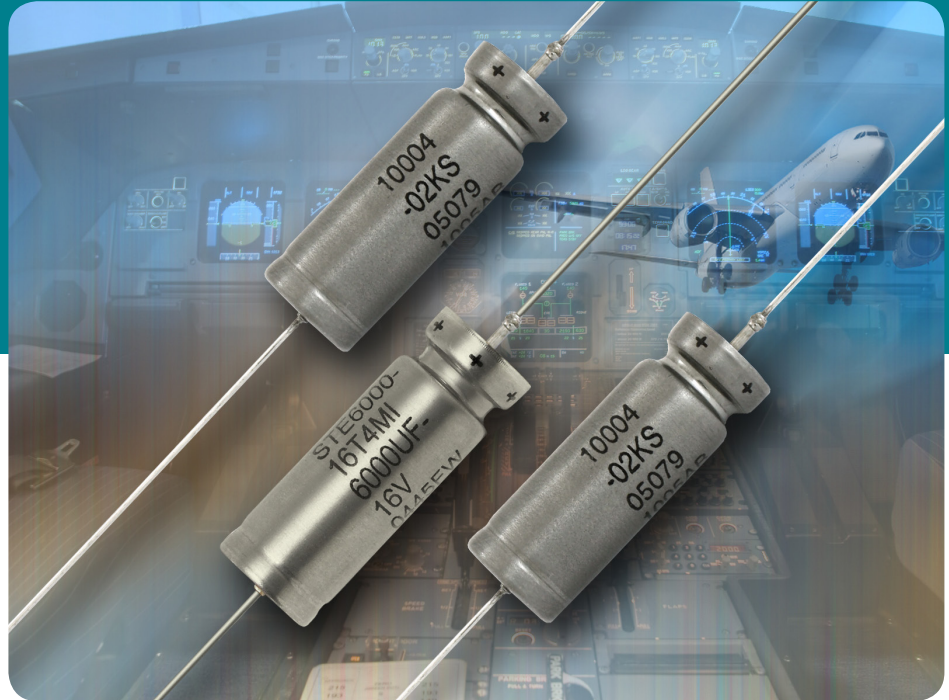




WET TANTALUM CAPACITOR

STE/DSCC 10004



SuperTan[®] Extended Capacitors, Wet Tantalum with Hermetic Seal

Key Benefits

- Temperature range of - 55 °C to + 85 °C, to + 125 °C with voltage derating
- Maximum ESR from 0.25 Ω to 1.5 Ω at + 120 Hz
- 180 μ F to 10 000 μ F capacitance range
- Capacitance tolerances of \pm 20 % standard at 120 Hz and + 25 °C
 - Tolerances of \pm 10 % available

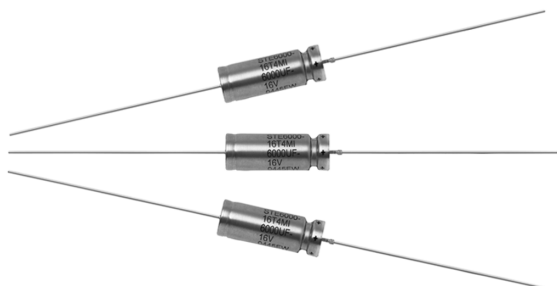
APPLICATIONS

- Low-voltage filtering and energy storage applications
- High-stress military and aerospace systems including:
 - Weapon systems
 - Radars
 - Transponders
 - Power supplies

Datasheet is available on our web site at www.vishay.com
for STE - <http://www.vishay.com/doc?43009>
for DSCC 10004 - <http://www.vishay.com/doc?40137>



SuperTan® Extended Capacitors, Wet Tantalum with Hermetic Seal



FEATURES

Vishay SuperTan® Extended (STE/DSCC 10004) represents a major breakthrough in wet tantalum capacitor technology. Its unique cathode system, also used in the ST, provides the highest capacitance per unit volume available. The STE/DSCC 10004 combines the inherent reliability of wet tantalum with the capacitance stability of solid tantalum, and there are no circuit impedance restrictions. The range is exceptionally well suited for low voltage filtering and energy storage applications. Ideal for designs targeting the military and aerospace industry.



Available
RoHS*
COMPLIANT

PERFORMANCE CHARACTERISTICS

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

Capacitance Tolerance: At 120 Hz, + 25 °C. ± 20 % standard. ± 10 % available as special.

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 at the applicable rated DC working voltage.

The SuperTan® Extended (STE/DSCC 10004) is housed in an all tantalum, hermetically sealed case and is manufactured to withstand high stress and hazardous environments.

- Terminations: Standard tin/lead (Sn/Pb) 100 % tin available terminations
- Compliant to RoHS directive 2002/95/EC

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

Notes

- Material at egress is tantalum
- Insulation sleeving will lap over the ends of the capacitor case
- Tinned nickel leads, solderable and weldable

Approx. Weight

T1: 2.3 g, T2: 5.7 g
T3: 9.4 g, T4: 14.8 g

ORDERING INFORMATION						
STE	6000	16	T4	M	I	E3
TYPE	CAPACITANCE µF	DC VOLTAGE RATING AT + 85 °C	CASE SIZE	CAPACITANCE TOLERANCE	INSULATING SLEEVE	RoHS COMPLIANT
				M = ± 20 % K = ± 10 %	I = Insulated X = Uninsulated	E3 = 100 % tin termination (RoHS compliant) Blank = SnPb termination (standard design)

Note

Packaging: The use of formed plastic trays for packaging this type of axial lead component is standard. Tape and reel is not recommended due to the unit weight.

ORDERING INFORMATION			
10004	-29	K	S
DSCC DRAWING NUMBER	DASH NUMBER	CAPACITANCE TOLERANCE	
		K = ± 10 %; M = ± 20 %	S = Sleeved; U = Unsleeved
DEFENSE SUPPLY CENTER, COLUMBUS COLUMBUS, OHIO		DRAWING NO. 10004	

* Pb containing terminations are not RoHS compliant, exemptions may apply

DISCLAIMER All product specifications and data are subject to change without notice. Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product. Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications. Product names and markings noted herein may be trademarks of their respective owners.

Build Vishay into your Design