

# TBJ Series



## COTS-Plus – SRC9000 Space Level



The TBJ COTS-Plus – SRC9000 series has been refined to incorporate only those commercially up-screened ratings which have been deemed suitable for mission critical and space level applications.

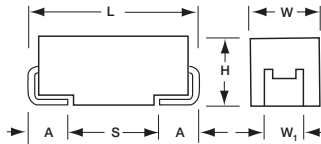
These capacitors have a more conservative design approach when compared to other up-screened components utilizing established CV powders and higher dielectric formation ratios. The DCL is typically 25% lower while still offering aggressive ESR values.

Currently there are 6 case sizes with the wide capac-

itance range available in a given voltage range.

These ratings are available with Weibull grading (B and C), surge current testing MIL-PRF-55365 Rev. G (A, B, C), optional Group A from MIL-PRF-55365, and the extensive SRC9000 space level screening.

For moisture sensitivity levels please refer to the High Reliability Tantalum MSL section located in the back of the High Reliability Tantalum Catalog.



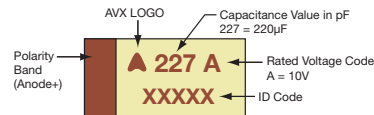
### CASE DIMENSIONS: millimeters (inches)

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)	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)

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

### MARKING

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



### CAPACITANCE AND RATED VOLTAGE, V<sub>R</sub> (VOLTAGE CODE) RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage DC (V <sub>R</sub> ) to 85°C						
µF	Code	6.3V (J)	10V (A)	16V (C)	20V (D)	25V (E)	35V (V)	50V (T)
0.10	104						A(20000)	
0.15	154						A(6000, 16470)	
0.22	224						A(6000, 13710)	A(7000, 7500)
0.33	334						A(6000, 11280)	A(7000)
0.47	474					A(7000, 9530)	A(4000, 9530)	B(5000)
0.68	684					A(6000, 7980)	A(6000, 8000)	B(2000, 4000)
1.0	105			A(10000)	A(3000, 6630)	A(3000, 6630)	A(3000, 6630) B(2000, 3400)	B(2000, 3400) C(3000)
1.5	155		A(7000)		A(3000, 5640)	A(3000, 5640) B(5000)	A(2000, 3100) B(2500, 5460)	C(1500, 2500)
2.2	225		A(7000)	A(3500, 4550)	A(3000, 4550)	A(1600, 2900) B(1200, 4550)	B(2000, 4550)	C(1000, 1700) D(1200, 2000)
3.3	335			A(3500, 3750) B(4500)	A(2500, 3750) B(1300, 3740)	B(2000, 3740)	B(1000, 3740) C(800, 1840) D(2000)	C(1000, 1400) D(800, 1100)
4.7	475		A(2000, 2900)	A(2000, 3160) B(1500, 3160)	A(1800, 2500) B(1000, 3160)	B(1000, 3160)	B(1500, 2200) C(600, 1410) D(1500)	D(600, 900)
6.8	685		A(1800, 4000) B(3000)	A(1500, 2000) B(1200, 2650) C(2500)	B(1000, 2650) C(2000)	B(1000, 1500) C(600, 1070)	C(600, 1070) D(1300)	D(700)
10	106	A(1500, 2000) B(3000)	A(1800, 2200) B(800, 2200)	B(800, 2200) C(2000)	B(1000, 2200) C(500, 800)	C(600, 800) D(1200)	C(600, 800) D(250, 800)	E(300, 700)
15	156	A(1500, 2030) B(700, 2030)	A(1000, 1800) B(600, 2030) C(2000)	B(800, 2000)	B(500, 1400) C(400, 750) D(1100)	C(500, 720) D(300, 720)	D(225, 720)	U(500)
22	226	A(900, 1700) B(600, 1880) C(2000)	B(700, 1800)	B(600, 1100) C(350, 700) D(1100)	C(400, 650) D(150, 650)	D(300, 650)	D(200, 650)	U(500)
33	336	B(600, 1740) C(1800)	B(650, 1000) C(300, 590) D(1100)	C(300, 590)	C(300, 590) D(250, 590)	D(400, 590)	E(250, 590)	
47	476	B(500, 1620) C(250, 540)	C(300, 540) D(400)	C(350, 540) D(200, 340)	D(200, 540)	D(250, 540) E(150, 540)	U(200,400)	
68	686	C(200, 490)	C(300, 490)	D(150, 490)	D(200, 490) E(125, 490)	U(500)		
100	107	C(300, 440)	C(200, 500) D(150, 440) E(100, 440)	D(150, 450) E(150, 450)	E(150, 300)	U(500)		
150	157	C(300, 500) D(150, 400)	D(150, 400) E(150, 400)	E(150, 300)	U(250, 500)			
220	227	D(150, 360)	D(500) E(150, 360)	U(200,500)				
330	337	D(400) E(150, 330)	E(100, 300)	U(200, 400)				
470	477	E(200, 250)	U(200, 400)					
680	687	U(250,500)						

Available Ratings: ESR limits quoted in brackets (mOhms)

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



# TBJ Series



## COTS-Plus – SRC9000 Space Level

### HOW TO ORDER

#### AVX PART NUMBER:

TBJ	D	227	*	035	R	B	S	Z	0	0	00
<b>Type</b>	<b>Case Size</b>	<b>Capacitance Code</b> pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	<b>Capacitance Tolerance</b> M = ±20% K = ±10%	<b>Voltage Code</b> 006 = 6.3Vdc 010 = 10Vdc 016 = 16Vdc 020 = 20Vdc 025 = 25Vdc 035 = 35Vdc 050 = 50Vdc	<b>ESR</b> R = Std ESR J = Low ESR	<b>Packaging</b> B = Bulk R = 7" T&R S = 13" T&R W = Waffle*	<b>Inspection Level</b> S = Std. Conformance L = Group A	<b>Reliability Grade</b> Weibull: B = 0.1%/1000 hrs. 90% conf. C = 0.01%/1000 hrs. 90% conf. Z = Non-ER	<b>Qualification Level</b> 0 = N/A 9 = SRC9000	<b>Termination Finish</b> H = Solder Plated 0 = Fused Solder Plated 8 = Hot Solder Dipped 9 = Gold Plated 7 = Matte Sn (COTS-Plus only)	<b>Surge Test Option</b> 00 = None 23 = 10 Cycles, +25°C 24 = 10 Cycles, -55°C & +85°C 45 = 10 cycles, -55°C & +85°C before Weibull

\*Waffle packaging not available for the TBJ U case

For RoHS compliant products, please select correct termination style.

