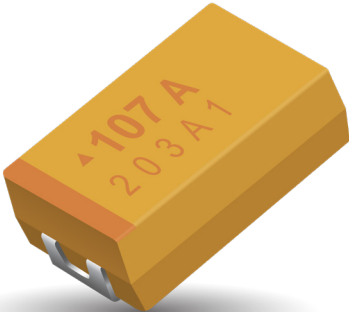




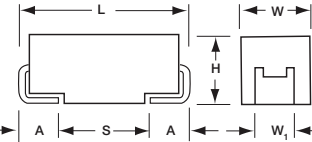
The TBJ COTS-Plus series, based on the CWR11 form factor, is a high reliability series encompassing the current range of EIA Low ESR ratings. These ratings are available with Weibull grading (B and C), surge current testing (A, B, C) per MIL-PRF-55365 Rev. G, and optional Group A from MIL-PRF-55365.

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.

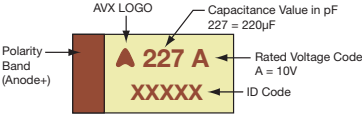
For moisture sensitivity levels please refer to the High Reliability Tantalum MSL section located in the back of the High Reliability Tantalum Catalog.

CASE DIMENSIONS: millimeters (inches)



MARKING

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



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,±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 (0.122)	1.30 (0.051)	4.40 (0.173)

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

HOW TO ORDER

AVX PART NUMBER:

TBJ

D

227

*

035

C

B

S

Z

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0

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Type

Case Size

Capacitance Code
pF code:
1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)

Capacitance Tolerance
K = ±10%
M = ±20%

Voltage Code
002 = 2Vdc
004 = 4Vdc
006 = 6Vdc
010 = 10Vdc
016 = 16Vdc
020 = 20Vdc
025 = 25Vdc
035 = 35Vdc
050 = 50Vdc

ESR
C = Std ESR
L = Low ESR

Packaging
B = Bulk
R = 7" T&R
S = 13" T&R
W = Waffle

Inspection Level
S = Std. Conformance
L = Group A

Reliability Grade
Weibull:
B = 0.1%/1000 hrs. 90% conf.
C = 0.01%/1000 hrs. 90% conf.
Z = Non-ER

Qualification Level
0 = N/A

Termination Finish
H = Solder Plated
0 = Fused Solder Plated
8 = Hot Solder Dipped
9 = Gold Plated
7 = Matte Sn

Surge Test Option
00 = None
23 = 10 Cycles, +25°C
24 = 10 Cycles, -55°C & +85°C
45 = 10 cycles, -55°C & +85°C before Weibull

LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT

RoHS
COMPLIANT

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									

The Important Information/Disclaimer is incorporated in these specifications by reference and should be reviewed in full before placing any order.

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

Capacitance		Rated Voltage DC (V _R) at 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(1000, 1500) 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, 2800) 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			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)

Note for designers - for the highlighted ratings, higher voltage options are now available in the same case size and are recommended for new designs.

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



RATING & PART NUMBER REFERENCE		Parametric Specifications by Rating per MIL-PRF-55365/4									Typical RMS Ripple Data by Rating						
		Cap @ 120Hz µF @ 25°C	DC Rated Voltage V @ +85°C	ESR @ 100kHz Ohms @ +25°C	DCL max			DF Max			Power Dissipation W	25°C Ripple Current A (100kHz)	85°C Ripple Current A (100kHz)	125°C Ripple Current A (100kHz)	25°C Ripple Voltage V (100kHz)	85°C Ripple Voltage V (100kHz)	125°C Ripple Voltage V (100kHz)
					+25°C	+85°C	+125°C	+25°C	+(85/125)°C	-55°C							
					(µA)	(µA)	(µA)	(%)	(%)	(%)							
AVX COTS-Plus P/N	Case																
TBJB157*002L□#@0°++	B	150	2	0.15	3	30	60	10	12	14	0.085	0.753	0.677	0.301	0.113	0.102	0.045
TBJB227*002C□#@0°++	B	220	2	0.2	4.4	44	88	16	19	21	0.085	0.652	0.587	0.261	0.130	0.117	0.052
TBJB227*002L□#@0°++	B	220	2	0.15	4.4	44	88	16	19	21	0.085	0.753	0.677	0.301	0.113	0.102	0.045
TBJD227*002L□#@0°++	D	220	2	0.045	4.4	44	88	8	10	12	0.150	1.826	1.643	0.730	0.082	0.074	0.033
TBJD477*002L□#@0°++	D	470	2	0.035	9.4	94	188	8	10	12	0.150	2.070	1.863	0.828	0.072	0.065	0.029
TBJD687*002C□#@0°++	D	680	2	0.05	13.6	136	272	16	19	21	0.150	1.732	1.559	0.693	0.087	0.078	0.035
TBJD687*002L□#@0°++	D	680	2	0.035	13.6	136	272	16	19	21	0.150	2.070	1.863	0.828	0.072	0.065	0.029
TBJE687*002C□#@0°++	E	680	2	0.05	13.6	136	272	10	12	14	0.165	1.817	1.635	0.727	0.091	0.082	0.036
TBJE687*002L□#@0°++	E	680	2	0.035	13.6	136	272	10	12	14	0.165	2.171	1.954	0.868	0.076	0.068	0.030
TBJE108*002C□#@0°++	E	1000	2	0.04	20	200	400	14	17	20	0.165	2.031	1.828	0.812	0.081	0.073	0.032
TBJE108*002L□#@0°++	E	1000	2	0.03	20	200	400	14	17	20	0.165	2.345	2.111	0.938	0.070	0.063	0.028
TBJD158*002L□#@0°++	D	1500	2	0.1	30	300	600	60	90	90	0.150	1.225	1.102	0.490	0.122	0.110	0.049
TBJE158*002L□#@0°++	E	1500	2	0.05	30	300	600	20	24	28	0.165	1.817	1.635	0.727	0.091	0.082	0.036
TBJJ158*002C□#@0°++	V	1500	2	0.04	30	300	600	20	24	28	0.250	2.500	2.250	1.000	0.100	0.090	0.040
TBJJ158*002L□#@0°++	V	1500	2	0.03	30	300	600	20	24	28	0.250	2.887	2.598	1.155	0.087	0.078	0.035
TBJA225*004C□#@0°++	A	2.2	4	8	0.088	0.88	1.76	6	9	9	0.075	0.097	0.087	0.039	0.775	0.697	0.310
TBJA475*004C□#@0°++	A	4.7	4	8	0.188	1.88	3.76	6	9	9	0.075	0.097	0.087	0.039	0.775	0.697	0.310
TBJB685*004C□#@0°++	B	6.8	4	5.5	0.272	2.72	5.44	6	9	9	0.085	0.124	0.112	0.050	0.684	0.615	0.273
TBJB106*004C□#@0°++	B	10	4	4	0.4	4	8	6	9	9	0.085	0.146	0.131	0.058	0.583	0.525	0.233
TBJB156*004C□#@0°++	B	15	4	3.5	0.6	6	12	6	9	9	0.085	0.156	0.140	0.062	0.545	0.491	0.218
TBJA336*004C□#@0°++	A	33	4	3	1.32	13.2	26.4	6	9	9	0.075	0.158	0.142	0.063	0.474	0.427	0.190
TBJC336*004C□#@0°++	C	33	4	2.2	1.32	13.2	26.4	6	9	9	0.110	0.224	0.201	0.089	0.492	0.443	0.197
TBJA476*004L□#@0°++	A	47	4	0.5	1.88	18.8	37.6	8	10	12	0.075	0.387	0.349	0.155	0.194	0.174	0.077
TBJC686*004C□#@0°++	C	68	4	1.6	2.72	27.2	54.4	6	9	10	0.110	0.262	0.236	0.105	0.420	0.378	0.168
TBJD686*004C□#@0°++	D	68	4	1.1	2.72	27.2	54.4	6	9	9	0.150	0.369	0.332	0.148	0.406	0.366	0.162
TBJA107*004C□#@0°++	A	100	4	1.4	4	40	80	30	36	42	0.075	0.231	0.208	0.093	0.324	0.292	0.130
TBJB107*004C□#@0°++	B	100	4	1.6	4	40	80	8	10	12	0.085	0.230	0.207	0.092	0.369	0.332	0.148
TBJB107*004L□#@0°++	B	100	4	0.2	4	40	80	8	10	12	0.085	0.652	0.587	0.261	0.130	0.117	0.052
TBJB157*004L□#@0°++	B	150	4	0.25	6	60	120	10	12	12	0.085	0.583	0.525	0.233	0.146	0.131	0.058
TBJC157*004C□#@0°++	C	150	4	0.08	6	60	120	6	9	10	0.110	1.173	1.055	0.469	0.094	0.084	0.038
TBJC157*004L□#@0°++	C	150	4	0.07	6	60	120	6	9	10	0.110	1.254	1.128	0.501	0.088	0.079	0.035
TBJD227*004C□#@0°++	D	220	4	0.9	8.8	88	176	8	10	12	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD227*004L□#@0°++	D	220	4	0.04	8.8	88	176	8	10	12	0.150	1.936	1.743	0.775	0.077	0.070	0.031
TBJC337*004L□#@0°++	C	330	4	0.1	13.2	132	264	8	10	12	0.110	1.049	0.944	0.420	0.105	0.094	0.042
TBJD337*004C□#@0°++	D	330	4	0.045	13.2	132	264	8	10	12	0.150	1.826	1.643	0.730	0.082	0.074	0.033
TBJD337*004L□#@0°++	D	330	4	0.035	13.2	132	264	8	10	12	0.150	2.070	1.863	0.828	0.072	0.065	0.029
TBJD477*004C□#@0°++	D	470	4	0.1	18.8	188	376	12	14	16	0.150	1.225	1.102	0.490	0.122	0.110	0.049
TBJD477*004L□#@0°++	D	470	4	0.045	18.8	188	376	12	14	16	0.150	1.826	1.643	0.730	0.082	0.074	0.033
TBJE477*004L□#@0°++	E	470	4	0.035	18.8	188	376	12	14	16	0.165	2.171	1.954	0.868	0.076	0.068	0.030
TBJD687*004C□#@0°++	D	680	4	0.06	27.2	272	544	14	17	20	0.150	1.581	1.423	0.632	0.095	0.085	0.038
TBJD687*004L□#@0°++	D	680	4	0.045	27.2	272	544	14	17	20	0.150	1.826	1.643	0.730	0.082	0.074	0.033
TBJE687*004C□#@0°++	E	680	4	0.06	27.2	272	544	10	12	14	0.165	1.658	1.492	0.663	0.099	0.090	0.040
TBJE687*004L□#@0°++	E	680	4	0.04	27.2	272	544	10	12	14	0.165	2.031	1.828	0.812	0.081	0.073	0.032
TBJE108*004L□#@0°++	E	1000	4	0.06	40	400	800	14	17	20	0.165	1.658	1.492	0.663	0.099	0.090	0.040
TBJJ108*004C□#@0°++	V	1000	4	0.035	40	400	800	16	19	21	0.250	2.673	2.405	1.069	0.094	0.084	0.037
TBJJ108*004L□#@0°++	V	1000	4	0.025	40	400	800	16	18	20	0.250	3.162	2.846	1.265	0.079	0.071	0.032
TBJE158*004C□#@0°++	E	1500	4	0.075	60	600	1200	30	36	42	0.165	1.483	1.335	0.593	0.111	0.100	0.044
TBJE158*004L□#@0°++	E	1500	4	0.05	60	600	1200	30	36	42	0.165	1.817	1.635	0.727	0.091	0.082	0.036
TBJJ158*004C□#@0°++	V	1500	4	0.075	60	600	1200	30	36	42	0.250	1.826	1.643	0.730	0.137	0.123	0.055
TBJJ158*004L□#@0°++	V	1500	4	0.05	60	600	1200	30	36	42	0.250	2.236	2.012	0.894	0.112	0.101	0.045
TBJA155*006C□#@0°++	A	1.5	6	8	0.09	0.9	1.08	6	9	9	0.075	0.097	0.087	0.039	0.775	0.697	0.310
TBJA225*006C□#@0°++	A	2.2	6	8	0.132	1.32	1.584	6	9	9	0.075	0.097	0.087	0.039	0.775	0.697	0.310
TBJA335*006C□#@0°++	A	3.3	6	8	0.198	1.98	2.376	6	9	9	0.075	0.097	0.087	0.039	0.775	0.697	0.310
TBJB475*006C□#@0°++	B	4.7	6	5.5	0.282	2.82	3.384	6	9	9	0.085	0.124	0.112	0.050	0.684	0.615	0.273
TBJA685*006C□#@0°++	A	6.8	6	5	0.408	4.08	8.16	6	9	10	0.075	0.122	0.110	0.049	0.612	0.551	0.245
TBJA685*006L□#@0°++	A	6.8	6	1.8	0.408	4.08	8.16	6	9	10	0.075	0.204	0.184	0.082	0.367	0.331	0.147

