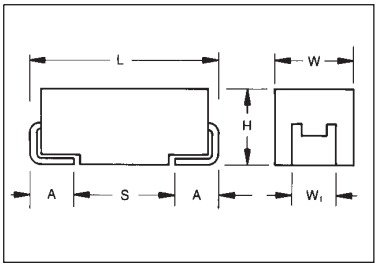
TAJ Series

Standard Tantalum

The TAJ standard series encompasses the five key sizes recognized by major OEMs throughout the world. The V case size has been added to the TAJ range to allow high CVs to be offered. The operational temperature is -55°C to +85°C at rated voltage and up to +125°C with voltage derating in applications utilizing recommended series resistance.



For part marking see page 93

CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	L±0.20 (0.008)	W+0.20 (0.008) -0.10 (0.004)	H+0.20 (0.008) -0.10 (0.004)	W_1±0.20 (0.008)	A+0.30 (0.012) -0.20 (0.008)	S Min.
A	3216-18	3.20 (0.126)	1.60 (0.063)	1.60 (0.063)	1.20 (0.047)	0.80 (0.031)	1.10 (0.043)
B	3528-21	3.50 (0.138)	2.80 (0.110)	1.90 (0.075)	2.20 (0.087)	0.80 (0.031)	1.40 (0.055)
C	6032-28	6.00 (0.236)	3.20 (0.126)	2.60 (0.102)	2.20 (0.087)	1.30 (0.051)	2.90 (0.114)
D	7343-31	7.30 (0.287)	4.30 (0.169)	2.90 (0.114)	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)
E	7343-43	7.30 (0.287)	4.30 (0.169)	4.10 (0.162)	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)
V	7361-38	7.30 (0.287)	6.10 (0.240)	3.45±0.30 (0.136±0.012)	3.10 (0.120)	1.40 (0.055)	4.40 (0.173)

W_1 dimension applies to the termination width for A dimensional area only.

HOW TO ORDER

TAJ	C	106	M	035	R	**
Type	**Case Code** See table above	**Capacitance Code** pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	**Tolerance** K=±10% M=±20%	**Rated DC Voltage** 002=2Vdc 004=4Vdc 006=6.3Vdc 010=10Vdc 016=16Vdc 020=20Vdc 025=25Vdc 035=35Vdc 050=50Vdc	**Packaging** R = 7" T/R S = 13" T/R A = Gold Plating 7" Reel B = Gold Plating 13" Reel	**Additional characters may be added for special requirements**

TECHNICAL SPECIFICATIONS

Technical Data:		All technical data relate to an ambient temperature of +25°C								
Capacitance Range:		0.1µF to 1000µF								
Capacitance Tolerance:		±10%; ±20%								
Rated Voltage (V_R)	≦ +85°C:	2	4	6.3	10	16	20	25	35	50
Category Voltage (V_C)	≦ +125°C:	1.3	2.7	4	7	10	13	17	23	33
Surge Voltage (V_S)	≦ +85°C:	2.7	5.2	8	13	20	26	32	46	65
Surge Voltage (V_S)	≦ +125°C:	1.7	3.2	5	8	12	16	20	28	40
Temperature Range:		-55°C to +125°C								
Reliability:		1% per 1000 hours at 85°C, Vr with 0.1Ω/Vr series impedance, 60% confidence level								
Qualification:		CECC 30801 - 005 issue 2 EIA 535BAAC								

CAPACITANCE AND RATED VOLTAGE, V_R (VOLTAGE CODE) RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated voltage DC (V_R) to 85°C								
µF	Code	2.5V (F)	4V (G)	6.3V (J)	10V (A)	16V (C)	20V (D)	25V (E)	35V (V)	50V (T)
0.10	104								A	A
0.15	154								A	A/B
0.22	224								A	A/B
0.33	334								A	B
0.47	474							A	A/B	C
0.68	684						A	A	A/B	C
1.0	105					A	A	A	A/B	B/C
1.5	155				A	A	A	A/B	A/B/C	C/D
2.2	225			A	A	A/B	A/B	A/B	B/C	C/D
3.3	335			A	A	A/B	A/B	B/C	B/C	C/D
4.7	475		A	A	A/B	A/B	A/B/C	B/C	B/C/D	D
6.8	685		A	A/B	A/B	A/B/C	B/C	B/C	C/D	D
10	106		A	A/B	A/B/C	A/B/C	B/C	C/D	C/D/E	E
15	156		A/B	A/B	A/B/C	B/C	B/C/D	C/D	C/D	
22	226		A	A/B/C	A/B/C	B/C/D	B/C/D	C/D	D/E	
33	336		A/B	A/B/C	B/C/D	B/C/D	C/D	D/E	D/E	
47	476	A	A/B	B/C/D	B/C/D	C/D	C/D/E	D/E	E	
68	686	A	B/C	B/C/D	C/D	C/D	D/E	E/V		
100	107		B/C	B/C/D	C/D/E	D/E	D/E/V			
150	157	B	B	C/D	C/D/E	D/E/V	E/V			
220	227	B	C/D	C/D/E	D/E	D/E/V				
330	337		C/D/E	C/D/E	D/E/V	E/V				
470	477		D/E	D/E/V	E/V					
680	687		D/E	E/V	V					
1000	108	E	E/V	V						
1500	158	E								