#### SPACE LEVEL OPTIONS TO SRC9000\*:

TBJ	D	227	*	035	R	B	L	C	9	0	45
<b>Type</b>	<b>Case Size</b>	<b>Capacitance Code</b> pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	<b>Capacitance Tolerance</b> M = ±20% K = ±10%	<b>Voltage Code</b> 006 = 6.3Vdc 010 = 10Vdc 016 = 16Vdc 020 = 20Vdc 025 = 25Vdc 035 = 35Vdc 050 = 50Vdc	<b>ESR</b> R = Std ESR J = Low ESR	<b>Packaging</b> B = Bulk R = 7" T&R S = 13" T&R W = Waffle*  See page 8 for additional packaging options.	<b>Inspection Level</b> L = Group A	<b>Reliability Grade</b> C = 0.01%/1000 hrs. 90% conf.	<b>Qualification Level</b> 9 = SRC9000	<b>Termination Finish</b> H = Solder Plated 0 = Fused Solder Plated 8 = Hot Solder Dipped 9 = Gold Plated	<b>Surge Test Option</b> 45 = 10 cycles, -55°C & +85°C before Weibull

\*Waffle packaging not available for the TBJ U case

\*Contact factory for AVX SRC9000 Space Level SCD details.

For RoHS compliant products, please select correct termination style.

### TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of 25°C								
Capacitance Range:	0.10 µF to 680 µF								
Capacitance Tolerance:	±10%; ±20%								
Leakage Current DCL:	0.0075CV								
Rated Voltage (V <sub>R</sub> )	≤ 85°C:	6.3	10	16	20	25	35	50	
Category Voltage (V <sub>C</sub> )	≤ 125°C:	4	7	10	13	17	23	33	
Surge Voltage (V <sub>S</sub> )	≤ 85°C:	8	13	20	26	32	46	65	
Surge Voltage (V <sub>S</sub> )	≤ 125°C:	5	8	13	16	20	28	40	
Temperature Range:	-55°C to +125°C								

