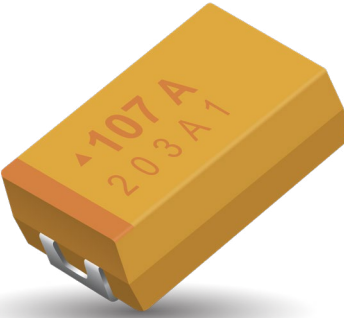


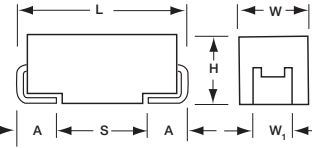


The TBJ COTS-Plus series, based on the CWR11 form factor, is a high reliability series encompassing the current range of EIA Low ESR ratings. These ratings are available with Weibull grading (B and C), surge current testing (A, B, C) per MIL-PRF-55365 Rev. G, and optional Group A from MIL-PRF-55365.

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.



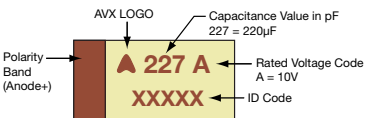
### CASE DIMENSIONS: millimeters (inches)

| Code | EIA Code | EIA Metric | L±0.20 (0.008) | W+0.20 (0.008)<br>-0.10 (0.004) | H+0.20 (0.008)<br>-0.10 (0.004) | W1±0.20 (0.008) | A+0.30 (0.012)<br>-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.

### 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  
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 <sub>R</sub> )    | ≤ 85°C: | 2                                                                                       | 4   | 6 | 10 | 16 | 20 | 25 | 35 | 50 |  |
| Category Voltage (V <sub>C</sub> ) | ≤125°C: | 1.4                                                                                     | 2.7 | 4 | 7  | 10 | 13 | 17 | 23 | 33 |  |
| Surge Voltage (V <sub>S</sub> )    | ≤ 85°C: | 2.6                                                                                     | 5.2 | 8 | 13 | 20 | 26 | 32 | 46 | 65 |  |
| Surge Voltage (V <sub>S</sub> )    | ≤125°C: | 1.7                                                                                     | 3.4 | 5 | 8  | 13 | 16 | 20 | 28 | 40 |  |
| Temperature Range:                 |         | -55°C to +125°C                                                                         |     |   |    |    |    |    |    |    |  |

