

Surface Mount Tantalum Capacitors
Conformally Coated 595D, 592D & 594D Series, Specifications



Part Number Determination

595D106X0A2T						
595D	107	X9	010	D	2	T
TYPE	CAPACITANCE CODE	TOLERANCE	VOLTAGE CODE	CASE CODE	TERMINATION	PACKAGING
595D=Std Tantalum 592D= Low Profile 594D=Low ESR	in pF 2 significant digits and 3rd representing the number of zeros to follow	X0=±20% X9=±10% X5=±5%** **special order	004=4V 6R3=6.3V 010=10V 016=16V 020=20V 025=25V 035=35V 050=50V	C=6032 D=7343 E=7343H	2= Tin Lead Solderable coating 4=Gold Plated	"T=7" reel W=13" reel *cathode nearest sprocket hole



595D

Electrical Characteristics

Capacitance Range: 1.0µF to 1500µF
Rated Voltage: 4V to 25 V
Capacitance Tolerance: ±20%
Operating Temp Range: -55°C to +85°C
Terminations: 60/40 Tin Lead

592D Low Profile

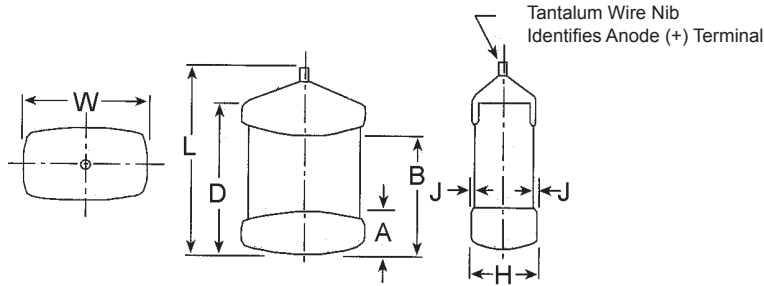
Electrical Characteristics

Capacitance Range: 1.0µF to 220µF
Rated Voltage: 6.3V to 35 V
Capacitance Tolerance: ±20%
Operating Temp Range: -55°C to +85°C
Dissipation Factor: @120Hz, +25°C
Terminations: 60/40 Tin Lead

594D Low ESR

Electrical Characteristics

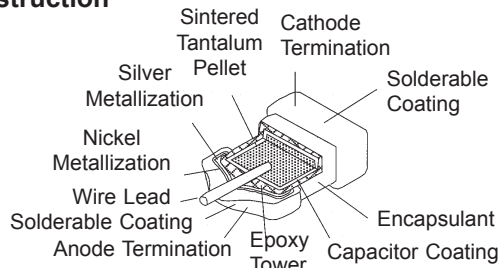
Capacitance Range: 47µF to 1000µF
Rated Voltage: 6.3V to 25V
Capacitance Tolerance: ±20%
Operating Temp Range: -55 to +85°C
Terminations: 60/40 Tin Lead



Package Dimensions (in/mm)

Case Size	L Max	W	H	A	B	D Ref	J Max
T	.158 4.0	.116±.01 2.8±.3	.079 2.0	.031±.012 .8±.3	.097±.015 2.5±.4	.138 3.5	.004 .1
A	.146 3.7	.072±.01 1.8±.3	.047±.008 1.2±.2	.031±.012 .8±.3	.085±.015 2.2±.4	.115 2.9	.004 .01
B	.158 4.0	.110+.010-.016 2.8+-.3-.4	.047±.012 1.2±.3	.031±.012 .8±.3	.097±.015 2.5±.4	.127 3.2	.004 .1
C	.281 7.1	.126±.01 3.2±.3	.047±.012 1.2±.3	.051±.012 1.3±.3	.180±.025 4.6±.6	.236 6.0	.004 .1
D	.293 7.5	.17±.01 4.3±.3	.047±.012 1.2±.3	.051±.012 1.3±.3	.180±.025 4.6±.6	.253 6.4	.004 .1
R	.285 7.2	.235±.01 6.0±.3	.047±.012 1.2±.3	.051±.012 1.3±.3	.180±.025 4.6±.6	.243 6.2	.004 .1

Construction



Mfg Specs

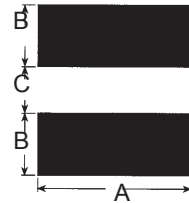
- Go to www.garrettelec.com
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Surface Mount Tantalum Capacitors
Conformally Coated 592D, 594D, 595D Series, Specifications



