

TBJ Series



COTS-Plus



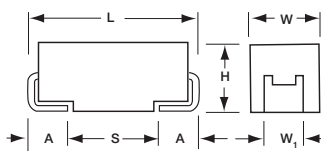
The TBJ COTS-Plus series, based on the CWR11 form factor, is a high reliability series encompassing the current range of EIA Low ESR ratings. These ratings are available with Weibull grading (B and C), surge current testing (A, B, C) per MIL-PRF-55365 Rev. G, and optional Group A from MIL-PRF-55365.

For Space Level applications, AVX SRC9000 qualification is recommended. Please refer to the TBJ COTS-Plus SRC9000 Datasheet for part number availability.

There are five termination finishes available: solder plated, fused solder plated, hot solder dipped, 100% Tin and gold plated (these correspond to "H", "K", "C", "7" and "B" termination, respectively). The molding compound has been selected to meet the requirements of UL94V-0 (Flame Retardancy) and outgassing requirements of ASTM E-595.

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)

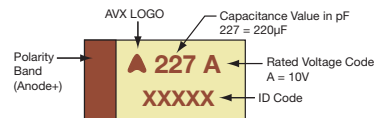


Code	EIA Code	EIA Metric	L±0.20 (0.008)	W+0.20 (0.008) -0.10 (0.004)	H+0.20 (0.008) -0.10 (0.004)	W ₁ ±0.20 (0.008)	A+0.30 (0.012) -0.20 (0.008)	S Min.
A	1206	3216-18	3.20 (0.126)	1.60 (0.063)	1.60 (0.063)	1.20 (0.047)	0.80 (0.031)	1.10 (0.043)
B	1210	3528-21	3.50 (0.138)	2.80 (0.110)	1.90 (0.075)	2.20 (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)
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)

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

MARKING

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



HOW TO ORDER

AVX PART NUMBER:

TBJ	D	227	*	035	C	B	S	Z	0	0	00
Type	Case Size	Capacitance Code	Capacitance Tolerance	Voltage Code	ESR	Packaging	Inspection Level	Reliability Grade	Qualification Level	Termination Finish	Surge Test Option
		pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	K = ±10% M = ±20%	002 = 2Vdc 004 = 4Vdc 006 = 6.3Vdc 010 = 10Vdc 016 = 16Vdc 020 = 20Vdc 025 = 25Vdc 035 = 35Vdc 050 = 50Vdc	C = Std ESR L = Low ESR	B = Bulk R = 7" T&R S = 13" T&R W = Waffle	S = Std. Conformance L = Group A	Weibull: B = 0.1%/1000 hrs. 90% conf. C = 0.01%/1000 hrs. 90% conf. Z = Non-ER	0 = N/A	H = Solder Plated 0 = Fused Solder Plated 8 = Hot Solder Dipped 9 = Gold Plated 7 = Matte Sn	00 = None 23 = 10 Cycles, +25°C 24 = 10 Cycles, -55°C & +85°C 45 = 10 cycles, -55°C & +85°C before Weibull



For RoHS compliant products, please select correct termination style.

TECHNICAL SPECIFICATIONS

Technical Data:	Unless otherwise specified, all technical data relate to an ambient temperature of 25°C									
Capacitance Range:	0.10 µF to 1500 µF									
Capacitance Tolerance:	±10%; ±20%									
Rated Voltage (V _R)	≤ 85°C:	2	4	6	10	16	20	25	35	50
Category Voltage (V _C)	≤ 125°C:	1.4	2.7	4	7	10	13	17	23	33
Surge Voltage (V _S)	≤ 85°C:	2.6	5.2	8	13	20	26	32	46	65
Surge Voltage (V _S)	≤ 125°C:	1.7	3.4	5	8	13	16	20	28	40
Temperature Range:	-55°C to +125°C									