RATING & PART NUMBER REFERENCE		Parametric Specifications by Rating										Typical RMS Ripple Data by Rating									
AVX P/N	Case	Cap @ 120Hz @ 25°C	DC Rated Voltage @ +48°C	ESR @ 100kHz @ +25°C	DCL max +85°C	DF Max +85/125°C			Power Dissipation	25°C			85°C			125°C					
						+25°C	+125°C	+55°C		mA	mV	mA	mV	mA	mV	mA	mV	mA	mV		
TBJA106*006R# @ 0 A++	A	10	6.3	2200	0.45	4.5	9	6	9	10	0.075	185	166	74	406	366	162				
TBJA106*006J# @ 0 A++	A	10	6.3	1500	0.45	4.5	9	6	9	10	0.075	224	201	89	335	302	134				
TBJB106*006R# @ 0 A++	B	10	6.3	3000	0.45	4.5	9	6	9	10	0.085	168	151	67	505	454	202				
TBJA156*006R# @ 0 A++	A	15	6.3	2030	0.68	6.8	13.6	6	9	10	0.075	192	173	77	390	351	156				
TBJA156*006J# @ 0 A++	A	15	6.3	1500	0.68	6.8	13.6	6	9	10	0.075	224	201	89	335	302	134				
TBJB156*006R# @ 0 A++	B	15	6.3	2030	0.68	6.8	13.6	6	9	10	0.085	205	184	82	415	374	166				
TBJB156*006J# @ 0 A++	B	15	6.3	700	0.68	6.8	13.6	6	9	10	0.085	348	314	139	244	220	98				
TBJA226*006R# @ 0 A++	A	22	6.3	1700	0.99	9.9	19.8	6	9	10	0.075	210	189	84	357	321	143				
TBJA226*006J# @ 0 A++	A	22	6.3	900	0.99	9.9	19.8	6	9	10	0.085	213	191	85	400	360	160				
TBJB226*006R# @ 0 A++	B	22	6.3	1880	0.99	9.9	19.8	6	9	10	0.085	213	191	85	400	360	160				
TBJB226*006J# @ 0 A++	B	22	6.3	600	0.99	9.9	19.8	6	9	10	0.085	376	339	151	226	203	90				
TBJC226*006R# @ 0 A++	C	22	6.3	2000	0.99	9.9	19.8	6	9	10	0.110	235	211	94	469	422	188				
TBJB336*006R# @ 0 A++	B	33	6.3	1740	1.5	15	30	6	9	10	0.085	221	199	88	385	346	154				
TBJB336*006J# @ 0 A++	B	33	6.3	600	1.5	15	30	6	9	10	0.085	376	339	151	226	203	90				
TBJC336*006R# @ 0 A++	C	33	6.3	1800	1.5	15	30	6	9	10	0.110	247	222	99	445	400	178				
TBJB476*006R# @ 0 A++	B	47	6.3	1620	2.1	21	42	6	9	10	0.085	229	206	92	371	334	148				
TBJB476*006J# @ 0 A++	B	47	6.3	500	2.1	21	42	6	9	10	0.085	412	371	165	206	186	82				
TBJC476*006R# @ 0 A++	C	47	6.3	540	2.1	21	42	6	9	10	0.110	451	406	181	244	219	97				
TBJC476*006J# @ 0 A++	C	47	6.3	250	2.1	21	42	6	9	10	0.110	663	597	265	166	149	66				
TBJC686*006R# @ 0 A++	C	68	6.3	490	3.1	31	62	6	9	10	0.110	474	426	190	232	209	93				
TBJC686*006J# @ 0 A++	C	68	6.3	200	3.1	31	62	6	9	10	0.110	742	667	297	148	133	59				
TBJC107*006R# @ 0 A++	C	100	6.3	440	4.5	45	90	6	9	10	0.110	500	450	200	220	198	88				
TBJC107*006J# @ 0 A++	C	100	6.3	300	4.5	45	90	6	9	10	0.110	606	545	242	182	163	73				
TBJC157*006R# @ 0 A++	C	150	6.3	300	6.8	68	136	8	10	12	0.110	469	422	188	235	211	94				
TBJC157*006J# @ 0 A++	C	150	6.3	300	6.8	68	136	8	10	12	0.110	606	545	242	182	163	73				
TBJD157*006R# @ 0 A++	D	150	6.3	400	6.8	68	136	6	9	10	0.150	612	551	245	245	220	98				
TBJD157*006J# @ 0 A++	D	150	6.3	150	6.8	68	136	6	9	10	0.150	1000	900	400	150	136	60				
TBJD227*006R# @ 0 A++	D	220	6.3	360	9.9	99	198	8	10	12	0.150	645	581	258	232	209	93				
TBJD227*006J# @ 0 A++	D	220	6.3	150	9.9	99	198	8	10	12	0.150	1000	900	400	150	136	60				
TBJD337*006R# @ 0 A++	D	330	6.3	400	14	140	280	8	10	12	0.150	612	551	245	245	220	98				
TBJD337*006J# @ 0 A++	D	330	6.3	330	14	140	280	8	10	12	0.165	707	636	283	233	210	93				
TBJE337*006R# @ 0 A++	E	330	6.3	150	14	140	280	8	10	12	0.165	1049	944	420	157	142	63				
TBJE337*006J# @ 0 A++	E	330	6.3	250	14	140	280	8	10	12	0.165	812	731	325	203	183	81				
TBJE477*006R# @ 0 A++	E	470	6.3	200	21	210	420	8	10	12	0.165	908	817	363	182	163	73				
TBJE477*006J# @ 0 A++	E	470	6.3	200	21	210	420	8	10	12	0.165	908	817	363	182	163	73				
TBJU687*006R# @ 0 A++	U	680	6.3	500	30	300	600	30	30	30	0.075	574	517	230	287	259	115				
TBJU687*006J# @ 0 A++	U	680	6.3	250	30	300	600	30	30	30	0.075	812	731	325	203	183	81				
TBJA155*010R# @ 0 A++	A	1.5	10	7000	0.3	3	6	6	6	9	10	0.075	104	93	41	725	652	290			
TBJA225*010R# @ 0 A++	A	2.2	10	7000	0.3	3	6	6	6	9	10	0.075	104	93	41	725	652	290			
TBJA475*010R# @ 0 A++	A	4.7	10	2900	0.35	3.5	7	6	6	9	10	0.075	161	145	64	466	420	187			
TBJA475*010J# @ 0 A++	A	4.7	10	2000	0.35	3.5	7	6	6	9	10	0.075	194	174	77	387	349	155			
TBJA685*010R# @ 0 A++	A	6.8	10	2650	0.51	5.1	10.2	6	9	10	0.075	168	151	67	446	401	178				
TBJA685*010J# @ 0 A++	A	6.8	10	1800	0.51	5.1	10.2	6	9	10	0.075	204	184	82	367	331	147				
TBJB685*010R# @ 0 A++	B	6.8	10	3000	0.51	5.1	10.2	6	9	10	0.085	168	151	67	505	454	202				
TBJA106*010R# @ 0 A++	A	10	10	2200	0.75	7.5	15	6	9	10	0.075	185	166	74	406	366	162				
TBJA106*010J# @ 0 A++	A	10	10	1800	0.75	7.5	15	6	9	10	0.075	204	184	82	367	331	147				
TBJB106*010R# @ 0 A++	B	10	10	2200	0.75	7.5	15	6	9	10	0.085	197	177	79	432	389	173				
TBJB106*010J# @ 0 A++	B	10	10	800	0.75	7.5	15	6	9	10	0.085	326	293	130	261	235	104				
TBJA156*010R# @ 0 A++	A	15	10	1800	1.1	11	22	6	9	10	0.075	204	184	82	367	331	147				
TBJA156*010J# @ 0 A++	A	15	10	1000	1.1	11	22	6	9	10	0.075	274	246	110	274	246	110				
TBJB156*010R# @ 0 A++	B	15	10	2030	1.1	11	22	6	9	10	0.085	205	184	82	415	374	166				
TBJB156*010J# @ 0 A++	B	15	10	600	1.1	11	22	6	9	10	0.085	376	339	151	226	203	90				
TBJC156*010R# @ 0 A++	C	15	10	2000	1.1	11	22	6	9	10	0.110	235	211	94	469	422	188				
TBJC156*010J# @ 0 A++	C	15	10	2000	1.1	11	22	6	9	10	0.110	235	211	94	469	422	188				
TBJB226*010R# @ 0 A++	B	22	10	1880	1.7	17	34	6	9	10	0.085	213	191	85	400	360	160				

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.

