

# TRJ Series



## Professional Tantalum Chip Capacitor



- Improved reliability – 2x standard
- DCL reduced by 25% to 0.0075 CV
- Robust against higher thermo-mechanical stresses during assembly process
- CV range: 0.10-470µF / 4-50V
- 5 case sizes available
- 123 low ESR parts released
- Automotive, medical, aerospace, military and other high-end applications



SnPb termination option is not RoHS compliant.



For part marking see page 127

### 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 <sub>1</sub> ±0.20 (0.008) -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)

W<sub>1</sub> dimension applies to the termination width for A dimensional area only.

### HOW TO ORDER

<b>TRJ</b>	<b>B</b>	<b>105</b>	<b>*</b>	<b>035</b>	<b>R</b>	<b>RJ</b>	<b>-</b>
<b>Type</b>	<b>Case Size</b> See table above	<b>Capacitance Code</b> pF code: 1st two digits represent significant figures, 3rd digit represents multiplier (number of zeros to follow)	<b>Tolerance</b> K=±10% M=±20%	<b>Rated DC Voltage</b> 004 = 4V 006 = 6.3V 010 = 10V 016 = 16V 020 = 20V 025 = 25V 035 = 35V 050 = 50V	<b>Packaging</b> 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	<b>Standard Suffix</b> OR <b>0100</b> Low ESR in mΩ	<b>Additional characters may be added for special requirements</b> 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 470 µF									
Capacitance Tolerance:	±10%; ±20%									
Leakage Current DCL:	0.0075CV									
Rated Voltage (V <sub>R</sub> )	≤ +85°C:	4	6.3	10	16	20	25	35	50	
Category Voltage (V <sub>C</sub> )	≤ +125°C:	2.7	4	7	10	13	17	23	33	
Surge Voltage (V <sub>S</sub> )	≤ +85°C:	5.2	8	13	20	26	32	46	65	
Surge Voltage (V <sub>S</sub> )	≤ +125°C:	3.4	5	8	13	16	20	28	40	
Temperature Range:	-55°C to +125°C									
Reliability:	0.5% per 1000 hours at 85°C, V <sub>R</sub> with 0.1Ω/V series impedance, 60% confidence level									
Termination Plating:	Sn Plating (standard), Gold and SnPb Plating upon request Meets requirements of AEC-Q200									



## Professional Tantalum Chip Capacitor

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

Capacitance		Rated Voltage DC (V <sub>R</sub> ) to 85°C							
μF	Code	4V (G)	6.3V (J)	10V (A)	16V (C)	20V (D)	25V (E)	35V (V)	50V (T)
0.10	104							A	
0.15	154							A, A(6000)	
0.22	224							A, A(6000)	A, A(7000)
0.33	334							A, A(6000)	A
0.47	474						A, A(7000)	A, A(4000)	B
0.68	684						A, A(6000)	A, A(6000)	B, B(2000)
1.0	105				A	A, A(3000)	A, A(3000)	A, B, A(3000), B(2000)	C, B, B(2000)
1.5	155			A		A, A(3000)	A, B, A(3000)	A, B, A(2000), B(2500)	C, C(1500)
2.2	225			A	A, A(3500)	A, A(3000)	A, B, A(1600), B(1200)	B, B(2000)	C, D, C(1000), D(1200)
3.3	335				A, B, A(3500)	A, B, A(2500), B(1300)	B, B(2000)	B, C, D, B(1000), C(800)	C, D, C(1000), D(800)
4.7	475			A, A(2000)	A, B, A(2000), B(1500)	A, B, A(1800), B(1000)	B, B(1000)	B, C, D, B(1500), C(600)	D, D(600)
6.8	685			A, B, A(1800)	A, B, C, A(1500), B(1200)	B, C, B(1000)	B, C, B(1000), C(600)	C, D, C(600)	D
10	106		A, B, A(1500)	A, B, A(1800), B(800)	B, C, B(800)	B, C, B(1000), C(500)	C, D, C(600)	C, D, C(600), D(250,400)	E, E(300,400)
15	156	B	A, B, A(1500), B(700)	A, B, C, A(1000), B(600)	B, B(800)	B, C, D, B(500), C(400)	C, D, C(500), D(300)	D, D(225)	
22	226		A, B, C, A(900), B(600)	B, B(700)	B, C, D, B(600), C(350)	C, D, C(400), D(150,300)	D, D(300)	D, D(200,400)	
33	336	C	B, C, B(600)	B, C, D, B(650), C(300)	C, C(300)	C, D, C(300), D(250)	D, D(400)	E, E(250)	
47	476		B, C, B(500), C(250)	C, D, C(300)	C, D, C(350), D(200)	D, D(200)	D, E, D(250), E(150)		
68	686		C, C(200)	C, C(300)	D, D(150)	D, E, D(200), E(120,200)			
100	107		C, C(300)	C, D, E, C(200), D(150), E(100)	D, E, D(150), E(150)	E, E(150)			
150	157		C, D, C(300), D(150)	D, E, D(150), E(150)	E, E(150)				
220	227		D, D(150)	D, E, E(150)					
330	337		D, E, E(150)	E, E(100)					
470	477		E, E(200)						