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.



The Important Information/Disclaimer is incorporated in these specifications by reference and should be reviewed in full before placing any order.

TBJ SERIES

COTS-Plus



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			DF Max			Power Dissipation	25°C Ripple Current	85°C Ripple Current	125°C Ripple Current	25°C Ripple Voltage	85°C Ripple Voltage	125°C Ripple Voltage
		µF	V	Ohms	+25°C	+85°C	+125°C	+25°C	+(85/125)°C	-55°C	W	A (100kHz)	A (100kHz)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)
		@ 25°C	@ +85°C	@ +25°C	(µA)	(µA)	(µA)	(%)	(%)	(%)							
TBJB685*006C□#@0°++	B	6.8	6	4.5	0.408	4.08	4.896	6	9	9	0.085	0.137	0.124	0.055	0.618	0.557	0.247
TBJA106*006C□#@0°++	A	10	6	4	0.6	6	12	6	9	10	0.075	0.137	0.123	0.055	0.548	0.493	0.219
TBJA106*006L□#@0°++	A	10	6	1.5	0.6	6	12	6	9	10	0.075	0.224	0.201	0.089	0.335	0.302	0.134
TBJB106*006C□#@0°++	B	10	6	3.5	0.6	6	7.2	6	9	9	0.085	0.156	0.140	0.062	0.545	0.491	0.218
TBJA156*006C□#@0°++	A	15	6	3.5	0.9	9	18	6	9	10	0.075	0.146	0.132	0.059	0.512	0.461	0.205
TBJA156*006L□#@0°++	A	15	6	1.5	0.9	9	18	6	9	10	0.075	0.224	0.201	0.089	0.335	0.302	0.134
TBJB156*006C□#@0°++	B	15	6	3.5	0.225	2.25	4.5	6	9	10	0.085	0.156	0.140	0.062	0.545	0.491	0.218
TBJC156*006C□#@0°++	C	15	6	3	0.9	9	10.8	6	6	9	0.110	0.191	0.172	0.077	0.574	0.517	0.230
TBJA226*006C□#@0°++	A	22	6	3	1.32	13.2	26.4	6	6	10	0.075	0.158	0.142	0.063	0.474	0.427	0.190
TBJA226*006L□#@0°++	A	22	6	0.5	1.32	13.2	26.4	6	9	10	0.075	0.387	0.349	0.155	0.194	0.174	0.077
TBJB226*006C□#@0°++	B	22	6	2.5	1.32	13.2	26.4	6	9	10	0.085	0.184	0.166	0.074	0.461	0.415	0.184
TBJB226*006L□#@0°++	B	22	6	0.375	1.32	13.2	26.4	6	9	10	0.085	0.476	0.428	0.190	0.179	0.161	0.071
TBJC226*006C□#@0°++	C	22	6	2.2	1.32	13.2	15.84	6	9	9	0.110	0.224	0.201	0.089	0.492	0.443	0.197
TBJA336*006L□#@0°++	A	33	6	0.6	1.98	19.8	39.6	8	10	12	0.075	0.354	0.318	0.141	0.212	0.191	0.085
TBJB336*006C□#@0°++	B	33	6	2.2	1.98	19.8	39.6	6	9	10	0.085	0.197	0.177	0.079	0.432	0.389	0.173
TBJB336*006L□#@0°++	B	33	6	0.6	1.98	19.8	39.6	6	9	10	0.085	0.376	0.339	0.151	0.226	0.203	0.090
TBJA476*006C□#@0°++	A	47	6	0.8	2.82	28.2	56.4	10	12	14	0.075	0.306	0.276	0.122	0.245	0.220	0.098
TBJB476*006C□#@0°++	B	47	6	0.35	2.82	28.2	56.4	6	9	10	0.085	0.493	0.444	0.197	0.172	0.155	0.069
TBJB476*006L□#@0°++	B	47	6	0.25	2.82	28.2	56.4	6	9	10	0.085	0.583	0.525	0.233	0.146	0.131	0.058
TBJC476*006C□#@0°++	C	47	6	1.6	2.82	28.2	56.4	6	9	10	0.110	0.262	0.236	0.105	0.420	0.378	0.168
TBJC476*006L□#@0°++	C	47	6	0.3	2.82	28.2	56.4	6	9	10	0.110	0.606	0.545	0.242	0.182	0.163	0.073
TBJD476*006C□#@0°++	D	47	6	1.1	2.82	28.2	33.84	6	6	9	0.150	0.369	0.332	0.148	0.406	0.366	0.162
TBJB686*006C□#@0°++	B	68	6	1.8	4.08	40.8	81.6	8	10	12	0.085	0.217	0.196	0.087	0.391	0.352	0.156
TBJB686*006L□#@0°++	B	68	6	0.25	4.08	40.8	81.6	8	9	10	0.085	0.583	0.525	0.233	0.146	0.131	0.058
TBJC686*006C□#@0°++	C	68	6	1.6	4.08	40.8	81.6	6	9	10	0.110	0.262	0.236	0.105	0.420	0.378	0.168
TBJC686*006L□#@0°++	C	68	6	0.15	4.08	40.8	81.6	6	9	10	0.110	0.856	0.771	0.343	0.128	0.116	0.051
TBJD686*006C□#@0°++	D	68	6	0.9	4.08	40.8	48.96	6	9	9	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJB107*006C□#@0°++	B	100	6	0.4	6	60	120	10	12	14	0.085	0.461	0.415	0.184	0.184	0.166	0.074
TBJB107*006L□#@0°++	B	100	6	0.25	6	60	120	10	12	14	0.085	0.583	0.525	0.233	0.146	0.131	0.058
TBJC107*006C□#@0°++	C	100	6	0.9	6	60	120	6	9	10	0.110	0.350	0.315	0.140	0.315	0.283	0.126
TBJC107*006L□#@0°++	C	100	6	0.15	6	60	120	6	9	10	0.110	0.856	0.771	0.343	0.128	0.116	0.051
TBJD107*006C□#@0°++	D	100	6	0.9	6	60	120	6	9	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJC157*006C□#@0°++	C	150	6	0.09	9	90	180	6	9	10	0.110	1.106	0.995	0.442	0.099	0.090	0.040
TBJC157*006L□#@0°++	C	150	6	0.05	9	90	180	6	9	10	0.110	1.483	1.335	0.593	0.074	0.067	0.030
TBJD157*006C□#@0°++	D	150	6	0.9	9	90	180	6	9	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD157*006L□#@0°++	D	150	6	0.05	9	90	180	6	9	10	0.150	1.732	1.559	0.693	0.087	0.078	0.035
TBJC227*006C□#@0°++	C	220	6	1.2	13.2	132	264	10	12	14	0.110	0.303	0.272	0.121	0.363	0.327	0.145
TBJC227*006L□#@0°++	C	220	6	0.07	13.2	132	264	8	10	12	0.110	1.254	1.128	0.501	0.088	0.079	0.035
TBJD227*006C□#@0°++	D	220	6	0.9	13.2	132	264	8	10	12	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD227*006L□#@0°++	D	220	6	0.1	13.2	132	264	8	10	12	0.150	1.225	1.102	0.490	0.122	0.110	0.049
TBJE227*006L□#@0°++	E	220	6	0.1	13.2	132	264	8	10	12	0.165	1.285	1.156	0.514	0.128	0.116	0.051
TBJD337*006C□#@0°++	D	330	6	0.05	19.8	198	396	8	10	12	0.150	1.732	1.559	0.693	0.087	0.078	0.035
TBJD337*006L□#@0°++	D	330	6	0.045	19.8	198	396	8	10	12	0.150	1.826	1.643	0.730	0.082	0.074	0.033
TBJE337*006C□#@0°++	E	330	6	0.9	19.8	198	396	8	10	12	0.165	0.428	0.385	0.171	0.385	0.347	0.154
TBJE337*006L□#@0°++	E	330	6	0.1	19.8	198	396	8	10	12	0.165	1.285	1.156	0.514	0.128	0.116	0.051
TBJV337*006L□#@0°++	V	330	6	0.1	19.8	198	396	8	10	12	0.250	1.581	1.423	0.632	0.158	0.142	0.063
TBJD477*006C□#@0°++	D	470	6	0.06	28.2	282	564	12	14	16	0.150	1.581	1.423	0.632	0.095	0.085	0.038
TBJD477*006L□#@0°++	D	470	6	0.045	28.2	282	564	12	14	16	0.150	1.826	1.643	0.730	0.082	0.074	0.033
TBJE477*006C□#@0°++	E	470	6	0.9	28.2	282	564	10	12	14	0.165	0.428	0.385	0.171	0.385	0.347	0.154
TBJE477*006L□#@0°++	E	470	6	0.05	28.2	282	564	10	12	14	0.165	1.817	1.635	0.727	0.091	0.082	0.036
TBJV477*006C□#@0°++	V	470	6	0.1	28.2	282	564	10	12	12	0.250	1.581	1.423	0.632	0.158	0.142	0.063
TBJV477*006L□#@0°++	V	470	6	0.055	28.2	282	564	10	12	14	0.250	2.132	1.919	0.853	0.117	0.106	0.047
TBJE687*006C□#@0°++	E	680	6	0.06	40.8	408	816	10	12	14	0.165	1.658	1.492	0.663	0.099	0.090	0.040
TBJE687*006L□#@0°++	E	680	6	0.045	40.8	408	816	10	12	14	0.165	1.915	1.723	0.766	0.086	0.078	0.034
TBJV687*006C□#@0°++	V	680	6	0.04	40.8	408	816	10	12	14	0.250	2.500	2.250	1.000	0.100	0.090	0.040
TBJV687*006L□#@0°++	V	680	6	0.035	40.8	408	816	14	17	20	0.250	2.673	2.405	1.069	0.094	0.084	0.037

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.