**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.**

RATING & PART NUMBER REFERENCE		Parametric Specifications by Rating										Typical RMS Ripple Data by Rating									
AVX P/N	Case	Cap @ 25°C µF	DC Rated Voltage @ +48°C V	ESR @ 100kHz @ +25°C mOhms	DCL max @ +85°C (µA)	+125°C (µA)	+25°C (%)	-55°C (%)	Power Dissipation W	25°C Ripple (100kHz) mA	85°C Ripple (100kHz) mA	125°C Ripple (100kHz) mA	25°C Ripple (100kHz) mV	85°C Ripple (100kHz) mV	125°C Ripple (100kHz) mV						
TBJ2226*010J0#00A++	B	22	10	700	1.7	17	34	6	9	10	0.085	348	314	139	244	220	98				
TBJB336*010R0#00A++	B	33	10	1000	2.5	25	50	6	9	10	0.085	292	262	117	292	262	117				
TBJB336*010J0#00A++	B	33	10	650	2.5	25	50	6	9	10	0.085	362	325	145	235	212	94				
TBJC336*010R0#00A++	C	33	10	590	2.5	25	50	6	9	10	0.110	432	389	173	255	229	102				
TBJC336*010J0#00A++	C	33	10	300	2.5	25	50	6	9	10	0.110	606	545	242	182	163	73				
TBJD336*010R0#00A++	D	33	10	1100	2.5	25	50	6	9	10	0.150	369	332	148	406	366	162				
TBJC476*010R0#00A++	C	47	10	540	3.5	35	70	6	9	10	0.110	451	406	181	244	219	97				
TBJC476*010J0#00A++	C	47	10	300	3.5	35	70	6	9	10	0.110	606	545	242	182	163	73				
TBJD476*010R0#00A++	D	47	10	400	3.5	35	70	6	9	10	0.150	612	551	245	245	220	98				
TBJC686*010R0#00A++	C	68	10	490	5.1	51	102	6	9	10	0.110	474	426	190	232	209	93				
TBJC686*010J0#00A++	C	68	10	300	5.1	51	102	6	9	10	0.110	606	545	242	182	163	73				
TBJD686*010R0#00A++	D	68	10	500	7.5	75	150	8	10	12	0.110	469	422	188	235	211	94				
TBJC107*010R0#00A++	C	100	10	200	7.5	75	150	8	10	12	0.110	742	667	297	148	133	59				
TBJC107*010J0#00A++	C	100	10	440	7.5	75	150	6	9	10	0.150	584	525	234	257	231	103				
TBJD107*010R0#00A++	D	100	10	150	7.5	75	150	6	9	10	0.150	1000	900	400	150	136	60				
TBJE107*010R0#00A++	E	100	10	440	7.5	75	150	6	9	10	0.165	612	551	245	245	220	98				
TBJE107*010J0#00A++	E	100	10	100	7.5	75	150	6	9	10	0.165	1285	1156	514	128	116	51				
TBJD157*010R0#00A++	D	150	10	400	11	110	220	8	10	12	0.150	612	551	245	245	220	98				
TBJD157*010J0#00A++	D	150	10	150	11	110	220	8	10	12	0.150	1000	900	400	150	135	60				
TBJE157*010R0#00A++	E	150	10	400	11	110	220	8	10	12	0.165	642	578	257	257	231	103				
TBJE157*010J0#00A++	E	150	10	150	11	110	220	8	10	12	0.165	1049	944	420	157	142	63				
TBJD227*010R0#00A++	D	220	10	500	17	170	340	8	10	12	0.150	548	493	219	274	246	110				
TBJD227*010J0#00A++	D	220	10	360	17	170	340	8	10	12	0.165	677	609	271	244	219	97				
TBJE227*010R0#00A++	E	220	10	150	17	170	340	8	10	12	0.165	1049	944	420	157	142	63				
TBJE227*010J0#00A++	E	220	10	400	17	170	340	8	10	12	0.165	1049	944	420	157	142	63				
TBJC337*010R0#00A++	C	330	10	300	25	250	500	8	10	12	0.165	742	667	297	222	200	89				
TBJC337*010J0#00A++	C	330	10	100	25	250	500	8	10	12	0.165	1285	1156	514	128	116	51				
TBJD477*010R0#00A++	D	470	10	400	35	350	700	30	45	45	0.165	608	578	257	257	231	103				
TBJD477*010J0#00A++	D	470	10	200	35	350	700	30	45	45	0.165	942	817	363	182	163	73				
TBJA105*016R0#00A++	A	1	16	10000	0.3	3	6	6	9	10	0.075	87	78	35	866	779	346				
TBJA225*016R0#00A++	A	2.2	16	4550	0.3	3	6	6	9	10	0.075	128	116	51	584	526	234				
TBJA225*016J0#00A++	A	2.2	16	3500	0.3	3	6	6	9	10	0.075	146	132	59	512	461	205				
TBJA335*016R0#00A++	A	3.3	16	3740	0.4	4	8	6	9	10	0.075	142	127	57	530	477	212				
TBJA335*016J0#00A++	A	3.3	16	3500	0.4	4	8	6	9	10	0.085	137	124	55	618	557	247				
TBJA475*016R0#00A++	A	4.7	16	3160	0.56	5.6	11.2	6	9	10	0.075	154	139	62	487	438	195				
TBJA475*016J0#00A++	A	4.7	16	2000	0.56	5.6	11.2	6	9	10	0.075	194	174	77	387	349	155				
TBJB475*016R0#00A++	B	4.7	16	3160	0.56	5.6	11.2	6	9	10	0.085	164	148	66	518	466	207				
TBJB475*016J0#00A++	B	4.7	16	1500	0.56	5.6	11.2	6	9	10	0.085	238	214	95	357	321	143				
TBJA685*016R0#00A++	A	6.8	16	2000	0.82	8.2	16.4	4	6	8	0.075	194	174	77	387	349	155				
TBJA685*016J0#00A++	A	6.8	16	1500	0.82	8.2	16.4	4	6	8	0.075	224	201	89	335	302	134				
TBJB685*016R0#00A++	B	6.8	16	2650	0.82	8.2	16.4	6	9	10	0.085	179	161	72	475	427	190				
TBJB685*016J0#00A++	B	6.8	16	1200	0.82	8.2	16.4	6	9	10	0.085	266	240	106	319	287	128				
TBJC685*016R0#00A++	C	6.8	16	2500	0.82	8.2	16.4	6	9	10	0.110	210	189	84	524	472	210				
TBJC685*016J0#00A++	C	6.8	16	2200	1.2	12	24	6	9	10	0.085	197	177	79	432	389	173				
TBJD106*016R0#00A++	D	10	16	800	1.2	12	24	6	9	10	0.085	326	293	130	261	232	104				
TBJD106*016J0#00A++	D	10	16	2000	1.2	12	24	6	9	10	0.110	235	211	94	469	422	188				
TBJB156*016R0#00A++	B	15	16	2030	1.8	18	36	6	9	10	0.085	205	184	82	415	374	166				
TBJB156*016J0#00A++	B	15	16	800	1.8	18	36	6	9	10	0.085	326	293	130	261	235	104				
TBJB226*016R0#00A++	B	22	16	1100	2.6	26	52	6	9	10	0.085	278	250	111	306	275	122				
TBJB226*016J0#00A++	B	22	16	600	2.6	26	52	6	9	10	0.085	376	339	151	226	203	90				
TBJC226*016R0#00A++	C	22	16	700	2.6	26	52	6	9	10	0.110	396	357	159	277	250	111				
TBJC226*016J0#00A++	C	22	16	350	2.6	26	52	6	9	10	0.110	561	505	224	196	177	78				
TBJD226*016R0#00A++	D	22	16	1100	2.6	26	52	6	9	10	0.150	369	332	148	406	366	162				
TBJD226*016J0#00A++	D	22	16	590	4	40	80	6	9	10	0.110	432	389	173	255	229	102				
TBJC336*016R0#00A++	C	33	16	300	4	40	80	6	9	10	0.110	606	545	242	182	163	73				

