

Distributed by:

JAMECO[®]
ELECTRONICS

www.Jameco.com ♦ 1-800-831-4242

The content and copyrights of the attached
material are the property of its owner.

Jameco Part Number 850224

TAJ Series



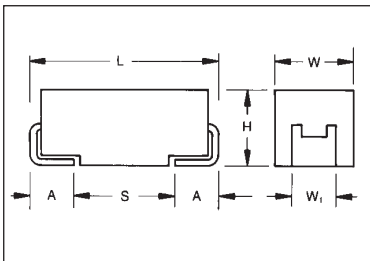
Standard Tantalum



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 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 163

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)

W₁ dimension applies to the termination width for A dimensional area only.

HOW TO ORDER

TAJ

Type

C

Case Size
See table above

106

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=2.5Vdc
004=4Vdc
006=6.3Vdc
010=10Vdc
016=16Vdc
020=20Vdc
025=25Vdc
035=35Vdc
050=50Vdc

R

Packaging
R = 7" T/R
(Lead Free since production date 1/1/04)
S = 13" T/R
(Lead Free since production date 1/1/04)
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:	0.1 µF to 2200 µF									
Capacitance Tolerance:	±10%; ±20%									
Rated Voltage (V _R)	≧ +85°C:	2.5	4	6.3	10	16	20	25	35	50
Category Voltage (V _C)	≧ +125°C:	1.7	2.7	4	7	10	13	17	23	33
Surge Voltage (V _S)	≧ +85°C:	3.3	5.2	8	13	20	26	32	46	65
Surge Voltage (V _S)	≧ +125°C:	2.2	3.4	5	8	13	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									
	Meets requirements of AEC-Q200									



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 (e)	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	A/B/C
0.68	684						A	A	A/B	A/B/C
1.0	105					A	A	A	A/B	A ^(M) /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	A/B/C	C/D
3.3	335			A	A	A/B	A/B	A/B/C	B/C	C/D
4.7	475		A	A	A/B	A/B	A/B/C	A/B/C	B/C/D	D
6.8	685		A	A/B	A/B	A/B/C	A/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	D/E
15	156		A/B	A/B	A/B/C	A ^(M) /B/C	B/C/D	C/D	C/D	D/E
22	226		A	A/B/C	A/B/C	B/C/D	B/C/D	C/D	D/E	V
33	336		A/B	A/B/C	A/B/C/D	B/C/D	C/D	D/E	D/E/V	
47	476	A	A/B	A/B/C/D	B/C/D	C/D	C/D/E	D/E	D/E	
68	686	A	A/B/C	B/C/D	B/C/D	C/D	D/E	E/V	E/V	V ^(M)
100	107	A/B	A/B/C	B/C/D	B ^(M) /C/D/E	D/E	D/E/V	V		
150	157	B	B/C	C/D	C/D/E	D/E/V	E/V			
220	227	B/D	B ^(M) /C/D	C/D/E	D/E	D/E/V				
330	337	D	C/D/E	C/D/E	D/E/V	E/V				
470	477	C/D	D/E	D/E/V	E/V	V				
680	687	D/E	D/E	E/V						
1000	108	D ^(M) /E	D/E/V	V ^(M)						
1500	158	D/E/V	E/V ^(M)							
2200	228	V								

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

Developmental Ratings - subject to change.

Released codes ^(M tolerance only)