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

| Capacitance |      | Rated Voltage DC (V <sub>R</sub> ) 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)<br>B(17000) |
| 0.22        | 224  |                                            |                         |                                                  |                                                         |          |                                               |                                            |                                          | A(6000, 18000)                                  | A(7000, 18000)<br>B(14000) |
| 0.33        | 334  |                                            |                         |                                                  |                                                         |          |                                               |                                            |                                          | A(6000, 15000)                                  | B(12000)                   |
| 0.47        | 474  |                                            |                         |                                                  |                                                         |          |                                               | A(14000)                                   | A(7000, 14000)                           | A(6000, 12000)<br>B(4000, 10000)                | C(8000)                    |
| 0.68        | 684  |                                            |                         |                                                  |                                                         | A(12000) | A(12000)                                      | A(12000)                                   | A(6000, 10000)<br>B(7500)                | A(6000, 8000)<br>B(8000)                        | A(7900)<br>C(7000)         |
| 1.0         | 105  |                                            |                         |                                                  | A(10000)                                                | A(10000) | A(10000)                                      | A(3000, 10000)                             | A(8000) B(6500)                          | A(3000, 7500)<br>B(2000, 6500)                  | C(2500, 6000)              |
| 1.5         | 155  |                                            |                         | A(8000)                                          | A(8000)                                                 | A(8000)  |                                               | A(6500)<br>B(6000)                         | A(3000, 7500)<br>B(1800, 6500)           | A(7500)<br>B(2500, 5200)<br>C(4500)             | C(1500, 5000)<br>D(4000)   |
| 2.2         | 225  |                                            | A(8000)                 | A(8000)                                          | A(1800, 8000)                                           | B(5500)  | A(1800, 5500)<br>B(5000)                      | A(3000, 5300)<br>B(5000)                   | A(7000)<br>B(900, 4500)<br>C(3500)       | A(1500, 4500)<br>B(2000, 4200)<br>C(1000, 3500) | D(1200, 2500)              |
| 3.3         | 335  |                                            |                         | A(8000)                                          | B(5500)                                                 | B(5000)  | A(3500, 5000)<br>B(4500)                      | A(2500)<br>B(1300, 4000)                   | A(1000, 1500)<br>B(750, 3500)<br>C(3500) | B(1000, 3500)<br>C(700, 2500)                   | D(800, 2000)               |
| 4.7         | 475  |                                            | A(8000)                 | B(5500)                                          | A(1400, 5000)<br>B(4500)                                | B(4000)  | A(2000, 4000)<br>B(800, 3100)                 | A(1800, 4000)<br>B(750, 3000)<br>C(3000)   | A(2800)<br>B(1500, 2800)<br>C(2500)      | B(700, 3100)<br>C(600, 2200)<br>D(500, 1500)    | D(300, 1500)               |
| 6.8         | 685  |                                            | B(5500)                 | A(1800, 5000)<br>B(4500)                         | A(1800, 4000)<br>B(3500)                                |          | A(1500, 2500)<br>B(60, 2500)                  | A(1000)<br>B(600, 2500)<br>C(700, 2400)    | B(700, 2800)<br>C(500, 2000)<br>D(1400)  | C(350, 1800)<br>D(500, 1300)                    | D(500, 1000)               |
| 10          | 106  |                                            | B(4000)                 | A(1500, 4000)<br>B(3500)                         | A(1800, 3000)<br>B(2500)                                | C(2500)  | A(1000, 3000)<br>B(500, 2800)<br>C(500, 2500) | B(1000, 2100)<br>C(500, 1900)              | C(500, 1800)<br>D(1200)                  | C(600, 1600)<br>D(300, 1000)<br>E(200, 250)     | E(400, 500)<br>V(650)      |
| 15          | 156  |                                            | B(3500)                 | A(1500, 3500)<br>B(3500) C(3000)                 | A(1000, 3200)<br>B(450, 2800)<br>C(2500)                |          | B(800, 2500)<br>C(1800)                       | B(500, 2000)<br>C(400, 1700)<br>D(1100)    | C(220, 300)<br>D(300, 1000)              | C(350, 1400)<br>D(300, 900)                     | D(600)<br>E(250, 600)      |
| 22          | 226  |                                            |                         | A(500, 3000)<br>B(375, 2500)<br>C(2200)          | B(700, 2400)<br>C(300, 1000)                            | D(1100)  | B(600, 2300)<br>C(375, 1600)<br>D(1100)       | B(400, 600)<br>C(150, 1600)<br>D(200, 900) | C(275, 1400)<br>D(200, 900)              | D(400, 900)<br>E(300, 900)                      | V(390, 600)                |
| 33          | 336  |                                            | A(3000)<br>C(2200)      | A(600)<br>B(600, 2200)                           | A(700, 1700)<br>B(250, 1800)<br>C(150, 1600)<br>D(1100) | D(900)   | B(350)<br>C(300, 1500)<br>D(200, 900)         | C(300, 1500)<br>D(100, 900)                | D(100, 900)<br>E(300, 900)               | D(300, 900)<br>E(100, 250)<br>V(200)            |                            |