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. 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.



RATING & PART NUMBER REFERENCE		Parametric Specifications by Rating										Typical RMS Ripple Data by Rating											
		Cap @ 120Hz	DC Rated Voltage	ESR @ 100kHz	DCL max	+25°C	+85°C	+125°C	+25°C	DF Max	Power Dissipation	25°C Ripple	85°C Ripple	125°C Ripple	25°C Ripple	85°C Ripple	125°C Ripple	25°C Ripple	85°C Ripple	125°C Ripple			
AVX P/N	Case	AVX SRC9000 P/N	µF @ 25°C	V @ +85°C	mOhms @ +25°C	µA	µA	µA	(%)	(%)	mA (100kHz)	mA (100kHz)	mA (100kHz)	mA (100kHz)	mA (100kHz)	mA (100kHz)	mA (100kHz)	mA (100kHz)	mA (100kHz)	mV (100kHz)	mV (100kHz)	mV (100kHz)	
TBJE107*020 J @ 0 A ++	E	TBJE107*020 J @ 0 C 9 A 45	100	20	150	150	300	6	9	10	0.165	1049	944	420	157	142	63						
TBJU157*020 R @ 0 A ++	U	TBJU157*020 R @ 0 C 9 A 45	150	20	500	220	440	30	45	45	0.165	574	517	230	287	259	115						
TBJU157*020 J @ 0 A ++	U	TBJU157*020 J @ 0 C 9 A 45	150	20	250	220	440	30	45	45	0.165	812	731	325	203	183	81						
TBJA474*025 R @ 0 A ++	A	TBJA474*025 R @ 0 C 9 A 45	0.47	25	9530	0.3	6	4	6	8	0.075	89	80	35	845	761	338						
TBJA474*025 J @ 0 A ++	A	TBJA474*025 J @ 0 C 9 A 45	0.47	25	7000	0.3	6	4	6	8	0.075	104	93	41	725	662	290						
TBJA684*025 R @ 0 A ++	A	TBJA684*025 R @ 0 C 9 A 45	0.68	25	7980	0.3	6	4	6	8	0.075	97	87	39	774	696	309						
TBJA684*025 J @ 0 A ++	A	TBJA684*025 J @ 0 C 9 A 45	0.68	25	6000	0.3	6	4	6	8	0.075	112	101	45	671	604	268						
TBJA105*025 R @ 0 A ++	A	TBJA105*025 R @ 0 C 9 A 45	1	25	6630	0.3	6	4	6	8	0.075	106	96	43	705	635	282						
TBJA105*025 J @ 0 A ++	A	TBJA105*025 J @ 0 C 9 A 45	1	25	3000	0.3	6	4	6	8	0.075	158	142	63	474	427	190						
TBJA155*025 R @ 0 A ++	A	TBJA155*025 R @ 0 C 9 A 45	1.5	25	5460	0.3	6	6	9	10	0.075	117	105	47	640	576	256						
TBJA155*025 J @ 0 A ++	A	TBJA155*025 J @ 0 C 9 A 45	1.5	25	3000	0.3	6	6	9	10	0.075	158	142	63	474	427	190						
TBJB155*025 R @ 0 A ++	B	TBJB155*025 R @ 0 C 9 A 45	1.5	25	5000	0.3	6	6	9	10	0.085	130	117	52	652	587	261						
TBJA225*025 R @ 0 A ++	A	TBJA225*025 R @ 0 C 9 A 45	2.2	25	2900	0.41	8.2	6	9	10	0.075	161	145	64	466	424	187						
TBJA225*025 J @ 0 A ++	A	TBJA225*025 J @ 0 C 9 A 45	2.2	25	1600	0.41	8.2	6	9	10	0.075	217	195	87	346	312	139						
TBJB225*025 R @ 0 A ++	B	TBJB225*025 R @ 0 C 9 A 45	2.2	25	4550	0.41	8.2	6	9	10	0.085	137	123	55	622	560	249						
TBJB225*025 J @ 0 A ++	B	TBJB225*025 J @ 0 C 9 A 45	2.2	25	1200	0.41	8.2	6	9	10	0.085	266	240	106	319	287	128						
TBJB335*025 R @ 0 A ++	B	TBJB335*025 R @ 0 C 9 A 45	3.3	25	3740	0.62	12.4	6	9	10	0.085	151	136	60	564	507	226						
TBJB335*025 J @ 0 A ++	B	TBJB335*025 J @ 0 C 9 A 45	3.3	25	2000	0.62	12.4	6	9	10	0.085	206	186	82	412	371	165						
TBJB475*025 R @ 0 A ++	B	TBJB475*025 R @ 0 C 9 A 45	4.7	25	3160	0.88	17.6	6	9	10	0.085	164	148	66	518	466	207						
TBJB475*025 J @ 0 A ++	B	TBJB475*025 J @ 0 C 9 A 45	4.7	25	1000	0.88	17.6	6	9	10	0.085	292	262	117	292	262	117						
TBJB685*025 R @ 0 A ++	B	TBJB685*025 R @ 0 C 9 A 45	6.8	25	1500	1.3	26	6	9	10	0.085	238	214	96	357	321	143						
TBJB685*025 J @ 0 A ++	B	TBJB685*025 J @ 0 C 9 A 45	6.8	25	1000	1.3	26	6	9	10	0.085	292	262	117	292	262	117						
TBJC685*025 R @ 0 A ++	C	TBJC685*025 R @ 0 C 9 A 45	6.8	25	1070	1.3	26	6	9	10	0.110	321	289	128	343	309	137						
TBJC685*025 J @ 0 A ++	C	TBJC685*025 J @ 0 C 9 A 45	6.8	25	600	1.3	26	6	9	10	0.110	428	385	171	257	231	103						
TBJC106*025 R @ 0 A ++	C	TBJC106*025 R @ 0 C 9 A 45	10	25	800	1.9	38	6	9	10	0.110	371	334	148	297	267	119						