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. (Ω) @100kHz
TAJA476*002#	A	47	2.5	0.9	6	3
TAJA686*002#	A	68	2.5	1.4	8	1.5
TAJA107*002#	A	100	2.5	2.5	30	1.4
TAJB107*002#	B	100	2.5	2.5	8	1.4
TAJB157*002#	B	150	2.5	3	10	1.6
TAJB227*002#	B	220	2.5	4.4	16	1.6
TAJD227*002#	D	220	2.5	5.5	8	0.3
TAJD337*002#	D	330	2.5	8.2	8	0.3
TAJC477*002#	C	470	2.5	9.4	12	0.2
TAJD477*002#	D	470	2.5	11.6	8	0.2
TAJD687*002#	D	680	2.5	17	16	0.2
TAJE687*002#	E	680	2.5	17	10	0.2
TAJD108M002#	D	1000	2.5	25	20	0.2
TAJE108*002#	E	1000	2.5	20	14	0.4
TAJD158*002#	D	1500	2.5	37.5	60	0.2
TAJE158*002#	E	1500	2.5	37	20	0.2
TAJV158*002#	V	1500	2.5	30	20	0.2
TAJV228*002#	V	2200	2.5	55	50	0.2
TAJA336*004#	A	33	4	1.3	6	3
TAJA476*004#	A	47	4	1.9	8	2.6
TAJA686*004#	A	68	4	2.7	10	1.5
TAJB686*004#	B	68	4	2.7	6	1.8
TAJA107*004#	A	100	4	4	30	1.4
TAJB107*004#	B	100	4	4	8	0.9
TAJB157*004#	B	150	4	6	8	1.5
TAJC157*004#	C	150	4	6	6	0.3
TAJB227M004#	B	220	4	8.8	12	1.1
TAJC227*004#	C	220	4	8.8	8	1.2
TAJD227*004#	D	220	4	8.8	8	0.9
TAJC337*004#	C	330	4	13.2	8	0.9
TAJD337*004#	D	330	4	13.2	8	0.9
TAJD477*004#	D	470	4	18.8	12	0.9
TAJE477*004#	E	470	4	18.8	10	0.5
TAJD687*004#	D	680	4	27.2	14	0.5
TAJE687*004#	E	680	4	27.2	14	0.9
TAJD108*004#	D	1000	4	40	60	0.2
TAJE108*004#	E	1000	4	40	14	0.4
TAJV108*004#	V	1000	4	40	16	0.4
TAJE158*004#	E	1500	4	60	30	0.2
TAJV158M004#	V	1500	4	60	30	0.2
TAJA106*006#	A	10	6.3	0.6	6	4
TAJA156*006#	A	15	6.3	0.9	6	3.5
TAJA226*006#	A	22	6.3	1.4	6	3
TAJA336*006#	A	33	6.3	2.1	8	2.5
TAJA476*006#	A	47	6.3	2.8	10	1.6
TAJB476*006#	B	47	6.3	3	6	2
TAJC476*006#	C	47	6.3	3	6	1.6
TAJB686*006#	B	68	6.3	4	8	0.9
TAJC686*006#	C	68	6.3	4.3	6	1.5
TAJB107*006#	B	100	6.3	6.3	10	1.7
TAJC107*006#	C	100	6.3	6.3	6	0.9
TAJC157*006#	C	150	6.3	9.5	6	1.3
TAJD157*006#	D	150	6.3	9.5	6	0.9
TAJC227*006#	C	220	6.3	13.9	8	1.2
TAJD227*006#	D	220	6.3	13.9	8	0.9
TAJE227*006#	E	220	6.3	13.9	8	0.9
TAJD337*006#	D	330	6.3	20.8	8	0.4
TAJE337*006#	E	330	6.3	20.8	8	0.4
TAJD477*006#	D	470	6.3	28	12	0.4
TAJE477*006#	E	470	6.3	28	10	0.4

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @100kHz
TAJV477*006#	V	470	6.3	28	10	0.4
TAJE687*006#	E	680	6.3	42.8	10	0.5
TAJV687*006#	V	680	6.3	42.8	10	0.5
TAJV108M006#	V	1000	6.3	63	16	0.4
TAJA475*010#	A	4.7	10	0.5	6	5
TAJA685*010#	A	6.8	10	0.7	6	4
TAJA106*010#	A	10	10	1	6	3
TAJA156*010#	A	15	10	1.5	6	3.2
TAJB156*010#	B	15	10	1.5	6	2.8
TAJA226*010#	A	22	10	2.2	8	3
TAJB226*010#	B	22	10	2.2	6	2.4
TAJA336*010#	A	33	10	3.3	8	1.7
TAJB336*010#	B	33	10	3.3	6	1.8
TAJC336*010#	C	33	10	3.3	6	1.6
TAJB476*010#	B	47	10	4.7	8	1
TAJC476*010#	C	47	10	4.7	6	1.2
TAJB686*010#	B	68	10	6.8	6	1.4
TAJC686*010#	C	68	10	6.8	6	1.3
TAJB107M010#	B	100	10	10	8	1.4
TAJC107*010#	C	100	10	10	8	1.2
TAJD107*010#	D	100	10	10	6	0.9
TAJC157*010#	C	150	10	15	8	0.9
TAJD157*010#	D	150	10	15	6	0.9
TAJE157*010#	E	150	10	15	8	0.9
TAJD227*010#	D	220	10	22	8	0.5
TAJE227*010#	E	220	10	22	8	0.5
TAJD337*010#	D	330	10	33	8	0.9
TAJE337*010#	E	330	10	33	8	0.9
TAJV337*010#	V	330	10	33	10	0.9
TAJE477*010#	E	470	10	47	10	0.5
TAJV477*010#	V	470	10	47	10	0.5
TAJA225*016#	A	2.2	16	0.5	6	6.5
TAJA335*016#	A	3.3	16	0.5	6	5
TAJB335*016#	B	3.3	16	0.5	6	4.5
TAJA475*016#	A	4.7	16	0.8	6	4
TAJB475*016#	B	4.7	16	0.8	6	3.5
TAJA685*016#	A	6.8	16	1.1	6	3.5
TAJB685*016#	B	6.8	16	1.1	6	2.5
TAJA106*016#	A	10	16	1.6	8	3
TAJB106*016#	B	10	16	1.6	6	2.8
TAJC106*016#	C	10	16	1.6	6	2
TAJA156M016#	A	15	16	2.4	6	2
TAJB156*016#	B	15	16	2.4	6	2.5
TAJC156*016#	C	15	16	2.4	6	1.8
TAJB226*016#	B	22	16	3.5	6	2.3
TAJC226*016#	C	22	16	3.5	6	1.6
TAJD226*016#	D	22	16	3.5	6	1.1
TAJB336*016#	B	33	16	5.3	8	2.1
TAJC336*016#	C	33	16	5.3	6	1.5
TAJD336*016#	D	33	16	5.3	6	0.9
TAJC476*016#	C	47	16	7.5	6	1.4
TAJD476*016#	D	47	16	7.5	6	0.9
TAJC686*016#	C	68	16	10.9	6	1.3
TAJD686*016#	D	68	16	10.9	6	0.9
TAJD107*016#	D	100	16	16	6	0.9
TAJE107*016#	E	100	16	16	6	0.9
TAJD157*016#	D	150	16	24	6	0.9
TAJE157*016#	E	150	16	24	8	0.3
TAJV157*016#	V	150	16	24	8	0.5
TAJE227*016#	E	220	16	35.2	10	0.5

