



TANTALUM CAPACITORS

592D Series



592D Series Conformal-Coated Solid Tantalum Capacitors

High Capacitance, Low-Profile Tantamount[®] Capacitors

KEY BENEFITS

- Very low ESR: as low as 35 m Ω
- Very high capacitance: up to 3300 μ F
- Highest capacitance offered in a low-profile case
- Design convenience, efficiency and portability
- Cost-savings; ability to replace several lesser-value capacitors
- Lead (Pb)-free terminations

APPLICATIONS

- Noise suppression
- Filtering
- Coupling
- Timing
- PCMCIA cards

Datasheet is available on our web site at www.vishay.com
for 592D Series - <http://www.vishay.com/doc?40004>

Solid Tantalum Chip Capacitors Tantamount[®], Low Profile, Conformal Coated, Maximum CV

FEATURES

- New robust 6.3 V ratings for battery operated wireless applications
- New extended range offerings
- 1.0 mm to 2.5 mm height
- Terminations: Lead (Pb)-free (2) standard
- Low Impedance
- 8 mm, 12 mm tape and reel packaging available per EIA-48-1 and reel per IEC 286-3
- 7 [178 mm] standard
- 13 [330 mm] available
- Case code compatible with EIA 535BAAC and CECC 30801 molded chips

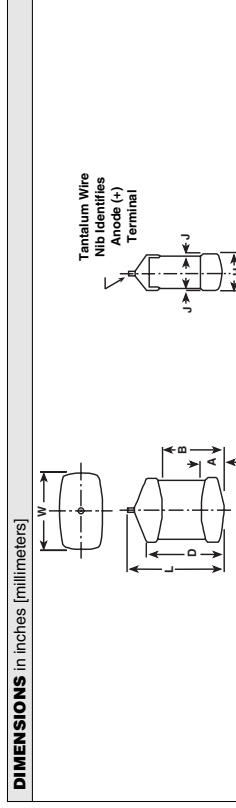


Available
RoHS*
COMPLIANT



PERFORMANCE CHARACTERISTICS

Operating Temperature: - 55 °C to + 85 °C
(To + 125 °C with voltage derating)
NOTE: Refer to Doc. 40088
Capacitance Range: 1.0 µF to 3300 µF
Capacitance Tolerance: ± 10 %, ± 20 % standard
Voltage Rating: 4 WVDC to 35 WVDC



CASE CODE	SUFFIX	H	L (Max.)	W	A	B	D (Ref.)	J (Max.)
A	12H	1.27 Max 0.047 ± 0.012 [1.2 ± 0.3]	0.146 [3.7]	0.072 ± 0.012 [1.8 ± 0.3]	0.031 ± 0.012 [0.80 ± 0.3]	0.087 ± 0.016 [2.2 ± 0.4]	0.115 [2.9]	0.004 [0.1]
B	15H	0.047 ± 0.012 [1.2 ± 0.3]	0.158 [4.0]	0.110 ± 0.012 [2.8 ± 0.3]	0.031 ± 0.012 [0.80 ± 0.3]	0.097 ± 0.016 [2.5 ± 0.4]	0.139 [3.5]	0.004 [0.1]
C	15H	0.047 ± 0.012 [1.2 ± 0.3]	0.281 [7.1]	0.126 ± 0.012 [3.2 ± 0.3]	0.051 ± 0.012 [1.3 ± 0.3]	0.180 ± 0.024 [4.4 ± 0.6]	0.238 [6.0]	0.004 [0.1]
D	15H	0.047 ± 0.012 [1.2 ± 0.3]	0.298 [7.5]	0.170 ± 0.012 [4.3 ± 0.3]	0.051 ± 0.012 [1.3 ± 0.3]	0.180 ± 0.024 [4.6 ± 0.6]	0.254 [6.4]	0.004 [0.1]
R	15H	0.047 ± 0.012 [1.2 ± 0.3]	0.285 [7.2]	0.235 ± 0.012 [6.0 ± 0.3]	0.051 ± 0.012 [1.3 ± 0.3]	0.180 ± 0.024 [4.6 ± 0.6]	0.246 [6.2]	0.004 [0.1]
S	13H	0.040 ± 0.012 [1.0 ± 0.3]	0.126 ± 0.012 [3.2 ± 0.3]	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	20H	0.079 [2.0] Max	0.575 [14.5]	0.280 ± 0.010 [7.37 ± 0.25]	0.051 ± 0.016 [1.3 ± 0.4]	0.170 ± 0.024 [4.3 ± 0.6]	0.254 [6.4]	0.004 [0.1]
X	25H	0.079 [2.0] Max	0.575 [14.5]	0.280 ± 0.010 [7.37 ± 0.25]	0.051 ± 0.016 [1.3 ± 0.4]	0.170 ± 0.024 [4.3 ± 0.6]	0.254 [6.4]	0.004 [0.1]

Note: The anode termination (D less B) will be a minimum of 0.012" (0.3 mm).

RATINGS AND CASE CODES

µF	4 V	6.3 V	10 V	16 V	20 V	25 V	35 V
1.0							A/B
1.5							B
2.2							B/C
3.3							C/D
4.7							B/C/D/R
6.8							D/R
10							B/D
15							C/R
22	A/B	B	C	B/C/D	B/C/D/R	C/D*	
33	B	B/C	B/C/D	B/C/D	B/C/D	D*/R	
47	B/C	B/C/D	B/C/D	B/C/D	B/C/D	R	
68	D/R	B/D/R	B/D/R	B/D/R	B/D/R		
100	A/B/C/D/R	D/R	D/C	D	D		
150	B/C/D/R	D/C	D*	D	D		
220	C/D/R	C/D/R	D	D	D		
330	C/D/R	C/D/R	D	D	D		
470	D/R	C/R	C/R	C/R	C/R		
680	R	R/X	R	R	R		
1000	X	X	X	X	X		
1500	X	X	X	X	X		
2200	X	X	X	X	X		
3300	X	X	X	X	X		

* Contact factory for availability

592D	106	X0	010	2	T	15H
TYPE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT + 85 °C	CASE CODE	TERMINATION	REEL SIZE AND PACKAGING	SUFFIX
	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 volts).	See Ratings and Case Codes Table	2 = 100 % Tin 4 = Gold Plated 8 = Solder 60/40 Special Order	T = Tape and Reel 7" [178 mm] Reel W = 13" [330 mm] Reel	Maximum Height (mm) See Dimensions

Note: Preferred Tolerance and reel sizes are in bold. We reserve the right to supply higher voltage ratings and lighter capacitance tolerance capacitors in the same case size. Voltage substitutions will be marked with the higher voltage rating.

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

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