| 47          | 476  |                                            | A(500)                  | A(800)<br>B(250, 350)<br>C(300, 1600)<br>D(1100) | B(250, 350)<br>C(200, 1200)<br>D(100, 900)              |          | C(350, 1500)<br>D(150, 900)                   | D(100, 200)<br>E(70, 250)                  | D(250, 900)<br>E(80, 100)                | E(200, 250)<br>V(200, 400)                      |                            |
| 68          | 686  |                                            | D(1100)                 | B(250, 1800)<br>C(150, 1600)<br>D(900)           | B(600)<br>C(80, 1200)<br>D(100, 900)                    |          | C(125, 200)<br>D(70, 900)                     | D(70, 900)<br>E(150, 900)                  | E(125, 200)<br>V(95)                     | V(150, 200)                                     |                            |
| 100         | 107  |                                            | A(1400)<br>B(200, 1600) | B(250, 400)<br>C(150, 900)<br>D(900)             | B(400)<br>C(200, 1200)<br>D(100, 900)<br>E(125)         |          | D(125, 900)<br>E(100, 900)                    | D(85, 100)<br>E(100, 150)<br>V(85, 200)    | V(100)                                   |                                                 |                            |
| 150         | 157  | B(150)                                     | B(250)<br>C(70,80)      | C(50, 90)<br>D(50, 900)                          | D(150, 900)<br>E(100)                                   |          | D(150, 900)<br>E(100, 300)<br>V(45, 75)       | E(300)<br>V(80)                            |                                          |                                                 |                            |
| 220         | 227  | B(150, 200)<br>D(45)                       | D(40,900)               | C(70, 1200)<br>D(100, 900)<br>E(100)             | D(150, 900)<br>E(100, 900)                              |          | E(100, 150)<br>V(75, 150)                     |                                            |                                          |                                                 |                            |
| 330         | 337  |                                            | C(100)<br>D(35, 45)     | D(45, 50)<br>E(100, 900)<br>V(100)               | D(150, 900)<br>E(60, 900)<br>V(60, 100)                 |          |                                               |                                            |                                          |                                                 |                            |
| 470         | 477  | D(35)                                      | D(45, 100)<br>E(35)     | D(45, 60)<br>E(50, 900)<br>V(55, 100)            | E(50, 900)<br>V(60, 100)                                |          |                                               |                                            |                                          |                                                 |                            |
| 680         | 687  | D(35, 50)<br>E(35, 50)                     | D(45, 60)<br>E(40, 60)  | E(45, 60)<br>V(35, 40)                           |                                                         |          |                                               |                                            |                                          |                                                 |                            |
| 1000        | 108  | E(30, 40)                                  | E(60)<br>V(25, 35)      | V(40, 50)                                        |                                                         |          |                                               |                                            |                                          |                                                 |                            |
| 1500        | 158  | D(100)<br>E(50)<br>V(30, 40)               | E(50, 75)<br>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<br>NUMBER REFERENCE |      | Parametric Specifications by Rating per MIL-PRF-55365/4 |                                     |                                     |         |       |        |        |             |       | Typical RMS Ripple Data by Rating |                                          |                                          |                                           |                                          |                                          |                                           |
|-----------------------------------|------|---------------------------------------------------------|-------------------------------------|-------------------------------------|---------|-------|--------|--------|-------------|-------|-----------------------------------|------------------------------------------|------------------------------------------|-------------------------------------------|------------------------------------------|------------------------------------------|-------------------------------------------|
|                                   |      | Cap<br>@ 120Hz<br>µF<br>@ 25°C                          | DC Rated<br>Voltage<br>V<br>@ +85°C | ESR<br>@ 100kHz<br>mOhms<br>@ +25°C | DCL max |       |        | DF Max |             |       | Power<br>Dissipation<br>W         | 25°C<br>Ripple Current<br>mA<br>(100kHz) | 85°C<br>Ripple Current<br>mA<br>(100kHz) | 125°C<br>Ripple Current<br>mA<br>(100kHz) | 25°C<br>Ripple Current<br>mV<br>(100kHz) | 85°C<br>Ripple Current<br>mV<br>(100kHz) | 125°C<br>Ripple Current<br>mV<br>(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                                     |
| TBJV158*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                                     |
| TBJV158*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     | 36     | 42          | 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                                     |
| TBJV108*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                                     |
| TBJV108*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                                     |
| TBJV158*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                                     |
| TBJV158*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.



