TAJ Series

Standard Tantalum



FEATURES

- General purpose SMT chip tantalum series
- 7 case sizes available
- Low profile options available
- CV range: 0.10-2200µF / 2.5-50V

APPLICATIONS

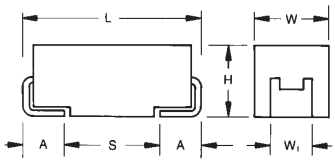
- General low power DC/DC and LDO

LEAD-FREE

LEAD-FREE COMPATIBLE COMPONENT

RoHS COMPLIANT

SnPb termination option is not RoHS compliant.



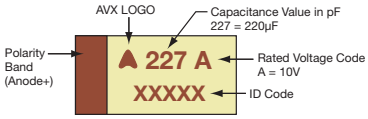
CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	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	1206	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	1210	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	2312	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	2917	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	2917	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)
U	2924	7361-43	7.30 (0.287)	6.10 (0.240)	4.10 (0.162)	3.10 (0.120)	1.30 (0.051)	4.40 (0.173)
V	2924	7361-38	7.30 (0.287)	6.10 (0.240)	3.55 (0.140)	3.10 (0.120)	1.30 (0.051)	4.40 (0.173)

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

MARKING

A, B, C, D, E, U, V CASE



HOW TO ORDER

TAJ C 106 M 035 R NJ –

Type

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

Packaging
R = Pure Tin 7" Reel
S = Pure Tin 13" Reel
A = Gold Plating 7" Reel
B = Gold Plating 13" Reel
H = Tin Lead 7" Reel (Contact Manufacturer)
K = Tin Lead 13" Reel (Contact Manufacturer)
H, K = Non RoHS

Specification Suffix
NJ = Standard Suffix

Additional characters may be added for special requirements
V = Dry pack Option (selected codes only)

TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C									
Capacitance Range:	0.10 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 series impedance, 60% confidence level									
Qualification:	CECC 30801 - 005 issue 2 EIA 535BAAC									
Termination Finished:	Sn Plating (standard), Gold and SnPb Plating upon request									
	For AEC-Q200 availability, please contact AVX									

CAPACITANCE AND RATED VOLTAGE 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	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/B/C
1.5	155				A	A	A	A/B	A/B/C	B/C/D
2.2	225			A	A	A/B	A/B	A/B	A/B/C	B/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	C/D
6.8	685		A	A/B	A/B	A/B/C	A/B/C	B/C	C/D	C/D
10	106		A	A/B	A/B/C	A/B/C	A(M)*/B/C	B/C/D	C/D/E	D/E/V
15	156		A/B	A/B	A/B/C	A(M)/B/C	B/C/D	C/D	C/D	D/E/V
22	226		A	A/B/C	A/B/C	B/C/D	B/C/D	C/D	D/E	V
33	336	A	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	E/V	
68	686	A	A/B/C	B/C/D	B/C/D	C/D	C(M)/D/E	E/V	V	
100	107	A/B	A/B/C	B/C/D	B(M)/C/D/E	C/D/E	D/E/V	E(M)/V		
150	157	B	B/C	B(M)/C/D	C/D/E	D/E/V	E/V	V(M)		
220	227	B/D	B(M)/C/D	C/D/E	C/D/E	E/V				
330	337	D	C/D/E	C/D/E	D/E/V	E(M)				
470	477	C/D	C/D/E	D/E/V	E/U/V					
680	687	C/D/E	D/E	E/V						
1000	108	D(M)/E	D/E/V	E(M)/V(M)						
1500	158	D/E/V(M)	E/V(M)							
2200	228	V(M)								

Not recommended for new designs, higher voltage or smaller case size substitution are offered.

Released codes (M tolerance only)

Engineering samples - please contact manufacturer

*Codes under development - subject to change

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)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @ 100kHz	MSL	100kHz RMS Current (mA)		
											25°C	85°C	125°C
2.5 Volt @ 85°C													
TAJA336*002#NJ	A	33	2.5	85	1.7	125	0.8	8	1.7	1	210	189	84
TAJA476*002#NJ	A	47	2.5	85	1.7	125	0.9	6	3	1	158	142	63
TAJA686*002#NJ	A	68	2.5	85	1.7	125	1.4	8	1.5	1	224	201	89
TAJA107*002#NJ	A	100	2.5	85	1.7	125	2.5	30	1.4	1	231	208	93
TAJB107*002#NJ	B	100	2.5	85	1.7	125	2.5	8	1.4	1	246	222	99
TAJB157*002#NJ	B	150	2.5	85	1.7	125	3	10	1.6	1	230	207	92
TAJB227*002#NJ	B	220	2.5	85	1.7	125	4.4	16	1.6	1	230	207	92
TAJD227*002#NJ	D	220	2.5	85	1.7	125	5.5	8	0.3	1	707	636	283
TAJD337*002#NJ	D	330	2.5	85	1.7	125	8.2	8	0.3	1	707	636	283
TAJC477*002#NJ	C	470	2.5	85	1.7	125	9.4	12	0.2	1	742	667	297
TAJD477*002#NJ	D	470	2.5	85	1.7	125	11.6	8	0.2	1	866	779	346
TAJC687*002#NJ	C	680	2.5	85	1.7	125	17	18	0.2	1	742	667	297
TAJD687*002#NJ	D	680	2.5	85	1.7	125	17	16	0.2	1	866	779	346
TAJE687*002#NJ	E	680	2.5	85	1.7	125	17	10	0.2	1[1)]	908	817	363
TAJD108M002#NJ	D	1000	2.5	85	1.7	125	25	20	0.2	1	866	779	346
TAJE108*002#NJ	E	1000	2.5	85	1.7	125	20	14	0.4	1[1)]	642	578	257
TAJD158*002#NJ	D	1500	2.5	85	1.7	125	37.5	60	0.2	1	866	779	346
TAJE158*002#NJ	E	1500	2.5	85	1.7	125	37	20	0.2	1[1)]	908	817	363
TAJV158M002#NJ	V	1500	2.5	85	1.7	125	30	20	0.2	1[1)]	1118	1006	447
TAJV228M002#NJ	V	2200	2.5	85	1.7	125	55	50	0.2	1[1)]	1118	1006	447
4 Volt @ 85°C													
TAJA336*004#NJ	A	33	4	85	2.7	125	1.3	6	3	1	158	142	63
TAJA476*004#NJ	A	47	4	85	2.7	125	1.9	8	2.6	1	170	153	68
TAJA686*004#NJ	A	68	4	85	2.7	125	2.7	10	1.5	1	224	201	89
TAJB686*004#NJ	B	68	4	85	2.7	125	2.7	6	1.8	1	217	196	87
TAJA107*004#NJ	A	100	4	85	2.7	125	4	30	1.4	1	231	208	93
TAJB107*004#NJ	B	100	4	85	2.7	125	4	8	0.9	1	307	277	123
TAJB157*004#NJ	B	150	4	85	2.7	125	6	10	1.5	1	238	214	95
TAJC157*004#NJ	C	150	4	85	2.7	125	6	6	0.3	1	606	545	242
TAJB227M004#NJ	B	220	4	85	2.7	125	8.8	12	1.1	1	278	250	111
TAJC227*004#NJ	C	220	4	85	2.7	125	8.8	8	1.2	1	303	272	121
TAJD227*004#NJ	D	220	4	85	2.7	125	8.8	8	0.9	1	408	367	163
TAJC337*004#NJ	C	330	4	85	2.7	125	13.2	8	0.3	1	606	545	242
TAJD337*004#NJ	D	330	4	85	2.7	125	13.2	8	0.9	1	408	367	163
TAJC477*004#NJ	C	470	4	85	2.7	125	18.8	14	0.3	1	606	545	242
TAJD477*004#NJ	D	470	4	85	2.7	125	18.8	12	0.9	1	408	367	163
TAJE477*004#NJ	E	470	4	85	2.7	125	18.8	10	0.5	1[1)]	574	517	230
TAJD687*004#NJ	D	680	4	85	2.7	125	27.2	14	0.5	1	548	493	219
TAJE687*004#NJ	E	680	4	85	2.7	125	27.2	14	0.9	1[1)]	428	385	171
TAJD108*004#NJ	D	1000	4	85	2.7	125	40	60	0.2	1	866	779	346
TAJE108*004#NJ	E	1000	4	85	2.7	125	40	14	0.4	1[1)]	642	578	257
TAJV108*004#NJ	V	1000	4	85	2.7	125	40	16	0.2	1[1)]	1118	1006	447
TAJE158*004#NJ	E	1500	4	85	2.7	125	60	30	0.2	1[1)]	908	817	363
TAJV158M004#NJ	V	1500	4	85	2.7	125	60	30	0.2	1[1)]	1118	1006	447
6.3 Volt @ 85°C													
TAJA106*006#NJ	A	10	6.3	85	4	125	0.6	6	4	1	137	123	55
TAJA156*006#NJ	A	15	6.3	85	4	125	0.9	6	3.5	1	146	132	59
TAJA226*006#NJ	A	22	6.3	85	4	125	1.4	6	3	1	158	142	63
TAJA336*006#NJ	A	33	6.3	85	4	125	2.1	8	2.2	1	185	166	74
TAJA476*006#NJ	A	47	6.3	85	4	125	2.8	10	1.6	1	217	195	87
TAJB476*006#NJ	B	47	6.3	85	4	125	3	6	2	1	206	186	82
TAJC476*006#NJ	C	47	6.3	85	4	125	3	6	1.6	1	262	236	105
TAJB686*006#NJ	B	68	6.3	85	4	125	4	8	0.9	1	307	277	123
TAJC686*006#NJ	C	68	6.3	85	4	125	4.3	6	1.5	1	271	244	108
TAJB107*006#NJ	B	100	6.3	85	4	125	6.3	10	1.7	1	224	201	89
TAJC107*006#NJ	C	100	6.3	85	4	125	6.3	6	0.9	1	350	315	140
TAJB157M006#NJ	B	150	6.3	85	4	125	9.5	10	1.2	1	266	240	106
TAJC157*006#NJ	C	150	6.3	85	4	125	9.5	6	1.3	1	291	262	116
TAJD157*006#NJ	D	150	6.3	85	4	125	9.5	6	0.9	1	408	367	163
TAJC227*006#NJ	C	220	6.3	85	4	125	13.9	8	1.2	1	303	272	121
TAJD227*006#NJ	D	220	6.3	85	4	125	13.9	8	0.4	1	612	551	245
TAJE227*006#NJ	E	220	6.3	85	4	125	13.9	8	0.4	1[1)]	642	578	257
TAJC337*006#NJ	C	330	6.3	85	4	125	19.8	12	0.5	1	469	422	188
TAJD337*006#NJ	D	330	6.3	85	4	125	20.8	8	0.4	1	612	551	245
TAJE337*006#NJ	E	330	6.3	85	4	125	20.8	8	0.4	1[1)]	642	578	257
TAJD477*006#NJ	D	470	6.3	85	4	125	28	12	0.4	1	612	551	245
TAJE477*006#NJ	E	470	6.3	85	4	125	28	10	0.4	1[1)]	642	578	257
TAJV477*006#NJ	V	470	6.3	85	4	125	28	10	0.4	1[1)]	791	712	316
TAJE687*006#NJ	E	680	6.3	85	4	125	42.8	10	0.5	1[1)]	574	517	230
TAJV687*006#NJ	V	680	6.3	85	4	125	42.8	10	0.5	1[1)]	707	636	283