TBJC106*025 J @ 0 A ++	C	TBJC106*025 J @ 0 C 9 A 45	10	25	600	1.9	38	6	9	10	0.110	428	385	171	257	231	103						
TBJD106*025 R @ 0 A ++	D	TBJD106*025 R @ 0 C 9 A 45	10	25	1200	1.9	38	6	9	10	0.150	354	318	141	424	382	170						
TBJD106*025 J @ 0 A ++	D	TBJD106*025 J @ 0 C 9 A 45	15	25	720	2.8	56	6	9	10	0.110	391	352	156	281	253	113						
TBJC156*025 R @ 0 A ++	C	TBJC156*025 R @ 0 C 9 A 45	15	25	500	2.8	56	6	9	10	0.110	469	422	188	235	211	94						
TBJD156*025 R @ 0 A ++	D	TBJD156*025 R @ 0 C 9 A 45	15	25	720	2.8	56	6	9	10	0.150	456	411	183	329	296	131						
TBJD156*025 J @ 0 A ++	D	TBJD156*025 J @ 0 C 9 A 45	15	25	300	2.8	56	6	9	10	0.150	707	636	283	212	191	85						
TBJD226*025 R @ 0 A ++	D	TBJD226*025 R @ 0 C 9 A 45	22	25	650	4.1	82	6	9	10	0.150	480	432	192	312	281	125						
TBJD226*025 J @ 0 A ++	D	TBJD226*025 J @ 0 C 9 A 45	22	25	300	4.1	82	6	9	10	0.150	707	636	283	212	191	85						
TBJD336*025 R @ 0 A ++	D	TBJD336*025 R @ 0 C 9 A 45	33	25	590	6.2	124	6	9	10	0.150	527	474	211	285	256	114						
TBJD336*025 J @ 0 A ++	D	TBJD336*025 J @ 0 C 9 A 45	33	25	400	6.2	124	6	9	10	0.150	612	551	245	245	220	98						
TBJD476*025 R @ 0 A ++	D	TBJD476*025 R @ 0 C 9 A 45	47	25	540	8.8	176	6	9	10	0.150	527	474	211	285	256	114						
TBJE476*025 R @ 0 A ++	E	TBJE476*025 R @ 0 C 9 A 45	47	25	540	8.8	176	6	9	10	0.165	553	497	221	298	269	119						
TBJE476*025 J @ 0 A ++	E	TBJE476*025 J @ 0 C 9 A 45	47	25	150	8.8	176	6	9	10	0.165	1049	944	420	157	142	63						
TBJU686*025 R @ 0 A ++	U	TBJU686*025 R @ 0 C 9 A 45	68	25	500	12	240	30	45	45	0.165	574	517	230	287	259	115						
TBJU686*025 J @ 0 A ++	U	TBJU686*025 J @ 0 C 9 A 45	68	25	500	12	240	30	45	45	0.165	574	517	230	287	259	115						
TBJU107*025 R @ 0 A ++	U	TBJU107*025 R @ 0 C 9 A 45	100	25	500	18	360	30	45	45	0.165	574	517	230	287	259	115						
TBJU107*025 J @ 0 A ++	U	TBJU107*025 J @ 0 C 9 A 45	100	25	2000	0.3	6	4	6	8	0.075	61	55	24	1225	1102	490						
TBJA154*035 R @ 0 A ++	A	TBJA154*035 R @ 0 C 9 A 45	0.15	35	16470	0.3	6	4	6	8	0.075	67	61	27	1111	1000	445						
TBJA154*035 J @ 0 A ++	A	TBJA154*035 J @ 0 C 9 A 45	0.15	35	6000	0.3	6	4	6	8	0.075	112	101	45	671	604	268						
TBJA224*035 R @ 0 A ++	A	TBJA224*035 R @ 0 C 9 A 45	0.22	35	13710	0.3	6	4	6	8	0.075	74	67	30	1014	913	406						
TBJA224*035 J @ 0 A ++	A	TBJA224*035 J @ 0 C 9 A 45	0.22	35	6000	0.3	6	4	6	8	0.075	112	101	45	671	604	268						
TBJA334*035 R @ 0 A ++	A	TBJA334*035 R @ 0 C 9 A 45	0.33	35	11280	0.3	6	4	6	8	0.075	82	73	33	920	828	368						
TBJA334*035 J @ 0 A ++	A	TBJA334*035 J @ 0 C 9 A 45	0.33	35	6000	0.3	6	4	6	8	0.075	112	101	45	671	604	268						
TBJA474*035 R @ 0 A ++	A	TBJA474*035 R @ 0 C 9 A 45	0.47	35	9530	0.3	6	4	6	8	0.075	89	80	35	845	761	338						
TBJA474*035 J @ 0 A ++	A	TBJA474*035 J @ 0 C 9 A 45	0.47	35	4000	0.3	6	4	6	8	0.075	137	123	55	548	493	219						
TBJA684*035 R @ 0 A ++	A	TBJA684*035 R @ 0 C 9 A 45	0.68	35	7980	0.3	6	4	6	8	0.075	97	87	39	774	696	309						
TBJA684*035 J @ 0 A ++	A	TBJA684*035 J @ 0 C 9 A 45	0.68	35	6000	0.3	6	4	6	8	0.075	112	101	45	671	604	268						
TBJA105*035 R @ 0 A ++	A	TBJA105*035 R @ 0 C 9 A 45	1	35	6630	0.3	6	4	6	8	0.075	106	96	43	705	635	282						
TBJA105*035 J @ 0 A ++	A	TBJA105*035 J @ 0 C 9 A 45	1	35	3000	0.3	6	4	6	8	0.075	158	142	63	474	427	190						
TBJB105*035 R @ 0 A ++	B	TBJB105*035 R @ 0 C 9 A 45	1	35	3400	0.3	6	4	6	8	0.085	158	142	63	474	427	190						
TBJB105*035 J @ 0 A ++	B	TBJB105*035 J @ 0 C 9 A 45	1	35	2000	0.3	6	4	6	8	0.085	206	186	82	412	371	165						
TBJA155*035 R @ 0 A ++	A	TBJA155*035 R @ 0 C 9 A 45	1.5	35	3100	0.39	7.8	6	9	10	0.075	156	140	62	482	434	193						