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

Capacitance		Rated Voltage DC (V_R) to 85°C									
μF	Code	2V (e)	4V (G)	6V (J)	10V (A)	15V (H)	16V (C)	20V (D)	25V (E)	35V (V)	50V (T)
0.10	104									A(24000)	A(22000)
0.15	154									A(21000)	A(9000, 21000) B(17000)
0.22	224									A(6000, 18000)	A(7000, 18000) B(14000)
0.33	334									A(6000, 15000)	B(12000)
0.47	474							A(14000)	A(7000, 14000)	A(6000, 12000) B(4000, 10000)	C(8000)
0.68	684					A(12000)	A(12000)	A(12000)	A(6000, 10000) B(7500)	A(6000, 8000) B(8000)	A(7900) C(7000)
1.0	105				A(10000)	A(10000)	A(10000)	A(3000, 10000)	A(8000) B(6500)	A(3000, 7500) B(2000, 6500)	C(2500, 6000)
1.5	155			A(8000)	A(8000)	A(8000)		A(6500) B(6000)	A(3000, 7500) B(1800, 6500)	A(7500) B(2500, 5200) C(4500)	C(1500, 5000) D(4000)
2.2	225		A(8000)	A(8000)	A(1800, 8000)	B(5500)	A(1800, 5500) B(5000)	A(3000, 5300) B(5000)	A(7000) B(900, 4500) C(3500)	A(1500, 4500) B(2000, 4200) C(1000, 3500)	D(1200, 2500)
3.3	335			A(8000)	B(5500)	B(5000)	A(3500, 5000) B(4500)	A(2500) B(1300, 4000)	A(2800) B(750, 3500) C(3500)	B(1000, 3500) C(700, 2500)	D(800, 2000)
4.7	475		A(8000)	B(5500)	A(1400, 5000) B(4500)	B(4000)	A(2000, 4000) B(800, 3100)	A(1800, 4000) B(750, 3000) C(3000)	A(2800) B(1500, 2300) C(2500)	B(700, 3100) C(600, 2200) D(500, 1500)	D(300, 1500)
6.8	685		B(5500)	A(1800, 5000) B(4500)	A(1800, 4000) B(3500)		A(1500, 2500) B(60, 2500)	A(1000) B(600, 2500) C(700, 2400)	B(700, 2800) C(500, 2000) D(1400)	C(350, 1800) D(500, 1300)	D(500, 1000)
10	106		B(4000)	A(1500, 4000) B(3500)	A(1800, 3000) B(2500)	C(2500)	A(1000, 3000) B(500, 2800) C(500, 2500)	B(1000, 2100) C(500, 1900)	C(500, 1800) D(1200)	C(600, 1600) D(300, 1000) E(200, 250)	E(400, 500) V(650)
15	156		B(3500)	A(1500, 3500) B(3500) C(3000)	A(1000, 3200) B(450, 2800) C(2500)		B(800, 2500) C(1800)	B(500, 2000) C(400, 1700) D(1100)	C(220, 300) D(300, 1000)	C(350, 1400) D(300, 900)	D(600) E(250, 600)
22	226			A(500, 3000) B(375, 2500) C(2200)	B(700, 2400) C(300, 1000)	D(1100)	B(600, 2300) C(375, 1600) D(1100)	B(400, 600) C(150, 1600) D(200, 900)	C(275, 1400) D(200, 900)	D(400, 900) E(300, 900)	V(390, 600)
33	336		A(3000) C(2200)	A(600) B(600, 2200)	A(700, 1700) B(250, 1800) C(150, 1600) D(1100)	D(900)	B(350) C(300, 1500) D(200, 900)	C(300, 1500) D(100, 900)	D(100, 900) E(300, 900)	D(300, 900) E(100, 250) V(200)	
47	476		A(500)	A(800) B(250, 350) C(300, 1600) D(1100)	B(250, 350) C(200, 1200) D(100, 900)		C(350, 1500) D(150, 900)	D(100, 200) E(70, 250)	D(250, 900) E(80, 100)	E(200, 250) V(200, 400)	
68	686		D(1100)	B(250, 1800) C(150, 1600) D(900)	B(600) C(80, 1200) D(100, 900)		C(125, 200) D(70, 900)	D(70, 900) E(150, 900)	E(125, 200) V(95)	V(150, 200)	
100	107		A(1400) B(200, 1600)	B(250, 400) C(150, 900) D(900)	B(400) C(200, 1200) D(100, 900) E(125)		D(125, 900) E(100, 900)	D(85, 100) E(100, 150) V(85, 200)	V(100)		
150	157	B(150)	B(250) C(70, 80)	C(50, 90) D(50, 900)	D(150, 900) E(100)		D(150, 900) E(100, 300) V(45, 75)	E(300) V(80)			
220	227	B(150, 200) D(45)	D(40, 900)	C(70, 1200) D(100, 900) E(100)	D(150, 900) E(100, 900)		E(100, 150) V(75, 150)				
330	337		C(100) D(35, 45)	D(45, 50) E(100, 900) V(100)	D(150, 900) E(60, 900) V(60, 100)						
470	477	D(35)	D(45, 100) E(35)	D(45, 60) E(50, 900) V(55, 100)	E(50, 900) V(60, 100)						
680	687	D(35, 50) E(35, 50)	D(45, 60) E(40, 60)	E(45, 60) V(35, 40)							
1000	108	E(30, 40)	E(60) V(25, 35)	V(40, 50)							
1500	158	D(100) E(50) V(30, 40)	E(50, 75) V(50, 75)								