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @ 100kHz	MSL	100kHz RMS Current (mA)		
											25°C	85°C	125°C
TAJE108M006#NJ	E	1000	6.3	85	4	125	60	20	0.2	1[1)]	908	817	363
TAJV108M006#NJ	V	1000	6.3	85	4	125	60	16	0.2	1[1)]	1118	1006	447
10 Volt @ 85°C													
TAJA475*010#NJ	A	4.7	10	85	7	125	0.5	6	5	1	122	110	49
TAJA685*010#NJ	A	6.8	10	85	7	125	0.7	6	4	1	137	123	55
TAJA106*010#NJ	A	10	10	85	7	125	1	6	3	1	158	142	63
TAJA156*010#NJ	A	15	10	85	7	125	1.5	6	3.2	1	153	138	61
TAJB156*010#NJ	B	15	10	85	7	125	1.5	6	2.8	1	174	157	70
TAJA226*010#NJ	A	22	10	85	7	125	2.2	8	3	1	158	142	63
TAJB226*010#NJ	B	22	10	85	7	125	2.2	6	2.4	1	188	169	75
TAJA336*010#NJ	A	33	10	85	7	125	3.3	8	1.7	1	210	189	84
TAJB336*010#NJ	B	33	10	85	7	125	3.3	6	1.8	1	217	196	87
TAJC336*010#NJ	C	33	10	85	7	125	3.3	6	1.6	1	262	236	105
TAJB476*010#NJ	B	47	10	85	7	125	4.7	8	1	1	292	262	117
TAJC476*010#NJ	C	47	10	85	7	125	4.7	6	1.2	1	303	272	121
TAJB686*010#NJ	B	68	10	85	7	125	6.8	6	1.4	1	246	222	99
TAJC686*010#NJ	C	68	10	85	7	125	6.8	6	1.3	1	291	262	116
TAJB107M010#NJ	B	100	10	85	7	125	10	8	1.4	1	246	222	99
TAJC107*010#NJ	C	100	10	85	7	125	10	8	1.2	1	303	272	121
TAJD107*010#NJ	D	100	10	85	7	125	10	6	0.9	1	408	367	163
TAJC157*010#NJ	C	150	10	85	7	125	15	8	0.9	1	350	315	140
TAJD157*010#NJ	D	150	10	85	7	125	15	8	0.9	1	408	367	163
TAJE157*010#NJ	E	150	10	85	7	125	15	8	0.9	1[1)]	428	385	171
TAJC227*010#NJ	C	220	10	85	7	125	22	16	0.5	1	469	422	188
TAJD227*010#NJ	D	220	10	85	7	125	22	8	0.5	1	548	493	219
TAJE227*010#NJ	E	220	10	85	7	125	22	8	0.5	1[1)]	574	517	230
TAJD337*010#NJ	D	330	10	85	7	125	33	8	0.9	1	408	367	163
TAJE337*010#NJ	E	330	10	85	7	125	33	8	0.9	1[1)]	428	385	171
TAJV337*010#NJ	V	330	10	85	7	125	33	10	0.9	1[1)]	572	474	211
TAJE477*010#NJ	E	470	10	85	7	125	47	10	0.5	1[1)]	574	517	230
TAJU477*010RNJ	U	470	10	85	7	125	47	12	0.5	1[1)]	574	517	230
TAJV477*010#NJ	V	470	10	85	7	125	47	10	0.5	1[1)]	707	636	283
16 Volt @ 85°C													
TAJA225*016#NJ	A	2.2	16	85	10	125	0.5	6	6.5	1	107	97	43
TAJA335*016#NJ	A	3.3	16	85	10	125	0.5	6	5	1	122	110	49
TAJB335*016#NJ	B	3.3	16	85	10	125	0.5	6	4.5	1	137	124	55
TAJA475*016#NJ	A	4.7	16	85	10	125	0.8	6	4	1	137	123	55
TAJB475*016#NJ	B	4.7	16	85	10	125	0.8	6	3.5	1	156	140	62
TAJA685*016#NJ	A	6.8	16	85	10	125	1.1	6	3.5	1	146	132	59
TAJB685*016#NJ	B	6.8	16	85	10	125	1.1	6	2.5	1	184	166	74
TAJA106*016#NJ	A	10	16	85	10	125	1.6	6	3	1	158	142	63
TAJB106*016#NJ	B	10	16	85	10	125	1.6	6	2.8	1	174	157	70
TAJC106*016#NJ	C	10	16	85	10	125	1.6	6	2	1	235	211	94
TAJA156M016#NJ	A	15	16	85	10	125	2.4	6	2	1	194	174	77
TAJB156*016#NJ	B	15	16	85	10	125	2.4	6	2.5	1	184	166	74
TAJC156*016#NJ	C	15	16	85	10	125	2.4	6	1.8	1	247	222	99
TAJB226*016#NJ	B	22	16	85	10	125	3.5	6	2.3	1	192	173	77
TAJC226*016#NJ	C	22	16	85	10	125	3.5	6	1	1	332	298	133
TAJD226*016#NJ	D	22	16	85	10	125	3.5	6	1.1	1	369	332	148
TAJB336*016#NJ	B	33	16	85	10	125	5.3	8	2.1	1	201	181	80
TAJC336*016#NJ	C	33	16	85	10	125	5.3	6	1.5	1	271	244	108
TAJD336*016#NJ	D	33	16	85	10	125	5.3	6	0.9	1	408	367	163
TAJC476*016#NJ	C	47	16	85	10	125	7.5	6	0.5	1	469	422	188
TAJD476*016#NJ	D	47	16	85	10	125	7.5	6	0.9	1	408	367	163
TAJC686*016#NJ	C	68	16	85	10	125	10.9	6	1.3	1	291	262	116
TAJD686*016#NJ	D	68	16	85	10	125	10.9	6	0.9	1	408	367	163
TAJC107*016#NJ	C	100	16	85	10	125	16	8	1	1	332	298	133
TAJD107*016#NJ	D	100	16	85	10	125	16	6	0.6	1	500	450	200
TAJE107*016#NJ	E	100	16	85	10	125	16	6	0.9	1[1)]	428	385	171
TAJD157*016#NJ	D	150	16	85	10	125	24	6	0.9	1	408	367	163
TAJE157*016#NJ	E	150	16	85	10	125	23	8	0.3	1[1)]	742	667	297
TAJV157*016#NJ	V	150	16	85	10	125	24	8	0.5	1[1)]	707	636	283
TAJE227*016#NJ	E	220	16	85	10	125	35.2	10	0.5	1[1)]	574	517	230
TAJV227*016#NJ	V	220	16	85	10	125	35.2	8	0.9	1[1)]	527	474	211
TAJE337M016#NJ	E	330	16	85	10	125	52.8	30	0.4	1[1)]	642	578	257
20 Volt @ 85°C													
TAJA105*020#NJ	A	1	20	85	13	125	0.5	4	9	1	91	82	37
TAJA155*020#NJ	A	1.5	20	85	13	125	0.5	6	6.5	1	107	97	43
TAJA225*020#NJ	A	2.2	20	85	13	125	0.5	6	5.3	1	119	107	48
TAJB225*020#NJ	B	2.2	20	85	13	125	0.5	6	3.5	1	156	140	62
TAJA335*020#NJ	A	3.3	20	85	13	125	0.7	6	4.5	1	129	116	52