Non preferred Ratings - not recommended for new designs, higher voltage or smaller case size substitution are offered.

Developmental Ratings - subject to change.

Available Ratings

Note: Voltage ratings are minimum values. AVX reserves the right to supply higher ratings in the same case size, to the same reliability standards.

TAJ Series

Standard Tantalum

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz
TAJA476*002#	A	47	2.5	0.9	6	3000
TAJA686*002#	A	68	2.5	1.4	8	2000
TAJB157*002#	B	150	2.5	3	10	1600
TAJB227*002#	B	220	2.5	4.4	8	1600
TAJE108*002#	E	1000	2.5	20	20	900
TAJE158*002#	E	1500	2.5	30	20	900
TAJA336*004#	A	33	4	1.3	6	3000
TAJA476*004#	A	47	4	1.9	8	2600
TAJB686*004#	B	68	4	2.7	6	1800
TAJB107*004#	B	100	4	4	8	900
TAJB157*004#	B	150	4	6	8	1500
TAJC227*004#	C	220	4	8.8	8	1200
TAJD227*004#	D	220	4	8.8	8	900
TAJC337*004#	C	330	4	13.2	8	900
TAJD337*004#	D	330	4	13.2	8	900
TAJD477*004#	D	470	4	18.8	12	900
TAJE477*004#	E	470	4	18.8	10	500
TAJD687*004#	D	680	4	27.2	14	500
TAJE687*004#	E	680	4	27.2	14	900
TAJE108*004#	E	1000	4	40	14	400
TAJV108*004#	V	1000	4	40	16	400
TAJA106*006#	A	10	6.3	0.6	6	4000
TAJA156*006#	A	15	6.3	0.9	6	3500
TAJA226*006#	A	22	6.3	1.4	6	3000
TAJA336*006#	A	33	6.3	2.1	8	2500
TAJB476*006#	B	47	6.3	3	6	2000
TAJC476*006#	C	47	6.3	3	6	1600
TAJB686*006#	B	68	6.3	4	8	900
TAJC686*006#	C	68	6.3	4.3	6	1500
TAJB107*006#	B	100	6.3	6.3	10	1700
TAJC107*006#	C	100	6.3	6.3	6	900
TAJC157*006#	C	150	6.3	9.5	6	1300
TAJD157*006#	D	150	6.3	9.5	6	900
TAJC227*006#	C	220	6.3	13.9	8	1200
TAJD227*006#	D	220	6.3	13.9	8	900
TAJE227*006#	E	220	6.3	13.9	8	900
TAJC337*006#	C	330	6.3	19.8	8	500
TAJD337*006#	D	330	6.3	20.8	8	400
TAJE337*006#	E	330	6.3	20.8	8	400
TAJD477*006#	D	470	6.3	28	12	400
TAJE477*006#	E	470	6.3	28	10	400
TAJV477*006#	V	470	6.3	28	10	400
TAJE687*006#	E	680	6.3	42.8	10	500
TAJV687*006#	V	680	6.3	42.8	10	500
TAJV108*006#	V	1000	6.3	63	16	400

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.

*Insert K for ±10% and M for ±20% Capacitance Tolerance

Standard Plating – Insert R for 7" reel and S for 13" reel

Gold Plating – Insert A for 7" reel and B for 13" reel

Developmental Ratings - subject to change.
Available Ratings

NOTE: AVX reserves the right to supply a higher voltage rating or tighter tolerance part in the same case size, to the same reliability standards.