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

Available Ratings, (ESR ratings in mOhms in brackets)

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.

# TRJ Series



## Professional Tantalum Chip Capacitor

### RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	MSL	100kHz RMS Current (mA)			100kHz RMS Voltage (mV)		
								25°C	85°C	125°C	25°C	85°C	125°C
<b>4 Volt @ 85°C (2.7 Volt @ 125°C)</b>													
TRJB156*004#RJ	B	15	4	0.45	6	3000	1	168	151	67	505	454	202
TRJC336*004#RJ	C	33	4	1.0	6	2000	1	235	211	94	469	422	188
<b>6.3 Volt @ 85°C (4 Volt @ 125°C)</b>													
TRJA106*006#RJ	A	10	6.3	0.45	6	2200	1	185	166	74	406	366	162
TRJA106*006#1500	A	10	6.3	0.45	6	1500	1	224	201	89	335	302	134
TRJB106*006#RJ	B	10	6.3	0.45	6	3000	1	168	151	67	505	454	202
TRJA156*006#RJ	A	15	6.3	0.68	6	2030	1	192	173	77	390	351	156
TRJA156*006#1500	A	15	6.3	0.68	6	1500	1	224	201	89	335	302	134
TRJB156*006#RJ	B	15	6.3	0.68	6	2030	1	205	184	82	415	374	166
TRJB156*006#0700	B	15	6.3	0.68	6	700	1	348	314	139	244	220	98
TRJA226*006#RJ	A	22	6.3	0.99	6	1700	1	210	189	84	357	321	143
TRJA226*006#0900	A	22	6.3	0.99	6	900	1	289	260	115	260	234	104
TRJB226*006#RJ	B	22	6.3	0.99	6	1880	1	213	191	85	400	360	160
TRJB226*006#0600	B	22	6.3	0.99	6	600	1	376	339	151	226	203	90
TRJC226*006#RJ	C	22	6.3	0.99	6	2000	1	235	211	94	469	422	188
TRJB336*006#RJ	B	33	6.3	1.5	6	1740	1	221	199	88	385	346	154
TRJB336*006#0600	B	33	6.3	1.5	6	600	1	376	339	151	226	203	90
TRJC336*006#RJ	C	33	6.3	1.5	6	1800	1	247	222	99	445	400	178
TRJB476*006#RJ	B	47	6.3	2.1	6	1620	1	229	206	92	371	334	148
TRJB476*006#0500	B	47	6.3	2.1	6	500	1	412	371	165	206	186	82
TRJC476*006#RJ	C	47	6.3	2.1	6	540	1	451	406	181	244	219	97
TRJC476*006#0250	C	47	6.3	2.1	6	250	1	663	597	265	166	149	66
TRJC686*006#RJ	C	68	6.3	3.1	6	490	1	474	426	190	232	209	93
TRJC686*006#0200	C	68	6.3	3.1	6	200	1	742	667	297	148	133	59
TRJC107*006#RJ	C	100	6.3	4.5	6	440	1	500	450	200	220	198	88
TRJC107*006#0300	C	100	6.3	4.5	6	300	1	606	545	242	182	163	73
TRJC157*006#RJ	C	150	6.3	6.8	8	500	1	469	422	188	235	211	94
TRJC157*006#0300	C	150	6.3	6.8	8	300	1	606	545	242	182	163	73
TRJD157*006#RJ	D	150	6.3	6.8	6	400	1	612	551	245	245	220	98
TRJD157*006#0150	D	150	6.3	6.8	6	150	1	1000	900	400	150	135	60
TRJD227*006#RJ	D	220	6.3	9.9	8	360	1	645	581	258	232	209	93
TRJD227*006#0150	D	220	6.3	9.9	8	150	1	1000	900	400	150	135	60
TRJD337*006#RJ	D	330	6.3	14	8	400	1	612	551	245	245	220	98
TRJE337*006#RJ	E	330	6.3	14	8	330	1 <sup>1)</sup>	707	636	283	233	210	93
TRJE337*006#0150	E	330	6.3	14	8	150	1 <sup>1)</sup>	1049	944	420	157	142	63
TRJE477*006#RJ	E	470	6.3	21	8	250	1 <sup>1)</sup>	812	731	325	203	183	81
TRJE477*006#0200	E	470	6.3	21	8	200	1 <sup>1)</sup>	908	817	363	182	163	73
<b>10 Volt @ 85°C (7 Volt @ 125°C)</b>													
TRJA155*010#RJ	A	1.5	10	0.30	6	7000	1	104	93	41	725	652	290
TRJA225*010#RJ	A	2.2	10	0.30	6	7000	1	104	93	41	725	652	290
TRJA475*010#RJ	A	4.7	10	0.35	6	2900	1	161	145	64	466	420	187
TRJA475*010#2000	A	4.7	10	0.35	6	2000	1	194	174	77	387	349	155
TRJA685*010#RJ	A	6.8	10	0.51	6	2650	1	168	151	67	446	401	178
TRJA685*010#1800	A	6.8	10	0.51	6	1800	1	204	184	82	367	331	147
TRJB685*010#RJ	B	6.8	10	0.51	6	3000	1	168	151	67	505	454	202
TRJA106*010#RJ	A	10	10	0.75	6	2200	1	185	166	74	406	366	162
TRJA106*010#1800	A	10	10	0.75	6	1800	1	204	184	82	367	331	147
TRJB106*010#RJ	B	10	10	0.75	6	2200	1	197	177	79	432	389	173
TRJB106*010#0800	B	10	10	0.75	6	800	1	326	293	130	261	235	104
TRJA156*010#RJ	A	15	10	1.10	6	1800	1	204	184	82	367	331	147
TRJA156*010#1000	A	15	10	1.10	6	1000	1	274	246	110	274	246	110
TRJB156*010#RJ	B	15	10	1.1	6	2030	1	205	184	82	415	374	166
TRJB156*010#0600	B	15	10	1.1	6	600	1	376	339	151	226	203	90
TRJC156*010#RJ	C	15	10	1.1	6	2000	1	235	211	94	469	422	188
TRJB226*010#RJ	B	22	10	1.7	6	1880	1	213	191	85	400	360	160
TRJB226*010#0700	B	22	10	1.7	6	700	1	348	314	139	244	220	98
TRJB336*010#RJ	B	33	10	2.5	6	1000	1	292	262	117	292	262	117
TRJB336*010#0650	B	33	10	2.5	6	650	1	362	325	145	235	212	94
TRJC336*010#RJ	C	33	10	2.5	6	590	1	432	389	173	255	229	102
TRJC336*010#0300	C	33	10	2.5	6	300	1	606	545	242	182	163	73
TRJD336*010#RJ	D	33	10	2.5	6	1100	1	369	332	148	406	366	162
TRJC476*010#RJ	C	47	10	3.5	6	540	1	451	406	181	244	219	97
TRJC476*010#0300	C	47	10	3.5	6	300	1	606	545	242	182	163	73
TRJD476*010#RJ	D	47	10	3.5	6	400	1	612	551	245	245	220	98
TRJC686*010#RJ	C	68	10	5.1	6	490	1	474	426	190	232	209	93
TRJC686*010#0300	C	68	10	5.1	6	300	1	606	545	242	182	163	73
TRJC107*010#RJ	C	100	10	7.5	8	500	1	469	422	188	235	211	94
TRJC107*010#0200	C	100	10	7.5	8	200	1	742	667	297	148	133	59
TRJD107*010#RJ	D	100	10	7.5	6	440	1	584	525	234	257	231	103

