Solid Tantalum Chip Capacitors
TANTAMOUNT® High Temperature, Molded Case

FEATURES

- Operating Temperature up to 150 °C with 50 % voltage derating
- High Reliability
- RoHS compliant terminations available: Matte Tin or Gold
- Standard EIA 535BAAC case sizes (A through E)
- 100 % Surge Current Tested (B, C, D, E case sizes)
- Compliant Terminations

Pb-free Available

RoHS* COMPLIANT

PERFORMANCE/ELECTRICAL CHARACTERISTICS

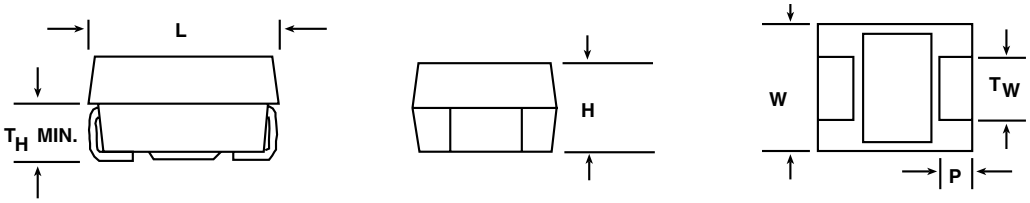
Operating Temperature: - 55 °C to + 150 °C
Note: Refer to doc. 40088
Capacitance Range: 0.33 µF to 100 µF
Capacitance Tolerance: ± 20 %, ± 10 % standard
Voltage Rating: 10 WVDC to 50 WVDC

ORDERING INFORMATION

TH3	D	106	K	035	C	T150
TYPE	CASE CODE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT + 85 °C	TERMINATION AND PACKAGING	SPECIAL REQUIREMENTS
	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 volts. To complete the three-digit block, zeros precede the voltage rating. A decimal point is indicated by an "R" (6R3 = 6.3 volts).	A: Gold/7" (178 mm) reels B: Gold/13" (330 mm) reels C: Matte Tin/7" (178 mm) reels D: Matte Tin/13" (330 mm) reels E: Sn/Pb Solder/7" (178 mm) reels F: Sn/Pb Solder/13" (330 mm) reels	Additional characters are added for special requirements

Note: We reserve the right to supply higher voltage ratings and tighter capacitance tolerance capacitors in the same case size. Voltage substitutions will be marked with the higher voltage rating.

DIMENSIONS in inches [millimeters]



CASE CODE	EIA SIZE	L	W	H	P	T_W	T_H (MIN.)
A	3216-18	0.126 ± 0.008 [3.2 ± 0.20]	0.063 ± 0.008 [1.6 ± 0.20]	0.063 ± 0.008 [1.6 ± 0.20]	0.031 ± 0.012 [0.80 ± 0.30]	0.047 ± 0.004 [1.2 ± 0.10]	0.028 [0.70]
B	3528-21	0.138 ± 0.008 [3.5 ± 0.20]	0.110 ± 0.008 [2.8 ± 0.20]	0.075 ± 0.008 [1.9 ± 0.20]	0.031 ± 0.012 [0.80 ± 0.30]	0.087 ± 0.004 [2.2 ± 0.10]	0.028 [0.70]
C	6032-28	0.236 ± 0.012 [6.0 ± 0.30]	0.126 ± 0.012 [3.2 ± 0.30]	0.098 ± 0.012 [2.5 ± 0.30]	0.051 ± 0.012 [1.3 ± 0.30]	0.087 ± 0.004 [2.2 ± 0.10]	0.039 [1.0]
D	7343-31	0.287 ± 0.012 [7.3 ± 0.30]	0.170 ± 0.012 [4.3 ± 0.30]	0.110 ± 0.012 [2.8 ± 0.30]	0.051 ± 0.012 [1.3 ± 0.30]	0.095 ± 0.004 [2.4 ± 0.10]	0.039 [1.0]
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]

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

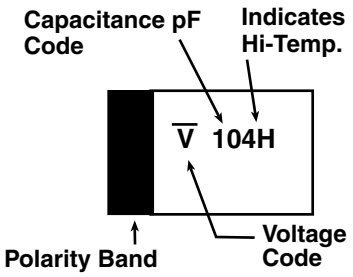
RATINGS AND CASE CODES

µF	10 V	16 V	20 V	25 V	35 V	50 V
0.33					*A	
0.47						
0.68						
1.0		A	A	A/*B	*B	*C
1.5					*C	
2.2	A	A	A/*B	B	C	
3.3		A/B		C	*C	
4.7	*B	*B	*C	*C	*C/D	D
6.8		*C			*D	
10	*C	*C	*C	*C/D	D	
15			D	D	D	
22		D	D	D	E	
33	D	D	D	D		
47	D	D				
68	D	D				
100		E				

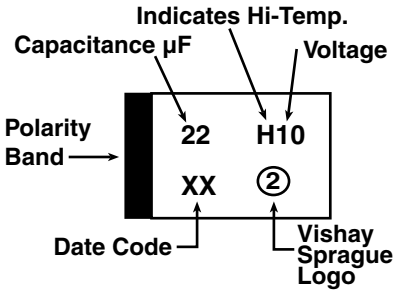
* Preliminary values. Contact factory for availability.

