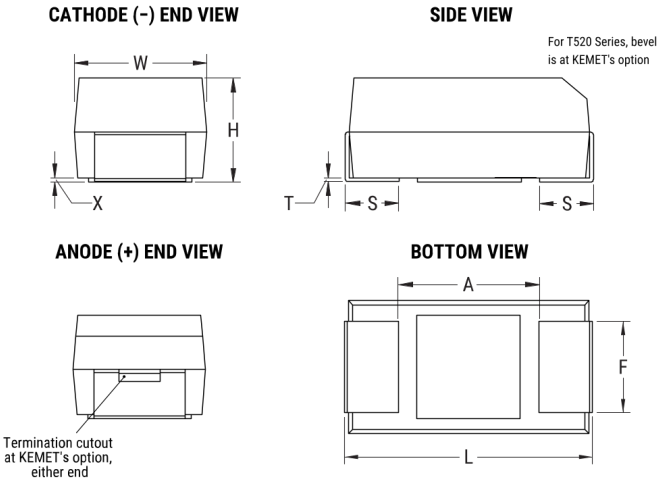
T520T107M2R5AHE070

T520, Tantalum, Polymer Tantalum, 100 uF, 20%, 2.5 VDC, SMD, Polymer, Molded, Low Profile/ESR, NonCombustible, 70 mOhms, 3528, Height Max = 1.2mm



Click here for the 3D model.

General Information

Series	T520
Dielectric	Polymer Tantalum
Style	SMD Chip
Description	SMD, Polymer, Molded, Low Profile/ESR, NonCombustible
Features	Low ESR
RoHS	No
Prop 65	⚠ **WARNING:** Cancer and reproductive harm - http://www.p65warnings.ca.gov.
SCIP Number	b064b03e-bd75-42af-b342-1fe94dec2340
Termination	Solder Coated
AEC-Q200	No
Component Weight	54.84 mg
Shelf Life	52 Weeks
MSL	3

Dimensions

Footprint	3528
L	3.5mm +/-0.2mm
W	2.8mm +/-0.2mm
H	1.1mm +/-0.1mm
T	0.13mm REF
S	0.8mm +/-0.3mm
F	2.2mm +/-0.1mm
A	1.9mm MIN
X	0.05mm REF

Specifications

Capacitance	100 uF
Capacitance Tolerance	20%
Voltage DC	2.5 VDC (105C)
Temperature Range	-55/+105°C
Rated Temperature	105°C
Life	2000 Hrs (105C)
Humidity	60C, 90% RH, 500 Hours, No Load
Dissipation Factor	8% 120Hz 25C
Failure Rate	N/A
Resistance	70 mOhms (100kHz 25C)
Ripple Current	1200 mA (rms, 100kHz 45C), 840 mA (rms, 85C), 300 mA (rms, 105C)
Leakage Current	25 uA (5min 25°C)

Packaging Specifications

Packaging	T&R, 178mm
Packaging Quantity	3000

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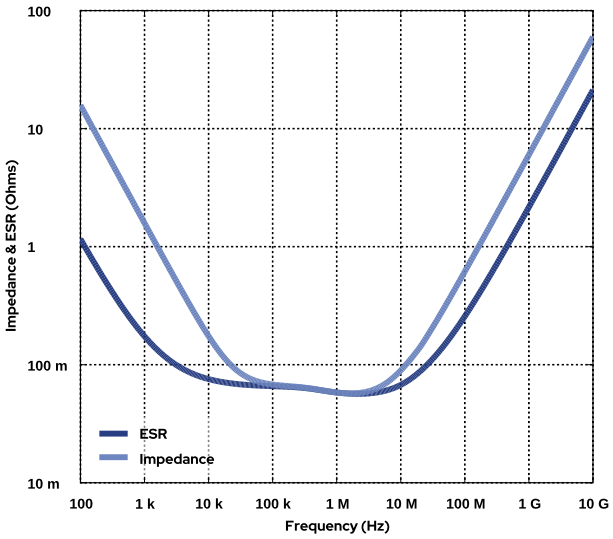
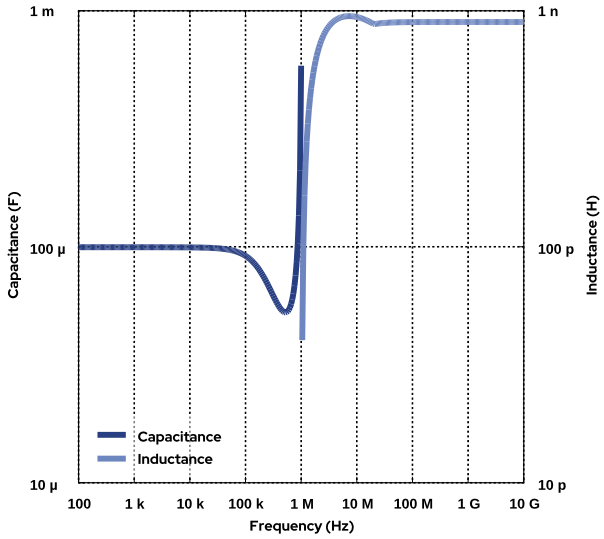
Simulations