<sup>1)</sup> 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.

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.

The EIA & CECC standards for low ESR Solid Tantalum Capacitors allow an ESR movement to 1.25 times catalogue limit post mounting.

For typical weight and composition see page 120.

**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.**



# TRJ Series



## Professional Tantalum Chip Capacitor

### RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	MSL	100kHz RMS Current (mA)			100kHz RMS Voltage (mV)		
								25°C	85°C	125°C	25°C	85°C	125°C
TRJD107*010#0150	D	100	10	7.5	6	150	1	1000	900	400	150	135	60
TRJE107*010#RJ	E	100	10	7.5	6	440	1 <sup>1)</sup>	612	551	245	269	242	108
TRJE107*010#0100	E	100	10	7.5	6	100	1 <sup>1)</sup>	1285	1156	514	128	116	51
TRJD157*010#RJ	D	150	10	11	8	400	1	612	551	245	245	220	98
TRJD157*010#0150	D	150	10	11	8	150	1	1000	900	400	150	135	60
TRJE157*010#RJ	E	150	10	11	8	400	1 <sup>1)</sup>	642	578	257	257	231	103
TRJE157*010#0150	E	150	10	11	8	150	1 <sup>1)</sup>	1049	944	420	157	142	63
TRJD227*010#RJ	D	220	10	17	8	500	1	548	493	219	274	246	110
TRJE227*010#RJ	E	220	10	17	8	360	1 <sup>1)</sup>	677	609	271	244	219	97
TRJE227*010#0150	E	220	10	17	8	150	1 <sup>1)</sup>	1049	944	420	157	142	63
TRJE337*010#RJ	E	330	10	25	8	300	1 <sup>1)</sup>	742	667	297	222	200	89
TRJE337*010#100	E	330	10	25	8	10.0	1 <sup>1)</sup>	1285	1156	514	128	116	51
<b>16 Volt @ 85°C (10 Volt @ 125°C)</b>													
TRJA105*016#RJ	A	1.0	16	0.30	6	10000	1	87	78	35	866	779	346
TRJA225*016#RJ	A	2.2	16	0.30	6	4550	1	128	116	51	584	526	234
TRJA225*016#3500	A	2.2	16	0.30	6	3500	1	146	132	59	512	461	205
TRJA335*016#RJ	A	3.3	16	0.40	6	3740	1	142	127	57	530	477	212
TRJA335*016#3500	A	3.3	16	0.40	6	3500	1	146	132	59	512	461	205
TRJB335*016#RJ	B	3.3	16	0.40	6	4500	1	137	124	55	618	557	247
TRJA475*016#RJ	A	4.7	16	0.56	6	3160	1	154	139	62	487	438	195
TRJA475*016#2000	A	4.7	16	0.56	6	2000	1	194	174	77	387	349	155
TRJB475*016#RJ	B	4.7	16	0.56	6	3160	1	164	148	66	518	466	207
TRJB475*016#1500	B	4.7	16	0.56	6	1500	1	238	214	95	357	321	143
TRJA685*016#RJ	A	6.8	16	0.82	4	2000	1	194	174	77	387	349	155
TRJA685*016#1500	A	6.8	16	0.82	4	1500	1	224	201	89	335	302	134
TRJB685*016#RJ	B	6.8	16	0.82	6	2650	1	179	161	72	475	427	190
TRJB685*016#1200	B	6.8	16	0.82	6	1200	1	266	240	106	319	287	128
TRJC685*016#RJ	C	6.8	16	0.82	6	2500	1	210	189	84	524	472	210
TRJB106*016#RJ	B	10	16	1.2	6	2200	1	197	177	79	432	389	173
TRJB106*016#0800	B	10	16	1.2	6	800	1	326	293	130	261	235	104