TAJ Series

Standard Tantalum

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @ 100kHz	MSL	100kHz RMS Current (mA)		
											25°C	85°C	125°C
TAJB335*020#NJ	B	3.3	20	85	13	125	0.7	6	3	1	168	151	67
TAJA475*020#NJ	A	4.7	20	85	13	125	0.9	6	4	1	137	123	55
TAJB475*020#NJ	B	4.7	20	85	13	125	0.9	6	3	1	168	151	67
TAJA685*020#NJ	A	6.8	20	85	13	125	1.4	6	2.4	1	177	159	71
TAJB685*020#NJ	B	6.8	20	85	13	125	1.4	6	2.5	1	184	166	74
TAJC685*020#NJ	C	6.8	20	85	13	125	1.4	6	2	1	235	211	94
TAJB106*020#NJ	B	10	20	85	13	125	2	6	2.1	1	201	181	80
TAJC106*020#NJ	C	10	20	85	13	125	2	6	1.2	1	303	272	121
TAJB156*020#NJ	B	15	20	85	13	125	3	6	2	1	206	186	82
TAJC156*020#NJ	C	15	20	85	13	125	3	6	1.7	1	254	229	102
TAJB226*020#NJ	B	22	20	85	13	125	4.4	6	1.8	1	217	196	87
TAJC226*020#NJ	C	22	20	85	13	125	4.4	6	1.6	1	262	236	105
TAJD226*020#NJ	D	22	20	85	13	125	4.4	6	0.9	1	408	367	163
TAJC336*020#NJ	C	33	20	85	13	125	6.6	6	1.5	1	271	244	108
TAJD336*020#NJ	D	33	20	85	13	125	6.6	6	0.9	1	408	367	163
TAJC476*020#NJ	C	47	20	85	13	125	9.4	6	0.5	1	469	422	188
TAJD476*020#NJ	D	47	20	85	13	125	9.4	6	0.9	1	408	367	163
TAJE476*020#NJ	E	47	20	85	13	125	9.4	6	0.9	1[1)]	428	385	171
TAJC686M020#NJ	C	68	20	85	13	125	13.6	8	0.5	1	469	422	188
TAJD686*020#NJ	D	68	20	85	13	125	13.6	6	0.4	1	612	551	245
TAJE686*020#NJ	E	68	20	85	13	125	13.6	6	0.9	1[1)]	428	385	171
TAJD107*020#NJ	D	100	20	85	13	125	20	6	0.5	1	548	493	219
TAJE107*020#NJ	E	100	20	85	13	125	20	6	0.4	1[1)]	642	578	257
TAJV107*020#NJ	V	100	20	85	13	125	20	8	0.9	1[1)]	527	474	211
TAJE157*020#NJ	E	150	20	85	13	125	30	8	0.3	1[1)]	742	667	297
TAJV157*020#NJ	V	150	20	85	13	125	30	8	0.3	1[1)]	913	822	365
25 Volt @ 85°C													
TAJA474*025#NJ	A	0.47	25	85	17	125	0.5	4	14	1	73	66	29
TAJA684*025#NJ	A	0.68	25	85	17	125	0.5	4	10	1	87	78	35
TAJA105*025#NJ	A	1	25	85	17	125	0.5	4	8	1	97	87	39
TAJA155*025#NJ	A	1.5	25	85	17	125	0.5	6	7.5	1	100	90	40
TAJB155*025#NJ	B	1.5	25	85	17	125	0.5	6	5	1	130	117	52
TAJA225*025#NJ	A	2.2	25	85	17	125	0.6	6	7	1	104	93	41
TAJB225*025#NJ	B	2.2	25	85	17	125	0.6	6	4.5	1	137	124	55
TAJA335*025#NJ	A	3.3	25	85	17	125	0.8	6	3.7	1	142	128	57
TAJB335*025#NJ	B	3.3	25	85	17	125	0.8	6	3.5	1	156	140	62
TAJA475*025#NJ	A	4.7	25	85	17	125	1.2	6	3.1	1	156	140	62
TAJB475*025#NJ	B	4.7	25	85	17	125	1.2	6	1.5	1	238	214	95
TAJB685*025#NJ	B	6.8	25	85	17	125	1.7	6	2.8	1	174	157	70
TAJC685*025#NJ	C	6.8	25	85	17	125	1.7	6	2	1	235	211	94
TAJB106*025#NJ	B	10	25	85	17	125	2.5	6	2.5	1	184	166	74
TAJC106*025#NJ	C	10	25	85	17	125	2.5	6	1.8	1	247	222	99
TAJD106*025#NJ	D	10	25	85	17	125	2.5	6	1.2	1	354	318	141
TAJC156*025#NJ	C	15	25	85	17	125	3.8	6	1.6	1	262	236	105
TAJD156*025#NJ	D	15	25	85	17	125	3.8	6	1	1	387	349	155
TAJC226*025#NJ	C	22	25	85	17	125	5.5	6	1.4	1	280	252	112
TAJD226*025#NJ	D	22	25	85	17	125	5.5	6	0.9	1	408	367	163
TAJD336*025#NJ	D	33	25	85	17	125	8.3	6	0.9	1	408	367	163
TAJE336*025#NJ	E	33	25	85	17	125	8.3	6	0.9	1[1)]	428	385	171
TAJD476*025#NJ	D	47	25	85	17	125	11.8	6	0.9	1	408	367	163
TAJE476*025#NJ	E	47	25	85	17	125	11.8	6	0.9	1[1)]	428	385	171
TAJE686*025#NJ	E	68	25	85	17	125	17	6	0.9	1[1)]	428	385	171
TAJV686*025#NJ	V	68	25	85	17	125	17	6	0.9	1[1)]	527	474	211
TAJE107M025#NJ	E	100	25	85	17	125	25	10	0.3	1[1)]	742	667	297
TAJV107*025#NJ	V	100	25	85	17	125	25	8	0.4	1[1)]	791	712	316
TAJV157M025#NJ	V	150	25	85	17	125	37.5	10	0.4	1[1)]	791	712	316
35 Volt @ 85°C													
TAJA104*035#NJ	A	0.1	35	85	23	125	0.5	4	24	1	56	50	22
TAJA154*035#NJ	A	0.15	35	85	23	125	0.5	4	21	1	60	54	24
TAJA224*035#NJ	A	0.22	35	85	23	125	0.5	4	18	1	65	58	26
TAJA334*035#NJ	A	0.33	35	85	23	125	0.5	4	15	1	71	64	28
TAJA474*035#NJ	A	0.47	35	85	23	125	0.5	4	12	1	79	71	32
TAJB474*035#NJ	B	0.47	35	85	23	125	0.5	4	10	1	92	83	37
TAJA684*035#NJ	A	0.68	35	85	23	125	0.5	4	8	1	97	87	39
TAJB684*035#NJ	B	0.68	35	85	23	125	0.5	4	8	1	103	93	41
TAJA105*035#NJ	A	1	35	85	23	125	0.5	4	7.5	1	100	90	40
TAJB105*035#NJ	B	1	35	85	23	125	0.5	4	6.5	1	114	103	46
TAJA155*035#NJ	A	1.5	35	85	23	125	0.5	6	7.5	1	100	90	40
TAJB155*035#NJ	B	1.5	35	85	23	125	0.5	6	5.2	1	128	115	51
TAJC155*035#NJ	C	1.5	35	85	23	125	0.5	6	4.5	1	156	141	63
TAJA225*035#NJ	A	2.2	35	85	23	125	0.8	6	4.5	1	129	116	52

