# Tantalum Product - **TPS** Low ESR Series

## PRODUCT SPECIFICATIONS :

| | | |
|---|---|---|
| Nominal Capacitance @ 120Hz | 10 µF | |
| Capacitance Tolerance (*) | K = ±10%; M = ±20% | |
| Rated Voltage DC ($V_R$) | ≤ 85°C | 6.3 V |
| Category Voltage DC ($V_C$) | ≤ 125°C | 4 V |
| Surge Voltage ($V_S$) | ≤ 85°C | 8 V |
| | ≤ 125°C | 5 V |
| Temperature Range | -55°C to +125°C | |
| Direct Leakage Current max. @ $V_R$ | 0.6 µA | |
| Dissipation Factor max. @ 120Hz | 8 % | |
| ESR max. @ 100kHz | 1.5 Ohm | |
| Typical weight (R case) | 10 mg | |



*Moisture sensitivity level: meets MSL 1*
*Reflow specification: meets J-STD-020 standard*
*For AEC-Q200 availability, please contact KYOCERA AVX*
*100% surge current tested*

RoHS COMPLIANT

LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT

*All technical data relates to an ambient temperature of +25°C, Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2V. DCL is measured at rated voltage after 5 minutes*

*The EIA and CECC standards for low ESR solid Tantalum capacitors allow an ESR movement to 1.25 times catalogue limit post mounting*

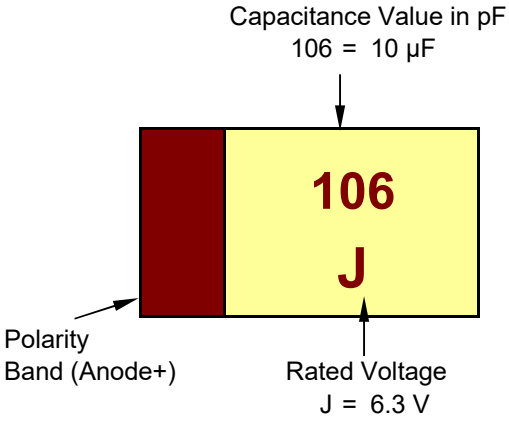
*KYOCERA AVX reserves the rights to supply higher voltage rating in the same case size, to the same reliability standards*

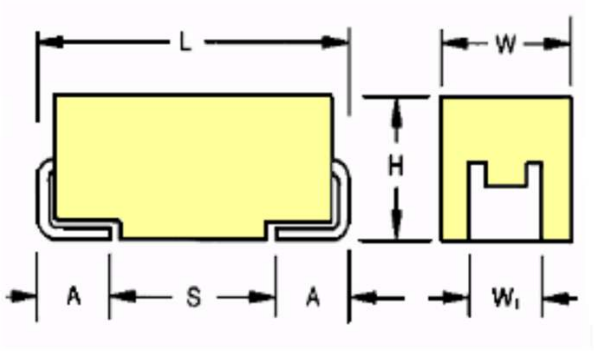
| RMS value of Ripple Current (mA) @100kHz | | | RMS value of Ripple Voltage (mV) @100kHz | | |
|---|---|---|---|---|---|
| 25˚C | 85˚C | 125˚C | 25˚C | 85˚C | 125˚C |
| 191 | 172 | 77 | 287 | 259 | 115 |

## HOW TO ORDER:

| TPS | R | 106 | * | 006 | # | 1500 |
|---|---|---|---|---|---|---|
| Type | Case code | Capacitance Value | Cap. Tolerance | Rated DC | Packaging | ESR in mOhms |

## DRAWING AND DIMENSIONS:



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## CASE DIMENSIONS: millimetres

| Case | | | | | | | |
|---|---|---|---|---|---|---|---|
| EIA | Size | L ±0.2 | W +0.2 –0.1 | H max. | A +0.3 –0.2 | S min. | W1 ±0.1 |
| 2012-12 | R | 2.05 | 1.3 | 1.2 | 0.5 | 0.85 | 1.0 |

## PACKAGING INFORMATION:

| Reel Size (#) | R = 7" Reel<br>Pure Tin Termination | S = 13" Reel<br>Pure Tin Termination | A = 7" Reel<br>Gold Plated Termination | B = 13" Reel<br>Gold Plated Termination |
|---|---|---|---|---|
| Quantity | 2500 | 10000 | 2500 | 10000 |
| Tape Width | 8 mm | 8 mm | 8 mm | 8 mm |

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