TRJC106*016#RJ	C	10	16	1.2	6	2000	1	235	211	94	469	422	188
TRJB156*016#RJ	B	15	16	1.8	6	2030	1	205	184	82	415	374	166
TRJB156*016#0800	B	15	16	1.8	6	800	1	326	293	130	261	235	104
TRJB226*016#RJ	B	22	16	2.6	6	1100	1	278	250	111	306	275	122
TRJB226*016#0600	B	22	16	2.6	6	600	1	376	339	151	226	203	90
TRJC226*016#RJ	C	22	16	2.6	6	700	1	396	357	159	277	250	111
TRJC226*016#0350	C	22	16	2.6	6	350	1	561	505	224	196	177	78
TRJD226*016#RJ	D	22	16	2.6	6	1100	1	369	332	148	406	366	162
TRJC336*016#RJ	C	33	16	4.0	6	590	1	432	389	173	255	229	102
TRJC336*016#0300	C	33	16	4.0	6	300	1	606	545	242	182	163	73
TRJC476*016#RJ	C	47	16	5.6	6	540	1	451	406	181	244	219	97
TRJC476*016#0350	C	47	16	5.6	6	350	1	561	505	224	196	177	78
TRJD476*016#RJ	D	47	16	5.6	6	540	1	527	474	211	285	256	114
TRJD476*016#0200	D	47	16	5.6	6	200	1	866	779	346	173	156	69
TRJD686*016#RJ	D	68	16	8.2	6	490	1	553	498	221	271	244	108
TRJD686*016#0150	D	68	16	8.2	6	150	1	1000	900	400	150	135	60
TRJD107*016#RJ	D	100	16	12	6	440	1	584	525	234	257	231	103
TRJD107*016#0150	D	100	16	12	6	150	1	1000	900	400	150	135	60
TRJE107*016#RJ	E	100	16	12	6	440	1 <sup>1)</sup>	612	551	245	269	242	108
TRJE107*016#0150	E	100	16	12	6	150	1 <sup>1)</sup>	1049	944	420	157	142	63
TRJE157*016#RJ	E	150	16	16	6	300	1 <sup>1)</sup>	742	667	297	222	200	89
TRJE157*016#0150	E	150	16	16	6	150	1 <sup>1)</sup>	1049	944	420	157	142	63
<b>20 Volt @ 85°C (13 Volt @ 125°C)</b>													
TRJA105*020#RJ	A	1	20	0.30	4	6630	1	106	96	43	705	635	282
TRJA105*020#3000	A	1	20	0.30	4	3000	1	158	142	63	474	427	190
TRJA155*020#RJ	A	1.5	20	0.30	6	5460	1	117	105	47	640	576	256
TRJA155*020#3000	A	1.5	20	0.30	6	3000	1	158	142	63	474	427	190
TRJA225*020#RJ	A	2.2	20	0.33	6	4550	1	128	116	51	584	526	234
TRJA225*020#3000	A	2.2	20	0.33	6	3000	1	158	142	63	474	427	190
TRJA335*020#RJ	A	3.3	20	0.50	6	3740	1	142	127	57	530	477	212
TRJA335*020#2500	A	3.3	20	0.50	6	2500	1	173	156	69	433	390	173
TRJB335*020#RJ	B	3.3	20	0.50	6	3740	1	151	136	60	564	507	226
TRJB335*020#1300	B	3.3	20	0.50	6	1300	1	256	230	102	332	299	133
TRJA475*020#RJ	A	4.7	20	0.71	5	2500	1	184	166	74	461	415	184
TRJA475*020#1800	A	4.7	20	0.71	5	1800	1	217	196	87	391	352	156
TRJB475*020#RJ	B	4.7	20	0.71	6	3160	1	164	148	66	518	466	207
TRJB475*020#1000	B	4.7	20	0.71	6	1000	1	292	262	117	292	262	117
TRJB685*020#RJ	B	6.8	20	1.0	6	2650	1	179	161	72	475	427	190
TRJB685*020#1000	B	6.8	20	1.0	6	1000	1	292	262	117	292	262	117
TRJC685*020#RJ	C	6.8	20	1.0	6	2000	1	235	211	94	469	422	188
TRJB106*020#RJ	B	10	20	1.5	6	2200	1	197	177	79	432	389	173