TAJ Series

Standard Tantalum

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @ 100kHz	MSL	100kHz RMS Current (mA)		
											25°C	85°C	125°C
TAJB225*035#NJ	B	2.2	35	85	23	125	0.8	6	4.2	1	142	128	57
TAJC225*035#NJ	C	2.2	35	85	23	125	0.8	6	3.5	1	177	160	71
TAJB335*035#NJ	B	3.3	35	85	23	125	1.2	6	3.5	1	156	140	62
TAJC335*035#NJ	C	3.3	35	85	23	125	1.2	6	2.5	1	210	189	84
TAJB475*035#NJ	B	4.7	35	85	23	125	1.6	6	3.1	1	166	149	66
TAJC475*035#NJ	C	4.7	35	85	23	125	1.6	6	2.2	1	224	201	89
TAJD475*035#NJ	D	4.7	35	85	23	125	1.6	6	1.5	1	316	285	126
TAJC685*035#NJ	C	6.8	35	85	23	125	2.4	6	1.8	1	247	222	99
TAJD685*035#NJ	D	6.8	35	85	23	125	2.4	6	1.3	1	340	306	136
TAJC106*035#NJ	C	10	35	85	23	125	3.5	6	1.6	1	262	236	105
TAJD106*035#NJ	D	10	35	85	23	125	3.5	6	1	1	387	349	155
TAJE106*035#NJ	E	10	35	85	23	125	3.5	6	0.9	1[1)]	428	385	171
TAJC156*035#NJ	C	15	35	85	23	125	5.3	6	1.4	1	280	252	112
TAJD156*035#NJ	D	15	35	85	23	125	5.3	6	0.9	1	408	367	163
TAJD226*035#NJ	D	22	35	85	23	125	7.7	6	0.9	1	408	367	163
TAJE226*035#NJ	E	22	35	85	23	125	7.7	6	0.5	1[1)]	574	517	230
TAJD336*035#NJ	D	33	35	85	23	125	11.6	6	0.9	1	408	367	163
TAJE336*035#NJ	E	33	35	85	23	125	11.6	6	0.9	1[1)]	428	385	171
TAJV336*035#NJ	V	33	35	85	23	125	11.6	6	0.5	1[1)]	707	636	283
TAJE476*035#NJ	E	47	35	85	23	125	16.5	6	0.9	1[1)]	428	385	171
TAJV476*035#NJ	V	47	35	85	23	125	16.5	6	0.4	1[1)]	791	712	316
TAJV686*035#NJ	V	68	35	85	23	125	23.8	6	0.5	1[1)]	707	363	283
50 Volt @ 85°C													
TAJA104*050#NJ	A	0.1	50	85	33	125	0.5	4	22	1	58	53	23
TAJA154*050#NJ	A	0.15	50	85	33	125	0.5	4	15	1	71	64	28
TAJB154*050#NJ	B	0.15	50	85	33	125	0.5	4	17	1	71	64	28
TAJA224*050#NJ	A	0.22	50	85	33	125	0.5	4	18	1	65	58	26
TAJB224*050#NJ	B	0.22	50	85	33	125	0.5	4	14	1	78	70	31
TAJA334*050#NJ	A	0.33	50	85	33	125	0.5	4	17	1	66	60	27
TAJB334*050#NJ	B	0.33	50	85	33	125	0.5	4	12	1	84	76	34
TAJA474*050#NJ	A	0.47	50	85	33	125	0.5	4	9.5	1	89	80	36
TAJB474*050#NJ	B	0.47	50	85	33	125	0.7	4	9.5	1	95	85	38
TAJC474*050#NJ	C	0.47	50	85	33	125	0.5	4	8	1	117	106	47
TAJA684*050#NJ	A	0.68	50	85	33	125	0.5	4	7.9	1	97	88	39
TAJB684*050#NJ	B	0.68	50	85	33	125	0.5	4	8	1	103	93	41
TAJC684*050#NJ	C	0.68	50	85	33	125	0.5	4	7	1	125	113	50
TAJA105*050#NJ	A	1	50	85	33	125	0.5	4	6.6	1	107	96	43
TAJB105*050#NJ	B	1	50	85	33	125	0.5	6	7	1	110	99	44
TAJC105*050#NJ	C	1	50	85	33	125	0.5	4	5.5	1	141	127	57
TAJB155*050#NJ	B	1.5	50	85	33	125	0.8	8	5.4	1	125	113	50
TAJC155*050#NJ	C	1.5	50	85	33	125	0.8	6	4.5	1	156	141	63
TAJD155*050#NJ	D	1.5	50	85	33	125	0.8	6	4	1	194	174	77
TAJB225*050#NJ	B	2.2	50	85	33	125	1.1	8	4.5	1	137	124	55
TAJC225*050#NJ	C	2.2	50	85	33	125	1.1	8	2.5	1	210	189	84
TAJD225*050#NJ	D	2.2	50	85	33	125	1.1	6	2.5	1	245	220	98
TAJC335*050#NJ	C	3.3	50	85	33	125	1.6	6	2.5	1	210	189	84
TAJD335*050#NJ	D	3.3	50	85	33	125	1.7	6	2	1	274	246	110
TAJC475*050#NJ	C	4.7	50	85	33	125	0.5	4	1.4	1	280	252	112
TAJD475*050#NJ	D	4.7	50	85	33	125	2.4	6	1.4	1	327	295	131
TAJC685*050#NJ	C	6.8	50	85	33	125	3.4	6	1	1	332	298	133
TAJD685*050#NJ	D	6.8	50	85	33	125	3.4	6	1	1	387	349	155
TAJD106*050#NJ	D	10	50	85	33	125	5	6	0.8	1	433	390	173
TAJE106*050#NJ	E	10	50	85	33	125	5	6	1	1[1)]	406	366	162
TAJV106*050#NJ	V	10	50	85	33	125	5	6	0.65	1[1)]	620	558	248
TAJD156*050#NJ	D	15	50	85	33	125	7.5	6	0.6	1	500	450	200
TAJE156*050#NJ	E	15	50	85	33	125	7.5	6	0.6	1[1)]	524	472	210
TAJV156*050#NJ	V	15	50	85	33	125	7.5	6	0.6	1[1)]	645	581	258
TAJV226*050#NJ	V	22	50	85	33	125	11	8	0.6	1[1)]	645	581	258