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

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. (Ω) @100kHz
TAJV227*016#	V	220	16	35.2	8	0.9
TAJA105*020#	A	1	20	0.5	4	9
TAJA155*020#	A	1.5	20	0.5	6	6.5
TAJA225*020#	A	2.2	20	0.5	6	5.3
TAJB225*020#	B	2.2	20	0.5	6	3.5
TAJA335*020#	A	3.3	20	0.7	6	4.5
TAJB335*020#	B	3.3	20	0.7	6	3
TAJA475*020#	A	4.7	20	0.9	6	4
TAJB475*020#	B	4.7	20	0.9	6	3
TAJA685*020#	A	6.8	20	1.4	6	2.5
TAJB685*020#	B	6.8	20	1.4	6	2.5
TAJC685*020#	C	6.8	20	1.4	6	2
TAJB106*020#	B	10	20	2	6	2.1
TAJC106*020#	C	10	20	2	6	1.9
TAJB156*020#	B	15	20	3	6	2
TAJC156*020#	C	15	20	3	6	1.7
TAJB226*020#	B	22	20	4.4	6	1.8
TAJC226*020#	C	22	20	4.4	6	1.6
TAJD226*020#	D	22	20	4.4	6	0.9
TAJC336*020#	C	33	20	6.6	6	1.5
TAJD336*020#	D	33	20	6.6	6	0.9
TAJC476*020#	C	47	20	9.4	6	0.9
TAJD476*020#	D	47	20	9.4	6	0.9
TAJE476*020#	E	47	20	9.4	6	0.9
TAJD686*020#	D	68	20	13.6	6	0.9
TAJE686*020#	E	68	20	13.6	6	0.9
TAJD107*020#	D	100	20	20	6	0.9
TAJE107*020#	E	100	20	20	6	0.9
TAJV107*020#	V	100	20	20	8	0.9
TAJE157*020#	E	150	20	30	8	0.3
TAJV157*020#	V	150	20	30	8	0.5
TAJA474*025#	A	0.47	25	0.5	4	14
TAJA684*025#	A	0.68	25	0.5	4	10
TAJA105*025#	A	1	25	0.5	4	8
TAJA155*025#	A	1.5	25	0.5	6	7.5
TAJB155*025#	B	1.5	25	0.5	6	5
TAJA225*025#	A	2.2	25	0.6	6	7
TAJB225*025#	B	2.2	25	0.6	6	4.5
TAJA335*025#	A	3.3	25	0.8	6	3.7
TAJB335*025#	B	3.3	25	0.8	6	3.5
TAJA475*025#	A	4.7	25	1.2	6	3.1
TAJB475*025#	B	4.7	25	1.2	6	2.8
TAJB685*025#	B	6.8	25	1.7	6	2.8
TAJC685*025#	C	6.8	25	1.7	6	2
TAJC106*025#	C	10	25	2.5	6	1.8
TAJD106*025#	D	10	25	2.5	6	1.2
TAJC156*025#	C	15	25	3.8	6	1.6
TAJD156*025#	D	15	25	3.8	6	1
TAJC226*025#	C	22	25	5.5	6	1.4
TAJD226*025#	D	22	25	5.5	6	0.9
TAJD336*025#	D	33	25	8.3	6	0.9
TAJE336*025#	E	33	25	8.3	6	0.9
TAJD476*025#	D	47	25	11.8	6	0.9
TAJE476*025#	E	47	25	11.8	6	0.9
TAJE686*025#	E	68	25	17	6	0.9
TAJV686*025#	V	68	25	17	6	0.9
TAJV107*025#	V	100	25	25	8	0.4
TAJA104*035#	A	0.1	35	0.5	4	24
TAJA154*035#	A	0.15	35	0.5	4	21
TAJA224*035#	A	0.22	35	0.5	4	18
TAJA334*035#	A	0.33	35	0.5	4	15

