

Solid Tantalum Chip Capacitors, TANTAMOUNT® Lead Frameless Molded



P and R Cases
Image is not to scale

FEATURES

- 0805 Footprint
- Wraparound lead (Pb)-free terminations:
P and R Cases
- 8 mm, 12 mm, 16 mm tape and reel packaging available per EIA-481-1 and reeling per IEC 286-3, 7" [178 mm] standard
13" [330 mm] 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 47 μF

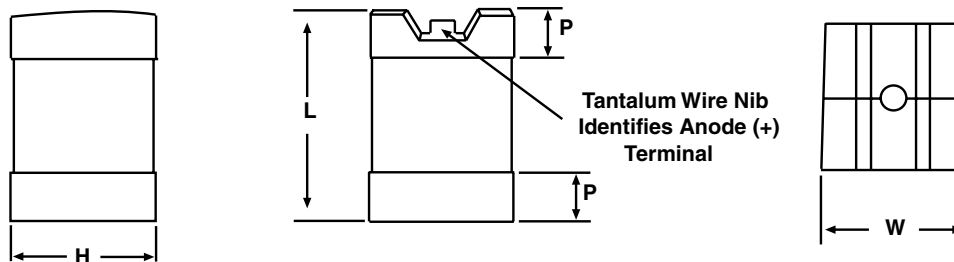
Capacitance Tolerance: ± 10 %, ± 20 % standard

Voltage Rating: 3 WVDC to 20 WVDC

ORDERING INFORMATION

292D TYPE	106 CAPACITANCE	X0 CAPACITANCE TOLERANCE	010 DC VOLTAGE RATING AT + 85 °C	P CASE CODE	2 TERMINATION	T 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.	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 volts).	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 *Cathode nearest sprocket hole
Note: Preferred Tolerance and reel sizes are in bold.						

DIMENSIONS in inches [millimeters]



CASE	EIA	L	W	H	P
R	0805 [2012]	0.079 ± 0.008 [2.0 ± 0.2]	0.051 ± 0.008 [1.3 ± 0.2]	0.047 (Max.) [1.2 Max.]	0.020 ± 0.012 [0.5 ± 0.3]
P	0805 [2012]	0.079 ± 0.010 [2.0 ± 0.25]	0.053 ± 0.008 [1.35 ± 0.2]	0.053 ± 0.008 [1.35 ± 0.2]	0.020 ± 0.012 [0.5 ± 0.3]

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

RATINGS AND CASE CODES						
μF	3 V	4 V	6.3 V	10 V	16 V	20 V
1.0				R	R	R
2.2		R	R	R	R	R
3.3		R		P/R	R	
4.7		R	R	P/R	R	
6.8		R	R	P/R		
10		R	P/R	P/R	P	
15		R	R	P		
22		P/R	P/R			
33		P/R	P/R*			
47	P					

* Preliminary values, contact factory for availability.