TBJ SERIES

COTS-Plus



RATING & PART NUMBER REFERENCE		Parametric Specifications by Rating per MIL-PRF-55365/4									Typical RMS Ripple Data by Rating						
		Cap @ 120Hz µF 25°C	DC Rated Voltage V @ +85°C	ESR @ 100kHz Ohms @ +25°C	DCL max			DF Max			Power Dissipation W	25°C Ripple Current A (100kHz)	85°C Ripple Current A (100kHz)	125°C Ripple Current A (100kHz)	25°C Ripple Voltage V (100kHz)	85°C Ripple Voltage V (100kHz)	125°C Ripple Voltage V (100kHz)
					+25°C	+85°C	+125°C	+25°C	+(85/125)°C	-55°C							
					(µA)	(µA)	(µA)	(%)	(%)	(%)							
AVX COTS-Plus P/N	Case																
TBJV108*006C□#@0*++	V	1000	6	0.05	60	600	1200	16	19	21	0.250	2.236	2.012	0.894	0.112	0.101	0.045
TBJV108*006L□#@0*++	V	1000	6	0.04	60	600	1200	16	19	21	0.250	2.500	2.250	1.000	0.100	0.090	0.040
TBJA105*010C□#@0*++	A	1	10	10	0.1	1	1.2	4	6	6	0.075	0.087	0.078	0.035	0.866	0.779	0.346
TBJA155*010C□#@0*++	A	1.5	10	8	0.15	1.5	1.8	6	6	9	0.075	0.097	0.087	0.039	0.775	0.697	0.310
TBJA225*010C□#@0*++	A	2.2	10	8	0.22	2.2	2.64	6	9	9	0.075	0.097	0.087	0.039	0.775	0.697	0.310
TBJA225*010L□#@0*++	A	2.2	10	1.8	0.22	2.2	4.4	6	9	10	0.075	0.204	0.184	0.082	0.367	0.331	0.147
TJB335*010C□#@0*++	B	3.3	10	5.5	0.33	3.3	3.96	6	9	9	0.085	0.124	0.112	0.050	0.684	0.615	0.273
TBJA475*010C□#@0*++	A	4.7	10	5	0.47	4.7	9.4	6	9	10	0.075	0.122	0.110	0.049	0.612	0.551	0.245
TBJA475*010L□#@0*++	A	4.7	10	1.4	0.47	4.7	9.4	6	9	10	0.075	0.231	0.208	0.093	0.324	0.292	0.130
TBJB475*010C□#@0*++	B	4.7	10	4.5	0.47	4.7	5.64	6	9	9	0.085	0.137	0.124	0.055	0.618	0.557	0.247
TBJA685*010C□#@0*++	A	6.8	10	4	0.68	6.8	13.6	6	9	10	0.075	0.137	0.123	0.055	0.548	0.493	0.219
TBJA685*010L□#@0*++	A	6.8	10	1.8	0.68	6.8	13.6	6	9	10	0.075	0.204	0.184	0.082	0.367	0.331	0.147
TJB685*010C□#@0*++	B	6.8	10	3.5	0.68	6.8	8.16	6	9	9	0.085	0.156	0.140	0.062	0.545	0.491	0.218
TBJA106*010C□#@0*++	A	10	10	3	1	10	20	6	9	10	0.075	0.158	0.142	0.063	0.474	0.427	0.190
TBJA106*010L□#@0*++	A	10	10	1.8	1	10	20	6	9	10	0.075	0.204	0.184	0.082	0.367	0.331	0.147
TJB106*010C□#@0*++	B	10	10	2.5	1	10	20	6	9	10	0.085	0.184	0.166	0.074	0.461	0.415	0.184
TBJA156*010C□#@0*++	A	15	10	3.2	1.5	15	30	6	9	10	0.075	0.153	0.138	0.061	0.490	0.441	0.196
TBJA156*010L□#@0*++	A	15	10	1	1.5	15	30	6	9	10	0.075	0.274	0.246	0.110	0.274	0.246	0.110
TJB156*010C□#@0*++	B	15	10	2.8	1.5	15	30	6	9	10	0.085	0.174	0.157	0.070	0.488	0.439	0.195
TJB156*010L□#@0*++	B	15	10	0.45	1.5	15	30	6	9	10	0.085	0.435	0.391	0.174	0.196	0.176	0.078
TBJC156*010C□#@0*++	C	15	10	2.5	1.5	15	18	6	6	9	0.110	0.210	0.189	0.084	0.524	0.472	0.210
TJB226*010C□#@0*++	B	22	10	2.4	2.2	22	44	6	9	10	0.085	0.188	0.169	0.075	0.452	0.406	0.181
TJB226*010L□#@0*++	B	22	10	0.7	2.2	22	44	6	9	10	0.085	0.348	0.314	0.139	0.244	0.220	0.098
TBJC226*010C□#@0*++	C	22	10	1	2.2	22	44	6	9	10	0.110	0.332	0.298	0.133	0.332	0.298	0.133
TBJC226*010L□#@0*++	C	22	10	0.3	2.2	22	44	6	9	10	0.110	0.606	0.545	0.242	0.182	0.163	0.073
TBJA336*010C□#@0*++	A	33	10	1.7	3.3	33	66	8	10	12	0.075	0.210	0.189	0.084	0.357	0.321	0.143
TBJA336*010L□#@0*++	A	33	10	0.7	3.3	33	66	8	10	12	0.075	0.327	0.295	0.131	0.229	0.206	0.092
TJB336*010C□#@0*++	B	33	10	1.8	3.3	33	66	6	9	10	0.085	0.217	0.196	0.087	0.391	0.352	0.156
TJB336*010L□#@0*++	B	33	10	0.25	3.3	33	66	6	8	10	0.085	0.583	0.525	0.233	0.146	0.131	0.058
TBJC336*010C□#@0*++	C	33	10	1.6	3.3	33	66	6	9	10	0.110	0.262	0.236	0.105	0.420	0.378	0.168
TBJC336*010L□#@0*++	C	33	10	0.15	3.3	33	66	6	9	10	0.110	0.856	0.771	0.343	0.128	0.116	0.051
TBJD336*010C□#@0*++	D	33	10	1.1	3.3	33	39.6	6	9	9	0.150	0.369	0.332	0.148	0.406	0.366	0.162
TJB476*010C□#@0*++	B	47	10	0.35	4.7	47	94	8	10	12	0.085	0.493	0.444	0.197	0.172	0.155	0.069
TJB476*010L□#@0*++	B	47	10	0.25	4.7	47	94	8	10	12	0.085	0.583	0.525	0.233	0.146	0.131	0.058
TBJC476*010C□#@0*++	C	47	10	1.2	4.7	47	94	6	9	10	0.110	0.303	0.272	0.121	0.363	0.327	0.145
TBJC476*010L□#@0*++	C	47	10	0.2	4.7	47	94	6	9	10	0.110	0.742	0.667	0.297	0.148	0.133	0.059
TBJD476*010C□#@0*++	D	47	10	0.9	4.7	47	56.4	6	9	9	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD476*010L□#@0*++	D	47	10	0.1	4.7	47	94	6	9	10	0.150	1.225	1.102	0.490	0.122	0.110	0.049
TJB686*010L□#@0*++	B	68	10	0.6	6.8	68	136	8	10	12	0.085	0.376	0.339	0.151	0.226	0.203	0.090
TBJC686*010C□#@0*++	C	68	10	1.2	6.8	68	136	6	10	12	0.110	0.303	0.272	0.121	0.363	0.327	0.145
TBJC686*010L□#@0*++	C	68	10	0.08	6.8	68	136	6	10	12	0.110	1.173	1.055	0.469	0.094	0.084	0.038
TBJD686*010C□#@0*++	D	68	10	0.9	6.8	68	136	6	9	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD686*010L□#@0*++	D	68	10	0.1	6.8	68	136	6	9	10	0.150	1.225	1.102	0.490	0.122	0.110	0.049
TJB107*010L□#@0*++	B	100	10	0.4	10	100	200	8	10	12	0.085	0.461	0.415	0.184	0.184	0.166	0.074
TBJC107*010C□#@0*++	C	100	10	1.2	10	100	200	8	10	12	0.110	0.303	0.272	0.121	0.363	0.327	0.145
TBJC107*010L□#@0*++	C	100	10	0.2	10	100	200	8	10	12	0.110	0.742	0.667	0.297	0.148	0.133	0.059
TBJD107*010C□#@0*++	D	100	10	0.9	10	100	200	6	9	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD107*010L□#@0*++	D	100	10	0.1	10	100	200	6	9	10	0.150	1.225	1.102	0.490	0.122	0.110	0.049
TBJE107*010C□#@0*++	E	100	10	0.125	10	100	200	6	9	10	0.165	1.285	1.156	0.514	0.128	0.116	0.051
TBJD157*010C□#@0*++	D	150	10	0.9	15	150	300	8	10	12	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD157*010L□#@0*++	D	150	10	0.1	15	150	300	8	10	12	0.150	1.225	1.102	0.490	0.122	0.110	0.049
TBJE157*010C□#@0*++	E	150	10	0.1	15	150	300	8	10	12	0.165	1.285	1.156	0.514	0.128	0.116	0.051
TBJD227*010C□#@0*++	D	220	10	0.9	22	220	440	8	10	12	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD227*010L□#@0*++	D	220	10	0.15	22	220	440	8	10	12	0.150	1.000	0.900	0.400	0.150	0.135	0.060
TBJE227*010C□#@0*++	E	220	10	0.9	22	220	440	8	10	12	0.165	0.428	0.385	0.171	0.385	0.347	0.154
TBJE227*010L□#@0*++	E	220	10	0.1	22	220	440	8	10	12	0.165	1.285	1.156	0.514	0.128	0.116	0.051

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.



The Important Information/Disclaimer is incorporated in these specifications by reference and should be reviewed in full before placing any order.