1[1)] – Dry pack option (see How to order) recommended for reduction of stress during soldering. Dry pack parts should be treated as MSL 3.

Moisture Sensitivity Level (MSL) is defined according to J-STD-020.

For AEC-Q200 availability, please contact AVX.

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.

For typical weight and composition see page 202.

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.

QUALIFICATION TABLE

<table>
<tr><th>TEST</th><th colspan="8">TAJ series (Temperature range -55ºC to +125ºC)</th></tr>
<tr><th></th><th colspan="3">Condition</th><th colspan="5">Characteristics</th></tr>
<tr><td rowspan="4">Endurance</td><td colspan="3" rowspan="4">Determine after application of rated voltage for 2000 +48/-0 hours at 85±2ºC and then leaving 1-2 hours at room temperature. Also determine of 125ºC temperature, category voltage for 2000 +48/-0 hours and then leaving 1-2 hours at room temperature. Power supply impedance to be ≤0.1Ω/V.</td><td>Visual examination</td><td colspan="4">no visible damage</td></tr>
<tr><td>DCL</td><td colspan="4">1.25 x initial limit</td></tr>
<tr><td>ΔC/C</td><td colspan="4">within ±10% of initial value</td></tr>
<tr><td>DF</td><td colspan="4">initial limit</td></tr>
<tr><td rowspan="4">Humidity</td><td colspan="3" rowspan="4">Determine after storage without applied voltage at 65±2ºC and 95±2% relative humidity for 500 hours and then recovery 1-2 hours at room temperature.</td><td>Visual examination</td><td colspan="4">no visible damage</td></tr>
<tr><td>DCL</td><td colspan="4">initial limit</td></tr>
<tr><td>ΔC/C</td><td colspan="4">within ±10% of initial value</td></tr>
<tr><td>DF</td><td colspan="4">1.2 x initial limit</td></tr>
<tr><td rowspan="8">Temperature Stability</td><td>Step</td><td>Temperature°C</td><td>Duration(min)</td><td></td><td>+20ºC</td><td>-55ºC</td><td>+20ºC</td><td>+85ºC</td><td>+125ºC</td><td>+20ºC</td></tr>
<tr><td>1</td><td>+20±2</td><td>15</td><td rowspan="6"></td><td rowspan="6"></td><td rowspan="6"></td><td rowspan="6"></td><td rowspan="6"></td><td rowspan="6"></td></tr>
<tr><td>2</td><td>-55+0/-3</td><td>15</td></tr>
<tr><td>3</td><td>+20±2</td><td>15</td></tr>
<tr><td>4</td><td>+85+3/-0</td><td>15</td></tr>
<tr><td>5</td><td>+125+3/-0</td><td>15</td></tr>
<tr><td>6</td><td>+20±2</td><td>15</td></tr>
<tr><td colspan="3" rowspan="3"></td><td>DCL</td><td>IL*</td><td>n/a</td><td>IL*</td><td>10 x IL*</td><td>12.5 x IL*</td><td>IL*</td></tr>
<tr><td>ΔC/C</td><td>n/a</td><td>+0/-10%</td><td>±5%</td><td>+10/-0%</td><td>+12/-0%</td><td>±5%</td></tr>
<tr><td>DF</td><td>IL*</td><td>1.5 x IL*</td><td>IL*</td><td>1.5 x IL*</td><td>2 x IL*</td><td>IL*</td></tr>
<tr><td rowspan="4">Surge Voltage</td><td colspan="3" rowspan="4">Test temperature: 125ºC+3/0ºC
Test voltage: Category voltage at 125ºC
Surge voltage: 1.3 x category voltage at 125ºC
Series protection resistance 1000±100Ω
Discharge resistance: 1000Ω
Number of cycles: 1000x
Cycle duration: 6 min; 30 sec charge,
5 min 30 sec discharge</td><td>Visual examination</td><td colspan="4">no visible damage</td></tr>
<tr><td>DCL</td><td colspan="4">initial limit</td></tr>
<tr><td>ΔC/C</td><td colspan="4">within ±5% of initial value</td></tr>
<tr><td>DF</td><td colspan="4">initial limit</td></tr>
</table>

*Initial Limit

TAJ Automotive Range

Standard Tantalum - Automotive Product Range

TAJ AUTOMOTIVE RANGE
CAPACITANCE AND RATED VOLTAGE RANGE
(LETTER DENOTES CASE SIZE)

Capacitance		Rated voltage DC (V_R) to 85°C						
µF	Code	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
0.33 0.47 0.68	334 474 684					A A	A A A	A A/B B
1.0 1.5 2.2	105 155 225		A	A A	A A A/B	A A A/B	A/B A/B B/C	B/C C C/D
3.3 4.7 6.8	335 475 685	A	A/B A/B	A/B A/B A/B	A/B A/B B/C	B B/C B/C	B/C B/C/D C/D	C/D C/D D
10 15 22	106 156 226	A/B A A/B/C	A/B A/B/C A/B/C	A/B/C B/C B/C/D	B/C B/C C/D	C/D C/D C/D	C/D D D/E	D/E E
33 47 68	336 476 686	A/B B/C B/C	B/C B/C/D C/D	C/D C/D C/D	C/D D D/E	D D/E	E	
100 150 220	107 157 227	C/D C/D D	C/D D/E D/E	D/E E	E			
330 470 680	337 477 687	D/E D/E E	E					

Not recommended for new designs, higher voltage or smaller case size substitution are offered.