# TBJ SERIES

## COTS-Plus



| RATING & PART<br>NUMBER REFERENCE |   | Parametric Specifications by Rating per MIL-PRF-55365/4 |                     |                 |         |       |        |        |             |       | Typical RMS Ripple Data by Rating |                        |                        |                         |                        |                        |                         |
|-----------------------------------|---|---------------------------------------------------------|---------------------|-----------------|---------|-------|--------|--------|-------------|-------|-----------------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|-------------------------|
|                                   |   | Cap<br>@<br>120Hz                                       | DC Rated<br>Voltage | ESR<br>@ 100kHz | DCL max |       |        | DF Max |             |       | Power<br>Dissipation              | 25°C<br>Ripple Current | 85°C<br>Ripple Current | 125°C<br>Ripple Current | 25°C<br>Ripple Current | 85°C<br>Ripple Current | 125°C<br>Ripple Current |
|                                   |   | µF<br>25°C                                              | V<br>+85°C          | mOhms<br>+25°C  | +25°C   | +85°C | +125°C | +25°C  | +(85/125)°C | -55°C | W                                 | mA<br>(100kHz)         | mA<br>(100kHz)         | mA<br>(100kHz)          | mV<br>(100kHz)         | mV<br>(100kHz)         | mV<br>(100kHz)          |
|                                   |   | @<br>25°C                                               | @<br>+85°C          | @<br>+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*006L□#@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<br>NUMBER REFERENCE |      | Parametric Specifications by Rating per MIL-PRF-55365/4 |                                     |                                     |         |       |        |        |             |       | Typical RMS Ripple Data by Rating |                                          |                                          |                                           |                                          |                                          |                                           |
|-----------------------------------|------|---------------------------------------------------------|-------------------------------------|-------------------------------------|---------|-------|--------|--------|-------------|-------|-----------------------------------|------------------------------------------|------------------------------------------|-------------------------------------------|------------------------------------------|------------------------------------------|-------------------------------------------|
|                                   |      | Cap<br>@ 120Hz<br>µF<br>@ 25°C                          | DC Rated<br>Voltage<br>V<br>@ +85°C | ESR<br>@ 100kHz<br>mOhms<br>@ +25°C | DCL max |       |        | DF Max |             |       | Power<br>Dissipation<br>W         | 25°C<br>Ripple Current<br>mA<br>(100kHz) | 85°C<br>Ripple Current<br>mA<br>(100kHz) | 125°C<br>Ripple Current<br>mA<br>(100kHz) | 25°C<br>Ripple Current<br>mV<br>(100kHz) | 85°C<br>Ripple Current<br>mV<br>(100kHz) | 125°C<br>Ripple Current<br>mV<br>(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                                     |
| TBJD107*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.**



# TBJ SERIES

## COTS-Plus



| RATING & PART<br>NUMBER REFERENCE |   | Parametric Specifications by Rating per MIL-PRF-55365/4 |                     |                    |         |       |        |        |             |       | Typical RMS Ripple Data by Rating |                |                |                |                |                |                |
|-----------------------------------|---|---------------------------------------------------------|---------------------|--------------------|---------|-------|--------|--------|-------------|-------|-----------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                                   |   | Cap<br>@<br>120Hz                                       | DC Rated<br>Voltage | ESR<br>@<br>100kHz | DCL max |       |        | DF Max |             |       | Power<br>Dissipation              | 25°C           | 85°C           | 125°C          | 25°C           | 85°C           | 125°C          |
|                                   |   | µF                                                      | V                   | mOhms              | +25°C   | +85°C | +125°C | +25°C  | +(85/125)°C | -55°C |                                   | Ripple Current | Ripple Current | Ripple Current | Ripple Current | Ripple Current | Ripple Current |
|                                   |   | @<br>25°C                                               | @<br>+85°C          | @<br>+25°C         | (µA)    | (µA)  | (µA)   | (%)    | (%)         | (%)   | W                                 | mA<br>(100kHz) | mA<br>(100kHz) | mA<br>(100kHz) | mV<br>(100kHz) | mV<br>(100kHz) | mV<br>(100kHz) |
| 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          |
| 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          |