Available Ratings: ESR limits quoted in brackets (mOhms)

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

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

RATING & PART NUMBER REFERENCE		Parametric Specifications by Rating per MIL-PRF-55365/4										Typical RMS Ripple Data by Rating					
		Cap @ 120Hz @ 25°C	DC Rated Voltage @ +85°C	ESR @ 100kHz	DCL max @ +85°C	+25°C (µA)	+125°C (µA)	+25°C (%)	DF Max (+85/125°C) (%)	-55°C (%)	Power Dissipation W	25°C Ripple Current (100kHz) A	85°C Ripple Current (100kHz) A	125°C Ripple Current (100kHz) A	25°C Ripple Voltage (100kHz) V	85°C Ripple Voltage (100kHz) V	125°C Ripple Voltage (100kHz) V
AVX COTS-Plus P/N	Case	µF @ 25°C	V @ +85°C	Ohms @ +25°C	(µA)	(µA)	(%)	(%)	(%)	W	A (100kHz)	A (100kHz)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)	
TBJC226*025CL#00++	C	22	25	0.275	5.5	110	6	8	10	0.110	0.632	0.569	0.253	0.174	0.157	0.070	
TBJD226*025CL#00++	D	22	25	0.9	5.5	110	6	8	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147	
TBJD226*025CL#00++	D	22	25	0.2	5.5	55	6	8	10	0.150	0.866	0.779	0.346	0.173	0.156	0.069	
TBJD336*025CL#00++	D	33	25	0.9	8.25	82.5	6	8	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147	
TBJD336*025CL#00++	D	33	25	0.1	8.25	82.5	6	8	10	0.150	1.225	1.102	0.490	0.122	0.110	0.049	
TBJE336*025CL#00++	E	33	25	0.9	8.25	82.5	6	8	10	0.165	0.428	0.385	0.171	0.385	0.347	0.154	
TBJE336*025CL#00++	E	33	25	0.3	8.25	82.5	6	8	10	0.165	0.742	0.667	0.297	0.222	0.200	0.089	
TBJD476*025CL#00++	D	47	25	0.9	11.75	117.5	6	8	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147	
TBJD476*025CL#00++	D	47	25	0.25	11.75	117.5	6	8	10	0.150	0.775	0.697	0.310	0.194	0.174	0.077	
TBJE476*025CL#00++	E	47	25	0.1	11.75	117.5	6	8	10	0.165	1.285	1.156	0.514	0.128	0.116	0.051	
TBJE476*025CL#00++	E	47	25	0.08	11.75	117.5	6	8	10	0.165	1.436	1.293	0.574	0.115	0.103	0.046	
TBJE666*025CL#00++	E	66	25	0.2	17	170	340	6	10	0.165	0.908	0.817	0.363	0.182	0.163	0.073	
TBJE666*025CL#00++	E	66	25	0.125	17	170	340	6	10	0.165	1.149	1.034	0.460	0.144	0.129	0.057	
TBJV666*025CL#00++	V	66	25	0.095	17	170	340	6	9	0.250	1.622	1.460	0.649	0.154	0.139	0.062	
TBM107*025CL#00++	V	100	25	0.1	25	250	500	8	10	0.250	1.581	1.423	0.632	0.158	0.142	0.063	
TBM104*035CL#00++	A	0.1	35	24	0.035	0.35	0.42	4	6	0.075	0.056	0.050	0.022	1.342	1.207	0.537	
TBJA154*035CL#00++	A	0.15	35	21	0.5	5	10	4	6	0.075	0.060	0.054	0.024	1.255	1.129	0.502	
TBJA224*035CL#00++	A	0.22	35	18	0.5	5	10	4	6	0.075	0.065	0.058	0.026	1.162	1.046	0.465	
TBJA224*035CL#00++	A	0.22	35	6	0.077	0.77	1.54	4	6	0.075	0.112	0.101	0.045	0.671	0.604	0.268	
TBJA334*035CL#00++	A	0.33	35	15	0.5	5	10	4	6	0.075	0.071	0.064	0.028	1.061	0.955	0.424	
TBJA334*035CL#00++	A	0.33	35	6	0.116	1.165	2.31	4	6	0.075	0.112	0.101	0.045	0.671	0.604	0.268	
TBJA474*035CL#00++	A	0.47	35	12	1.645	16.45	3.29	4	6	0.075	0.079	0.071	0.032	0.949	0.854	0.379	
TBJA474*035CL#00++	A	0.47	35	6	0.165	1.645	3.29	4	6	0.075	0.112	0.101	0.045	0.671	0.604	0.268	
