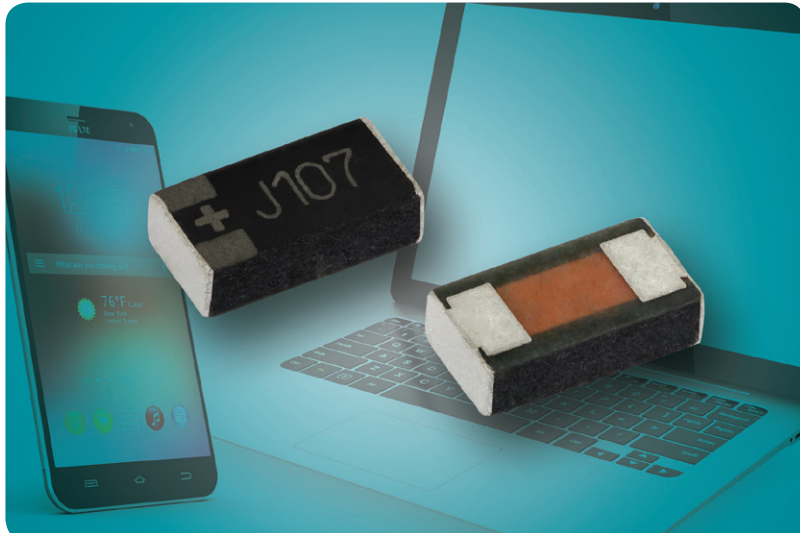


## vPolyTan™ Solid Tantalum Surface-Mount Chip Capacitors, Leadframeless Molded Polymer Type



### KEY BENEFITS

- Volumetric efficiency
  - Our package offers a 10 % improvement in space utilization over competing facedown technology
- Allows for higher capacitance density in our product as compared to competition
- Size reductions in end product designs
- Low ESR and impedance

### APPLICATIONS

- Power conversion and distribution in hand-held consumer electronics (e.g., smartphones, phablets, tables, ultra-thin laptops)
- Decoupling and bypass capacitors in audio amplifiers and pre-amplifiers

### RESOURCES

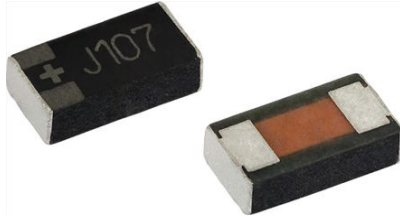
- Datasheet: T58 - [www.vishay.com/doc?40189](http://www.vishay.com/doc?40189)
- For technical questions contact [tantalum@vishay.com](mailto:tantalum@vishay.com)
- Material categorization: for definitions of compliance, please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS** HALOGEN **GREEN**  
COMPLIANT **FREE** (5-2008)

A **WORLD OF**  
**SOLUTIONS**

## vPolyTan™ Solid Tantalum Surface-Mount Chip Capacitors, Leadframeless Molded Polymer Type



### PERFORMANCE / ELECTRICAL CHARACTERISTICS

**Operating Temperature:** -55 °C to +105 °C (above 85 °C, voltage derating is required)

**Capacitance Range:** 10 µF to 330 µF

**Capacitance Tolerance:** ± 20 %

**Voltage Rating:** 4 V<sub>DC</sub> to 25 V<sub>DC</sub>

### FEATURES

- Low ESR
- Molded case available in eight case codes including 0603 and 0805 footprints
- Lead (Pb)-free L-shaped face-down terminations
- 8 mm tape and reel packaging available per EIA-481 standard
- Moisture sensitivity level 3
- Decoupling, smoothing, filtering
- Bulk energy storage in wireless cards
- Infrastructure equipment
- Storage and networking
- Computer motherboards
- Smartphones and tablets

### ORDERING INFORMATION

T58 TYPE	MM CASE CODE	106 CAPACITANCE	M CAPACITANCE TOLERANCE	6R3 DC VOLTAGE RATING AT +85 °C	C TERMINATION / PACKAGING	0300 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 = ± 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 V)	C = lead (Pb)-free solderable coating, 7" reel	Maximum 100 kHz ESR in mΩ

### DIMENSIONS in inches [millimeters]

CASE CODE	EIA SIZE	H (MAX.)	L	W	P1	P2 (REF.)	C
MM	1608-09	0.035 [0.9]	0.063 ± 0.008 [1.6 ± 0.2]	0.033 ± 0.008 [0.85 ± 0.2]	0.020 ± 0.004 [0.5 ± 0.1]	0.024 [0.6]	0.024 ± 0.004 [0.6 ± 0.1]
M0	1608-10	0.039 [1.0]	0.063 ± 0.008 [1.6 ± 0.2]	0.033 ± 0.008 [0.85 ± 0.2]	0.020 ± 0.004 [0.5 ± 0.1]	0.024 [0.6]	0.024 ± 0.004 [0.6 ± 0.1]
W9	2012-09	0.035 [0.9]	0.079 ± 0.008 [2.0 ± 0.2]	0.049 ± 0.008 [1.25 ± 0.2]	0.020 ± 0.004 [0.5 ± 0.1]	0.039 [1.0]	0.035 ± 0.004 [0.9 ± 0.1]
W0	2012-09	0.035 [0.9]	0.079 ± 0.008 [2.0 ± 0.2]	0.049 ± 0.008 [1.25 ± 0.2]	0.020 ± 0.004 [0.5 ± 0.1]	0.039 [1.0]	0.035 ± 0.004 [0.9 ± 0.1]
A0	3216-10	0.039 [1.0]	0.126 ± 0.008 [3.2 ± 0.2]	0.063 ± 0.008 [1.6 ± 0.2]	0.031 ± 0.004 [0.8 ± 0.1]	0.063 [1.6]	0.047 ± 0.004 [1.2 ± 0.1]
AA	3216-18	0.071 [1.8]	0.126 ± 0.008 [3.2 ± 0.2]	0.063 ± 0.008 [1.6 ± 0.2]	0.031 ± 0.004 [0.8 ± 0.1]	0.063 [1.6]	0.047 ± 0.004 [1.2 ± 0.1]
B0	3528-10	0.039 [1.0]	0.138 ± 0.008 [3.5 ± 0.2]	0.110 ± 0.008 [2.8 ± 0.2]	0.031 ± 0.008 [0.8 ± 0.2]	0.077 [1.95]	0.094 ± 0.004 [2.4 ± 0.1]
BB	3528-20	0.079 [2.0]	0.138 ± 0.008 [3.5 ± 0.2]	0.110 ± 0.008 [2.8 ± 0.2]	0.031 ± 0.008 [0.8 ± 0.2]	0.077 [1.95]	0.094 ± 0.004 [2.4 ± 0.1]

Revision 16-Dec-15