TBJ SERIES

COTS-Plus



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			DF Max			Power Dissipation	25°C Ripple Current	85°C Ripple Current	125°C Ripple Current	25°C Ripple Voltage	85°C Ripple Voltage	125°C Ripple Voltage
		µF	V	Ohms	+25°C	+85°C	+125°C	+25°C	+(85/125)°C	-55°C	W	A	A	A	V	V	V
		@ 25°C	@ +85°C	@ +25°C	(µA)	(µA)	(µA)	(%)	(%)	(%)		(100kHz)	(100kHz)	(100kHz)	(100kHz)	(100kHz)	(100kHz)
TBJD337*010C□#@0°++	D	330	10	0.9	33	330	660	8	10	12	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD337*010L□#@0°++	D	330	10	0.15	33	330	660	8	10	12	0.150	1.000	0.900	0.400	0.150	0.135	0.060
TBJE337*010C□#@0°++	E	330	10	0.9	33	330	660	8	10	12	0.165	0.428	0.385	0.171	0.385	0.347	0.154
TBJE337*010L□#@0°++	E	330	10	0.06	33	330	660	8	10	12	0.165	1.658	1.492	0.663	0.099	0.090	0.040
TBJV337*010C□#@0°++	V	330	10	0.1	33	330	660	8	10	12	0.250	1.581	1.423	0.632	0.158	0.142	0.063
TBJV337*010L□#@0°++	V	330	10	0.06	33	330	660	10	10	12	0.250	2.041	1.837	0.816	0.122	0.110	0.049
TBJE477*010C□#@0°++	E	470	10	0.9	47	470	940	10	12	14	0.165	0.428	0.385	0.171	0.385	0.347	0.154
TBJE477*010L□#@0°++	E	470	10	0.05	47	470	940	10	12	14	0.165	1.817	1.635	0.727	0.091	0.082	0.036
TBJV477*010C□#@0°++	V	470	10	0.1	47	470	940	10	12	14	0.250	1.581	1.423	0.632	0.158	0.142	0.063
TBJV477*010L□#@0°++	V	470	10	0.06	47	470	940	10	12	14	0.250	2.041	1.837	0.816	0.122	0.110	0.049
TBJA684*015C□#@0°++	A	0.68	15	12	0.102	1.02	1.224	4	6	6	0.075	0.079	0.071	0.032	0.949	0.854	0.379
TBJA105*015C□#@0°++	A	1	15	10	0.15	1.5	1.8	4	6	6	0.075	0.087	0.078	0.035	0.866	0.779	0.346
TBJA155*015C□#@0°++	A	1.5	15	8	0.225	2.25	2.7	6	9	9	0.075	0.097	0.087	0.039	0.775	0.697	0.310
TBJB225*015C□#@0°++	B	2.2	15	5.5	0.33	3.3	3.96	6	9	9	0.085	0.124	0.112	0.050	0.684	0.615	0.273
TBJB335*015C□#@0°++	B	3.3	15	5	0.495	4.95	5.94	6	8	9	0.085	0.130	0.117	0.052	0.652	0.587	0.261
TBJB475*015C□#@0°++	B	4.7	15	4	0.705	7.05	8.46	6	8	8	0.085	0.146	0.131	0.058	0.583	0.525	0.233
TBJC106*015C□#@0°++	C	10	15	2.5	1.5	15	18	6	8	9	0.110	0.210	0.189	0.084	0.524	0.472	0.210
TBJD226*015C□#@0°++	D	22	15	1.1	3.3	33	39.6	6	8	9	0.150	0.369	0.332	0.148	0.406	0.366	0.162
TBJD336*015C□#@0°++	D	33	15	0.9	4.95	49.5	59.4	6	8	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD157*015L□#@0°++	D	150	15	0.05	5.625	56.25	112.5	6	9	10	0.150	1.732	1.559	0.693	0.087	0.078	0.035
TBJA684*016C□#@0°++	A	0.68	16	12	0.109	1.088	2.176	4	6	6	0.075	0.079	0.071	0.032	0.949	0.854	0.379
TBJA105*016C□#@0°++	A	1	16	10	0.16	1.6	3.2	4	6	6	0.075	0.087	0.078	0.035	0.866	0.779	0.346
TBJA225*016C□#@0°++	A	2.2	16	5.5	0.352	3.52	7.04	6	9	10	0.075	0.117	0.105	0.047	0.642	0.578	0.257
TBJA225*016L□#@0°++	A	2.2	16	1.8	0.352	3.52	7.04	6	9	10	0.075	0.204	0.184	0.082	0.367	0.331	0.147
TBJB225*016C□#@0°++	B	2.2	16	5	0.352	3.52	7.04	6	8	8	0.085	0.130	0.117	0.052	0.652	0.587	0.261
TBJA335*016C□#@0°++	A	3.3	16	5	0.528	5.28	10.56	6	9	10	0.075	0.122	0.110	0.049	0.612	0.551	0.245
TBJA335*016L□#@0°++	A	3.3	16	3.5	0.528	5.28	10.56	6	9	10	0.075	0.146	0.132	0.059	0.512	0.461	0.205
TBJB335*016C□#@0°++	B	3.3	16	4.5	0.528	5.28	10.56	6	9	10	0.085	0.137	0.124	0.055	0.618	0.557	0.247
TBJA475*016C□#@0°++	A	4.7	16	4	0.752	7.52	15.04	6	9	10	0.075	0.137	0.123	0.055	0.548	0.493	0.219
TBJA475*016L□#@0°++	A	4.7	16	2	0.752	7.52	15.04	6	9	10	0.075	0.194	0.174	0.077	0.387	0.349	0.155
TBJB475*016C□#@0°++	B	4.7	16	3.1	0.752	7.52	15.04	6	8	8	0.085	0.166	0.149	0.066	0.513	0.462	0.205
TBJB475*016L□#@0°++	B	4.7	16	0.8	0.752	7.52	15.04	6	9	10	0.085	0.326	0.293	0.130	0.261	0.235	0.104
TBJA685*016C□#@0°++	A	6.8	16	2.5	1.088	10.88	21.76	6	9	10	0.075	0.173	0.156	0.069	0.433	0.390	0.173
TBJA685*016L□#@0°++	A	6.8	16	1.5	1.088	10.88	21.76	6	9	10	0.075	0.224	0.201	0.089	0.335	0.302	0.134
TBJB685*016C□#@0°++	B	6.8	16	2.5	1.088	10.88	21.76	6	9	10	0.085	0.184	0.166	0.074	0.461	0.415	0.184
TBJB685*016L□#@0°++	B	6.8	16	0.6	1.088	10.88	21.76	6	9	10	0.085	0.376	0.339	0.151	0.226	0.203	0.090
TBJA106*016C□#@0°++	A	10	16	3	1.6	16	32	8	10	12	0.075	0.158	0.142	0.063	0.474	0.427	0.190
TBJA106*016L□#@0°++	A	10	16	1	1.6	16	32	8	10	12	0.075	0.274	0.246	0.110	0.274	0.246	0.110
TBJB106*016C□#@0°++	B	10	16	2.8	1.6	16	32	6	9	10	0.085	0.174	0.157	0.070	0.488	0.439	0.195
TBJB106*016L□#@0°++	B	10	16	0.5	1.6	16	32	6	9	10	0.085	0.412	0.371	0.165	0.206	0.186	0.082
TBJC106*016C□#@0°++	C	10	16	2.5	1.6	16	32	6	8	10	0.110	0.210	0.189	0.084	0.524	0.472	0.210
TBJC106*016L□#@0°++	C	10	16	0.5	1.6	16	32	6	9	10	0.110	0.469	0.422	0.188	0.235	0.211	0.094
TBJB156*016C□#@0°++	B	15	16	2.5	2.4	24	48	6	9	10	0.085	0.184	0.166	0.074	0.461	0.415	0.184
TBJB156*016L□#@0°++	B	15	16	0.8	2.4	24	48	6	9	10	0.085	0.326	0.293	0.130	0.261	0.235	0.104
TBJC156*016C□#@0°++	C	15	16	1.8	2.4	24	48	6	9	10	0.110	0.247	0.222	0.099	0.445	0.400	0.178
TBJB226*016C□#@0°++	B	22	16	2.3	3.52	35.2	70.4	6	9	10	0.085	0.192	0.173	0.077	0.442	0.398	0.177
TBJB226*016L□#@0°++	B	22	16	0.6	3.52	35.2	70.4	6	9	10	0.085	0.376	0.339	0.151	0.226	0.203	0.090
TBJC226*016C□#@0°++	C	22	16	1.6	3.52	35.2	70.4	6	9	10	0.110	0.262	0.236	0.105	0.420	0.378	0.168
TBJC226*016L□#@0°++	C	22	16	0.375	3.52	35.2	70.4	6	9	10	0.110	0.542	0.487	0.217	0.203	0.183	0.081
TBJD226*016C□#@0°++	D	22	16	1.1	3.52	35.2	70.4	6	8	9	0.150	0.369	0.332	0.148	0.406	0.366	0.162
TBJB336*016L□#@0°++	B	33	16	0.35	5.28	52.8	105.6	8	10	12	0.085	0.493	0.444	0.197	0.172	0.155	0.069
TBJC336*016C□#@0°++	C	33	16	1.5	5.28	52.8	105.6	6	9	10	0.110	0.271	0.244	0.108	0.406	0.366	0.162
TBJC336*016L□#@0°++	C	33	16	0.3	5.28	52.8	105.6	6	9	10	0.110	0.606	0.545	0.242	0.182	0.163	0.073
TBJD336*016C□#@0°++	D	33	16	0.9	5.28	52.8	105.6	6	9	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD336*016L□#@0°++	D	33	16	0.2	5.28	52.8	105.6	6	9	10	0.150	0.866	0.779	0.346	0.173	0.156	0.069
TBJC476*016C□#@0°++	C	47	16	1.5	7.52	75.2	150.4	6	9	10	0.110	0.271	0.244	0.108	0.406	0.366	0.162
TBJC476*016L□#@0°++	C	47	16	0.35	7.52	75.2	150.4	6	9	10	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.