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz
TAJA475*010#	A	4.7	10	0.5	6	5000
TAJA685*010#	A	6.8	10	0.7	6	4000
TAJA106*010#	A	10	10	1	6	3000
TAJA156*010#	A	15	10	1.5	6	3200
TAJB156*010#	B	15	10	1.5	6	2800
TAJA226*010#	A	22	10	2.2	8	3000
TAJB226*010#	B	22	10	2.2	6	2400
TAJB336*010#	B	33	10	3.3	6	1800
TAJC336*010#	C	33	10	3.3	6	1600
TAJB476*010#	B	47	10	4.7	8	1000
TAJC476*010#	C	47	10	4.7	6	1200
TAJC686*010#	C	68	10	6.8	6	1300
TAJC107*010#	C	100	10	10	8	1200
TAJD107*010#	D	100	10	10	6	900
TAJC157*010#	C	150	10	15	8	900
TAJD157*010#	D	150	10	15	6	900
TAJE157*010#	E	150	10	15	8	900
TAJD227*010#	D	220	10	22	8	500
TAJE227*010#	E	220	10	22	8	500
TAJD337*010#	D	330	10	33	8	900
TAJE337*010#	E	330	10	33	8	900
TAJV337*010#	V	330	10	33	10	900
TAJE477*010#	E	470	10	47	10	500
TAJV477*010#	V	470	10	47	10	500
TAJV687*010#	V	680	10	68	12	400
TAJA225*016#	A	2.2	16	0.5	6	6500
TAJA335*016#	A	3.3	16	0.5	6	5000
TAJB335*016#	B	3.3	16	0.5	6	4500
TAJA475*016#	A	4.7	16	0.8	6	4000
TAJB475*016#	B	4.7	16	0.8	6	3500
TAJA685*016#	A	6.8	16	1.1	6	3500
TAJB685*016#	B	6.8	16	1.1	6	2500
TAJA106*016#	A	10	16	1.6	8	3000
TAJB106*016#	B	10	16	1.6	6	2800
TAJC106*016#	C	10	16	1.6	6	2000
TAJB156*016#	B	15	16	2.4	6	2500
TAJC156*016#	C	15	16	2.4	6	1800
TAJB226*016#	B	22	16	3.5	6	2300
TAJC226*016#	C	22	16	3.5	6	1600
TAJD226*016#	D	22	16	3.5	6	1100
TAJB336*016#	B	33	16	5.3	8	2100
TAJC336*016#	C	33	16	5.3	6	1500
TAJD336*016#	D	33	16	5.3	6	900
TAJC476*016#	C	47	16	7.5	6	1400
TAJD476*016#	D	47	16	7.5	6	900
TAJC686*016#	C	68	16	10.9	6	1300
TAJD686*016#	D	68	16	10.9	6	900
TAJD107*016#	D	100	16	16	6	900
TAJE107*016#	E	100	16	16	6	900
TAJD157*016#	D	150	16	24	6	900
TAJE157*016#	E	150	16	24	6	900
TAJV157*016#	V	150	16	24	8	500
TAJD227*016#	D	220	16	35.2	12	500
TAJE227*016#	E	220	16	35.2	10	500
TAJV227*016#	V	220	16	35.2	8	900
TAJV337*016#	V	330	16	52.8	10	500

TAJ Series

Standard Tantalum

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz
TAJA105*020#	A	1	20	0.5	4	9000
TAJA155*020#	A	1.5	20	0.5	6	6500
TAJA225*020#	A	2.2	20	0.5	6	5300
TAJB225*020#	B	2.2	20	0.5	6	3500
TAJA335*020#	A	3.3	20	0.7	6	4500
TAJB335*020#	B	3.3	20	0.7	6	3000
TAJA475*020#	A	4.7	20	0.9	6	4000
TAJB475*020#	B	4.7	20	0.9	6	3000
TAJB685*020#	B	6.8	20	1.4	6	2500
TAJC685*020#	C	6.8	20	1.4	6	2000
TAJB106*020#	B	10	20	2	6	2100
TAJC106*020#	C	10	20	2	6	1900
TAJB156*020#	B	15	20	3	6	2000
TAJC156*020#	C	15	20	3	6	1700
TAJB226*020#	B	22	20	4.4	6	1800
TAJC226*020#	C	22	20	4.4	6	1600
TAJD226*020#	D	22	20	4.4	6	900
TAJC336*020#	C	33	20	6.6	6	1500
TAJD336*020#	D	33	20	6.6	6	900
TAJC476*020#	C	47	20	9.4	6	900
TAJD476*020#	D	47	20	9.4	6	900
TAJE476*020#	E	47	20	9.4	6	900
TAJD686*020#	D	68	20	13.6	6	900
TAJE686*020#	E	68	20	13.6	6	900
TAJD107*020#	D	100	20	20	6	900
TAJE107*020#	E	100	20	20	6	900
TAJV107*020#	V	100	20	20	8	900
TAJV157*020#	V	150	20	30	8	500
TAJA474*025#	A	0.47	25	0.5	4	14000
TAJA684*025#	A	0.68	25	0.5	4	10000
TAJA105*025#	A	1	25	0.5	4	8000
TAJA155*025#	A	1.5	25	0.5	6	7500
TAJB155*025#	B	1.5	25	0.5	6	5000
TAJA225*025#	A	2.2	25	0.6	6	7000
TAJB225*025#	B	2.2	25	0.6	6	4500
TAJB335*025#	B	3.3	25	0.8	6	3500
TAJB475*025#	B	4.7	25	1.2	6	2800
TAJB685*025#	B	6.8	25	1.7	6	2800
TAJC685*025#	C	6.8	25	1.7	6	2000
TAJC106*025#	C	10	25	2.5	6	1800
TAJD106*025#	D	10	25	2.5	6	1200
TAJC156*025#	C	15	25	3.8	6	1600
TAJD156*025#	D	15	25	3.8	6	1000
TAJC226*025#	C	22	25	5.5	6	1400
TAJD226*025#	D	22	25	5.5	6	900
TAJD336*025#	D	33	25	8.3	6	900
TAJE336*025#	E	33	25	8.3	6	900
TAJD476*025#	D	47	25	11.8	6	900
TAJE476*025#	E	47	25	11.8	6	900
TAJE686*025#	E	68	25	17	6	900
TAJV686*025#	V	68	25	17	6	900