TBJB474*035CL#00++	B	0.47	35	10	0.165	1.645	1.974	4	6	0.085	0.092	0.083	0.037	0.922	0.830	0.369	
TBJB474*035CL#00++	B	0.47	35	4	0.165	1.645	3.29	4	6	0.085	0.146	0.131	0.058	0.583	0.525	0.233	
TBJA684*035CL#00++	A	0.68	35	8	0.238	2.38	4.76	4	6	0.075	0.097	0.087	0.039	0.775	0.697	0.310	
TBJA684*035CL#00++	A	0.68	35	6	0.238	2.38	4.76	4	6	0.075	0.112	0.101	0.045	0.671	0.604	0.268	
TBJB684*035CL#00++	B	0.68	35	8	0.238	2.38	2.856	4	6	0.085	0.103	0.093	0.041	0.825	0.742	0.330	
TBJA105*035CL#00++	A	1	35	7.5	3.5	3.5	7	4	6	0.075	0.100	0.090	0.040	0.750	0.675	0.300	
TBJA105*035CL#00++	A	1	35	3	0.35	3.5	7	4	6	0.075	0.158	0.142	0.063	0.474	0.427	0.190	
TBJB105*035CL#00++	B	1	35	6.5	3.5	3.5	4.2	4	6	0.085	0.114	0.103	0.046	0.743	0.669	0.297	
TBJB105*035CL#00++	B	1	35	2	0.35	3.5	7	4	6	0.085	0.206	0.186	0.082	0.412	0.371	0.165	
TBJA155*035CL#00++	A	1.5	35	7.5	5.25	5.25	10.5	6	8	0.085	0.128	0.115	0.051	0.665	0.598	0.266	
TBJA155*035CL#00++	A	1.5	35	5.2	5.25	5.25	10.5	6	8	0.085	0.184	0.166	0.074	0.461	0.415	0.184	
TBJB155*035CL#00++	B	1.5	35	2.5	5.25	5.25	10.5	6	10	0.085	0.184	0.166	0.074	0.461	0.415	0.184	
TBJC155*035CL#00++	C	1.5	35	4.5	5.25	5.25	6.3	6	9	0.110	0.156	0.141	0.063	0.704	0.633	0.281	
TBJA225*035CL#00++	A	2.2	35	4.5	0.77	7.7	15.4	6	8	0.075	0.129	0.116	0.052	0.581	0.523	0.232	
TBJA225*035CL#00++	A	2.2	35	1.5	0.77	7.7	15.4	6	9	0.075	0.224	0.201	0.089	0.335	0.302	0.134	
TBJB225*035CL#00++	B	2.2	35	4.2	0.77	7.7	15.4	6	8	0.085	0.142	0.128	0.057	0.597	0.538	0.239	
TBJB225*035CL#00++	B	2.2	35	2	0.77	7.7	15.4	6	8	0.085	0.206	0.186	0.082	0.412	0.371	0.165	
TBJC225*035CL#00++	C	2.2	35	3.5	0.77	7.7	9.24	6	8	0.110	0.177	0.160	0.071	0.620	0.558	0.248	
TBJC225*035CL#00++	C	2.2	35	1	0.77	7.7	15.4	6	10	0.110	0.332	0.298	0.133	0.332	0.298	0.133	
TBJB335*035CL#00++	B	3.3	35	3.5	1.155	11.55	23.1	6	8	0.085	0.156	0.140	0.062	0.545	0.491	0.218	
TBJB335*035CL#00++	B	3.3	35	1	1.155	11.55	23.1	6	9	0.085	0.292	0.262	0.117	0.292	0.262	0.117	
TBJC335*035CL#00++	C	3.3	35	2.5	1.155	11.55	13.86	6	8	0.110	0.210	0.189	0.084	0.524	0.472	0.210	
TBJC335*035CL#00++	C	3.3	35	0.7	1.155	11.55	23.1	6	10	0.110	0.336	0.307	0.159	0.277	0.250	0.111	
TBJB475*035CL#00++	B	4.7	35	3.1	1.645	16.45	32.9	6	8	0.085	0.166	0.149	0.066	0.513	0.462	0.205	
TBJB475*035CL#00++	B	4.7	35	0.7	1.645	16.45	32.9	6	8	0.085	0.348	0.314	0.139	0.244	0.220	0.098	
TBJC475*035CL#00++	C	4.7	35	2.2	1.645	16.45	32.9	6	8	0.110	0.224	0.201	0.089	0.492	0.443	0.197	
TBJC475*035CL#00++	C	4.7	35	0.6	1.645	16.45	32.9	6	8	0.110	0.428	0.385	0.171	0.257	0.231	0.103	
TBJD475*035CL#00++	D	4.7	35	1.5	1.645	16.45	19.74	6	8	0.150	0.316	0.285	0.126	0.474	0.427	0.190	
TBJD475*035CL#00++	D	4.7	35	0.5	1.645	16.45	32.9	6	8	0.150	0.548	0.493	0.219	0.274	0.246	0.110	
TBJC685*035CL#00++	C	6.8	35	1.8	2.38	23.8	47.6	6	9	0.110	0.247	0.222	0.099	0.445	0.400	0.178	
TBJC685*035CL#00++	C	6.8	35	0.35	2.38	23.8	47.6	6	9	0.110	0.561	0.505	0.224	0.196	0.177	0.078	