Released codes

Engineering samples - please contact manufacturer

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

HOW TO ORDER

TAJ	C	106	M	035	T	NJ	V
Type	**Case Size** 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** 006 = 6.3Vdc 010 = 10Vdc 016 = 16Vdc 020 = 20Vdc 025 = 25Vdc 035 = 35Vdc 050 = 50Vdc	**Packaging** T = Automotive Lead Free 7" Reel U = Automotive Lead Free 13" Reel	**Specification Suffix** NJ = Std Suffix	**Dry Pack Option** (D,E case sizes mandatory)

LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT

RoHS COMPLIANT

TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C							
Capacitance Range:	0.22 µF to 680 µF							
Capacitance Tolerance:	±10%; ±20%							
Rated Voltage (V_R)	≤ +85°C:	6.3	10	16	20	25	35	50
Category Voltage (V_C)	≤ +125°C:	4	7	10	13	17	23	33
Surge Voltage (V_S)	≤ +85°C:	8	13	20	26	32	46	65
Surge Voltage (V_S)	≤ +125°C:	5	8	13	16	20	28	40
Temperature Range:	-55°C to +125°C							
Environmental Classification:	55/125/56 (IEC 68-2)							
Reliability:	1% per 1000 hours at 85°C, V_R with 0.1Ω/V series impedance, 60% confidence level							
Termination Finished:	Sn Plating (standard), Gold and SnPb Plating upon request							
	Meets requirements of AEC-Q200							

TAJ Automotive Range

Standard Tantalum - Automotive Product Range

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @ 100kHz	MSL	100kHz RMS Current (mA)		
											25°C	85°C	125°C
6.3 Volt @ 85°C													
TAJA335*006TNJ	A	3.3	6.3	85	4	125	0.5	6	7	1	104	93	41
TAJA106*006TNJ	A	10	6.3	85	4	125	0.6	6	4	1	137	123	55
TAJB106*006TNJ	B	10	6.3	85	4	125	0.6	6	3	1	168	151	67
TAJA156*006TNJ	A	15	6.3	85	4	125	0.9	6	3.5	1	146	132	59
TAJA226*006TNJ	A	22	6.3	85	4	125	1.4	6	3	1	158	142	63
TAJB226*006TNJ	B	22	6.3	85	4	125	1.4	6	2.5	1	184	166	74
TAJC226*006TNJ	C	22	6.3	85	4	125	1.4	6	2	1	235	211	94
TAJA336*006TNJ	A	33	6.3	85	4	125	2.1	8	2.2	1	185	166	74
TAJB336*006TNJ	B	33	6.3	85	4	125	2.1	6	2.2	1	197	177	79
TAJB476*006TNJ	B	47	6.3	85	4	125	3	6	2	1	206	186	82
TAJC476*006TNJ	C	47	6.3	85	4	125	3	6	1.6	1	262	236	105
TAJB686*006TNJ	B	68	6.3	85	4	125	4	8	0.9	1	307	277	123
TAJC686*006TNJ	C	68	6.3	85	4	125	4.3	6	1.5	1	271	244	108
TAJC107*006TNJ	C	100	6.3	85	4	125	6.3	6	0.9	1	350	315	140
TAJD107*006TNJV	D	100	6.3	85	4	125	6.3	6	0.9	3	408	367	163
TAJC157*006TNJ	C	150	6.3	85	4	125	9.5	6	1.3	1	291	262	116
TAJD157*006TNJV	D	150	6.3	85	4	125	9.5	6	0.9	3	408	367	163
TAJD227*006TNJV	D	220	6.3	85	4	125	13.9	8	0.4	3	612	551	245
TAJD337*006TNJV	D	330	6.3	85	4	125	20.8	8	0.4	3	612	551	245
TAJE337*006TNJV	E	330	6.3	85	4	125	20.8	8	0.4	3	642	578	257
TAJD477*006TNJV	D	470	6.3	85	4	125	28	12	0.4	3	612	551	245
TAJE477*006TNJV	E	470	6.3	85	4	125	28	10	0.4	3	642	578	257
TAJE687*006TNJV	E	680	6.3	85	4	125	42.8	10	0.5	3	574	517	230
10 Volt @ 85°C													
TAJA225*010TNJ	A	2.2	10	85	7	125	0.5	6	7	1	104	93	41
TAJA475*010TNJ	A	4.7	10	85	7	125	0.5	6	5	1	122	110	49
TAJB475*010TNJ	B	4.7	10	85	7	125	0.5	6	4	1	146	131	58
TAJA685*010TNJ	A	6.8	10	85	7	125	0.7	6	4	1	137	123	55
TAJB685*010TNJ	B	6.8	10	85	7	125	0.7	6	3	1	168	151	67
TAJA106*010TNJ	A	10	10	85	7	125	1	6	3	1	158	142	63
TAJB106*010TNJ	B	10	10	85	7	125	1	6	2.1	1	201	181	80
TAJA156*010TNJ	A	15	10	85	7	125	1.5	6	3.2	1	153	138	61
TAJB156*010TNJ	B	15	10	85	7	125	1.5	6	2.8	1	174	157	70
TAJC156*010TNJ	C	15	10	85	7	125	1.5	6	2	1	235	211	94
TAJA226*010TNJ	A	22	10	85	7	125	2.2	8	3	1	158	142	63
TAJB226*010TNJ	B	22	10	85	7	125	2.2	6	2.4	1	188	169	75
TAJC226*010TNJ	C	22	10	85	7	125	2.2	6	1.8	1	247	222	99
TAJB336*010TNJ	B	33	10	85	7	125	3.3	6	1.8	1	217	196	87
TAJC336*010TNJ	C	33	10	85	7	125	3.3	6	1.6	1	262	236	105
TAJB476*010TNJ	B	47	10	85	7	125	4.7	8	1	1	292	262	117
TAJC476*010TNJ	C	47	10	85	7	125	4.7	6	1.2	1	303	272	121
TAJD476*010TNJV	D	47	10	85	7	125	4.7	6	0.4	3	612	551	245
TAJC686*010TNJ	C	68	10	85	7	125	6.8	6	1.3	1	291	262	116
TAJD686*010TNJV	D	68	10	85	7	125	6.8	6	0.9	3	408	367	163
TAJC107*010TNJ	C	100	10	85	7	125	10	8	1.2	1	303	272	121
TAJD107*010TNJV	D	100	10	85	7	125	10	6	0.9	3	408	367	163
TAJD157*010TNJV	D	150	10	85	7	125	15	8	0.9	3	408	367	163
TAJE157*010TNJV	E	150	10	85	7	125	15	8	0.9	3	428	385	171
TAJD227*010TNJV	D	220	10	85	7	125	22	8	0.5	3	548	493	219
TAJE227*010TNJV	E	220	10	85	7	125	22	8	0.5	3	574	517	230
TAJE337*010TNJV	E	330	10	85	7	125	33	8	0.9	3	428	385	171
16 Volt @ 85°C													
TAJA105*016TNJ	A	1	16	85	10	125	0.5	4	11	1	83	74	33
TAJA225*016TNJ	A	2.2	16	85	10	125	0.5	6	6.5	1	107	97	43
TAJA335*016TNJ	A	3.3	16	85	10	125	0.5	6	5	1	122	110	49
TAJB335*016TNJ	B	3.3	16	85	10	125	0.5	6	4.5	1	137	124	55
TAJA475*016TNJ	A	4.7	16	85	10	125	0.8	6	4	1	137	123	55
TAJB475*016TNJ	B	4.7	16	85	10	125	0.8	6	3.5	1	156	140	62
TAJA685*016TNJ	A	6.8	16	85	10	125	1.1	6	3.5	1	146	132	59
TAJB685*016TNJ	B	6.8	16	85	10	125	1.1	6	2.5	1	184	166	74
TAJA106*016TNJ	A	10	16	85	10	125	1.6	6	3	1	158	142	63
TAJB106*016TNJ	B	10	16	85	10	125	1.6	6	2.8	1	174	157	70
TAJC106*016TNJ	C	10	16	85	10	125	1.6	6	2	1	235	211	94
TAJB156*016TNJ	B	15	16	85	10	125	2.4	6	2.5	1	184	166	74
TAJC156*016TNJ	C	15	16	85	10	125	2.4	6	1.8	1	247	222	99
TAJB226*016TNJ	B	22	16	85	10	125	3.5	6	2.3	1	192	173	77
TAJC226*016TNJ	C	22	16	85	10	125	3.5	6	1	1	332	298	133
TAJD226*016TNJV	D	22	16	85	10	125	3.5	6	1.1	3	369	332	148
TAJC336*016TNJ	C	33	16	85	10	125	5.3	6	1.5	1	271	244	108
TAJD336*016TNJV	D	33	16	85	10	125	5.3	6	0.9	3	408	367	163