TBJ SERIES

COTS-Plus



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			DF Max			Power Dissipation	25°C Ripple Current	85°C Ripple Current	125°C Ripple Current	25°C Ripple Voltage	85°C Ripple Voltage	125°C Ripple Voltage
		µF @ 25°C	V @ +85°C	Ohms @ +25°C	+25°C	+85°C	+125°C	+25°C	+(85/125)°C	-55°C	W	A (100kHz)	A (100kHz)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)
					(µA)	(µA)	(µA)	(%)	(%)	(%)							
TBJD476*016C□#@0°++	D	47	16	0.9	7.52	75.2	150.4	6	9	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD476*016L□#@0°++	D	47	16	0.15	7.52	75.2	150.4	6	9	10	0.150	1.000	0.900	0.400	0.150	0.135	0.060
TBJC686*016C□#@0°++	C	68	16	0.2	10.88	108.8	217.6	6	9	10	0.110	0.742	0.667	0.297	0.148	0.133	0.059
TBJC686*016L□#@0°++	C	68	16	0.125	10.88	108.8	217.6	6	9	10	0.110	0.938	0.844	0.375	0.117	0.106	0.047
TBJD686*016C□#@0°++	D	68	16	0.9	10.88	108.8	217.6	6	9	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD686*016L□#@0°++	D	68	16	0.07	10.88	108.8	217.6	6	9	10	0.150	1.464	1.317	0.586	0.102	0.092	0.041
TBJD107*016C□#@0°++	D	100	16	0.9	16	160	320	6	9	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD107*016L□#@0°++	D	100	16	0.125	16	160	320	6	9	10	0.150	1.095	0.986	0.438	0.137	0.123	0.055
TBJE107*016C□#@0°++	E	100	16	0.9	16	160	320	6	9	10	0.165	0.428	0.385	0.171	0.385	0.347	0.154
TBJE107*016L□#@0°++	E	100	16	0.1	16	160	320	6	9	10	0.165	1.285	1.156	0.514	0.128	0.116	0.051
TBJD157*016C□#@0°++	D	150	16	0.9	24	240	480	6	9	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD157*016L□#@0°++	D	150	16	0.15	24	240	480	6	9	10	0.150	1.000	0.900	0.400	0.150	0.135	0.060
TBJE157*016C□#@0°++	E	150	16	0.3	24	240	480	6	9	10	0.165	0.742	0.667	0.297	0.222	0.200	0.089
TBJE157*016L□#@0°++	E	150	16	0.1	24	240	480	6	9	10	0.165	1.285	1.156	0.514	0.128	0.116	0.051
TBJV157*016C□#@0°++	V	150	16	0.075	24	240	480	8	10	12	0.250	1.826	1.643	0.730	0.137	0.123	0.055
TBJV157*016L□#@0°++	V	150	16	0.045	24	240	480	6	8	10	0.250	2.357	2.121	0.943	0.106	0.095	0.042
TBJE227*016C□#@0°++	E	220	16	0.15	35.2	352	704	10	12	14	0.165	1.049	0.944	0.420	0.157	0.142	0.063
TBJE227*016L□#@0°++	E	220	16	0.1	35.2	352	704	10	12	14	0.165	1.285	1.156	0.514	0.128	0.116	0.051
TBJJV227*016C□#@0°++	V	220	16	0.15	35.2	352	704	8	10	12	0.250	1.291	1.162	0.516	0.194	0.174	0.077
TBJJV227*016L□#@0°++	V	220	16	0.075	35.2	352	704	8	10	12	0.250	1.826	1.643	0.730	0.137	0.123	0.055
TBJA474*020C□#@0°++	A	0.47	20	14	0.5	5	10	4	6	6	0.075	0.073	0.066	0.029	1.025	0.922	0.410
TBJA684*020C□#@0°++	A	0.68	20	12	0.136	1.36	1.632	4	6	6	0.075	0.079	0.071	0.032	0.949	0.854	0.379
TBJA105*020C□#@0°++	A	1	20	10	0.2	2	2.4	4	6	6	0.075	0.087	0.078	0.035	0.866	0.779	0.346
TBJA105*020L□#@0°++	A	1	20	3	0.2	2	4	4	6	6	0.075	0.158	0.142	0.063	0.474	0.427	0.190
TBJA155*020C□#@0°++	A	1.5	20	6.5	0.3	3	6	4	8	10	0.075	0.107	0.097	0.043	0.698	0.628	0.279
TBJB155*020C□#@0°++	B	1.5	20	6	0.3	3	3.6	6	9	9	0.085	0.119	0.107	0.048	0.714	0.643	0.286
TBJA225*020C□#@0°++	A	2.2	20	5.3	0.44	4.4	8.8	6	8	8	0.075	0.119	0.107	0.048	0.630	0.567	0.252
TBJA225*020L□#@0°++	A	2.2	20	3	0.44	4.4	8.8	6	9	10	0.075	0.158	0.142	0.063	0.474	0.427	0.190
TBJB225*020C□#@0°++	B	2.2	20	5	0.44	4.4	5.28	6	8	9	0.085	0.130	0.117	0.052	0.652	0.587	0.261
TBJA335*020L□#@0°++	A	3.3	20	2.5	0.66	6.6	13.2	6	9	10	0.075	0.173	0.156	0.069	0.433	0.390	0.173
TBJB335*020C□#@0°++	B	3.3	20	4	0.66	6.6	7.92	6	9	9	0.085	0.146	0.131	0.058	0.583	0.525	0.233
TBJB335*020L□#@0°++	B	3.3	20	1.3	0.66	6.6	13.2	6	9	10	0.085	0.256	0.230	0.102	0.332	0.299	0.133
TBJA475*020C□#@0°++	A	4.7	20	4	0.94	9.4	18.8	6	8	10	0.075	0.137	0.123	0.055	0.548	0.493	0.219
TBJA475*020L□#@0°++	A	4.7	20	1.8	0.94	9.4	18.8	6	8	10	0.075	0.204	0.184	0.082	0.367	0.331	0.147
TBJB475*020C□#@0°++	B	4.7	20	3	0.94	9.4	18.8	6	8	10	0.085	0.168	0.151	0.067	0.505	0.454	0.202
TBJB475*020L□#@0°++	B	4.7	20	0.75	0.94	9.4	18.8	6	9	10	0.085	0.337	0.303	0.135	0.252	0.227	0.101
TBJC475*020C□#@0°++	C	4.7	20	3	0.94	9.4	11.28	6	8	9	0.110	0.191	0.172	0.077	0.574	0.517	0.230
TBJA685*020L□#@0°++	A	6.8	20	1	1.36	13.6	27.2	6	9	10	0.075	0.274	0.246	0.110	0.274	0.246	0.110
TBJB685*020C□#@0°++	B	6.8	20	2.5	1.36	13.6	27.2	6	8	10	0.085	0.184	0.166	0.074	0.461	0.415	0.184
TBJB685*020L□#@0°++	B	6.8	20	0.6	1.36	13.6	27.2	6	9	10	0.085	0.376	0.339	0.151	0.226	0.203	0.090
TBJC685*020C□#@0°++	C	6.8	20	2.4	1.36	13.6	16.32	6	9	9	0.110	0.214	0.193	0.086	0.514	0.462	0.206
TBJC685*020L□#@0°++	C	6.8	20	0.7	1.36	13.6	27.2	6	9	10	0.110	0.396	0.357	0.159	0.277	0.250	0.111
TBJB106*020C□#@0°++	B	10	20	2.1	2	20	40	6	8	10	0.085	0.201	0.181	0.080	0.422	0.380	0.169
TBJB106*020L□#@0°++	B	10	20	1	2	20	40	6	8	10	0.085	0.292	0.262	0.117	0.292	0.262	0.117
TBJJC106*020C□#@0°++	C	10	20	1.9	2	20	40	6	8	10	0.110	0.241	0.217	0.096	0.457	0.411	0.183
TBJJC106*020L□#@0°++	C	10	20	0.5	2	20	40	6	9	10	0.110	0.469	0.422	0.188	0.235	0.211	0.094
TBJB156*020C□#@0°++	B	15	20	2	3	30	60	6	8	10	0.085	0.206	0.186	0.082	0.412	0.371	0.165
TBJB156*020L□#@0°++	B	15	20	0.5	3	30	60	6	9	10	0.085	0.412	0.371	0.165	0.206	0.186	0.082
TBJJC156*020C□#@0°++	C	15	20	1.7	3	30	60	6	8	10	0.110	0.254	0.229	0.102	0.432	0.389	0.173
TBJJC156*020L□#@0°++	C	15	20	0.4	3	30	60	6	8	10	0.110	0.524	0.472	0.210	0.210	0.189	0.084
TBJD156*020C□#@0°++	D	15	20	1.1	3	30	36	6	8	9	0.150	0.369	0.332	0.148	0.406	0.366	0.162
TBJB226*020C□#@0°++	B	22	20	0.6	4.4	44	88	6	9	10	0.085	0.376	0.339	0.151	0.226	0.203	0.090
TBJB226*020L□#@0°++	B	22	20	0.4	4.4	44	88	6	9	10	0.085	0.461	0.415	0.184	0.184	0.166	0.074
TBJC226*020C□#@0°++	C	22	20	1.6	4.4	44	88	6	8	10	0.110	0.262	0.236	0.105	0.420	0.378	0.168
TBJC226*020L□#@0°++	C	22	20	0.15	4.4	44	88	6	8	10	0.110	0.856	0.771	0.343	0.128	0.116	0.051
TBJD226*020C□#@0°++	D	22	20	0.9	4.4	44	52.8	6	9	9	0.150	0.408	0.367	0.163	0.367	0.331	0.147

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.



The Important Information/Disclaimer is incorporated in these specifications by reference and should be reviewed in full before placing any order.