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 per MIL-PRF-55365/4										Typical RMS Ripple Data by Rating					
		Cap @ 120Hz	DC Rated Voltage	ESR @ 100kHz	DCL max @ +85°C	+125°C (µA)	+25°C (%)	DF Max (+85/125)°C (%)	-55°C (%)	Power Dissipation W	25°C Ripple Current (100kHz) A	85°C Ripple Current (100kHz) A	125°C Ripple Current (100kHz) A	25°C Ripple Voltage (100kHz) V	85°C Ripple Voltage (100kHz) V	125°C Ripple Voltage (100kHz) V	
AVX COTS-Plus P/N	Case	µF @ +25°C	V @ +85°C	Ohms @ +25°C	(µA)	(µA)	(%)	(%)	(%)	(100kHz)	(100kHz)	(100kHz)	(100kHz)	(100kHz)	(100kHz)		
TBJD685035C1#000++	D	6.8	35	1.3	2.38	23.8	6	9	9	0.150	0.340	0.306	0.136	0.442	0.397	0.177	
TBJD885035L1#000++	D	6.8	35	0.5	2.38	23.8	6	9	9	0.150	0.548	0.493	0.219	0.274	0.246	0.110	
TBJC106035C1#000++	C	10	35	1.6	3.5	35	6	9	9	0.110	0.262	0.236	0.171	0.257	0.231	0.103	
TBJC106035L1#000++	C	10	35	0.6	3.5	35	6	9	9	0.110	0.428	0.385	0.171	0.257	0.231	0.103	
TBJD106035C1#000++	D	10	35	1	3.5	35	6	9	9	0.150	0.387	0.349	0.155	0.387	0.349	0.155	
TBJD106035L1#000++	D	10	35	0.3	3.5	35	6	9	9	0.150	0.707	0.636	0.283	0.212	0.191	0.085	
TBJE106035C1#000++	E	10	35	0.25	3.5	35	6	9	10	0.165	0.812	0.731	0.325	0.203	0.183	0.081	
TBJE106035L1#000++	E	10	35	0.2	3.5	35	6	9	10	0.165	0.908	0.817	0.363	0.182	0.163	0.073	
TBJC156035C1#000++	C	15	35	1.4	5.25	52.5	105	6	9	0.110	0.290	0.252	0.112	0.392	0.363	0.157	
TBJC156035L1#000++	C	15	35	0.35	5.25	52.5	105	6	9	0.110	0.561	0.505	0.224	0.196	0.177	0.078	
TBJD156035C1#000++	D	15	35	0.9	5.25	52.5	105	6	9	0.150	0.408	0.367	0.163	0.367	0.331	0.147	
TBJD156035L1#000++	D	15	35	0.3	5.25	52.5	105	6	9	0.150	0.707	0.636	0.283	0.212	0.191	0.085	
TBD226035C1#000++	D	22	35	0.9	7.7	77	154	6	9	0.150	0.408	0.367	0.163	0.367	0.331	0.147	
TBD226035L1#000++	D	22	35	0.4	7.7	77	154	6	9	0.150	0.612	0.551	0.245	0.245	0.220	0.098	
TBE226035C1#000++	E	22	35	0.9	7.7	77	154	6	9	0.165	0.428	0.385	0.171	0.385	0.347	0.154	
TBE226035L1#000++	E	22	35	0.3	7.7	77	154	6	9	0.165	0.742	0.667	0.297	0.222	0.200	0.089	
TBD336035C1#000++	D	33	35	0.9	11.55	115.5	231	6	9	0.150	0.408	0.367	0.163	0.367	0.331	0.147	
TBD336035L1#000++	D	33	35	0.3	11.55	115.5	231	6	9	0.150	0.707	0.636	0.283	0.212	0.191	0.085	
TBE336035C1#000++	E	33	35	0.25	11.55	115.5	231	6	9	0.165	0.812	0.731	0.325	0.203	0.183	0.081	
TBE336035L1#000++	E	33	35	0.1	11.55	115.5	231	6	8	0.165	1.285	1.156	0.514	0.128	0.116	0.051	
TBV336035L1#000++	V	33	35	0.2	11.55	115.5	231	6	9	0.250	1.118	1.006	0.447	0.224	0.201	0.089	
TBV336035C1#000++	V	33	35	0.25	16.45	164.5	329	6	9	0.165	0.812	0.731	0.325	0.203	0.183	0.081	
TBE476035L1#000++	E	47	35	0.2	16.45	164.5	329	6	9	0.165	0.908	0.817	0.363	0.182	0.163	0.073	
