

# TANTALUM CAPACITORS M34



## **Surface-Mount Wet Tantalum Capacitors**

## **KEY BENEFITS**

- Molded, surface-mount design
- Internal all-tantalum hermetic cell
- Tin/lead or 100 % tin (RoHS-compliant) terminations
- All axial leaded SuperTan<sup>®</sup> "T1" case size ratings
- Maximum capacitance range: 120  $\mu F$  / 25 V to 10  $\mu F$  / 125 V

## **APPLICATIONS**

• AMS (avionics, military, space) power supplies



## Wet Tantalum Capacitors Surface Mount, Molded Case



## **PERFORMANCE CHARACTERISTICS**

**Operating Temperature:** - 55  $^{\circ}$ C to + 85  $^{\circ}$ C. (To + 125  $^{\circ}$ C with voltage derating.)

Capacitance Tolerance: At 120 Hz, + 25 °C,  $\pm$  20 % standard,  $\pm$  10 %

**DC Leakage Current (DCL Max.):** At + 25 °C and above: Leakage current shall not exceed the values listed in the Standard Ratings Tables.

**Life Test:** Capacitors are capable of withstanding a 2000 h life test at a temperature of + 85 °C or + 125 °C at the applicable rated DC working voltage.

### Following life test:

- 1. DCL, measured at + 85 °C rated voltage, shall not be in excess of the original requirement.
- 2. The equivalent series resistance shall not exceed 150 % of the initial requirement.
- 3. Change in capacitance shall not exceed 10 % from the initial measurement.

## **FEATURES**

 Terminations: standard tin/lead (SnPb), 100 % tin (RoHS compliant) terminations available

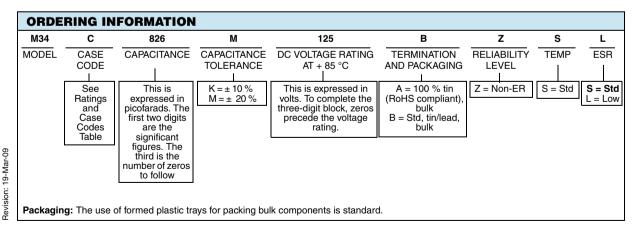


ROHS

- Very high capacitance, 10 μF to 470 μF
   6 V to 125 V. 55 °C to + 125 °C
- Very low ESR
- · High ripple current capability
- Low DCL
- Model M34 wet tantalum electrolytic chip capacitors incorporate the advantages of all the varieties of electrolytic capacitors and eliminate most of the disadvantages. These units have a transient reverse voltage capability and a higher ripple current capability than any other electrolytic type with similar combinations of capacitance and case size.
- Compliant to RoHS directive 2002/95/EC

#### **APPLICATION NOTES**

- a) No continuous reverse voltage permissible.
- b) Transient reverse voltage surges are acceptable under the following conditions:
  - The peak reverse voltage does not exceed 1.5 V and the peak current times the duration of the reverse transient does not exceed 0.05 As. In addition, the repetition frequency of the reverse voltage surge is less than 10 Hz.
- c) The peak of the applied AC ripple and the applied DC voltage must not exceed the DC voltage rating of the capacitor.



<sup>\*</sup> Pb containing terminations are not RoHS compliant, exemptions may apply

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