

# Tantalum Product - TPS Low ESR Series

## PRODUCT SPECIFICATIONS :

|                                     |                              |      |
|-------------------------------------|------------------------------|------|
| Nominal Capacitance @ 120Hz         | 470 $\mu$ F                  |      |
| Capacitance Tolerance (*)           | K = $\pm$ 10%; M = $\pm$ 20% |      |
| Rated Voltage DC ( $V_R$ )          | $\leq$ 85°C                  | 10 V |
| Category Voltage DC ( $V_C$ )       | $\leq$ 125°C                 | 7 V  |
| Surge Voltage ( $V_S$ )             | $\leq$ 85°C                  | 13 V |
|                                     | $\leq$ 125°C                 | 8 V  |
| Temperature Range                   | -55°C to +125°C              |      |
| Direct Leakage Current max. @ $V_R$ | 47 $\mu$ A                   |      |
| Dissipation Factor max. @ 120Hz     | 10 %                         |      |
| ESR max. @ 100kHz                   | 0.2 Ohm                      |      |
| Typical weight (E case)             | 512 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

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

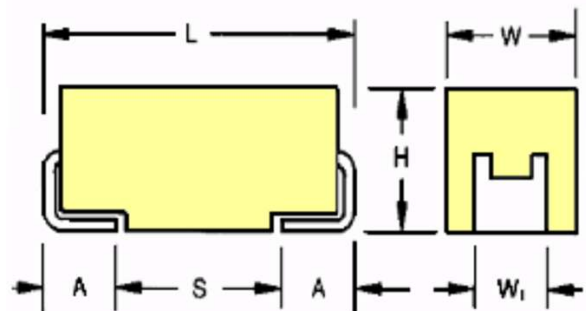
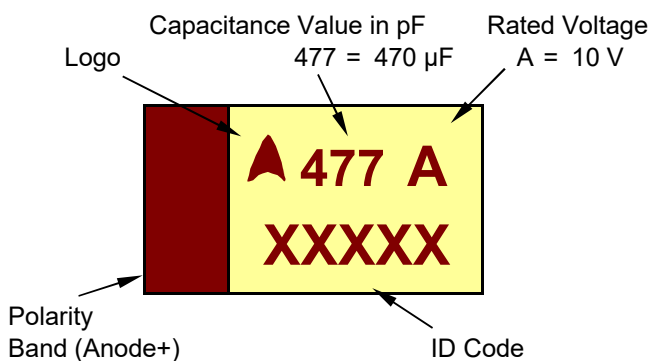
The EIA and CECC standards for low ESR solid Tantalum capacitors allow an ESR movement to 1.25 times catalogue limit post mounting KYOCERA AVX reserves the rights to supply higher voltage rating in the same case size, to the same reliability standards

| RMS value of Ripple Current (mA)<br>@100kHz |      |       | RMS value of Ripple Voltage (mV)<br>@100kHz |      |       |
|---|------|-------|---|------|-------|
| 25°C  | 85°C | 125°C | 25°C  | 85°C | 125°C |
| 908   | 817  | 363   | 182   | 163  | 73    |

## HOW TO ORDER:

|            |           |                   |                |            |           |              |
|------------|-----------|-------------------|----------------|------------|-----------|--------------|
| <b>TPS</b> | <b>E</b>  | <b>477</b>        | <b>*</b>       | <b>010</b> | <b>#</b>  | <b>0200</b>  |
|            |           |                   |                |            |           |              |
| Type       | Case code | Capacitance Value | Cap. Tolerance | Rated DC   | Packaging | ESR in mOhms |

## DRAWING AND DIMENSIONS:



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## CASE DIMENSIONS: millimetres

| Case    |      | L ±0.2 | W +0.2 -0.1 | H +0.2 -0.1 | A +0.3 -0.2 | S min. | W1 ±0.2 |
|---------|------|--------|-------------|-------------|-------------|--------|---------|
| EIA     | Size |        |             |             |             |        |         |
| 7343-43 | E    | 7.3    | 4.3         | 4.1         | 1.3         | 4.4    | 2.4     |

## 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      | 400                                 | 1500                                 | 400                                    | 1500                                    |
| Tape Width    | 12 mm                               | 12 mm                                | 12 mm                                  | 12 mm                                   |

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