<sup>1)</sup> 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.  
 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.

The EIA & CECC standards for low ESR Solid Tantalum Capacitors allow an ESR movement to 1.25 times catalogue limit post mounting.  
 For typical weight and composition see page 120.  
**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.**



# TRJ Series



## Professional Tantalum Chip Capacitor

### RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	MSL	100kHz RMS Current (mA)			100kHz RMS Voltage (mV)		
								25°C	85°C	125°C	25°C	85°C	125°C
TRJB106*020#1000	B	10	20	1.5	6	1000	1	292	262	117	292	262	117
TRJC106*020#RJ	C	10	20	1.5	6	800	1	371	334	148	297	267	119
TRJC106*020#0500	C	10	20	1.5	6	500	1	469	422	188	235	211	94
TRJB156*020#RJ	B	15	20	2.3	6	1400	1	280	252	112	392	353	157
TRJB156*020#0500	B	15	20	2.3	6	500	1	469	422	188	235	211	94
TRJC156*020#RJ	C	15	20	2.3	6	720	1	391	352	156	281	253	113
TRJC156*020#0400	C	15	20	2.3	6	400	1	524	472	210	210	189	84
TRJD156*020#RJ	D	15	20	2.3	6	1100	1	369	332	148	406	366	162
TRJC226*020#RJ	C	22	20	3.3	6	650	1	411	370	165	267	241	107
TRJC226*020#0400	C	22	20	3.3	6	400	1	524	472	210	210	189	84
TRJD226*020#RJ	D	22	20	3.3	6	650	1	480	432	192	312	281	125
TRJD226*020#0150	D	22	20	3.3	6	150	1	1000	900	400	150	135	60
TRJD226*020#0300	D	22	20	3.3	6	300	1	707	636	283	212	191	85
TRJC336*020#RJ	C	33	20	5.0	6	590	1	432	389	173	255	229	102
TRJC336*020#0300	C	33	20	5.0	6	300	1	606	545	242	182	163	73
TRJD336*020#RJ	D	33	20	5.0	6	590	1	504	454	202	297	268	119
TRJD336*020#0250	D	33	20	5.0	6	250	1	775	697	310	194	174	77
TRJD476*020#RJ	D	47	20	7.1	6	540	1	527	474	211	285	256	114
TRJD476*020#0200	D	47	20	7.1	6	200	1	866	779	346	173	156	69
TRJD686*020#RJ	D	68	20	10	6	490	1	553	498	221	271	244	108
TRJD686*020#0200	D	68	20	10	6	200	1	866	779	346	173	156	69
TRJE686*020#RJ	E	68	20	10	6	490	1 <sup>1)</sup>	580	522	232	284	256	114
TRJE686*020#0120	E	68	20	10	6	120	1 <sup>1)</sup>	1173	1055	469	141	127	56
TRJE686*020#0200	E	68	20	10	6	200	1 <sup>1)</sup>	908	817	363	182	163	73
TRJE107*020#RJ	E	100	20	15	6	300	1 <sup>1)</sup>	742	667	297	222	200	89
TRJE107*020#0150	E	100	20	15	6	150	1 <sup>1)</sup>	1049	944	420	157	142	63
<b>25 Volt @ 85°C (17 Volt @ 125°C)</b>													
TRJA474*025#RJ	A	0.47	25	0.30	4	9530	1	89	80	35	845	761	338
TRJA474*025#7000	A	0.47	25	0.30	4	7000	1	104	93	41	725	652	290
TRJA684*025#RJ	A	0.68	25	0.30	4	7980	1	97	87	39	774	696	309
TRJA684*025#6000	A	0.68	25	0.30	4	6000	1	112	101	45	671	604	268