TBJ SERIES

COTS-Plus



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			DF Max			Power Dissipation	25°C Ripple Current	85°C Ripple Current	125°C Ripple Current	25°C Ripple Voltage	85°C Ripple Voltage	125°C Ripple Voltage	
		µF @ 25°C	V @ +85°C	Ohms @ +25°C	+25°C (µA)	+85°C (µA)	+125°C (µA)	+25°C (%)	+(85/125)°C (%)	-55°C (%)		A (100kHz)	A (100kHz)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)	
AVX COTS-Plus P/N	Case																	
TBJD226*020L□#@0°++	D	22	20	0.2	4.4	44	88	6	9	10	0.150	0.866	0.779	0.346	0.173	0.156	0.069	
TBJC336*020C□#@0°++	C	33	20	1.5	6.6	66	132	6	8	10	0.110	0.271	0.244	0.108	0.406	0.366	0.162	
TBJC336*020L□#@0°++	C	33	20	0.3	6.6	66	132	6	9	10	0.110	0.606	0.545	0.242	0.182	0.163	0.073	
TBJD336*020C□#@0°++	D	33	20	0.9	6.6	66	132	6	8	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147	
TBJD336*020L□#@0°++	D	33	20	0.1	6.6	66	132	6	8	10	0.150	1.225	1.102	0.490	0.122	0.110	0.049	
TBJD476*020C□#@0°++	D	47	20	0.2	9.4	94	188	6	8	10	0.150	0.866	0.779	0.346	0.173	0.156	0.069	
TBJD476*020L□#@0°++	D	47	20	0.1	9.4	94	188	6	8	10	0.150	1.225	1.102	0.490	0.122	0.110	0.049	
TBJE476*020C□#@0°++	E	47	20	0.25	9.4	94	188	6	8	8	0.165	0.812	0.731	0.325	0.203	0.183	0.081	
TBJE476*020L□#@0°++	E	47	20	0.07	9.4	94	188	6	9	10	0.165	1.535	1.382	0.614	0.107	0.097	0.043	
TBJD686*020C□#@0°++	D	68	20	0.9	13.6	136	272	6	8	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147	
TBJD686*020L□#@0°++	D	68	20	0.07	13.6	136	272	6	9	10	0.150	1.464	1.317	0.586	0.102	0.092	0.041	
TBJE686*020C□#@0°++	E	68	20	0.9	13.6	136	272	6	8	10	0.165	0.428	0.385	0.171	0.385	0.347	0.154	
TBJE686*020L□#@0°++	E	68	20	0.15	13.6	136	272	6	8	10	0.165	1.049	0.944	0.420	0.157	0.142	0.063	
TBJD107*020C□#@0°++	D	100	20	0.1	20	200	400	6	9	10	0.150	1.225	1.102	0.490	0.122	0.110	0.049	
TBJD107*020L□#@0°++	D	100	20	0.085	20	200	400	6	9	10	0.150	1.328	1.196	0.531	0.113	0.102	0.045	
TBJE107*020C□#@0°++	E	100	20	0.15	20	200	400	6	9	10	0.165	1.049	0.944	0.420	0.157	0.142	0.063	
TBJE107*020L□#@0°++	E	100	20	0.1	20	200	400	6	9	10	0.165	1.285	1.156	0.514	0.128	0.116	0.051	
TBJV107*020C□#@0°++	V	100	20	0.2	20	200	400	8	10	12	0.250	1.118	1.006	0.447	0.224	0.201	0.089	
TBJV107*020L□#@0°++	V	100	20	0.085	20	200	400	8	10	12	0.250	1.715	1.543	0.686	0.146	0.131	0.058	
TBJE157*020C□#@0°++	E	150	20	0.3	30	300	600	8	10	10	0.165	0.742	0.667	0.297	0.222	0.200	0.089	
TBJV157*020L□#@0°++	V	150	20	0.08	30	300	600	8	10	12	0.250	1.768	1.591	0.707	0.141	0.127	0.057	
TBJA334*025C□#@0°++	A	0.33	25	15	0.083	0.825	0.99	4	6	6	0.075	0.071	0.064	0.028	1.061	0.955	0.424	
TBJA474*025C□#@0°++	A	0.47	25	14	0.118	1.175	1.41	4	6	6	0.075	0.073	0.066	0.029	1.025	0.922	0.410	
TBJA474*025L□#@0°++	A	0.47	25	7	0.118	1.175	2.35	4	6	6	0.075	0.104	0.093	0.041	0.725	0.652	0.290	
TBJA684*025C□#@0°++	A	0.68	25	10	0.68	6.8	13.6	4	6	8	0.075	0.087	0.078	0.035	0.866	0.779	0.346	
TBJA684*025L□#@0°++	A	0.68	25	6	0.17	1.7	3.4	4	6	6	0.075	0.112	0.101	0.045	0.671	0.604	0.268	
TBJB684*025C□#@0°++	B	0.68	25	7.5	0.17	1.7	2.04	4	6	6	0.085	0.106	0.096	0.043	0.798	0.719	0.319	
TBJA105*025C□#@0°++	A	1	25	8	0.25	2.5	5	4	6	8	0.075	0.097	0.087	0.039	0.775	0.697	0.310	
TBJB105*025C□#@0°++	B	1	25	6.5	0.25	2.5	3	4	6	6	0.085	0.114	0.103	0.046	0.743	0.669	0.297	
TBJA155*025C□#@0°++	A	1.5	25	7.5	0.375	3.75	7.5	6	8	10	0.075	0.100	0.090	0.040	0.750	0.675	0.300	
TBJA155*025L□#@0°++	A	1.5	25	3	0.375	3.75	7.5	6	8	10	0.075	0.158	0.142	0.063	0.474	0.427	0.190	
TBJB155*025C□#@0°++	B	1.5	25	6.5	0.375	3.75	4.5	6	8	9	0.085	0.114	0.103	0.046	0.743	0.669	0.297	
TBJB155*025L□#@0°++	B	1.5	25	1.8	0.375	3.75	7.5	6	9	10	0.085	0.217	0.196	0.087	0.391	0.352	0.156	
TBJA225*025C□#@0°++	A	2.2	25	7.0	0.6	6	12	6	9	10	0.075	0.104	0.093	0.041	0.725	0.652	0.290	
TBJB225*025C□#@0°++	B	2.2	25	4.5	0.55	5.5	11	6	8	10	0.085	0.137	0.124	0.055	0.618	0.557	0.247	
TBJB225*025L□#@0°++	B	2.2	25	0.9	0.55	5.5	11	6	9	10	0.085	0.307	0.277	0.123	0.277	0.249	0.111	
TBJC225*025C□#@0°++	C	2.2	25	3.5	0.55	5.5	6.6	6	9	9	0.110	0.177	0.160	0.071	0.620	0.558	0.248	
TBJA335*025C□#@0°++	A	3.3	25	1.5	0.825	8.25	16.5	6	9	10	0.075	0.224	0.201	0.089	0.335	0.302	0.134	
TBJA335*025L□#@0°++	A	3.3	25	1	0.825	8.25	16.5	6	9	10	0.075	0.274	0.246	0.110	0.274	0.246	0.110	
TBJB335*025C□#@0°++	B	3.3	25	3.5	0.825	8.25	16.5	6	8	10	0.085	0.156	0.140	0.062	0.545	0.491	0.218	
TBJB335*025L□#@0°++	B	3.3	25	0.75	0.825	8.25	16.5	6	9	10	0.085	0.337	0.303	0.135	0.252	0.227	0.101	
TBJC335*025C□#@0°++	C	3.3	25	3.5	0.825	8.25	9.9	6	8	9	0.110	0.177	0.160	0.071	0.620	0.558	0.248	
TBJA475*025C□#@0°++	A	4.7	25	2.8	1.175	11.75	23.5	6	9	10	0.075	0.164	0.147	0.065	0.458	0.412	0.183	
TBJB475*025C□#@0°++	B	4.7	25	2.8	1.175	11.75	23.5	6	8	10	0.085	0.174	0.157	0.070	0.488	0.439	0.195	
TBJB475*025L□#@0°++	B	4.7	25	1.5	1.175	11.75	23.5	6	8	10	0.085	0.238	0.214	0.095	0.357	0.321	0.143	
TBJC475*025C□#@0°++	C	4.7	25	2.5	1.175	11.75	14.1	6	9	9	0.110	0.210	0.189	0.084	0.524	0.472	0.210	
TBJB685*025C□#@0°++	B	6.8	25	2.8	1.7	17	34	6	8	10	0.085	0.174	0.157	0.070	0.488	0.439	0.195	
TBJB685*025L□#@0°++	B	6.8	25	0.7	1.7	17	34	6	9	10	0.085	0.348	0.314	0.139	0.244	0.220	0.098	
TBJC685*025C□#@0°++	C	6.8	25	2	1.7	17	34	6	8	10	0.110	0.235	0.211	0.094	0.469	0.422	0.188	
TBJC685*025L□#@0°++	C	6.8	25	0.5	1.7	17	34	6	9	10	0.110	0.469	0.422	0.188	0.235	0.211	0.094	
TBJD685*025C□#@0°++	D	6.8	25	1.4	1.7	17	20.4	6	9	9	0.150	0.327	0.295	0.131	0.458	0.412	0.183	
TBJC106*025C□#@0°++	C	10	25	1.8	2.5	25	50	6	8	10	0.110	0.247	0.222	0.099	0.445	0.400	0.178	
TBJC106*025L□#@0°++	C	10	25	0.5	2.5	25	50	6	8	10	0.110	0.469	0.422	0.188	0.235	0.211	0.094	
TBJD106*025C□#@0°++	D	10	25	1.2	2.5	25	30	6	8	9	0.150	0.354	0.318	0.141	0.424	0.382	0.170	
TBJC156*025C□#@0°++	C	15	25	0.3	3.75	37.5	75	6	9	10	0.110	0.606	0.545	0.242	0.182	0.163	0.073	
TBJC156*025L□#@0°++	C	15	25	0.22	3.75	37.5	75	6	9	10	0.110	0.707	0.636	0.283	0.156	0.140	0.062	

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.



