# WET TANTALUM CAPACITORS

T18

## Wet Tantalum Capacitors, Ultra High Capacitance, Glass Tantalum Hermetic Seal for -55 °C to +125 °C Operation


### KEY BENEFITS

- Higher capacitance
- Greater reverse voltage capability: 1.5 V
- Extended thermal shock capability: 300 shocks
- Greater vibration capability: 80 *g* sine, 53.79 *g* random
- Temperature range of -55 °C to +85 °C, to +125 °C with voltage derating
- Low ESR down to 0.35 Ω at 120 Hz and +25 °C

### APPLICATIONS

- Avionics
- Military
- Space

### RESOURCES

- Datasheet: T18 - www.vishay.com/ppg?40161
- For technical questions contact tantalum@vishay.com
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free Available
RoHS* Available
HALOGEN FREE
GREEN (5-2008) Available

A WORLD OF SOLUTIONS™

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## FEATURES

- Enhanced performance, high reliability design
- Terminations: axial, standard tin / lead (SnPb), 100 % tin available
- Model T18 tantalum-case electrolytic capacitors provide all the advantages of Vishay's SuperTan® series devices, while offering improved reverse voltage and vibration capability
- Increased thermal shock capability of 300 cycles
- Designed for the avionics and aerospace applications
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

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**Note**

* This datasheet provides information about parts that are RoHS-compliant and / or parts that are non RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details

## PERFORMANCE CHARACTERISTICS

Refer to: Typical Performance Characteristics

**Operating Temperature:** -55 °C to +85 °C
(to +125 °C with voltage derating)

**Capacitance Tolerance:** ± 10 %, ± 20 % standard

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

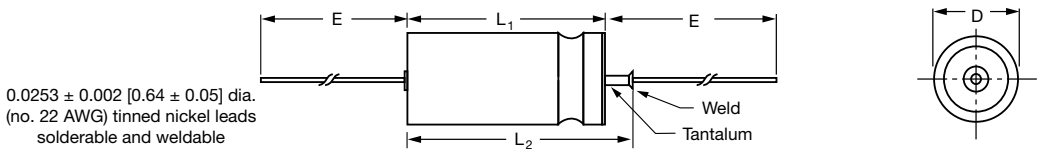
## ORDERING INFORMATION

| T18 | D | 108 | M | 075 | E | Z | S | S |
|---|---|---|---|---|---|---|---|---|
| MODEL | CASE CODE | CAPACITANCE | CAPACITANCE TOLERANCE | DC VOLTAGE RATING AT +85 °C | TERMINATION AND PACKAGING | RELIABILITY / SHOCK / VIBRATION LEVEL | INSULATING SLEEVE | ESR |
| | See Ratings and Case Codes table | This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow | K = ± 10 %<br>M = ± 20 % | This is expressed in volts. To complete the three-digit block, zeros precede the voltage rating | E = tin / lead, bulk, standard<br>C = 100 % tin, bulk | Z = standard<br>H = high | S = sleeved<br>U = unsleeved | S = standard<br>L = low |

**Note**

- Packaging: the use of formed plastic trays for packing bulk components is standard

## DIMENSIONS in inches [millimeters]




| CASE CODE | | D | $L_1$ | $L_2$ (max.) | E | WEIGHT (g) (max.) |
|---|---|---|---|---|---|---|
| TYPE T18 | ST | | | | | |
| A | T1 | 0.188 ± 0.016 [4.78 ± 0.41] | 0.453 + 0.031 / - 0.016 [11.51 + 0.79 / - 0.41] | 0.734 [18.64] | 1.500 ± 0.250 [38.10 ± 6.35] | 2.6 |
| B | T2 | 0.281 ± 0.016 [7.14 ± 0.41] | 0.641 + 0.031 / - 0.016 [16.28 + 0.79 / - 0.41] | 0.922 [23.42] | 2.250 ± 0.250 [57.15 ± 6.35] | 6.2 |
| C | T3 | 0.375 ± 0.016 [9.52 ± 0.41] | 0.766 + 0.031 / - 0.016 [19.46 + 0.79 / - 0.41] | 1.047 [26.59] | 2.250 ± 0.250 [57.15 ± 6.35] | 11.6 |
| D | T4 | 0.375 ± 0.016 [9.52 ± 0.41] | 1.062 + 0.031 / - 0.016 [26.97 + 0.79 / - 0.41] | 1.343 [34.11] | 2.250 ± 0.250 [57.15 ± 6.35] | 17.7 |

**Note**

- For insulated parts, add 0.015" [0.38 mm] to the diameter. The insulation shall lap over the ends of the capacitor body

Revision 16-Jun-09