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.

**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.**

RATING & PART NUMBER REFERENCE		Parametric Specifications by Rating										Typical RMS Ripple Data by Rating										
AVX P/N	Case	Cap @ 25°C µF	DC Rated Voltage @ +48°C V	ESR @ 100kHz @ +25°C mOhms	DCL max			DF Max			Power Dissipation			25°C			85°C			125°C		
					+25°C (µA)	+125°C (µA)	+85°C (µA)	+25°C (%)	+125°C (%)	+85°C (%)	W	mA (100kHz)	mV (100kHz)	mV (100kHz)	mV (100kHz)	mV (100kHz)	mV (100kHz)	mV (100kHz)	mV (100kHz)	mV (100kHz)	mV (100kHz)	
TBJA155*035 R□□# @ 0 A++	A	1.5	35	2000	0.39	3.9	7.8	6	9	10	0.075	194	174	77	387	349	155					
TBJB155*035 R□□# @ 0 A++	B	1.5	35	5460	0.39	3.9	7.8	6	9	10	0.085	125	112	50	681	613	272					
TBJC155*035 R□□# @ 0 A++	B	1.5	35	2500	0.39	3.9	7.8	6	9	10	0.085	184	166	74	461	415	184					
TBJD225*035 R□□# @ 0 A++	B	2.2	35	4550	0.58	5.8	11.6	6	9	10	0.085	137	123	55	622	560	249					
TBJE225*035 R□□# @ 0 A++	B	2.2	35	2000	0.58	5.8	11.6	6	9	10	0.085	206	186	82	412	371	165					
TBJF335*035 R□□# @ 0 A++	B	3.3	35	3740	0.87	8.7	17.4	6	9	10	0.085	151	136	60	564	507	226					
TBJG335*035 R□□# @ 0 A++	B	3.3	35	1840	0.87	8.7	17.4	6	9	10	0.110	245	220	98	450	405	180					
TBJH335*035 R□□# @ 0 A++	C	3.3	35	2000	0.87	8.7	17.4	6	9	10	0.110	371	334	148	297	267	119					
TBJI335*035 R□□# @ 0 A++	C	3.3	35	8000	0.87	8.7	17.4	6	9	10	0.150	274	246	110	548	493	219					
TBJJ475*035 R□□# @ 0 A++	D	4.7	35	2200	1.2	12	24	6	9	10	0.085	197	177	79	432	389	173					
TBJK475*035 R□□# @ 0 A++	B	4.7	35	1500	1.2	12	24	6	9	10	0.085	238	214	95	357	321	143					
TBJL475*035 R□□# @ 0 A++	B	4.7	35	1410	1.2	12	24	6	9	10	0.110	279	251	112	394	354	158					
TBJM475*035 R□□# @ 0 A++	C	4.7	35	600	1.2	12	24	6	9	10	0.110	428	385	171	257	231	103					
TBJN475*035 R□□# @ 0 A++	C	4.7	35	1500	1.2	12	24	6	9	10	0.150	316	285	126	474	427	190					
TBJO685*035 R□□# @ 0 A++	D	6.8	35	1070	1.8	18	36	6	9	10	0.110	321	289	128	343	309	137					
TBJP685*035 R□□# @ 0 A++	C	6.8	35	600	1.8	18	36	6	9	10	0.110	428	385	171	257	231	103					
TBJQ685*035 R□□# @ 0 A++	C	6.8	35	1300	1.8	18	36	6	9	10	0.150	340	306	136	442	397	177					
TBJR106*035 R□□# @ 0 A++	D	10	35	600	2.6	26	52	6	9	10	0.110	371	334	148	297	267	119					
TBJS106*035 R□□# @ 0 A++	C	10	35	600	2.6	26	52	6	9	10	0.110	428	385	171	257	231	103					
TBJT106*035 R□□# @ 0 A++	D	10	35	250	2.6	26	52	6	9	10	0.150	775	697	310	194	174	77					
TBJU156*035 R□□# @ 0 A++	D	15	35	720	3.9	39	78	6	9	10	0.150	456	411	183	329	296	131					
TBJV156*035 R□□# @ 0 A++	D	15	35	225	3.9	39	78	6	9	10	0.150	816	735	327	184	165	73					
TBJW226*035 R□□# @ 0 A++	D	22	35	650	5.8	58	116	6	9	10	0.150	480	432	192	312	281	125					
TBJX226*035 R□□# @ 0 A++	D	22	35	200	5.8	58	116	6	9	10	0.150	866	779	346	173	156	69					
TBJY336*035 R□□# @ 0 A++	E	33	35	590	8.7	87	174	6	9	10	0.165	529	476	212	312	281	125					
