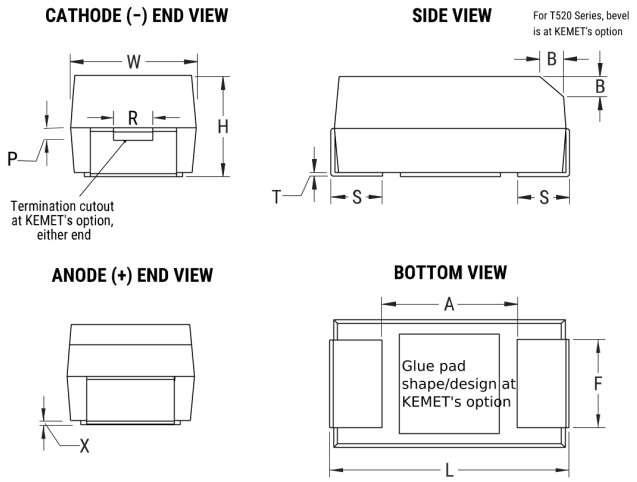
# T520B227M2R5ATE015

T520, Tantalum, Polymer Tantalum, Commercial Grade, 220 uF, 20%, 2.5 VDC, SMD, Polymer, Molded, Low ESR, Non-Combustible, 15 mOhms, 3528, 2mm




Click here for the 3D model.

## Dimensions

| | |
|---|---|
| Footprint | 3528 |
| L | 3.5mm +/-0.2mm |
| W | 2.8mm +/-0.2mm |
| H | 1.9mm +/-0.1mm |
| T | 0.13mm REF |
| S | 0.8mm +/-0.3mm |
| F | 2.2mm +/-0.1mm |
| A | 1.9mm MIN |
| B | 0.4mm +/-0.15mm |
| P | 0.5mm REF |
| R | 1mm REF |
| X | 0.1mm +/-0.1mm REF |

## Packaging Specifications

| | |
|---|---|
| Packaging | T&R, 178mm |
| Packaging Quantity | 2000 |

## General Information

| | |
|---|---|
| Series | T520 |
| Dielectric | Polymer Tantalum |
| Style | SMD Chip |
| Description | SMD, Polymer, Molded, Low ESR, Non-Combustible |
| Features | Low ESR |
| RoHS | Yes |
| Termination | Tin |
| AEC-Q200 | No |
| Typical Component Weight | 94.85 mg |
| Shelf Life | 52 Weeks |
| MSL | 3 |

## Specifications

| | |
|---|---|
| Capacitance | 220 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 |
| ESR | 15 mOhms (100kHz 25C) |
| Ripple Current | 2900 mA (rms, 100kHz 45C), 2030 mA (rms, 85C), 725 mA (rms, 105C) |
| Leakage Current | 55 uA (5min 25°C) |

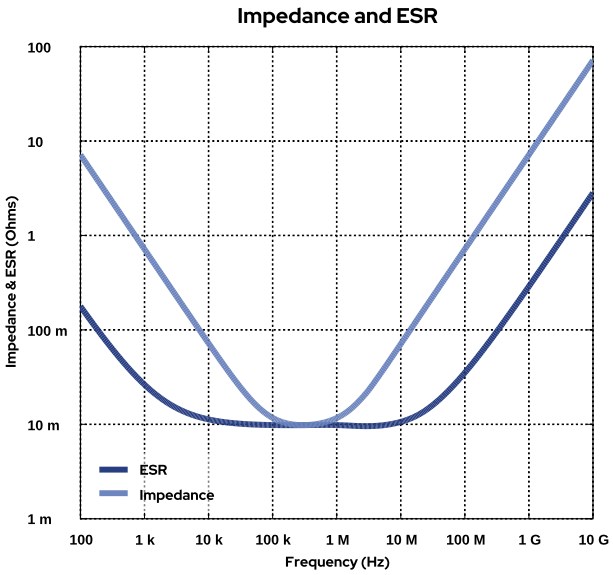
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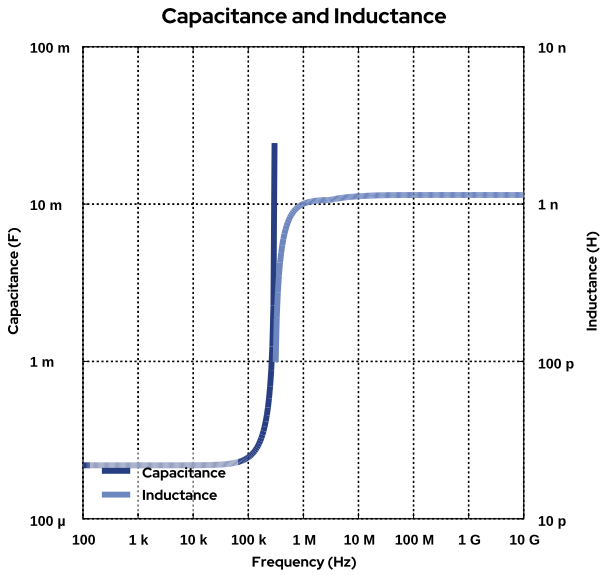