Electrical Characteristics: 595D Series

Part Number	Cap (uF)	Case Code	Max DC Leakage @ + 25°C (uA)	Max DF @ + 25°C 120 Hz (%)	Max ESR @ + 25°C 100kHz (Ohms)	Max Ripple 100kHz Irms (Amps)	
4V 595D158X0004R2T	1500.0	R	60.0	20	0.07	1.88	
6.3V	595D476X06R3A2T	47	2.8	6	1.50	0.22	
	595D686X06R3B2T	68	4.3	6	0.55	0.38	
	595D107X06R3B2T	100	6.3	8	0.55	0.39	
	595D337X06R3C2T	330	20.8	8	0.17	0.80	
	595D477X06R3D2T	470	29.6	8	0.13	1.07	
	595D108X06R3R2T	1000	R	63.0	16	0.07	1.88
10V	595D225X0010T2T	2.2	0.5	6	8.6	0.06	
	595D475X0010T2T	4.7	0.5	6	8.6	0.06	
	595D156X0010A2T	15.0	A	1.5	6	1.8	0.20
	595D476X0010B2T	47	B	4.7	6	0.65	0.35
	595D157X0010C2T	150	C	15.0	8	0.22	0.71
	595D227X0010D2T	220	D	22.0	8	0.14	1.04
	595D227X0010R2T	220	R	22.0	8	0.13	1.39
	595D337X0010R2T	330	R	33.0	8	0.13	1.39
16V	595D475X0016A2T	4.7	A	0.8	6	2.9	0.16
	595D106X0016A2T	10	A	1.6	6	2.5	0.17
	595D106X0016B2T	10	B	1.6	6	0.76	0.32
	595D107X0016C2T	100	C	16.0	8	0.27	0.64
	595D157X0016D2T	150	D	24.0	8	0.14	1.04
20V	595D105X0020T2T	1.0	T	0.5	4	9.0	0.06
	595D226X0020B2T	22	B	4.4	6	0.90	0.31
	595D226X0020C2T	22	C	7.4	6	0.38	0.54
	595D107X0020D2T	100	D	20.0	8	0.18	0.91
25V	595D476X0025D2T	47	D	11.8	6	0.26	0.76
	595D686X0025R2T	68	R	17.0	6	0.20	1.12
35V 595D226X0035R2T	22	R	7.7	6	0.28	0.94	



Land Pattern (in/mm)

CASE CODE	WIDTH (A)	PAD METALLIZATION (B)	SEPARATION (C)
T	.055 (1.5)	.030 (0.7)	.025 (0.6)
A	.082 (2.1)	.065 (1.7)	.050 (1.3)
B	.120 (3.0)	.065 (1.7)	.065 (1.7)
C	.136 (3.5)	.090 (2.3)	.120 (3.1)
D	.180 (4.6)	.090 (2.3)	.145 (3.7)
R	.245 (6.3)	.090 (2.3)	.145 (3.7)

Electrical Characteristics: 592D Series, Low Profile

Part Number	Cap (uF)	Case Code	Max DC Leakage @ + 25°C (uA)	Max DF @ + 25°C 120 Hz (%)	Max ESR @ + 25°C 100kHz (Ohms)	Max Ripple 100kHz Irms (Amps)	
6.3V	592D476X06R3C2T	47	3.0	6	0.40	0.50	
	592D686X06R3C2T	68	4.0	6	0.38	0.51	
	592D107X96R3D2T	100	6.0	8	0.26	0.69	
	592D227X06R3R2T	220	R	13.2	8	0.18	0.91
10V	592D106X0010A2T	10	A	1.0	6	2.6	0.15
	592D226X0010B2T	22	B	2.2	6	1.5	0.23
35V 592D105X9035B2T	1.0	B	0.5	4	6.50	0.11	

Electrical Characteristics: 594D Series, Low ESR

Part Number	Cap (uF)	Case Code	Max DC Leakage @ + 25°C (uA)	Max DF @ + 25°C 120 Hz (%)	Max ESR @ + 25°C 100kHz (Ohms)	Max Ripple 100kHz Irms (Amps)	
6.3V	594D227X06R3C2T	220	C	13.9	8	0.080	1.37
	594D337X96R3D2T	330	D	20.8	8	0.060	1.58
	594D477X96R3D2T	470	D	29.6	10	0.060	1.58
	594D108X06R3R2T	1000	R	63.0	16	0.030	2.89
10V 594D227X9010D2T	220	D	22	8	0.065	1.52	
16V	594D107X0016C2T	100	C	16	8	0.080	1.17
	594D107X9016D2T	100	D	16	8	0.075	1.41
20V 594D476X0020D2T	47	D	9.4	6	0.095	1.26	
25V 594D686X0025R2T	68	R	17	6	0.095	1.60	

- Go to www.garrettelec.com
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