For the complete simulation environment please visit K-SIM.

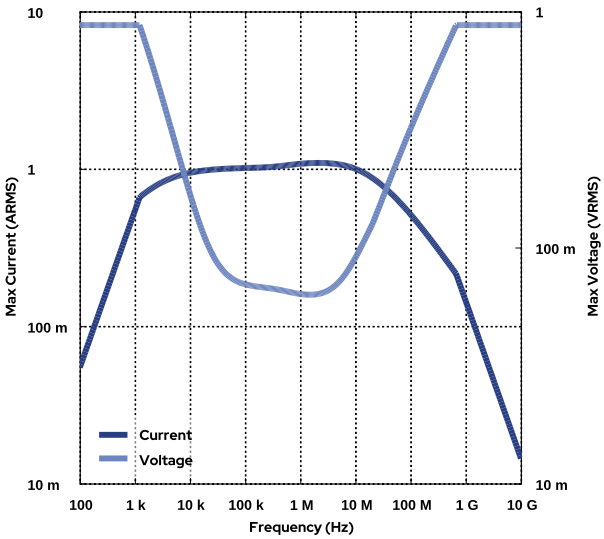
Impedance and ESR



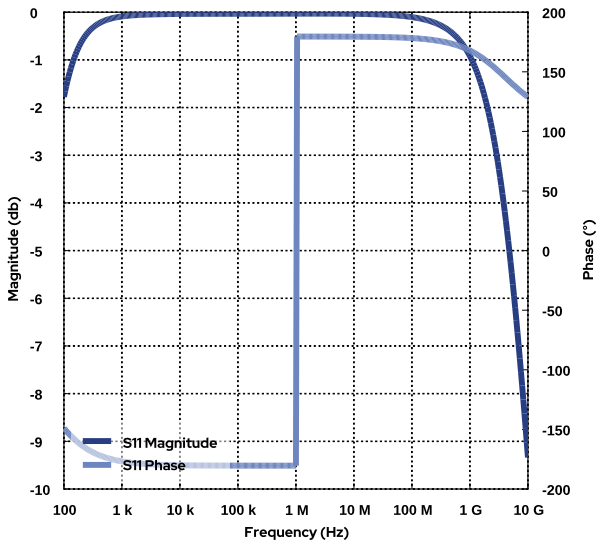
Capacitance and Inductance



Current and Voltage



S11



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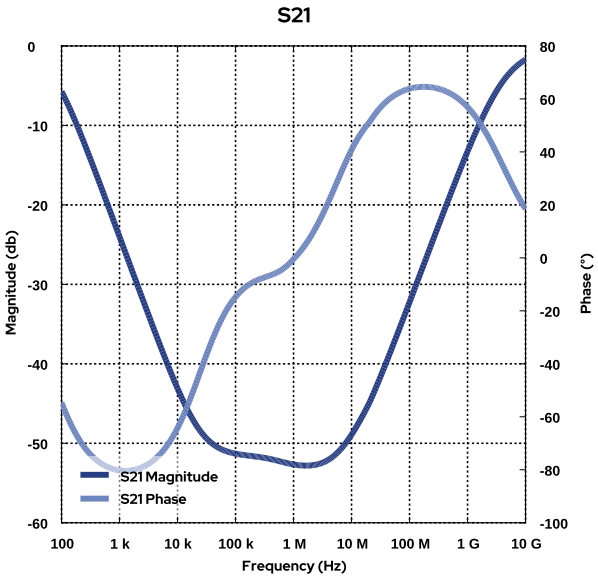

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These are simulations.

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.