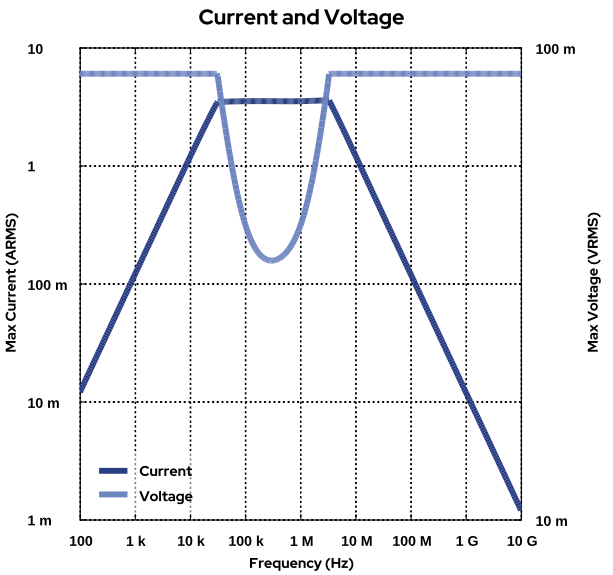
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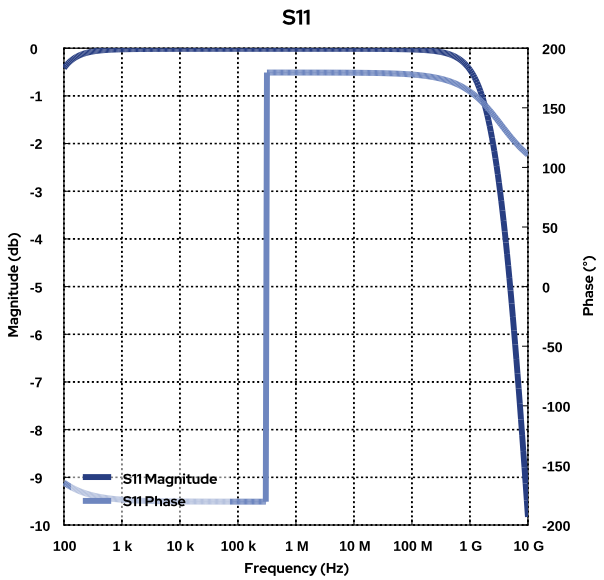
# Simulations

For the complete simulation environment please visit K-SIM.



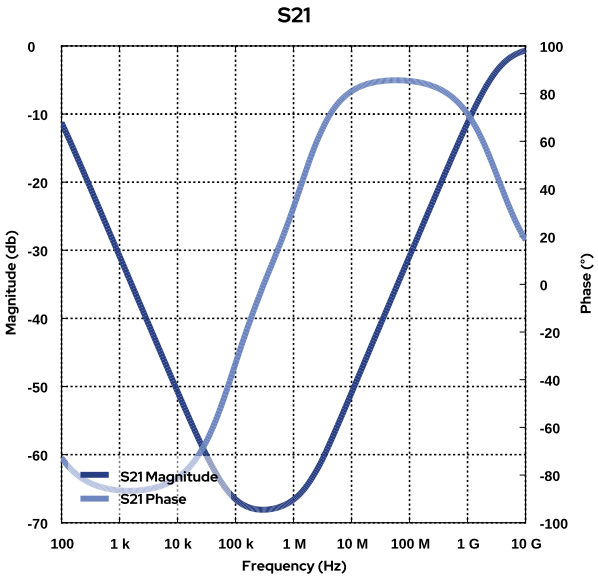





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**These are simulations.**

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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RM4A(025)-185X70T0800 LDEDD4100KA0N00 RSBEC1470AA00K T498X106K050ATE500 GTX-2200-Y0X C0805X221M5RACTU R66ID3220AA7AK EXV227M050A9PAA SNT-D30T T350A104K035AT C0603C273K1RACTU SN8S-40P2 C0603C470K5RACAUTO C0805C339D5GACTU PEH532RDG4180M2 SS26V-080350 C0603C160J5GACTU C0603X339C5GACTU C0805C473K2RACTU CBR04C339B5GAC CBR04C808B5GAC SBC4-471-491 T496X227K010ATE500 C4AQLBU5160M11K CBR04C180F2GAC MPX1D1235L1R0 MPX1D1740L6R8 MPXV1D1054L100 C1206C222K2RACTU R413F1100CK00M