TRJA105*025#RJ	A	1	25	0.30	4	6630	1	106	96	43	705	635	282
TRJA105*025#3000	A	1	25	0.30	4	3000	1	158	142	63	474	427	190
TRJA155*025#RJ	A	1.5	25	0.30	6	5460	1	117	105	47	640	576	256
TRJA155*025#3000	A	1.5	25	0.30	6	3000	1	158	142	63	474	427	190
TRJB155*025#RJ	B	1.5	25	0.30	6	5000	1	130	117	52	652	587	261
TRJA225*025#RJ	A	2.2	25	0.41	6	2900	1	161	145	64	466	420	187
TRJA225*025#1600	A	2.2	25	0.41	6	1600	1	217	195	87	346	312	139
TRJB225*025#RJ	B	2.2	25	0.41	6	4550	1	137	123	55	622	560	249
TRJB225*025#1200	B	2.2	25	0.41	6	1200	1	266	240	106	319	287	128
TRJB335*025#RJ	B	3.3	25	0.62	6	3740	1	151	136	60	564	507	226
TRJB335*025#2000	B	3.3	25	0.62	6	2000	1	206	186	82	412	371	165
TRJB475*025#RJ	B	4.7	25	0.88	6	3160	1	164	148	66	518	466	207
TRJB475*025#1000	B	4.7	25	0.88	6	1000	1	292	262	117	292	262	117
TRJB685*025#RJ	B	6.8	25	1.30	6	1500	1	238	214	95	357	321	143
TRJB685*025#1000	B	6.8	25	1.30	6	1000	1	292	262	117	292	262	117
TRJC685*025#RJ	C	6.8	25	1.3	6	1070	1	321	289	128	343	309	137
TRJC685*025#0600	C	6.8	25	1.3	6	600	1	428	385	171	257	231	103
TRJC106*025#RJ	C	10	25	1.9	6	800	1	371	334	148	297	267	119
TRJC106*025#0600	C	10	25	1.9	6	600	1	428	385	171	257	231	103
TRJD106*025#RJ	D	10	25	1.9	6	1200	1	354	318	141	424	382	170
TRJC156*025#RJ	C	15	25	2.8	6	720	1	391	352	156	281	253	113
TRJC156*025#0500	C	15	25	2.8	6	500	1	469	422	188	235	211	94
TRJD156*025#RJ	D	15	25	2.8	6	720	1	456	411	183	329	296	131
TRJD156*025#0300	D	15	25	2.8	6	300	1	707	636	283	212	191	85
TRJD226*025#RJ	D	22	25	4.1	6	650	1	480	432	192	312	281	125
TRJD226*025#0300	D	22	25	4.1	6	300	1	707	636	283	212	191	85
TRJD336*025#RJ	D	33	25	6.2	6	590	1	504	454	202	297	268	119
TRJD336*025#0400	D	33	25	6.2	6	400	1	612	551	245	245	220	98
TRJD476*025#RJ	D	47	25	8.8	6	540	1	527	474	211	285	256	114
TRJD476*025#0250	D	47	25	8.8	6	250	1	775	697	310	194	174	77
TRJE476*025#RJ	E	47	25	8.8	6	540	1 <sup>1)</sup>	553	497	221	298	269	119
TRJE476*025#0150	E	47	25	8.8	6	150	1 <sup>1)</sup>	1049	944	420	157	142	63
<b>35 Volt @ 85°C (23 Volt @ 125°C)</b>													
TRJA104*035#RJ	A	0.1	35	0.30	4	20000	1	61	55	24	1225	1102	490
TRJA154*035#RJ	A	0.15	35	0.30	4	16470	1	67	61	27	1111	1000	445
TRJA154*035#6000	A	0.15	35	0.30	4	6000	1	112	101	45	671	604	268
TRJA224*035#RJ	A	0.22	35	0.30	4	13710	1	74	67	30	1014	913	406
TRJA224*035#6000	A	0.22	35	0.30	4	6000	1	112	101	45	671	604	268
TRJA334*035#RJ	A	0.33	35	0.30	4	11280	1	82	73	33	920	828	368
TRJA334*035#6000	A	0.33	35	0.30	4	6000	1	112	101	45	671	604	268