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz
TAJA104*035#	A	0.1	35	0.5	4	24000
TAJA154*035#	A	0.15	35	0.5	4	21000
TAJA224*035#	A	0.22	35	0.5	4	18000
TAJA334*035#	A	0.33	35	0.5	4	15000
TAJA474*035#	A	0.47	35	0.5	4	12000
TAJB474*035#	B	0.47	35	0.5	4	10000
TAJA684*035#	A	0.68	35	0.5	4	8000
TAJB684*035#	B	0.68	35	0.5	4	8000
TAJA105*035#	A	1	35	0.5	4	7500
TAJB105*035#	B	1	35	0.5	4	6500
TAJA155*035#	A	1.5	35	0.5	6	7500
TAJB155*035#	B	1.5	35	0.5	6	5200
TAJC155*035#	C	1.5	35	0.5	6	4500
TAJB225*035#	B	2.2	35	0.8	6	4200
TAJC225*035#	C	2.2	35	0.8	6	3500
TAJB335*035#	B	3.3	35	1.2	6	3500
TAJC335*035#	C	3.3	35	1.2	6	2500
TAJB475*035#	B	4.7	35	1.2	6	3100
TAJC475*035#	C	4.7	35	1.6	6	2200
TAJD475*035#	D	4.7	35	1.6	6	1500
TAJC685*035#	C	6.8	35	2.4	6	1800
TAJD685*035#	D	6.8	35	2.4	6	1300
TAJC106*035#	C	10	35	3.5	6	1600
TAJD106*035#	D	10	35	3.5	6	1000
TAJE106*035#	E	10	35	3.5	6	900
TAJC156*035#	C	15	35	5.3	6	1400
TAJD156*035#	D	15	35	5.3	6	900
TAJD226*035#	D	22	35	7.7	6	900
TAJE226*035#	E	22	35	7.7	6	900
TAJD336*035#	D	33	35	11.6	6	900
TAJE336*035#	E	33	35	11.6	6	900
TAJE476*035#	E	47	35	16.5	6	900
TAJA104*050#	A	0.1	50	0.5	4	22000
TAJA154*050#	A	0.15	50	0.5	4	15000
TAJB154*050#	B	0.15	50	0.5	4	17000
TAJA224*050#	A	0.22	50	0.5	4	18000
TAJB224*050#	B	0.22	50	0.5	4	14000
TAJB334*050#	B	0.33	50	0.5	4	12000
TAJC474*050#	C	0.47	50	0.5	4	8000
TAJC684*050#	C	0.68	50	0.5	4	7000
TAJB105*050#	B	1	50	0.5	4	7000
TAJC105*050#	C	1	50	0.5	4	5500
TAJC155*050#	C	1.5	50	0.8	6	4500
TAJD155*050#	D	1.5	50	0.8	6	4000
TAJC225*050#	C	2.2	50	1.1	6	3000
TAJD225*050#	D	2.2	50	1.1	6	2500
TAJC335*050#	C	3.3	50	1.7	6	2500
TAJD335*050#	D	3.3	50	1.7	6	2000
TAJD475*050#	D	4.7	50	2.4	6	1400
TAJD685*050#	D	6.8	50	3.4	6	1000
TAJE106*050#	E	10	50	5	6	1000

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.

* Insert K for ±10% and M for ±20% Capacitance Tolerance

\# **Standard Plating** – Insert R for 7" reel and S for 13" reel

\# **Gold Plating** – Insert A for 7" reel and B for 13" reel

Developmental Ratings - subject to change.
Available Ratings

NOTE: AVX reserves the right to supply a higher voltage rating or tighter tolerance part in the same case size, to the same reliability standards.