TBV476035C1#000++	V	47	35	0.4	16.45	164.5	329	6	10	0.250	0.791	0.712	0.316	0.285	0.266	0.126	
TBV476035L1#000++	V	47	35	0.2	16.45	164.5	329	6	10	0.250	1.118	1.006	0.447	0.224	0.201	0.089	
TBV686035C1#000++	V	68	35	0.2	23.8	238	476	6	9	0.250	1.118	1.006	0.447	0.224	0.201	0.089	
TBV686035L1#000++	V	68	35	0.15	23.8	238	476	6	9	0.250	1.291	1.162	0.516	0.194	0.174	0.077	
TBA104050C1#000++	A	0.1	50	22	0.05	0.5	0.6	6	8	0.075	0.058	0.053	0.023	1.285	1.156	0.514	
TBA154050C1#000++	A	0.15	50	21	0.02	0.2	0.4	4	6	0.075	0.060	0.054	0.024	1.255	1.129	0.502	
TBA154050L1#000++	A	0.15	50	9	0.075	0.75	1.5	4	6	0.075	0.091	0.082	0.037	0.822	0.739	0.329	
TBA154050C1#000++	B	0.15	50	17	0.075	0.75	0.9	4	6	0.085	0.071	0.064	0.028	1.202	1.082	0.481	
TBA224050C1#000++	A	0.22	50	18	0.11	1.1	2.2	4	6	0.075	0.065	0.058	0.026	1.162	1.046	0.465	
TBA224050L1#000++	A	0.22	50	7	0.11	1.1	2.2	4	6	0.075	0.104	0.093	0.041	0.725	0.652	0.290	
TBA224050C1#000++	B	0.22	50	14	0.11	1.1	1.32	4	6	0.085	0.078	0.070	0.031	1.091	0.982	0.436	
TBA224050L1#000++	B	0.22	50	12	0.165	1.65	1.98	4	6	0.085	0.084	0.076	0.034	1.010	0.909	0.404	
TBA334050C1#000++	C	0.47	50	8	0.235	2.35	2.82	4	6	0.110	0.117	0.106	0.047	0.938	0.844	0.375	
TBA684050C1#000++	A	0.68	50	7.9	0.34	3.4	6.8	4	6	0.075	0.097	0.088	0.039	0.770	0.693	0.308	
TBC684050C1#000++	C	0.68	50	7	0.34	3.4	4.08	4	6	0.110	0.125	0.113	0.050	0.877	0.790	0.351	
TBC105050C1#000++	C	1	50	6	0.5	5	6	4	6	0.110	0.135	0.122	0.054	0.812	0.731	0.325	
TBC105050L1#000++	C	1	50	2.5	0.5	5	10	4	6	0.110	0.210	0.189	0.084	0.524	0.472	0.210	
TBC155050C1#000++	C	1.5	50	5	0.75	7.5	15	6	8	0.110	0.148	0.133	0.059	0.742	0.667	0.297	
TBC155050L1#000++	C	1.5	50	1.5	0.75	7.5	15	6	10	0.110	0.271	0.244	0.108	0.406	0.366	0.162	
TBD155050C1#000++	D	1.5	50	4	0.75	7.5	9	6	8	0.150	0.194	0.174	0.077	0.775	0.697	0.310	
TBD225050C1#000++	D	2.2	50	2.5	1.1	11	13.2	6	8	0.150	0.245	0.220	0.098	0.612	0.551	0.245	
TBD225050L1#000++	D	2.2	50	1.2	1.1	11	22	6	10	0.150	0.354	0.318	0.141	0.424	0.382	0.170	
TBD335050C1#000++	D	3.3	50	2	1.65	16.5	19.8	6	9	0.150	0.274	0.246	0.110	0.548	0.493	0.219	
TBD335050L1#000++	D	3.3	50	0.8	1.65	16.5	33	6	9	0.150	0.433	0.390	0.173	0.346	0.312	0.139	
TBD475050C1#000++	D	4.7	50	1.5	2.35	23.5	28.2	6	9	0.150	0.316	0.285	0.126	0.474	0.427	0.190	
TBD475050L1#000++	D	4.7	50	0.3	2.35	23.5	47	6	9	0.150	0.707	0.636	0.283	0.212	0.191	0.085	
TBD685050C1#000++	D	6.8	50	1	3.4	34	68	6	9	0.150	0.387	0.349	0.155	0.387	0.349	0.155	
TBD685050L1#000++	D	6.8	50	0.5	3.4	34	68	6	9	0.150	0.548	0.493	0.219	0.246	0.210	0.110	
TBE106050C1#000++	E	10	50	0.5	5	50	100	6	9	0.165	0.574	0.517	0.230	0.287	0.259	0.115	
TBE106050L1#000++	E	10	50	0.4	5	50	100	6	9	0.165	0.642	0.578	0.257	0.257	0.231	0.103	