STANDARD RATINGS						
CAPACITANCE (μF)	CASE CODE	PART NUMBER	MAX DCL AT + 25 °C (μA)	MAX DF AT + 25 °C (%)	MAX ESR at 100 kHz (Ω)	MAX RIPPLE 100 kHz Irms (AMPS)
3 WVDC AT + 85 °C, SURGE = 3.9 V . . 1.9 WVDC AT + 125 °C, SURGE = 2.9 V						
47	P	292D476X_003P2T	1.5	12	6.0	0.21
4 WVDC AT + 85 °C, SURGE = 5.2 V . . 2.7 WVDC AT + 125 °C, SURGE = 3.4 V						
2.2	R	292D225X_004R2T	0.5	6	7.6	0.057
3.3	R	292D335X_004R2T	0.5	6	7.6	0.057
4.7	R	292D475X_004R2T	0.5	6	6.3	0.063
6.8	R	292D685X_004R2T	0.5	6	5.5	0.067
10	R	292D106X_004R2T	0.5	6	5.1	0.070
15	R	292D156X_004R27	0.8	8	3.5	0.085
22	P	292D226X_004P2T	0.9	8	3.5	0.085
22	R	292D226X_004R2T	0.9	10	3.5	0.085
33	P	292D336X_004P2T	1.3	10	3.5	0.085
33	P	292D336X_004P2T_035	1.3	10	1.1	0.151
33	R	292D336X_004R2T	1.3	12	3.5	0.085
6.3 WVDC AT + 85 °C, SURGE = 8 V . . 4 WVDC AT + 125 °C, SURGE = 5 V						
2.2	R	292D225X_6R3R2T	0.5	10	7.6	0.057
4.7	R	292D475X_6R3R2T_035	0.6	6	2.0	0.086
4.7	R	292D475X_6R3R2T	0.6	6	3.4	0.086
6.8	R	292D685X_6R3R2T	0.5	6	5.0	0.071
6.8	R	292D685X_6R3R2T_035	0.5	6	2.0	0.067
10	P	292D106X_6R3P2T	0.6	6	3.5	0.085
10	R	292D106X_6R3R2T	0.6	6	1.2	0.144
15	R	292D156X_6R3R2T_035	0.9	10	3.5	0.085
15	R	292D15X_6R3R2_035	0.9	10	1.8	0.118
22	P	292D226X_6R3P2T	1.3	10	3.5	0.118
22	P	292D226X_6R3P2_035	0.9	10	1.1	0.151
22	R	292D226X_6R3R2T	1.4	10	3.5	0.085
33	P	292D336X_6R3P2T	2.1	12	3.5	0.085
33*	R*	292D336X_6R3R2T*	2.1*	12*	3.5*	0.085*

* Preliminary values, contact factory for availability.

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Vishay Sprague

STANDARD RATINGS						
CAPACITANCE (μ F)	CASE CODE	PART NUMBER	MAX DCL AT + 25 °C (μ A)	MAX DF AT + 25 °C (%)	MAX ESR AT 100 kHz (Ω)	MAX RIPPLE 100 kHz Irms (AMPS)
10 WVDC AT+ 85 °C, SURGE = 13 V . . 7 WVDC AT + 125 °C, SURGE = 8 V						
1.0	R	292D105X_010R2	0.5	4	9.6	0.051
2.2	R	292D225X_010R2T	0.5	6	6.3	0.063
3.3	R	292D335X_010R2T	0.5	8	2.0	0.112
3.3	R	292D335X_010R2_035	0.5	8	1.0	0.158
3.3	P	292D335X_010P2T	0.5	8	2.0	0.112
4.7	P	292D475X_010P2T	0.5	8	5.0	0.071
4.7	R	292D475X_010R2T	0.5	8	5.0	0.071
4.7	R	292D475X_010R2T_035	0.5	8	2.0	0.112
6.8	P	292D685X_010P2T	0.7	8	2.0	0.112
6.8	R	292D685X_010R2T	0.7	8	2.0	0.112
10	P	292D106X_010P2T	1.0	8	2.0	0.112
10	R	292D106X_010R2T	1.0	8	2.0	0.112
15	P	292D156X_010P2T	1.5	8	3.5	0.085
15	P	292D156X_010P2_035	1.5	8	1.1	0.151
16 WVDC AT + 85 °C, SURGE = 20 V . . 10 WVDC AT + 125 °C, SURGE = 12 V						
1.0	R	292D105X_016R2	0.5	4	9.3	0.052
2.2	R	292D225X_016R2T	0.35	8	6.0	0.065
3.3	R	292D335X_016R2T	0.53	8	6.0	0.065
3.3	R	292D335X_016R2_035	0.53	8	3.0	0.091
4.7	R	292D475X_016R2T	0.75	8	6.0	0.065
10	P	292D106X_016P2T	1.6	8	6.0	0.065
20 WVDC AT + 85 °C, SURGE = 26 V . . 13 WVDC AT + 125 °C, SURGE = 16 V						
1.0	R	292D105X_020R2T	0.2	8	5.0	0.071
2.2	R	292D225X_020R2T	0.5	8	6.0	0.140



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