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<br>NUMBER REFERENCE |      | Parametric Specifications by Rating per MIL-PRF-55365/4 |                                     |                                     |         |       |        |        |             |       | Typical RMS Ripple Data by Rating |                                          |                                          |                                           |                                          |                                          |                                           |
|-----------------------------------|------|---------------------------------------------------------|-------------------------------------|-------------------------------------|---------|-------|--------|--------|-------------|-------|-----------------------------------|------------------------------------------|------------------------------------------|-------------------------------------------|------------------------------------------|------------------------------------------|-------------------------------------------|
|                                   |      | Cap<br>@ 120Hz<br>µF<br>25°C                            | DC Rated<br>Voltage<br>V<br>@ +85°C | ESR<br>@ 100kHz<br>mOhms<br>@ +25°C | DCL max |       |        | DF Max |             |       | Power<br>Dissipation<br>W         | 25°C<br>Ripple Current<br>mA<br>(100kHz) | 85°C<br>Ripple Current<br>mA<br>(100kHz) | 125°C<br>Ripple Current<br>mA<br>(100kHz) | 25°C<br>Ripple Current<br>mV<br>(100kHz) | 85°C<br>Ripple Current<br>mV<br>(100kHz) | 125°C<br>Ripple Current<br>mV<br>(100kHz) |
|                                   |      |                                                         |                                     |                                     | +25°C   | +85°C | +125°C | +25°C  | +(85/125)°C | -55°C |                                   |                                          |                                          |                                           |                                          |                                          |                                           |
|                                   |      |                                                         |                                     |                                     | (µA)    | (µA)  | (µA)   | (%)    | (%)         | (%)   |                                   |                                          |                                          |                                           |                                          |                                          |                                           |
| AVX COTS-Plus P/N                 | Case |                                                         |                                     |                                     |         |       |        |        |             |       |                                   |                                          |                                          |                                           |                                          |                                          |                                           |
| 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                                     |
| TBJV227*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                                     |
| TBJV227*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                             | 0.158                                    | 0.142                                    | 0.063                                     | 0.474                                    | 0.427                                    | 0.190                                     |
| 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                                     |
| TBJC106*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                                     |
| TBJC106*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                                     |
| TBJC156*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                                     |
| TBJC156*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                                     |
| 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                                     |

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<br>NUMBER REFERENCE |      | Parametric Specifications by Rating per MIL-PRF-55365/4 |                                   |                                      |         |       |        |        |             |       | Typical RMS Ripple Data by Rating |                                          |                                          |                                           |                                          |                                          |                                           |
|-----------------------------------|------|---------------------------------------------------------|-----------------------------------|--------------------------------------|---------|-------|--------|--------|-------------|-------|-----------------------------------|------------------------------------------|------------------------------------------|-------------------------------------------|------------------------------------------|------------------------------------------|-------------------------------------------|
|                                   |      | Cap<br>@<br>120Hz<br>µF<br>25°C                         | DC Rated<br>Voltage<br>V<br>+85°C | ESR<br>@<br>100kHz<br>mOhms<br>+25°C | DCL max |       |        | DF Max |             |       | Power<br>Dissipation<br>W         | 25°C<br>Ripple Current<br>mA<br>(100kHz) | 85°C<br>Ripple Current<br>mA<br>(100kHz) | 125°C<br>Ripple Current<br>mA<br>(100kHz) | 25°C<br>Ripple Current<br>mV<br>(100kHz) | 85°C<br>Ripple Current<br>mV<br>(100kHz) | 125°C<br>Ripple Current<br>mV<br>(100kHz) |
|                                   |      |                                                         |                                   |                                      | +25°C   | +85°C | +125°C | +25°C  | +(85/125)°C | -55°C |                                   |                                          |                                          |                                           |                                          |                                          |                                           |
|                                   |      |                                                         |                                   |                                      | (µA)    | (µA)  | (µA)   | (%)    | (%)         | (%)   |                                   |                                          |                                          |                                           |                                          |                                          |                                           |
| AVX COTS-Plus P/N                 | Case |                                                         |                                   |                                      |         |       |        |        |             |       |                                   |                                          |                                          |                                           |                                          |                                          |                                           |
| 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                                     |
| 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                                     |
| 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                                     |