AVX Part No.	Case Size	Capacitance (μF)	Rated Voltage (V)	DCL (μA) Max.	DF % Max.	ESR Max. (Ω) @100kHz
TAJA474*035#	A	0.47	35	0.5	4	12
TAJB474*035#	B	0.47	35	0.5	4	10
TAJA684*035#	A	0.68	35	0.5	4	8
TAJB684*035#	B	0.68	35	0.5	4	8
TAJA105*035#	A	1	35	0.5	4	7.5
TAJB105*035#	B	1	35	0.5	4	6.5
TAJA155*035#	A	1.5	35	0.5	6	7.5
TAJB155*035#	B	1.5	35	0.5	6	5.2
TAJC155*035#	C	1.5	35	0.5	6	4.5
TAJA225*035#	A	2.2	35	0.8	6	4.5
TAJB225*035#	B	2.2	35	0.8	6	4.2
TAJC225*035#	C	2.2	35	0.8	6	3.5
TAJB335*035#	B	3.3	35	1.2	6	3.5
TAJC335*035#	C	3.3	35	1.2	6	2.5
TAJB475*035#	B	4.7	35	1.2	6	3.1
TAJC475*035#	C	4.7	35	1.6	6	2.2
TAJD475*035#	D	4.7	35	1.6	6	1.5
TAJC685*035#	C	6.8	35	2.4	6	1.8
TAJD685*035#	D	6.8	35	2.4	6	1.3
TAJC106*035#	C	10	35	3.5	6	1.6
TAJD106*035#	D	10	35	3.5	6	1
TAJE106*035#	E	10	35	3.5	6	0.9
TAJC156*035#	C	15	35	5.3	6	1.4
TAJD156*035#	D	15	35	5.3	6	0.9
TAJD226*035#	D	22	35	7.7	6	0.9
TAJE226*035#	E	22	35	7.7	6	0.9
TAJD336*035#	D	33	35	11.6	6	0.9
TAJE336*035#	E	33	35	11.6	6	0.9
TAJV336*035#	V	33	35	11.6	6	500
TAJE476*035#	E	47	35	16.5	6	0.9
TAJV476*035#	V	47	35	16.5	6	0.4
TAJV686M035#	V	68	35	23.8	6	0.5
TAJA104*050#	A	0.1	50	0.5	4	22
TAJA154*050#	A	0.15	50	0.5	4	15
TAJB154*050#	B	0.15	50	0.5	4	17
TAJA224*050#	A	0.22	50	0.5	4	18
TAJB224*050#	B	0.22	50	0.5	4	14
TAJB334*050#	B	0.33	50	0.5	4	12
TAJA474*050#	A	0.47	50	0.5	4	9.5
TAJB474*050#	B	0.47	50	0.7	4	9.5
TAJC474*050#	C	0.47	50	0.5	4	8
TAJA684*050#	A	0.68	50	0.5	4	7.9
TAJB684*050#	B	0.68	50	0.5	4	8
TAJC684*050#	C	0.68	50	0.5	4	7
TAJA105M050#	A	1	50	0.5	4	6.6
TAJB105*050#	B	1	50	0.5	4	7
TAJC105*050#	C	1	50	0.5	4	5.5
TAJC155*050#	C	1.5	50	0.8	6	4.5
TAJD155*050#	D	1.5	50	0.8	6	4
TAJC225*050#	C	2.2	50	1.1	6	3
TAJD225*050#	D	2.2	50	1.1	6	2.5
TAJC335*050#	C	3.3	50	1.7	6	2.5
TAJD335*050#	D	3.3	50	1.7	6	2
TAJD475*050#	D	4.7	50	2.4	6	1.4
TAJD685*050#	D	6.8	50	3.4	6	1
TAJD106*050#	D	10	50	5	6	0.8
TAJE106*050#	E	10	50	5	6	1
TAJD156*050#	D	15	50	7.5	4	0.6
TAJE156*050#	E	15	50	7.5	6	0.6
TAJV226*050#	V	22	50	11	8	0.6

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

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.