TBJ SERIES

COTS-Plus



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			DF Max			Power Dissipation	25°C	85°C	125°C	25°C	85°C	125°C
		µF @ 25°C	V @ +85°C	Ohms @ +25°C	+25°C	+85°C	+125°C	+25°C	+(85/125)°C	-55°C		Ripple Current	Ripple Current	Ripple Current	Ripple Voltage	Ripple Voltage	Ripple Voltage
		(µA)	(µA)	(µA)	(%)	(%)	(%)	(%)	(%)	W		A (100kHz)	A (100kHz)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)
AVX COTS-Plus P/N	Case																
TBJD156*025C□#@0^++	D	15	25	1	3.75	37.5	45	6	9	9	0.150	0.387	0.349	0.155	0.387	0.349	0.155
TBJD156*025L□#@0^++	D	15	25	0.3	3.75	37.5	75	6	8	9	0.150	0.707	0.636	0.283	0.212	0.191	0.085
TBJC226*025C□#@0^++	C	22	25	1.4	5.5	55	110	6	8	10	0.110	0.280	0.252	0.112	0.392	0.353	0.157
TBJC226*025L□#@0^++	C	22	25	0.275	5.5	55	110	6	8	10	0.110	0.632	0.569	0.253	0.174	0.157	0.070
TBJD226*025C□#@0^++	D	22	25	0.9	5.5	55	110	6	8	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD226*025L□#@0^++	D	22	25	0.2	5.5	55	110	6	8	10	0.150	0.866	0.779	0.346	0.173	0.156	0.069
TBJD336*025C□#@0^++	D	33	25	0.9	8.25	82.5	165	6	8	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD336*025L□#@0^++	D	33	25	0.1	8.25	82.5	165	6	8	10	0.150	1.225	1.102	0.490	0.122	0.110	0.049
TBJE336*025C□#@0^++	E	33	25	0.9	8.25	82.5	165	6	8	10	0.165	0.428	0.385	0.171	0.385	0.347	0.154
TBJE336*025L□#@0^++	E	33	25	0.3	8.25	82.5	165	6	8	10	0.165	0.742	0.667	0.297	0.222	0.200	0.089
TBJD476*025C□#@0^++	D	47	25	0.9	11.75	117.5	235	6	8	10	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD476*025L□#@0^++	D	47	25	0.25	11.75	117.5	235	6	8	10	0.150	0.775	0.697	0.310	0.194	0.174	0.077
TBJE476*025C□#@0^++	E	47	25	0.1	11.75	117.5	235	6	9	10	0.165	1.285	1.156	0.514	0.128	0.116	0.051
TBJE476*025L□#@0^++	E	47	25	0.08	11.75	117.5	235	6	9	10	0.165	1.436	1.293	0.574	0.115	0.103	0.046
TBJE686*025C□#@0^++	E	68	25	0.2	17	170	340	6	9	10	0.165	0.908	0.817	0.363	0.182	0.163	0.073
TBJE686*025L□#@0^++	E	68	25	0.125	17	170	340	6	9	10	0.165	1.149	1.034	0.460	0.144	0.129	0.057
TBJV686*025L□#@0^++	V	68	25	0.095	17	170	340	6	9	10	0.250	1.622	1.460	0.649	0.154	0.139	0.062
TBJV107*025L□#@0^++	V	100	25	0.1	25	250	500	8	10	12	0.250	1.581	1.423	0.632	0.158	0.142	0.063
TBJA104*035C□#@0^++	A	0.1	35	24	0.035	0.35	0.42	4	6	6	0.075	0.056	0.050	0.022	1.342	1.207	0.537
TBJA154*035C□#@0^++	A	0.15	35	21	0.5	5	10	4	6	6	0.075	0.060	0.054	0.024	1.255	1.129	0.502
TBJA224*035C□#@0^++	A	0.22	35	18	0.5	5	10	4	6	6	0.075	0.065	0.058	0.026	1.162	1.046	0.465
TBJA224*035L□#@0^++	A	0.22	35	6	0.077	0.77	1.54	4	6	6	0.075	0.112	0.101	0.045	0.671	0.604	0.268
TBJA334*035C□#@0^++	A	0.33	35	15	0.5	5	10	4	6	6	0.075	0.071	0.064	0.028	1.061	0.955	0.424
TBJA334*035L□#@0^++	A	0.33	35	6	0.116	1.155	2.31	4	6	6	0.075	0.112	0.101	0.045	0.671	0.604	0.268
TBJA474*035C□#@0^++	A	0.47	35	12	0.165	1.645	3.29	4	6	8	0.075	0.079	0.071	0.032	0.949	0.854	0.379
TBJA474*035L□#@0^++	A	0.47	35	6	0.165	1.645	3.29	4	6	6	0.075	0.112	0.101	0.045	0.671	0.604	0.268
TBJB474*035C□#@0^++	B	0.47	35	10	0.165	1.645	1.974	4	6	6	0.085	0.092	0.083	0.037	0.922	0.830	0.369
TBJB474*035L□#@0^++	B	0.47	35	4	0.165	1.645	3.29	4	6	6	0.085	0.146	0.131	0.058	0.583	0.525	0.233
TBJA684*035C□#@0^++	A	0.68	35	8	0.238	2.38	4.76	4	6	8	0.075	0.097	0.087	0.039	0.775	0.697	0.310
TBJA684*035L□#@0^++	A	0.68	35	6	0.238	2.38	4.76	4	6	6	0.075	0.112	0.101	0.045	0.671	0.604	0.268
TBJB684*035C□#@0^++	B	0.68	35	8	0.238	2.38	2.856	4	6	6	0.085	0.103	0.093	0.041	0.825	0.742	0.330
TBJA105*035C□#@0^++	A	1	35	7.5	0.35	3.5	7	4	6	6	0.075	0.100	0.090	0.040	0.750	0.675	0.300
TBJA105*035L□#@0^++	A	1	35	3	0.35	3.5	7	4	6	6	0.075	0.158	0.142	0.063	0.474	0.427	0.190
TBJB105*035C□#@0^++	B	1	35	6.5	0.35	3.5	4.2	4	6	6	0.085	0.114	0.103	0.046	0.743	0.669	0.297
TBJB105*035L□#@0^++	B	1	35	2	0.35	3.5	7	4	6	6	0.085	0.206	0.186	0.082	0.412	0.371	0.165
TBJA155*035C□#@0^++	A	1.5	35	7.5	0.525	5.25	10.5	6	8	9	0.075	0.100	0.090	0.040	0.750	0.675	0.300
TBJB155*035C□#@0^++	B	1.5	35	5.2	0.525	5.25	10.5	6	8	9	0.085	0.128	0.115	0.051	0.665	0.598	0.266
TBJB155*035L□#@0^++	B	1.5	35	2.5	0.525	5.25	10.5	6	9	10	0.085	0.184	0.166	0.074	0.461	0.415	0.184
TBJC155*035C□#@0^++	C	1.5	35	4.5	0.525	5.25	6.3	6	8	9	0.110	0.156	0.141	0.063	0.704	0.633	0.281
TBJA225*035C□#@0^++	A	2.2	35	4.5	0.77	7.7	15.4	6	9	9	0.075	0.129	0.116	0.052	0.581	0.523	0.232
TBJA225*035L□#@0^++	A	2.2	35	1.5	0.77	7.7	15.4	6	9	10	0.075	0.224	0.201	0.089	0.335	0.302	0.134
TBJB225*035C□#@0^++	B	2.2	35	4.2	0.77	7.7	15.4	6	8	9	0.085	0.142	0.128	0.057	0.597	0.538	0.239
TBJB225*035L□#@0^++	B	2.2	35	2	0.77	7.7	15.4	6	8	9	0.085	0.206	0.186	0.082	0.412	0.371	0.165
TBJC225*035C□#@0^++	C	2.2	35	3.5	0.77	7.7	9.24	6	8	9	0.110	0.177	0.160	0.071	0.620	0.558	0.248
TBJC225*035L□#@0^++	C	2.2	35	1	0.77	7.7	15.4	6	9	10	0.110	0.332	0.298	0.133	0.332	0.298	0.133
TBJB335*035C□#@0^++	B	3.3	35	3.5	1.155	11.55	23.1	6	8	9	0.085	0.156	0.140	0.062	0.545	0.491	0.218
TBJB335*035L□#@0^++	B	3.3	35	1	1.155	11.55	23.1	6	9	10	0.085	0.292	0.262	0.117	0.292	0.262	0.117
TBJC335*035C□#@0^++	C	3.3	35	2.5	1.155	11.55	13.86	6	8	9	0.110	0.210	0.189	0.084	0.524	0.472	0.210
TBJC335*035L□#@0^++	C	3.3	35	0.7	1.155	11.55	23.1	6	9	10	0.110	0.396	0.357	0.159	0.277	0.250	0.111
TBJB475*035C□#@0^++	B	4.7	35	3.1	1.645	16.45	32.9	6	8	9	0.085	0.166	0.149	0.066	0.513	0.462	0.205
TBJB475*035L□#@0^++	B	4.7	35	0.7	1.645	16.45	32.9	6	8	8	0.085	0.348	0.314	0.139	0.244	0.220	0.098
TBJC475*035C□#@0^++	C	4.7	35	2.2	1.645	16.45	32.9	6	8	9	0.110	0.224	0.201	0.089	0.492	0.443	0.197
TBJC475*035L□#@0^++	C	4.7	35	0.6	1.645	16.45	32.9	6	8	9	0.110	0.428	0.385	0.171	0.257	0.231	0.103
TBJD475*035C□#@0^++	D	4.7	35	1.5	1.645	16.45	19.74	6	8	9	0.150	0.316	0.285	0.126	0.474	0.427	0.190

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.



The Important Information/Disclaimer is incorporated in these specifications by reference and should be reviewed in full before placing any order.

