TANTALUM CAPACITORS

TH5

HI TMP® Solid Tantalum Surface-Mount Capacitors TANTAMOUNT®, Molded Case, - 55 °C to + 200 °C

KEY BENEFITS

- Application voltage: 12 V, 21 V at + 200 °C **(no further voltage derating required)**
- Capacitance value: 10 µF at 21 V or 12 V
- 500 h continuous operation at + 200 °C
- 100 % surge current tested
- High reliability
- EIA 7343-43 molded package
- Compliant to RoHS Directive 2002/95/EC
- Gold plated terminations

APPLICATIONS

- Oil and petroleum applications
- High-temperature sensing and drilling systems
- Industrial applications
- Safety critical industrial tools and products
- Automotive applications

Datasheet is available on our web site at www.vishay.com
for TH5 - http://www.vishay.com/doc?40146

HI TMP® Solid Tantalum Surface-Mount Capacitors TANTAMOUNT®, Molded Case, - 55 °C to + 200 °C

FEATURES

- Application voltage: 12 V, 21 V at + 200 °C **(no further voltage derating required)**
- Operating temperature up to + 200 °C
- 500 h continuous operation at V_R
- High reliability
- Gold plated terminations
- Standard EIA 535BAAC case size (E)
- 100 % surge current tested
- Compliant to RoHS Directive 2002/95/EC

Pb-free
RoHS COMPLIANT

PERFORMANCE/ELECTRICAL CHARACTERISTICS

Operating Temperature: - 55 °C to + 200 °C

Note
- Refer to doc. 40088

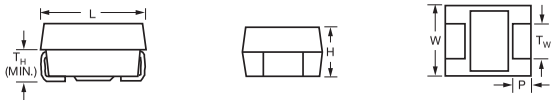
Capacitance Range: 10 µF
Capacitance Tolerance: ± 10 %, ± 20 %
Voltage Rating: 12 V_{DC}, 21 V_{DC}

ORDERING INFORMATION

TH5 TYPE	E CASE CODE	106 CAPACITANCE	K CAPACITANCE TOLERANCE	021 DC VOLTAGE RATING AT + 85 °C	B TERMINATION/ PACKAGING	1000 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 % M = ± 20 %	This is expressed in V. To complete the three-digit block, zeros precede the voltage rating.	A = Gold/ 7" (178 mm) reels B = Gold/ 13" (330 mm), reels Other (1)	Maximum 100 kHz ESR 0500 = 500 mΩ 5000 = 5 Ω 10R0 = 10.0 Ω

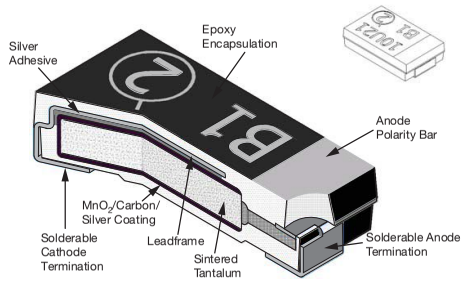
Note
(1) Other termination on request

DIMENSIONS in inches [millimeters]

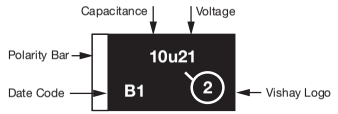


CASE CODE	EIA SIZE	L	W	H	P	T_W	T_H (MIN.)
E	7343-43	0.287 ± 0.012 [7.3 ± 0.30]	0.170 ± 0.012 [4.3 ± 0.30]	0.158 ± 0.012 [4.0 ± 0.30]	0.051 ± 0.012 [1.3 ± 0.30]	0.095 ± 0.004 [2.4 ± 0.10]	0.039 [1.0]

CONSTRUCTION AND MARKING



Gold Termination



TH5 Standard Marking
Case Sizes "E"

Marking:
Capacitor marking includes an anode (+) polarity band, capacitance in microfarads and the voltage rating.
The Vishay Sprague® trademark is included if space permits. A manufacturing date code is marked on all capacitors. Call the factory for further explanation.

RATINGS AND PART NUMBER REFERENCE

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE at + 25 °C (µA)	TYPICAL DC LEAKAGE at + 200 °C (µA)	MAX. DF at + 25 °C (%)	MAX. ESR at + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{RMS} (A)
12 V_{DC} AT + 200 °C (No voltage derating required)							
10	E	TH5E106(1)012(2)1000	1.2	60	6	1000	0.41
21 V_{DC} AT + 200 °C (No voltage derating required)							
10	E	TH5E106(1)021(2)1000	2.1	120	6	1000	0.41

Notes
(1) Capacitance tolerance codes: K, M
(2) Terminations and packaging: A, B

Revision 02-Mar-11

Build Vishay into your Design