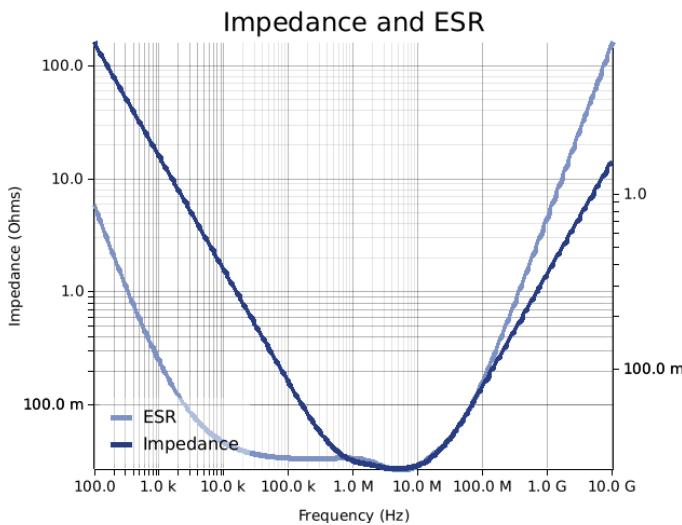
**Packaging Specifications**

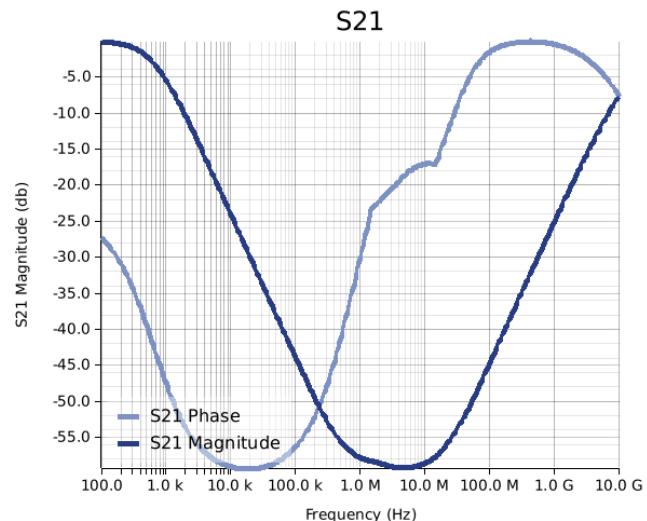
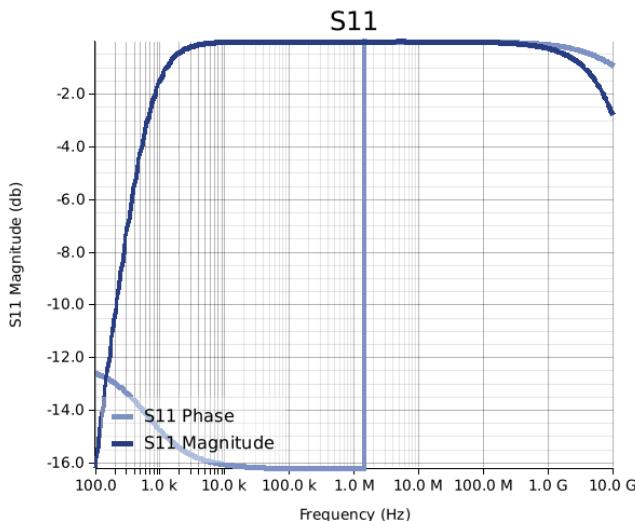
Packaging	T&R, 178mm
Packaging Quantity	500

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## Simulations

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





**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 ( $R_{th}$ ) 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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