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 per MIL-PRF-55365/4						Typical RMS Ripple Data by Rating								
		Cap @ 120Hz @ 25°C	DC Rated Voltage @ +85°C	ESR @ 100kHz @ +25°C	DCL max +85°C	+25°C	+125°C	+25°C	+85°C	125°C	25°C	85°C	125°C	25°C	85°C	125°C
Case	P/N	µF	V	Ohms	(µA)	(µA)	(%)	(%)	(%)	W	A	A	A	V	V	V
AVX COTS-Plus																
TB1V106*050C□□#0*++	V	10	50	0.65	5	100	3	6	0.250	0.620	0.558	0.248	0.403	0.363	0.161	
TB1D156*050C□□#0*++	D	15	50	0.6	7.5	150	4	6	0.150	0.500	0.450	0.200	0.300	0.270	0.120	
TB1E156*050C□□#0*++	E	15	50	0.6	7.5	150	8	10	0.165	0.524	0.472	0.210	0.315	0.283	0.126	
TB1E156*050L□□#0*++	E	15	50	0.25	7.5	150	6	9	0.165	0.812	0.731	0.325	0.203	0.183	0.081	
TB1V226*050C□□#0*++	V	22	50	0.6	11	220	8	10	0.250	0.645	0.581	0.258	0.387	0.349	0.155	
TB1V226*050L□□#0*++	V	22	50	0.39	11	220	8	10	0.250	0.801	0.721	0.320	0.312	0.281	0.125	

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.**

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