TAJ Automotive Range

Standard Tantalum - Automotive Product Range

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @ 100kHz	MSL	100kHz RMS Current (mA)		
											25°C	85°C	125°C
TAJC476*016TNJ	C	47	16	85	10	125	7.5	6	0.5	1	469	422	188
TAJD476*016TNJV	D	47	16	85	10	125	7.5	6	0.9	3	408	367	163
TAJC686*016TNJ	C	68	16	85	10	125	10.9	6	1.3	1	291	262	116
TAJD686*016TNJV	D	68	16	85	10	125	10.9	6	0.9	3	408	367	163
TAJD107*016TNJV	D	100	16	85	10	125	16	6	0.6	3	500	450	200
TAJE107*016TNJV	E	100	16	85	10	125	16	6	0.9	3	428	385	171
TAJE157*016TNJV	E	150	16	85	10	125	23	8	0.3	3	742	667	297
20 Volt @ 85°C													
TAJA105*020TNJ	A	1	20	85	13	125	0.5	4	9	1	91	82	37
TAJA155*020TNJ	A	1.5	20	85	13	125	0.5	6	6.5	1	107	97	43
TAJA225*020TNJ	A	2.2	20	85	13	125	0.5	6	5.3	1	119	107	48
TAJB225*020TNJ	B	2.2	20	85	13	125	0.5	6	3.5	1	156	140	62
TAJA335*020TNJ	A	3.3	20	85	13	125	0.7	6	4.5	1	129	116	52
TAJB335*020TNJ	B	3.3	20	85	13	125	0.7	6	3	1	168	151	67
TAJA475*020TNJ	A	4.7	20	85	13	125	0.9	6	4	1	137	123	55
TAJB475*020TNJ	B	4.7	20	85	13	125	0.9	6	3	1	168	151	67
TAJB685*020TNJ	B	6.8	20	85	13	125	1.4	6	2.5	1	184	166	74
TAJC685*020TNJ	C	6.8	20	85	13	125	1.4	6	2	1	235	211	94
TAJB106*020TNJ	B	10	20	85	13	125	2	6	2.1	1	201	181	80
TAJC106*020TNJ	C	10	20	85	13	125	2	6	1.2	1	303	272	121
TAJB156*020TNJ	B	15	20	85	13	125	3	6	2	1	206	186	82
TAJC156*020TNJ	C	15	20	85	13	125	3	6	1.7	1	254	229	102
TAJC226*020TNJ	C	22	20	85	13	125	4.4	6	1.6	1	262	236	105
TAJD226*020TNJV	D	22	20	85	13	125	4.4	6	0.9	3	408	367	163
TAJC336*020TNJ	C	33	20	85	13	125	6.6	6	1.5	1	271	244	108
TAJD336*020TNJV	D	33	20	85	13	125	6.6	6	0.9	3	408	367	163
TAJD476*020TNJV	D	47	20	85	13	125	9.4	6	0.9	3	408	367	163
TAJD686*020TNJV	D	68	20	85	13	125	13.6	6	0.4	3	612	551	245
TAJE686*020TNJV	E	68	20	85	13	125	13.6	6	0.9	3	428	385	171
TAJE107*020TNJV	E	100	20	85	13	125	20	6	0.4	3	642	578	257
25 Volt @ 85°C													
TAJA474*025TNJ	A	0.47	25	85	17	125	0.5	4	14	1	73	66	29
TAJA684*025TNJ	A	0.68	25	85	17	125	0.5	4	10	1	87	78	35
TAJA105*025TNJ	A	1	25	85	17	125	0.5	4	8	1	97	87	39
TAJA155*025TNJ	A	1.5	25	85	17	125	0.5	6	7.5	1	100	90	40
TAJA225*025TNJ	A	2.2	25	85	17	125	0.6	6	7	1	104	93	41
TAJB225*025TNJ	B	2.2	25	85	17	125	0.6	6	4.5	1	137	124	55
TAJB335*025TNJ	B	3.3	25	85	17	125	0.8	6	3.5	1	156	140	62
TAJB475*025TNJ	B	4.7	25	85	17	125	1.2	6	1.5	1	238	214	95
TAJC475*025TNJ	C	4.7	25	85	17	125	1.2	6	2.4	1	214	193	86
TAJB685*025TNJ	B	6.8	25	85	17	125	1.7	6	2.8	1	174	157	70
TAJC685*025TNJ	C	6.8	25	85	17	125	1.7	6	2	1	235	211	94
TAJC106*025TNJ	C	10	25	85	17	125	2.5	6	1.8	1	247	222	99
TAJD106*025TNJV	D	10	25	85	17	125	2.5	6	1.2	3	354	318	141
TAJC156*025TNJ	C	15	25	85	17	125	3.8	6	1.6	1	262	236	105
TAJD156*025TNJV	D	15	25	85	17	125	3.8	6	1	3	387	349	155
TAJC226*025TNJ	C	22	25	85	17	125	5.5	6	1.4	1	280	252	112
TAJD226*025TNJV	D	22	25	85	17	125	5.5	6	0.9	3	408	367	163
TAJD336*025TNJV	D	33	25	85	17	125	8.3	6	0.9	3	408	367	163
TAJD476*025TNJV	D	47	25	85	17	125	11.8	6	0.9	3	408	367	163
TAJE476*025TNJV	E	47	25	85	17	125	11.8	6	0.9	3	428	385	171
35 Volt @ 85°C													
TAJA334*035TNJ	A	0.33	35	85	23	125	0.5	4	15	1	71	64	28
TAJA474*035TNJ	A	0.47	35	85	23	125	0.5	4	12	1	79	71	32
TAJA684*035TNJ	A	0.68	35	85	23	125	0.5	4	8	1	97	87	39
TAJA105*035TNJ	A	1	35	85	23	125	0.5	4	7.5	1	100	90	40
TAJB105*035TNJ	B	1	35	85	23	125	0.5	4	6.5	1	114	103	46
TAJA155*035TNJ	A	1.5	35	85	23	125	0.5	6	7.5	1	100	90	40
TAJB155*035TNJ	B	1.5	35	85	23	125	0.5	6	5.2	1	128	115	51
TAJB225*035TNJ	B	2.2	35	85	23	125	0.8	6	4.2	1	142	128	57
TAJC225*035TNJ	C	2.2	35	85	23	125	0.8	6	3.5	1	177	160	71
TAJB335*035TNJ	B	3.3	35	85	23	125	1.2	6	3.5	1	156	140	62
TAJC335*035TNJ	C	3.3	35	85	23	125	1.2	6	2.5	1	210	189	84
TAJB475*035TNJ	B	4.7	35	85	23	125	1.6	6	3.1	1	166	149	66
TAJC475*035TNJ	C	4.7	35	85	23	125	1.6	6	2.2	1	224	201	89
TAJD475*035TNJV	D	4.7	35	85	23	125	1.6	6	1.5	3	316	285	126
TAJC685*035TNJ	C	6.8	35	85	23	125	2.4	6	1.8	1	247	222	99
TAJD685*035TNJV	D	6.8	35	85	23	125	2.4	6	1.3	3	340	306	136
TAJC106*035TNJ	C	10	35	85	23	125	3.5	6	1.6	1	262	236	105
TAJD106*035TNJV	D	10	35	85	23	125	3.5	6	1	3	387	349	155
TAJD156*035TNJV	D	15	35	85	23	125	5.3	6	0.9	3	408	367	163

