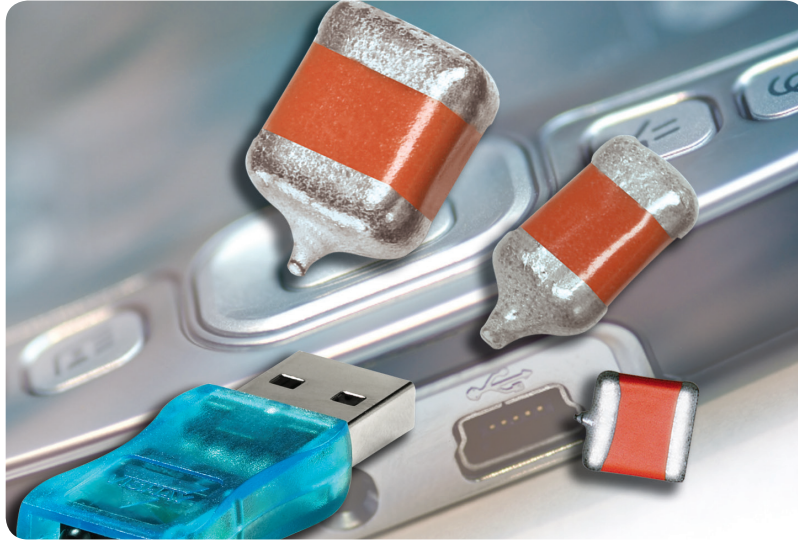


592D Series Conformal-Coated Solid Tantalum Capacitors



KEY BENEFITS

- Highest capacitance offered in a low-profile case (case heights between 1.3mm - 2.0mm)
- Low ESR: as low as 35 mΩ with the 591D Series
- Very high capacitance: up to 2200 μF
- Design convenience, efficiency and portability
- Low ESL: inductance of conformal construction is 1/3 of molded chips
- Cost-savings; ability to replace several lesser-value capacitors

APPLICATIONS

- Bulk capacitance used in voltage holdup for power amplifiers in wireless data communications
- Noise suppression
- Filtering
- Coupling
- Timing

RESOURCES

- Datasheet: <http://www.vishay.com/doc?40004>
- Tantalum product portfolio: <http://www.vishay.com/capacitors/tantalum/>
- FIT 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>

RoHS
COMPLIANT

HALOGEN
FREE

GREEN
(5-2008)

A WORLD OF
SOLUTIONS

RATINGS AND CASE CODES								
µF	4 V	6.3 V	10 V	16 V	20 V	25 V	35 V	50 V
1.0							A/B	B
1.5							B	
2.2					A	A/B	B/C	C
3.3						B/C	C/D	C
4.7			A	A	A/B	C	B/C/D/R	C/R
6.8			A	A/B	B/C	C/D	D/R	R
10		A	A/B	B/C	B/C/D	B/D/R	R	R
15		A/B	B	B/C/D	C/D/R	R		
22	A/B	A/B	A/B/C	B/C/D	B/D/R			
33	B	A/B/C/S	C/D	B/C/D/R	R			
47	C	A/B/C/D	B/D/R	B/C/R				
68	B/C/D	B/C/D/R	B/C/D/R	C/D		R		
100	A/B/C/D/R	B/C/D/R	B/C/D/R	C/D				
120		C						
150	B/C/D/R	C/D/R	C/D	D/R				
220	C/D/R	C/D/R	D/R	R				
330	C/D	C/D/R	D/R					
470	C/D/R	C/D/R						
680	D/R	R	X					
1000	R	R/X						
1500	X	M/R/X						
2200	X	X						

ORDERING INFORMATION							
592D	106	X0	010	B	2	T	15H
TYPE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT + 85 °C	CASE CODE	TERMINATION	REEL SIZE AND PACKAGING	SUFFIX
	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 8 = Solder plated 60/40 Special order	T = Tape and reel 7" [178 mm] reel W = 13" [330 mm] reel	Maximum height (mm) see Standard Ratings table

Note

- Preferred tolerance and reel sizes are in bold.
- We reserve the right to substitute form-fit-function replacement products with higher voltage rating, tighter capacitance tolerance or lower ESR (e.g., 591D series).

DIMENSIONS in inches [millimeters]						
CASE CODE	L MAX.	W	A	B	D REF.	J MAX.
A	0.146 [3.7]	0.071 ± 0.012 [1.8 ± 0.3]	0.031 ± 0.012 [0.8 ± 0.3]	0.087 ± 0.016 [2.2 ± 0.4]	0.114 [2.9]	0.004 [0.1]
B	0.157 [4.0]	0.110 ± 0.012 [2.8 ± 0.3]	0.031 ± 0.012 [0.8 ± 0.3]	0.098 ± 0.016 [2.5 ± 0.4]	0.138 [3.5]	0.004 [0.1]
C	0.28 [7.1]	0.126 ± 0.012 [3.2 ± 0.3]	0.051 ± 0.012 [1.3 ± 0.3]	0.173 ± 0.024 [4.4 ± 0.6]	0.236 [6.0]	0.004 [0.1]
D	0.295 [7.5]	0.169 ± 0.012 [4.3 ± 0.3]	0.051 ± 0.012 [1.3 ± 0.3]	0.181 ± 0.024 [4.6 ± 0.6]	0.252 [6.4]	0.004 [0.1]
M	0.295 [7.5]	0.248 ± 0.012 [6.3 ± 0.3]	0.051 ± 0.012 [1.3 ± 0.3]	0.200 ± 0.024 [5.1 ± 0.6]	0.264 [6.7]	0.004 [0.1]
R	0.283 [7.2]	0.236 ± 0.012/- 0.024 [6.0 + 0.3/- 0.6]	0.051 ± 0.012 [1.3 ± 0.3]	0.181 ± 0.024 [4.6 ± 0.6]	0.244 [6.2]	0.004 [0.1]
S	0.138 [3.5]	0.063 ± 0.012 [1.6 ± 0.3]	0.031 ± 0.012 [0.8 ± 0.3]	0.079 ± 0.012 [2.0 ± 0.3]	0.087 [2.2]	0.004 [0.1]
X	0.571 [14.5]	0.290 ± 0.010/- 0.020 [7.37 + 0.25/- 0.5]	0.051 ± 0.016 [1.3 ± 0.4]	0.469 ± 0.024 [11.9 ± 0.6]	0.52 [13.2]	0.004 [0.1]

Notes

- The anode termination (D less B) will be a minimum of 0.012" [0.3 mm]
- For package height, please refer to specific rating in the "Standard Ratings" table