CONSTRUCTION AND MARKING

MARKING



A Case Size



B, C, D, E Case Sizes

STANDARD/EXTENDED RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ohms)	MAX. RIPPLE 100 kHz Irms (Amps)
10 WVDC AT + 85 °C, 7 WVDC AT + 125 °C, 5 WVDC AT + 150 °C						
2.2	A	TH3A225(1)010(2)	0.5	6	6.30	0.11
4.7	B	TH3B475(1)010(2)	0.5	6	3.40	0.16
10	C	TH3C106(1)010(2)	1.0	6	1.80	0.25
33	D	TH3D336(1)010(2)	3.3	6	0.80	0.43
47	D	TH3D476(1)010(2)	4.7	6	0.70	0.46
68	D	TH3D686(1)010(2)	6.8	6	0.70	0.46
16 WVDC AT + 85 °C, 10 WVDC AT + 125 °C, 8 WVDC AT + 150 °C						
1	A	TH3A105(1)016(2)	0.5	4	9.30	0.09
2.2	A	TH3A225(1)016(2)	0.5	6	5.90	0.11
3.3	A	TH3A335(1)016(2)	0.5	6	5.00	0.12
3.3	B	TH3B335(1)016(2)	0.5	6	3.50	0.16
4.7	B	TH3B475(1)016(2)	0.8	6	2.90	0.17
6.8	C	TH3C685(1)016(2)	1.1	6	1.90	0.24
10	C	TH3C106(1)016(2)	1.6	6	1.80	0.25
22	D	TH3D226(1)016(2)	3.5	6	0.80	0.43
33	D	TH3D336(1)016(2)	5.3	6	0.70	0.46
47	D	TH3D476(1)016(2)	7.5	6	0.70	0.46
68	D	TH3D686(1)016(2)	10.9	6	0.60	0.50
100	E	TH3E107(1)016(2)	16.0	8	0.60	0.52
20 WVDC AT + 85 °C, 13 WVDC AT + 125 °C, 10 WVDC AT + 150 °C						
1	A	TH3A105(1)020(2)	0.5	4	8.40	0.09
2.2	A	TH3A225(1)020(2)	0.5	6	5.90	0.11
2.2	B	TH3B225(1)020(2)	0.5	6	3.50	0.16
4.7	C	TH3C475(1)020(2)	0.9	6	2.30	0.22
10	C	TH3C106(1)020(2)	2.0	6	1.70	0.25
15	D	TH3D156(1)020(2)	3.0	6	0.90	0.41
22	D	TH3D226(1)020(2)	4.4	6	0.70	0.46
33	D	TH3D336(1)020(2)	6.6	6	0.70	0.46
25 WVDC AT + 85 °C, 17 WVDC AT + 125 °C, 12.5 WVDC AT + 150 °C						
1	A	TH3A105(1)025(2)	0.5	4	7.60	0.11
1	B	TH3B105(1)025(2)	0.5	4	5.00	0.13
2.2	B	TH3B225(1)025(2)	0.6	6	3.80	0.15
3.3	C	TH3C335(1)025(2)	0.8	6	2.30	0.22
4.7	C	TH3C475(1)025(2)	1.2	6	2.00	0.24
10	C	TH3C106(1)025(2)	2.5	6	1.50	0.27
10	D	TH3D106(1)025(2)	2.5	6	1.00	0.39
15	D	TH3D156(1)025(2)	3.8	6	0.80	0.43
22	D	TH3D226(1)025(2)	5.5	6	0.70	0.46
33	D	TH3D336(1)025(2)	8.3	6	0.70	0.46
35 WVDC AT + 85 °C, 23 WVDC AT + 125 °C, 17.5 WVDC AT + 150 °C						
0.33	A	TH3A334(1)035(2)	0.5	4	13.00	0.08
1	B	TH3B105(1)035(2)	0.5	4	5.00	0.13
1.5	C	TH3C155(1)035(2)	0.5	6	3.80	0.17
2.2	C	TH3C225(1)035(2)	0.8	6	2.90	0.20
3.3	C	TH3C335(1)035(2)	1.2	6	2.10	0.23
4.7	C	TH3C475(1)035(2)	1.6	6	1.90	0.24
4.7	D	TH3D475(1)035(2)	1.6	6	1.30	0.34
6.8	D	TH3D685(1)035(2)	2.4	6	1.10	0.37
10	D	TH3D106(1)035(2)	3.5	6	0.80	0.43
15	D	TH3D156(1)035(2)	5.3	6	0.70	0.46
22	E	TH3E226(1)035(2)	7.7	6	0.60	0.52
50 WVDC AT + 85 °C, 33 WVDC AT + 125 °C, 25 WVDC AT + 150 °C						
1	C	TH3C105(1)050(2)	0.5	4	4.60	0.16
4.7	D	TH3D475(1)050(2)	2.4	6	1.20	0.37

(1) Capacitance Tolerance: K, M
(2) Termination and Packaging: A, B, C, D, E, F

Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.