

**298D Series Solid Tantalum Chip Capacitor
MicroTan® Leadframeless Molded**



KEY BENEFITS

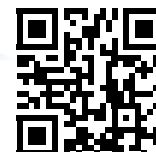
- Industry’s highest capacitance density
- Small sizes including 0603 and 0402 footprints
- No piezoelectric noise
- Capacitance range: 1 μF to 330 μF
- Voltage rating: 2.5 V_{DC} to 50 V_{DC}
- Lead (Pb)-free L-shaped terminations which allow visual/optical inspection during manufacturing

APPLICATIONS

- Mobile phones
- Media players
- eBook readers
- Hearing aids
- Other electronic products with size constraints

RESOURCES

- Datasheet: <http://www.vishay.com/doc?40065>
- Tantalum product portfolio: <http://www.vishay.com/capacitors/tantalum/>
- Reliability calculator: <http://www.vishay.com/capacitors/tantalum/capacitors/tantalum/tantalum-wet/tantalum-reliability-calculator-list/>
- Technical questions: contact_tantalum@vishay.com
- Sales contacts: <http://www.vishay.com/doc?99914>
- Material categorization: for definitions of compliance please see <http://www.vishay.com/doc?99912>



CAPACITORS

298D MicroTan® TANTALUM

CAPACITOR - Tantalum in Small Size Footprints

RATINGS AND CASE CODES									
μF	2.5 V	4 V	6.3 V	10 V	16 V	20 V	25 V	35 V	50 V
1.0			K	K	K/M		M/R		P
1.5				M					
2.2			K/M	K/M	M			P	
3.3			M	M					
4.7		K	M	M/P	M ⁽¹⁾ /P	P	P		
10		K/M	K ⁽¹⁾ /M	M	R		A		
15		K	M	M					
22		M	M	M					
33		M	M	P					
47	M	M	R/P/A	P					
100		P	P/Q/A						
220	P	P/Q							
330			B						

Note

(1) Rating in development, contact factory for availability.

ORDERING INFORMATION						
298D	335	X0	010	M	2	T
TYPE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT + 85 °C	CASE CODE	TERMINATION	REEL SIZE AND PACKAGING
	This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow.	X0 = ± 20 % X9 = ± 10 %	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).	See Ratings and Case Codes table	2 = 100 % tin 4 = Gold plated	T = Tape and reel 7" [178 mm] reel

Note

- Preferred tolerance and reel sizes are in bold. 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	L	W	H	P1	P2 (REF.)	C
K	0.039 ± 0.008 [1.0 ± 0.2]	0.02 ± 0.008 [0.5 ± 0.2]	0.024 max. [0.6 max.]	0.01 ± 0.004 [0.25 ± 0.1]	0.02 [0.5]	0.015 ± 0.004 [0.38 ± 0.1]
M	0.063 ± 0.008 [1.60 ± 0.2]	0.033 ± 0.008 [0.85 ± 0.2]	0.031 ± 0.004 [0.80 ± 0.1]	0.020 ± 0.004 [0.50 ± 0.1]	0.024 [0.60]	0.024 ± 0.004 [0.60 ± 0.1]
R	0.081 ± 0.006 [2.06 ± 0.15]	0.053 ± 0.006 [1.35 ± 0.15]	0.058 ± 0.004 [1.47 ± 0.10]	0.020 ± 0.004 [0.51 ± 0.1]	0.028 min. [0.071 min.]	0.035 ± 0.004 [0.90 ± 0.1]
P	0.094 ± 0.004 [2.4 ± 0.1]	0.057 ± 0.004 [1.45 ± 0.1]	0.043 ± 0.004 [1.10 ± 0.1]	0.020 ± 0.004 [0.50 ± 0.1]	0.057 [1.40]	0.035 ± 0.004 [0.90 ± 0.1]
Q	0.126 ± 0.008 [3.2 ± 0.2]	0.063 ± 0.008 [1.6 ± 0.2]	0.039 max. [1.0 max.]	0.031 ± 0.004 [0.80 ± 0.1]	0.063 [1.60]	0.047 ± 0.004 [1.20 ± 0.1]
A	0.126 ± 0.008 [3.2 ± 0.2]	0.063 ± 0.008 [1.6 ± 0.2]	0.063 ± 0.008 [1.6 ± 0.2]	0.031 ± 0.004 [0.80 ± 0.1]	0.063 [1.60]	0.047 ± 0.004 [1.20 ± 0.1]
B	0.138 ± 0.008 [3.5 ± 0.2]	0.112 ± 0.008 [2.8 ± 0.2]	0.08 max. [2.0 max.]	0.031 ± 0.008 [0.80 ± 0.2]	0.077 [1.95]	0.094 ± 0.004 [2.4 ± 0.1]