TBJZ336*035 R□□# @ 0 A++	E	33	35	250	8.7	87	174	6	9	10	0.165	812	731	325	203	183	81					
TBJA476*035 R□□# @ 0 A++	U	47	35	400	12.3	123	246	10	12	12	0.165	642	578	257	257	231	103					
TBJB476*035 R□□# @ 0 A++	U	47	35	200	12.3	123	246	10	12	12	0.165	908	817	363	182	163	73					
TBJC476*035 R□□# @ 0 A++	A	0.22	50	7500	0.3	3	6	4	6	8	0.075	104	93	41	725	652	290					
TBJD224*050 R□□# @ 0 A++	A	0.22	50	7000	0.3	3	6	4	6	8	0.075	104	93	41	725	652	290					
TBJE334*050 R□□# @ 0 A++	A	0.33	50	7000	0.3	3	6	4	6	8	0.085	130	117	52	652	587	261					
TBJF474*050 R□□# @ 0 A++	B	0.47	50	5000	0.3	3	6	4	6	8	0.085	130	117	52	652	587	261					
TBJG684*050 R□□# @ 0 A++	B	0.68	50	4000	0.3	3	6	4	6	8	0.085	146	131	58	583	525	233					
TBJH684*050 R□□# @ 0 A++	B	0.68	50	2000	0.3	3	6	4	6	8	0.085	206	186	82	412	371	165					
TBJI105*050 R□□# @ 0 A++	B	1	50	3400	0.4	4	8	4	6	8	0.085	158	142	63	538	484	215					
TBJJ105*050 R□□# @ 0 A++	B	1	50	2000	0.4	4	8	4	6	8	0.085	206	186	82	412	371	165					
TBJK105*050 R□□# @ 0 A++	B	1	50	3000	0.4	4	8	4	6	8	0.110	191	172	77	574	517	230					
TBJL155*050 R□□# @ 0 A++	C	1.5	50	2500	0.6	6	12	6	9	10	0.110	210	189	84	524	472	210					
TBJM155*050 R□□# @ 0 A++	C	1.5	50	1500	0.6	6	12	6	9	10	0.110	271	244	108	406	366	162					
TBJN225*050 R□□# @ 0 A++	C	2.2	50	1700	0.8	8	16	6	9	10	0.110	254	229	102	432	389	173					
TBJO225*050 R□□# @ 0 A++	C	2.2	50	1000	0.8	8	16	6	9	10	0.110	332	298	133	332	298	133					
TBJP225*050 R□□# @ 0 A++	D	2.2	50	2000	0.8	8	16	4.5	7	9	0.150	274	246	110	548	483	219					
TBJQ225*050 R□□# @ 0 A++	D	2.2	50	1200	0.8	8	16	4.5	7	9	0.150	354	318	141	424	382	170					
TBJR335*050 R□□# @ 0 A++	D	3.3	50	1400	1.2	12	24	6	9	10	0.110	280	252	112	392	353	157					
TBJS335*050 R□□# @ 0 A++	C	3.3	50	1000	1.2	12	24	6	9	10	0.110	332	298	133	332	298	133					
TBJT335*050 R□□# @ 0 A++	D	3.3	50	1100	1.2	12	24	4.5	7	9	0.150	369	332	148	406	366	162					
TBJU335*050 R□□# @ 0 A++	D	3.3	50	800	1.2	12	24	4.5	7	9	0.150	433	390	173	346	312	139					
TBJV475*050 R□□# @ 0 A++	D	4.7	50	900	1.8	18	36	4.5	7	9	0.150	408	367	163	367	331	147					
TBJW475*050 R□□# @ 0 A++	D	4.7	50	600	1.8	18	36	4.5	7	9	0.150	500	450	200	300	270	120					
TBJX685*050 R□□# @ 0 A++	D	6.8	50	700	2.6	26	52	4.5	7	9	0.150	463	417	185	324	292	130					
TBJY106*050 R□□# @ 0 A++	E	10	50	300	3.8	38	76	4.5	7	9	0.165	486	437	194	340	306	136					
TBJZ106*050 R□□# @ 0 A++	E	10	50	300	3.8	38	76	4.5	7	9	0.165	742	667	297	222	200	89					
TBJA156*050 R□□# @ 0 A++	U	15	50	500	5.6	56	112	30	45	45	0.165	574	517	230	287	259	115					
TBJB226*050 R□□# @ 0 A++	U	22	50	500	8.2	82	164	30	45	45	0.165	574	517	230	287	259	115					

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.

**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.**

单击下面可查看定价，库存，交付和生命周期等信息

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