<sup>1)</sup> 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.  
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.

The EIA & CECC standards for low ESR Solid Tantalum Capacitors allow an ESR movement to 1.25 times catalogue limit post mounting.  
For typical weight and composition see page 120.  
**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.**





# TRJ Series



## Professional Tantalum Chip Capacitor

### RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	MSL	100kHz RMS Current (mA)			100kHz RMS Voltage (mV)		
								25°C	85°C	125°C	25°C	85°C	125°C
TRJA474*035#RJ	A	0.47	35	0.30	4	9530	1	89	80	35	845	761	338
TRJA474*035#4000	A	0.47	35	0.30	4	4000	1	137	123	55	548	493	219
TRJA684*035#RJ	A	0.68	35	0.30	4	7980	1	97	87	39	774	696	309
TRJA684*035#6000	A	0.68	35	0.30	4	6000	1	112	101	45	671	604	268
TRJA105*035#RJ	A	1	35	0.30	4	6630	1	106	96	43	705	635	282
TRJA105*035#3000	A	1	35	0.30	4	3000	1	158	142	63	474	427	190
TRJB105*035#RJ	B	1	35	0.30	4	3400	1	158	142	63	538	484	215
TRJB105*035#2000	B	1	35	0.30	4	2000	1	206	186	82	412	371	165
TRJA155*035#RJ	A	1.5	35	0.39	6	3100	1	166	149	66	513	462	205
TRJA155*035#2000	A	1.5	35	0.39	6	2000	1	206	186	82	412	371	165
TRJB155*035#RJ	B	1.5	35	0.39	6	5460	1	125	112	50	681	613	272
TRJB155*035#2500	B	1.5	35	0.39	6	2500	1	184	166	74	461	415	184
TRJB225*035#RJ	B	2.2	35	0.58	6	4550	1	137	123	55	622	560	249
TRJB225*035#2000	B	2.2	35	0.58	6	2000	1	206	186	82	412	371	165
TRJB335*035#RJ	B	3.3	35	0.87	6	3740	1	151	136	60	564	507	226
TRJB335*035#1000	B	3.3	35	0.87	6	1000	1	292	262	117	292	262	117
TRJC335*035#RJ	C	3.3	35	0.87	6	1840	1	245	220	98	450	405	180
TRJC335*035#0800	C	3.3	35	0.87	6	800	1	371	334	148	297	267	119
TRJD335*035#RJ	D	3.3	35	0.87	6	2000	1	274	246	110	548	493	219
TRJB475*035#RJ	B	4.7	35	1.20	6	2200	1	224	201	89	492	443	197
TRJB475*035#1500	B	4.7	35	1.20	6	1500	1	271	244	108	406	366	162
TRJC475*035#RJ	C	4.7	35	1.2	6	1410	1	279	251	112	394	354	158
TRJC475*035#0600	C	4.7	35	1.2	6	600	1	428	385	171	257	231	103
TRJD475*035#RJ	D	4.7	35	1.2	6	1500	1	316	285	126	474	427	190
TRJC685*035#RJ	C	6.8	35	1.8	6	1070	1	321	289	128	343	309	137
TRJC685*035#0600	C	6.8	35	1.8	6	600	1	428	385	171	257	231	103
TRJD685*035#RJ	D	6.8	35	1.8	6	1300	1	340	306	136	442	397	177
TRJC106*035#RJ	C	10	35	2.6	6	800	1	371	334	148	297	267	119
TRJC106*035#0600	C	10	35	2.6	6	600	1	428	385	171	257	231	103
TRJD106*035#RJ	D	10	35	2.6	6	800	1	433	390	173	346	312	139
TRJD106*035#0250	D	10	35	2.6	6	250	1	775	697	310	194	174	77
TRJD106*035#0400	D	10	35	2.6	6	400	1	612	551	245	245	220	98
TRJD156*035#RJ	D	15	35	3.9	6	720	1	456	411	183	329	296	131
TRJD156*035#0225	D	15	35	3.9	6	225	1	816	735	327	184	165	73
