

TAJ Series

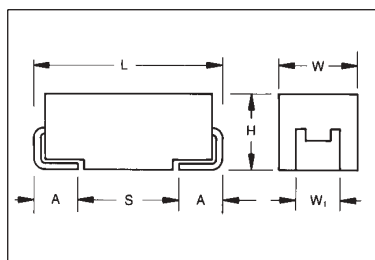
Standard Tantalum



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.

CASE DIMENSIONS: millimeters (inches)



For part marking see page 93

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

HOW TO ORDER

TAJ

Type

C

Case Code
See table above

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Capacitance Code
pF code: 1st two digits represent significant figures
3rd digit represents multiplier (number of zeros to follow)

M

Tolerance
K=±10%
M=±20%

035

Rated DC Voltage
002=2Vdc
004=4Vdc
006=6.3Vdc
010=10Vdc
016=16Vdc
020=20Vdc
025=25Vdc
035=35Vdc
050=50Vdc

R

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, V_r with 0.1Ω/V_r 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 0.15 0.22	104 154 224								A A A	A A/B A/B
0.33 0.47 0.68	334 474 684						A	A A	A A/B A/B	B C C
1.0 1.5 2.2	105 155 225			A	A A	A A A/B	A A A/B	A A/B A/B	A/B A/B/C B/C	B/C C/D C/D
3.3 4.7 6.8	335 475 685		A A	A A A/B	A A/B A/B	A/B A/B A/B/C	A/B A/B/C B/C	B/C B/C B/C	B/C B/C/D C/D	C/D D D
10 15 22	106 156 226		A A/B A	A/B A/B A/B/C	A/B/C A/B/C A/B/C	A/B/C B/C B/C/D	B/C B/C/D B/C/D	C/D C/D C/D	C/D/E C/D D/E	E
33 47 68	336 476 686	A A	A/B A/B B/C	A/B/C B/C/D B/C/D	B/C/D B/C/D C/D	B/C/D C/D C/D	C/D C/D/E D/E	D/E D/E E/V	D/E E	
100 150 220	107 157 227	B B	B/C B C/D	B/C/D C/D C/D/E	C/D/E C/D/E D/E	D/E D/E/V D/E/V	D/E/V E/V			
330 470 680	337 477 687		C/D/E D/E D/E	C/D/E D/E/V E/V	D/E/V E/V V	E/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.

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

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
TAJC337*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

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.

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
TAJC106*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
TAJC226*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.