

vPolyTan™ Solid Tantalum Surface-Mount Chip Capacitors, Molded Case, High Performance Polymer Type



KEY BENEFITS

- Low ESR from 500 mΩ down to 12 mΩ
- Requires only 10 % to 20 % derating (20 % for $V_R \geq 16$ V)
- Case sizes: J (1608-09), P (2012-12), A (3216-18), B (3528-21), T (3528-12), Z (7343-19), V (7343-20), and D (7343-30)
- Capacitance from 3.3 μ F to 680 μ F
- Voltage from 2.5 V to 63 V
- RoHS-compatible

APPLICATIONS

- Laptop computers and tablets
- Smartphones
- Wireless cards, SSD
- USB port decoupling, USB Type-C hub
- Computer servers

RESOURCES

- Datasheet: T55 - www.vishay.com/doc?40174
- For technical questions contact tantalum@vishay.com
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912



HALOGEN
FREE

GREEN
(5-2008)

RoHS
COMPLIANT

A **WORLD OF**
SOLUTIONS™

vPolyTan™ Solid Tantalum Surface-Mount Chip Capacitors, Molded Case, High-Performance Polymer Type



FEATURES

- Ultra-low ESR
- Molded case available in 8 case codes
- Terminations:
cases J, P: 100 % tin
case A: 100 % tin or Ni / Pd / Au
cases T, B, Z, V, D: Ni / Pd / Au
- Compatible with “high volume” automatic pick and place equipment
- Moisture sensitivity level 3
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

PERFORMANCE / ELECTRICAL CHARACTERISTICS

Operating Temperature: -55 °C to +105 °C
Capacitance Range: 3.3 μ F to 1000 μ F
Capacitance Tolerance: \pm 20 %
Voltage Rating: 2.5 V_{DC} to 63 V_{DC}

APPLICATIONS

- Decoupling, smoothing, filtering
- Bulk energy storage in wireless cards
- Infrastructure equipment
- Storage and networking
- Computer motherboards

ORDERING INFORMATION						
T55	B	156	M	6R3	C	0500
TYPE	CASE CODE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING	TERMINATION / PACKAGING	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.	M = \pm 20 %	2R5 = 2.5 V 004 = 4 V 6R3 = 6.3 V 010 = 10 V 12R = 12.5 V 016 = 16 V 020 = 20 V 025 = 25 V 035 = 35 V 050 = 50 V 063 = 63 V	C = lead (Pb)-free solderable coating, 7" reel	Maximum 100 kHz ESR in m Ω

RATINGS AND CASE CODES												
μ F	2.5 V	4.0 V	6.3 V	7.0 V	10 V	12.5 V	16 V	20 V	25 V	35 V	50 V	63 V
3.3			J / P		J / P							
4.7			J / P / A		P / A							D
6.8			P / A		A		B		B	B		
10		J / P / A	P / A		A		B		B	B	D	
15		P / A	A		A	T	B	B	B			
22	A	A / B	A / T / B		A / T / B		B			V / D		
33	A	A / B	A / T / B		A / T / B		V		V / D	D		
47	A	A / T / B	A / T / B		B		Z / V	Z / V				
68	A / B	A / T / B	T / B		V							
100	A / T / B	A / T / B	A / T / B / V	A	Z ⁽¹⁾ / V / D		V	D	D			
150	B	B / V	B / Z ⁽¹⁾ / V		V							
220	B / V	B / V / D	B / Z ⁽¹⁾ / V / D		Z ⁽¹⁾ / V / D							
330	B / V	V / D	Z ⁽¹⁾ / V / D		D							
470	B / V / D	D	V / D									
680		D										
1000	D ⁽¹⁾											

Note

(1) Rating in development, contact factory for availability

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