TRJD226*035#RJ	D	22	35	5.8	6	650	1	480	432	192	312	281	125
TRJD226*035#0200	D	22	35	5.8	6	200	1	866	779	346	173	156	69
TRJD226*035#0400	D	22	35	5.8	6	400	1	612	551	245	245	220	98
TRJE336*035#RJ	E	33	35	8.7	6	590	1 <sup>1)</sup>	529	476	212	312	281	125
TRJE336*035#0250	E	33	35	8.7	6	250	1 <sup>1)</sup>	812	731	325	203	183	81
<b>50 Volt @ 85°C (33 Volt @ 125°C)</b>													
TRJA224*050#RJ	A	0.22	50	0.3	4	7500	1	100	90	40	750	675	300
TRJA224*050#7000	A	0.22	50	0.3	4	7000	1	104	93	41	725	652	290
TRJA334*050#RJ	A	0.33	50	0.3	4	7000	1	104	93	41	725	652	290
TRJB474*050#RJ	B	0.47	50	0.3	4	5000	1	130	117	52	652	587	261
TRJB684*050#RJ	B	0.68	50	0.3	4	4000	1	146	131	58	583	525	233
TRJB684*050#2000	B	0.68	50	0.3	4	2000	1	206	186	82	412	371	165
TRJB105*050#RJ	B	1	50	0.4	4	3400	1	158	142	63	538	484	215
TRJB105*050#2000	B	1	50	0.4	4	2000	1	206	186	82	412	371	165
TRJC105*050#RJ	C	1	50	0.4	4	3000	1	191	172	77	574	517	230
TRJC155*050#RJ	C	1.5	50	0.6	6	2500	1	210	189	84	524	472	210
TRJC155*050#1500	C	1.5	50	0.6	6	1500	1	271	244	108	406	366	162
TRJC225*050#RJ	C	2.2	50	0.8	6	1700	1	254	229	102	432	389	173
TRJC225*050#1000	C	2.2	50	0.8	6	1000	1	332	298	133	332	298	133
TRJD225*050#RJ	D	2.2	50	0.8	4.5	2000	1	274	246	110	548	493	219
TRJD225*050#1200	D	2.2	50	0.8	4.5	1200	1	354	318	141	424	382	170
TRJC335*050#RJ	C	3.3	50	1.2	6	1400	1	280	252	112	392	353	157
TRJC335*050#1000	C	3.3	50	1.2	6	1000	1	332	298	133	332	298	133
TRJD335*050#RJ	D	3.3	50	1.20	4.5	1100	1	369	332	148	406	366	162
TRJD335*050#0800	D	3.3	50	1.20	4.5	800	1	433	390	173	346	312	139
TRJD475*050#RJ	D	4.7	50	1.80	4.5	900	1	408	367	163	367	331	147
TRJD475*050#0600	D	4.7	50	1.80	4.5	600	1	500	450	200	300	270	120
TRJD685*050#RJ	D	6.8	50	2.60	4.5	700	1	463	417	185	324	292	130
TRJE106*050#RJ	E	10	50	3.80	4.5	700	1 <sup>1)</sup>	486	437	194	340	306	136
TRJE106*050#0300	E	10	50	3.80	4.5	300	1 <sup>1)</sup>	742	667	297	222	200	89
TRJE106*050#0400	E	10	50	3.80	4.5	400	1 <sup>1)</sup>	642	578	257	257	231	103

<sup>1)</sup> 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.

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.

The EIA & CECC standards for low ESR Solid Tantalum Capacitors allow an ESR movement to 1.25 times catalogue limit post mounting.

For typical weight and composition see page 120.

**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.**

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

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«FORSTAR» (основан в 1998 г.)

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(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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