TBJ SERIES

COTS-Plus



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			DF Max			Power Dissipation	25°C	85°C	125°C	25°C	85°C	125°C
		µF 25°C	V +85°C	Ohms +25°C	+25°C	+85°C	+125°C	+25°C	+85/125°C	-55°C		Ripple Current	Ripple Current	Ripple Current	Ripple Voltage	Ripple Voltage	Ripple Voltage
												A	A	A	V	V	V
AVX COTS-Plus P/N	Case				(µA)	(µA)	(µA)	(%)	(%)	(%)	W	A (100kHz)	A (100kHz)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)
TBJD475*035L□#@0*++	D	4.7	35	0.5	1.645	16.45	32.9	6	8	9	0.150	0.548	0.493	0.219	0.274	0.246	0.110
TBJC685*035C□#@0*++	C	6.8	35	1.8	2.38	23.8	47.6	6	9	9	0.110	0.247	0.222	0.099	0.445	0.400	0.178
TBJC685*035L□#@0*++	C	6.8	35	0.35	2.38	23.8	47.6	6	9	10	0.110	0.561	0.505	0.224	0.196	0.177	0.078
TBJD685*035C□#@0*++	D	6.8	35	1.3	2.38	23.8	28.56	6	9	9	0.150	0.340	0.306	0.136	0.442	0.397	0.177
TBJD685*035L□#@0*++	D	6.8	35	0.5	2.38	23.8	47.6	6	9	9	0.150	0.548	0.493	0.219	0.274	0.246	0.110
TBJC106*035C□#@0*++	C	10	35	1.6	3.5	35	70	6	9	9	0.110	0.262	0.236	0.105	0.420	0.378	0.168
TBJC106*035L□#@0*++	C	10	35	0.6	3.5	35	70	6	9	9	0.110	0.428	0.385	0.171	0.257	0.231	0.103
TBJD106*035C□#@0*++	D	10	35	1	3.5	35	70	6	9	9	0.150	0.387	0.349	0.155	0.387	0.349	0.155
TBJD106*035L□#@0*++	D	10	35	0.3	3.5	35	70	6	9	9	0.150	0.707	0.636	0.283	0.212	0.191	0.085
TBJE106*035C□#@0*++	E	10	35	0.25	3.5	35	70	6	9	10	0.165	0.812	0.731	0.325	0.203	0.183	0.081
TBJE106*035L□#@0*++	E	10	35	0.2	3.5	35	70	6	9	10	0.165	0.908	0.817	0.363	0.182	0.163	0.073
TBJC156*035C□#@0*++	C	15	35	1.4	5.25	52.5	105	6	9	9	0.110	0.280	0.252	0.112	0.392	0.353	0.157
TBJC156*035L□#@0*++	C	15	35	0.35	5.25	52.5	105	6	9	10	0.110	0.561	0.505	0.224	0.196	0.177	0.078
TBJD156*035C□#@0*++	D	15	35	0.9	5.25	52.5	105	6	9	9	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD156*035L□#@0*++	D	15	35	0.3	5.25	52.5	105	6	9	9	0.150	0.707	0.636	0.283	0.212	0.191	0.085
TBJD226*035C□#@0*++	D	22	35	0.9	7.7	77	154	6	9	9	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD226*035L□#@0*++	D	22	35	0.4	7.7	77	154	6	9	9	0.150	0.612	0.551	0.245	0.245	0.220	0.098
TBJE226*035C□#@0*++	E	22	35	0.9	7.7	77	154	6	9	9	0.165	0.428	0.385	0.171	0.385	0.347	0.154
TBJE226*035L□#@0*++	E	22	35	0.3	7.7	77	154	6	9	9	0.165	0.742	0.667	0.297	0.222	0.200	0.089
TBJD336*035C□#@0*++	D	33	35	0.9	11.55	115.5	231	6	9	9	0.150	0.408	0.367	0.163	0.367	0.331	0.147
TBJD336*035L□#@0*++	D	33	35	0.3	11.55	115.5	231	6	9	9	0.150	0.707	0.636	0.283	0.212	0.191	0.085
TBJE336*035C□#@0*++	E	33	35	0.25	11.55	115.5	231	6	9	10	0.165	0.812	0.731	0.325	0.203	0.183	0.081
TBJE336*035L□#@0*++	E	33	35	0.1	11.55	115.5	231	6	8	10	0.165	1.285	1.156	0.514	0.128	0.116	0.051
TBJV336*035L□#@0*++	V	33	35	0.2	11.55	115.5	231	6	9	10	0.250	1.118	1.006	0.447	0.224	0.201	0.089
TBJE476*035C□#@0*++	E	47	35	0.25	16.45	164.5	329	6	8	10	0.165	0.812	0.731	0.325	0.203	0.183	0.081
TBJE476*035L□#@0*++	E	47	35	0.2	16.45	164.5	329	6	9	9	0.165	0.908	0.817	0.363	0.182	0.163	0.073
TBJV476*035C□#@0*++	V	47	35	0.4	16.45	164.5	329	6	9	10	0.250	0.791	0.712	0.316	0.316	0.285	0.126
TBJV476*035L□#@0*++	V	47	35	0.2	16.45	164.5	329	6	10	10	0.250	1.118	1.006	0.447	0.224	0.201	0.089
TBJV686*035C□#@0*++	V	68	35	0.2	23.8	238	476	6	9	10	0.250	1.118	1.006	0.447	0.224	0.201	0.089
TBJV686*035L□#@0*++	V	68	35	0.15	23.8	238	476	6	9	10	0.250	1.291	1.162	0.516	0.194	0.174	0.077
TBJA104*050C□#@0*++	A	0.1	50	22	0.05	0.5	0.6	6	8	8	0.075	0.058	0.053	0.023	1.285	1.156	0.514
TBJA154*050C□#@0*++	A	0.15	50	21	0.02	0.2	0.4	4	6	6	0.075	0.060	0.054	0.024	1.255	1.129	0.502
TBJA154*050L□#@0*++	A	0.15	50	9	0.075	0.75	1.5	4	6	6	0.075	0.091	0.082	0.037	0.822	0.739	0.329
TBJB154*050C□#@0*++	B	0.15	50	17	0.075	0.75	0.9	4	6	6	0.085	0.071	0.064	0.028	1.202	1.082	0.481
TBJA224*050C□#@0*++	A	0.22	50	18	0.11	1.1	2.2	4	6	6	0.075	0.065	0.058	0.026	1.162	1.046	0.465
TBJA224*050L□#@0*++	A	0.22	50	7	0.11	1.1	2.2	4	6	6	0.075	0.104	0.093	0.041	0.725	0.652	0.290
TBJB224*050C□#@0*++	B	0.22	50	14	0.11	1.1	1.32	4	6	6	0.085	0.078	0.070	0.031	1.091	0.982	0.436
TBJB334*050C□#@0*++	B	0.33	50	12	0.165	1.65	1.98	4	6	6	0.085	0.084	0.076	0.034	1.010	0.909	0.404
TBJC474*050C□#@0*++	C	0.47	50	8	0.235	2.35	2.82	4	6	6	0.110	0.117	0.106	0.047	0.938	0.844	0.375
TBJA684*050C□#@0*++	A	0.68	50	7.9	0.34	3.4	6.8	4	6	8	0.075	0.097	0.088	0.039	0.770	0.693	0.308
TBJC684*050C□#@0*++	C	0.68	50	7	0.34	3.4	4.08	4	6	6	0.110	0.125	0.113	0.050	0.877	0.790	0.351
TBJC105*050C□#@0*++	C	1	50	6	0.5	5	6	4	6	6	0.110	0.135	0.122	0.054	0.812	0.731	0.325
TBJC105*050L□#@0*++	C	1	50	2.5	0.5	5	10	4	6	6	0.110	0.210	0.189	0.084	0.524	0.472	0.210
TBJC155*050C□#@0*++	C	1.5	50	5	0.75	7.5	15	6	8	9	0.110	0.148	0.133	0.059	0.742	0.667	0.297
TBJC155*050L□#@0*++	C	1.5	50	1.5	0.75	7.5	15	6	9	10	0.110	0.271	0.244	0.108	0.406	0.366	0.162
TBJD155*050C□#@0*++	D	1.5	50	4	0.75	7.5	9	6	8	9	0.150	0.194	0.174	0.077	0.775	0.697	0.310
TBJD225*050C□#@0*++	D	2.2	50	2.5	1.1	11	13.2	6	8	9	0.150	0.245	0.220	0.098	0.612	0.551	0.245
TBJD225*050L□#@0*++	D	2.2	50	1.2	1.1	11	22	6	9	10	0.150	0.354	0.318	0.141	0.424	0.382	0.170
TBJD335*050C□#@0*++	D	3.3	50	2	1.65	16.5	19.8	6	9	9	0.150	0.274	0.246	0.110	0.548	0.493	0.219
TBJD335*050L□#@0*++	D	3.3	50	0.8	1.65	16.5	33	6	9	10	0.150	0.433	0.390	0.173	0.346	0.312	0.139
TBJD475*050C□#@0*++	D	4.7	50	1.5	2.35	23.5	28.2	6	9	9	0.150	0.316	0.285	0.126	0.474	0.427	0.190
TBJD475*050L□#@0*++	D	4.7	50	0.3	2.35	23.5	47	6	9	9	0.150	0.707	0.636	0.283	0.212	0.191	0.085
TBJD685*050C□#@0*++	D	6.8	50	1	3.4	34	68	6	9	9	0.150	0.387	0.349	0.155	0.387	0.349	0.155

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.

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TBJ SERIES

COTS-Plus



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			DF Max			Power Dissipation	25°C	85°C	125°C	25°C	85°C	125°C
					+25°C	+85°C	+125°C	+25°C	+(85/125)°C	-55°C		Ripple Current	Ripple Current	Ripple Current	Ripple Voltage	Ripple Voltage	Ripple Voltage
AVX COTS-Plus P/N	Case	µF @ 25°C	V @ +85°C	Ohms @ +25°C	(µA)	(µA)	(µA)	(%)	(%)	(%)	W	A (100kHz)	A (100kHz)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)
TBJD685*050L□#@0*++	D	6.8	50	0.5	3.4	34	68	6	9	9	0.150	0.548	0.493	0.219	0.274	0.246	0.110
TBJE106*050C□#@0*++	E	10	50	0.5	5	50	100	6	9	10	0.165	0.574	0.517	0.230	0.287	0.259	0.115
TBJE106*050L□#@0*++	E	10	50	0.4	5	50	100	6	9	10	0.165	0.642	0.578	0.257	0.257	0.231	0.103
TBJV106*050C□#@0*++	V	10	50	0.65	5	50	100	3			0.250	0.620	0.558	0.248	0.403	0.363	0.161
TBJD156*050C□#@0*++	D	15	50	0.6	7.5	75	150	4	6	6	0.150	0.500	0.450	0.200	0.300	0.270	0.120
TBJE156*050C□#@0*++	E	15	50	0.6	7.5	75	150	8	10	12	0.165	0.524	0.472	0.210	0.315	0.283	0.126
TBJE156*050L□#@0*++	E	15	50	0.25	7.5	75	150	6	9	10	0.165	0.812	0.731	0.325	0.203	0.183	0.081
TBJV226*050C□#@0*++	V	22	50	0.6	11	110	220	8	10	12	0.250	0.645	0.581	0.258	0.387	0.349	0.155
TBJV226*050L□#@0*++	V	22	50	0.39	11	110	220	8	10	12	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.

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TBJC336M016LRSZ0700	TBJB336K010LRSB0800	TBJB106K016CBDB0823	TBJD336K035CBSZ0H00
TBJB335M035CBSC0823	TBJD336K025LRSB0000	TBJB106K020LRSZ0800	TBJB226K010CBSC0000
TBJC106K025CWSZ0H00	TBJB336K006LSSC0800	TBJA106K010LBSC0H23	TBJC156K035LRSZ0023
TBJA476K006LBLB0700	TBJC226K020LRSZ0024	TBJC475K035LBSC0H24	TBJD685M050CRDC0845
TBJC106K025LBDC0H24	TBJA475K020CBLC0845	TBJA476K006LRLB0700	TBJE337K010LBLB0824
TBJB475K035CRDB0924	TBJC226K016LRDC0H24	TBJD337M010LBLC0024	TBJA106M010LRSZ0H24
TBJB226K020CWLC0823	TBJD226K035LRLB0824	TBJD336K025CRSB0824	TBJC155K050CWSC0823
TBJC156K035CBSB0000	TBJE336K025LWSB0000	TBJC106K025LBDC0824	TBJD337M010LBDC0824
TBJD157K006CBDC0H24	TBJB335K035CRLC0823	TBJD337M010LBDB0H24	TBJD157K010LRDC0H24
TBJB226K020CRLC0823	TBJD226K035LRDC0H23	TBJD107M016LRDC0823	TBJD106K035CBSC0700
TBJD107M010LBSZ0H00	TBJB106K020CRDC0H45	TBJC475K020CBSC0824	TBJB106M016LRSZ0700
TBJA105K025CRDB0800	TBJA105K035CRSZ0H00	TBJD106K035CWSC0700	TBJB106K010CRSB0H24
TBJV157K016LBLC0845	TBJC226K020CRSZ0H00	TBJC106K035CRSZ0H00	TBJD336K035LSLC0800
TBJA106K010LBDC0H23	TBJD476M025LBDC0824	TBJC106K020CBSB0000	TBJD686K016CBLC0000
TBJC107K010LRLB0000	TBJD337K010LRDC0H24	TBJV107M020LBSZ0700	TBJC686K010LRDC0H24
TBJD157M016LBSZ0700	TBJD106M035LRSZ0H00	TBJD476K025LRLC0045	TBJC106K025CBSC0823
TBJB156M016LRSZ0000	TBJD336M035CRSB0800	TBJB475M035CWSZ0H00	TBJD335K050LBSB0823
TBJD107K010LRSB0924	TBJE156J050LRSB0724	TBJE227K010LBDC0945	TBJD476K025LBSZ0800
TBJE226K035LRDB0H23	TBJD157M016LRDC0824	TBJD686K020LSSC0824	TBJE227K010LRDC0845
TBJB336K016LBSZ0H00	TBJB336K016LRSZ0H00	TBJC226M020LRSZ0024	TBJB106K010CRSB0H45
TBJE156K050LRSB0723	TBJC476K010LRLC0845	TBJD106K025CRLB0024	TBJB156K016LSLB0723
TBJC106M025CBSC0H00	TBJA475K010CRDC0H23	TBJB106K020LRSC0824	TBJC105K050LRSC0845
TBJC476K016CRSC0823	TBJE157K016LBSZ0000	TBJB106K020LBDB0823	TBJC685K035CRSC0823
TBJD106K035LBDC0H24	TBJB475K035CWSC0823	TBJC105K050LBSB0023	TBJE477K010LBSZ0800
TBJB106K016LRSB0024	TBJC476K016CBLB0H45	TBJE336K025LRSB0723	TBJD336K025LRDC0H24