TAJ Automotive Range

Standard Tantalum - Automotive Product Range

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @ 100kHz	MSL	100kHz RMS Current (mA)		
											25°C	85°C	125°C
TAJD226*035TNJV	D	22	35	85	23	125	7.7	6	0.9	3	408	367	163
TAJE226*035TNJV	E	22	35	85	23	125	7.7	6	0.5	3	574	517	230
TAJE336*035TNJV	E	33	35	85	23	125	11.6	6	0.9	3	428	385	171
50 Volt @ 85°C													
TAJA224*050TNJ	A	0.22	50	85	33	125	0.5	4	18	1	65	58	26
TAJA334*050TNJ	A	0.33	50	85	33	125	0.5	4	17	1	66	60	27
TAJA474*050TNJ	A	0.47	50	85	33	125	0.5	4	9.5	1	89	80	36
TAJB474*050TNJ	B	0.47	50	85	33	125	0.7	4	9.5	1	95	85	38
TAJB684*050TNJ	B	0.68	50	85	33	125	0.5	4	8	1	103	93	41
TAJB105*050TNJ	B	1	50	85	33	125	0.5	6	7	1	110	99	44
TAJC105*050TNJ	C	1	50	85	33	125	0.5	4	5.5	1	141	127	57
TAJC155*050TNJ	C	1.5	50	85	33	125	0.8	6	4.5	1	156	141	63
TAJC225*050TNJ	C	2.2	50	85	33	125	1.1	8	2.5	1	210	189	84
TAJD225*050TNJV	D	2.2	50	85	33	125	1.1	6	2.5	3	245	220	98
TAJC335*050TNJ	C	3.3	50	85	33	125	1.6	6	2.5	1	210	189	84
TAJD335*050TNJV	D	3.3	50	85	33	125	1.7	6	2	3	274	246	110
TAJC475*050TNJ	C	4.7	50	85	33	125	0.5	4	1.4	1	280	252	112
TAJD475*050TNJV	D	4.7	50	85	33	125	2.4	6	1.4	3	327	295	131
TAJD685*050TNJV	D	6.8	50	85	33	125	3.4	6	1	3	387	349	155
TAJD106*050TNJV	D	10	50	85	33	125	5	6	0.8	3	433	390	173
TAJE106*050TNJV	E	10	50	85	33	125	5	6	1	3	406	366	162
TAJE156*050TNJV	E	15	50	85	33	125	7.5	6	0.6	3	524	472	210

Moisture Sensitivity Level (MSL) is defined according to J-STD-020

*Please use "U" instead of "T" in the suffix letter for 13'' reel packaging

Please use specific PN for automotive version – see "HOW TO ORDER".

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.

For typical weight and composition see page 202.

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.

QUALIFICATION TABLE

<table>
<tr><th rowspan="2">TEST</th><th colspan="11">TAJ automotive series (Temperature range -55ºC to +125ºC)</th></tr>
<tr><th colspan="3">Condition</th><th colspan="8">Characteristics</th></tr>
<tr><td rowspan="5">Endurance</td><td colspan="3" rowspan="5">Determine after application of rated voltage for 2000 +48/-0 hours at 85±2ºC and then leaving 1-2 hours at room temperature. Also determine of 125ºC temperature, category voltage for 2000 +48/-0 hours and then leaving 1-2 hours at room temperature. Power supply impedance to be ≤0.1Ω/V.</td><td>Visual examination</td><td colspan="7">no visible damage</td></tr>
<tr><td>DCL</td><td colspan="7">1.25 x initial limit</td></tr>
<tr><td>ΔC/C</td><td colspan="7">within ±10% of initial value</td></tr>
<tr><td>DF</td><td colspan="7">initial limit</td></tr>
<tr><td>ESR</td><td colspan="7">initial limit</td></tr>
<tr><td rowspan="5">Storage Life</td><td colspan="3" rowspan="5">125ºC, 0V, 2000h</td><td>Visual examination</td><td colspan="7">no visible damage</td></tr>
<tr><td>DCL</td><td colspan="7">1.25 x initial limit</td></tr>
<tr><td>ΔC/C</td><td colspan="7">within ±10% of initial value</td></tr>
<tr><td>DF</td><td colspan="7">initial limit</td></tr>
<tr><td>ESR</td><td colspan="7">initial limit</td></tr>
<tr><td rowspan="5">Humidity</td><td colspan="3" rowspan="5">Determine after storage without applied voltage at 65±2ºC and 95±2% relative humidity for 500 hours and then recovery 1-2 hours at room temperature.</td><td>Visual examination</td><td colspan="7">no visible damage</td></tr>
<tr><td>DCL</td><td colspan="7">1.5 x initial limit</td></tr>
<tr><td>ΔC/C</td><td colspan="7">within ±10% of initial value</td></tr>
<tr><td>DF</td><td colspan="7">1.2 x initial limit</td></tr>
<tr><td>ESR</td><td colspan="7">initial limit</td></tr>
<tr><td rowspan="5">Biased Humidity</td><td colspan="3" rowspan="5">Determine after leaving for 1000 hours at 85±2ºC, 85% relative humidity and rated voltage and then recovery 1-2 hours at room temperature.</td><td>Visual examination</td><td colspan="7">no visible damage</td></tr>
<tr><td>DCL</td><td colspan="7">2 x initial limit</td></tr>
<tr><td>ΔC/C</td><td colspan="7">within ±10% of initial value</td></tr>
<tr><td>DF</td><td colspan="7">1.2 x initial limit</td></tr>
<tr><td>ESR</td><td colspan="7">initial limit</td></tr>
<tr><td rowspan="8">Temperature Stability</td><td>Step</td><td>Temperature°C</td><td>Duration(min)</td><td></td><td>+20ºC</td><td>-55ºC</td><td>+20ºC</td><td>+85ºC</td><td>+125ºC</td><td>+20ºC</td></tr>
<tr><td>1</td><td>+20±2</td><td>15</td><td>DCL</td><td>IL*</td><td>n/a</td><td>IL*</td><td>10 x IL*</td><td>12.5 x IL*</td><td>IL*</td></tr>
<tr><td>2</td><td>-55+0/-3</td><td>15</td><td>ΔC/C</td><td>n/a</td><td>+0/-10%</td><td>±5%</td><td>+10/-0%</td><td>+12/-0%</td><td>±5%</td></tr>
<tr><td>3</td><td>+20±2</td><td>15</td><td>DF</td><td>IL*</td><td>1.5 x IL*</td><td>IL*</td><td>1.5 x IL*</td><td>2 x IL*</td><td>IL*</td></tr>
<tr><td>4</td><td>+85+3/-0</td><td>15</td><td>ESR</td><td>IL*</td><td>2 x IL*</td><td>IL*</td><td>IL*</td><td>IL*</td><td>IL*</td></tr>
<tr><td>5</td><td>+125+3/-0</td><td>15</td><td colspan="6"></td></tr>
<tr><td>6</td><td>+20±2</td><td>15</td><td colspan="6"></td></tr>
<tr><td rowspan="5">Surge Voltage</td><td colspan="3" rowspan="5">Test temperature: 125ºC+3/0ºC
Test voltage: Category voltage at 125ºC
Surge voltage: 1.3 x category voltage at 125ºC
Series protection resistance 1000±100Ω
Discharge resistance: 1000Ω
Number of cycles: 1000x
Cycle duration: 6 min; 30 sec charge,
5 min 30 sec discharge</td><td>Visual examination</td><td colspan="7">no visible damage</td></tr>
<tr><td>DCL</td><td colspan="7">initial limit</td></tr>
<tr><td>ΔC/C</td><td colspan="7">within ±5% of initial value</td></tr>
<tr><td>DF</td><td colspan="7">initial limit</td></tr>
<tr><td>ESR</td><td colspan="7">initial limit</td></tr>
</table>

*Initial Limit