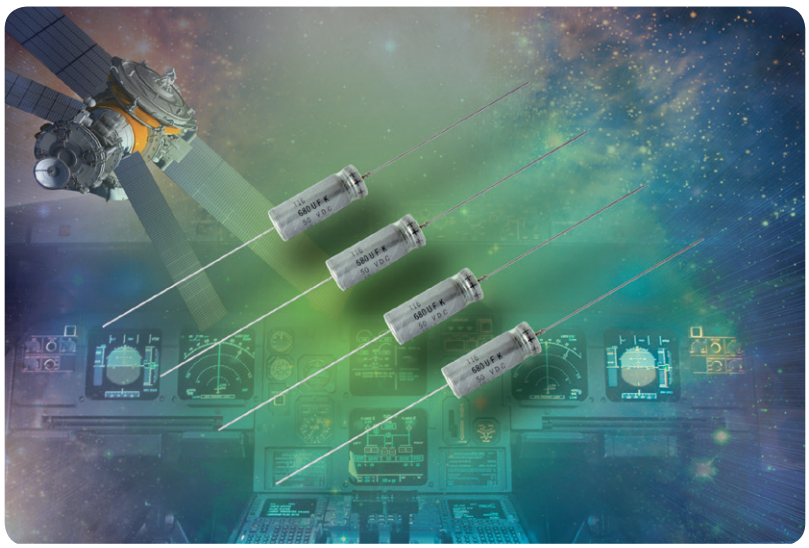
WET TANTALUM CAPACITORS

DLA 13017 / T16

Wet Tantalum, Axial Leaded, Tantalum Case, Extended Capacitance, Enhanced Performance



KEY BENEFITS

- Higher capacitance
- Greater reverse voltage capability
- Extended thermal shock capability
- Greater vibration capability
- Temperature range of –55 °C to +85 °C, to +125 °C with voltage derating
- Low ESR down to 0.70 Ω at 120 Hz and +25 °C

APPLICATIONS

- Power supplies for space and avionics applications
- Timing
- Filtering
- Energy hold-up
- Pulse power

RESOURCES

- Datasheet: T16 - www.vishay.com/doc?40139
  DLA 13017 - www.vishay.com/doc?40167
- For technical questions contact tantalum@vishay.com
- Material categorization: For definitions of compliance, please see www.vishay.com/doc?99912

Pb-free Available

One of the World's Largest Manufacturers of
Discrete Semiconductors and Passive Components

Capacitors - Higher Capacitance, Enhanced Performance

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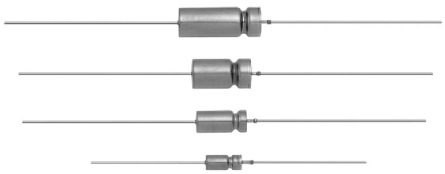


FEATURES

- Enhanced performance, high reliability design
- Terminations: Axial, standard tin/lead (SnPb) plated
- The 13017 tantalum-case electrolytic capacitors provide all the advantages of Vishay's SuperTan® series devices, while offering improved reverse voltage and vibration capabilities
- Increased thermal shock capability of 300 cycles
- Mounting: Through-hole
- Designed for the avionics and aerospace applications

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

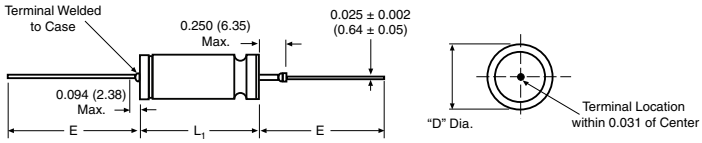
DC Leakage Current (DCL Max.): At +25 °C and above, leakage current shall not exceed the values listed in the Standard Ratings table.

ORDERING INFORMATION

13017	-01	K	S
DLA DRAWING NUMBER	DASH NUMBER	CAPACITANCE TOLERANCE	
		K = ± 10 % M = ± 20 %	S = Sleeved U = Unsleeved

DLA LAND AND MARITIME COLUMBUS, OHIO	Drawing no. 13017

DIMENSIONS in inches [millimeters]



CASE CODE	D ± 0.016 [0.41]	D MAX. INSULATED (DIA.)	L_1 UNINSULATED +0.031 [0.79] -0.016 [0.41]	E ± 0.250 [6.35] MAX.
T1	0.188 [4.78]	0.219 [5.56]	0.453 [11.51]	1.500 [38.10]
T2	0.281 [7.14]	0.312 [7.92]	0.641 [16.28]	2.250 [57.15]
T3	0.375 [9.52]	0.406 [10.31]	0.766 [19.46]	2.250 [57.15]
T4	0.375 [9.52]	0.406 [10.31]	1.062 [26.97]	2.250 [57.15]

Note

- Insulation sleeving will lap over the ends of the capacitor body.

MECHANICAL CHARACTERISTICS

ITEM	CONDITION	COMMENTS
Shock (Specified Pulse)	MIL-STD-202, method 213, condition I (100 *g*)	The capacitors shall meet the requirements of MIL-PRF-39006.
Vibration, High Frequency	MIL-STD-202, method 204, condition E (50 *g* peak)	The capacitors shall meet the requirements of MIL-PRF-39006.
Random Vibration	MIL-STD-202, method 214, condition II-G (overall RMS 27.78 *g*)	The capacitors shall meet the requirements of MIL-PRF-39006.
Thermal Shock	MIL-STD-202, method 107, condition A	Thermal shock shall be in accordance with MIL-PRF-39006 when tested for 300 cycles.
Solderability	MIL-STD-202, method 208, ANSI/J-STD-002, test A	Solderability shall be in accordance with MIL-PRF-39006.
Terminal Strength	MIL-STD-202, method 211	Terminal strength shall be in accordance with MIL-PRF-39006.
Resistance to Solder Heat	MIL-STD-202, method 210, condition C	The capacitors shall meet the requirements of MIL-PRF-39006.
Terminals	MIL-STD-1276	Terminals shall be as specified in MIL-STD-1276. The length and diameter of the terminals shall be as specified in Dimensions table. All terminals shall be permanently secured internally and externally, as applicable. All external joints shall be welded.
Marking	MIL-STD-1285	Marking of capacitors conforms to method I of MIL-STD-1285 and include capacitance (in µF), capacitance tolerance letter, rated voltage, date code, lot symbol and Vishay trademark.

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