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<br>NUMBER REFERENCE |      | Parametric Specifications by Rating per MIL-PRF-55365/4 |                                     |                                     |         |       |        |        |             |       | Typical RMS Ripple Data by Rating |                                          |                                          |                                           |                                          |                                          |                                           |
|-----------------------------------|------|---------------------------------------------------------|-------------------------------------|-------------------------------------|---------|-------|--------|--------|-------------|-------|-----------------------------------|------------------------------------------|------------------------------------------|-------------------------------------------|------------------------------------------|------------------------------------------|-------------------------------------------|
|                                   |      | Cap<br>@ 120Hz<br>µF<br>@ 25°C                          | DC Rated<br>Voltage<br>V<br>@ +85°C | ESR<br>@ 100kHz<br>mOhms<br>@ +25°C | DCL max |       |        | DF Max |             |       | Power<br>Dissipation<br>W         | 25°C<br>Ripple Current<br>mA<br>(100kHz) | 85°C<br>Ripple Current<br>mA<br>(100kHz) | 125°C<br>Ripple Current<br>mA<br>(100kHz) | 25°C<br>Ripple Current<br>mV<br>(100kHz) | 85°C<br>Ripple Current<br>mV<br>(100kHz) | 125°C<br>Ripple Current<br>mV<br>(100kHz) |
|                                   |      |                                                         |                                     |                                     | +25°C   | +85°C | +125°C | +25°C  | +(85/125)°C | -55°C |                                   |                                          |                                          |                                           |                                          |                                          |                                           |
|                                   |      |                                                         |                                     |                                     | (µA)    | (µA)  | (µA)   | (%)    | (%)         | (%)   |                                   |                                          |                                          |                                           |                                          |                                          |                                           |
| AVX COTS-Plus P/N                 | Case |                                                         |                                     |                                     |         |       |        |        |             |       |                                   |                                          |                                          |                                           |                                          |                                          |                                           |
| 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                                     |
| 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                                     |

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<br>NUMBER REFERENCE |      | Parametric Specifications by Rating per MIL-PRF-55365/4 |                     |                  |         |       |        |        |              |       | Typical RMS Ripple Data by Rating |                        |                        |                         |                        |                        |                         |
|-----------------------------------|------|---------------------------------------------------------|---------------------|------------------|---------|-------|--------|--------|--------------|-------|-----------------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|-------------------------|
|                                   |      | Cap<br>@ 120Hz                                          | DC Rated<br>Voltage | ESR<br>@ 100kHz  | DCL max |       |        | DF Max |              |       | Power<br>Dissipation              | 25°C<br>Ripple Current | 85°C<br>Ripple Current | 125°C<br>Ripple Current | 25°C<br>Ripple Current | 85°C<br>Ripple Current | 125°C<br>Ripple Current |
|                                   |      | µF<br>25°C                                              | V<br>+85°C          | mOhms<br>@ +25°C | +25°C   | +85°C | +125°C | +25°C  | + (85/125)°C | -55°C | W                                 | mA<br>(100kHz)         | mA<br>(100kHz)         | mA<br>(100kHz)          | mV<br>(100kHz)         | mV<br>(100kHz)         | mV<br>(100kHz)          |
| AVX COTS-Plus P/N                 | Case |                                                         |                     |                  |         |       |        |        |              |       |                                   |                        |                        |                         |                        |                        |                         |
| 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                   |
| 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                   |

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<br>NUMBER REFERENCE |      | Parametric Specifications by Rating per MIL-PRF-55365/4 |                                         |                                            |         |       |        |        |             |       | Typical RMS Ripple Data by Rating |                                              |                                              |                                               |                                              |                                              |                                               |
|-----------------------------------|------|---------------------------------------------------------|-----------------------------------------|--------------------------------------------|---------|-------|--------|--------|-------------|-------|-----------------------------------|----------------------------------------------|----------------------------------------------|-----------------------------------------------|----------------------------------------------|----------------------------------------------|-----------------------------------------------|
|                                   |      | Cap<br>@<br>120Hz<br><br>µF<br>@ 25°C                   | DC Rated<br>Voltage<br><br>V<br>@ +85°C | ESR<br>@<br>100kHz<br><br>mOhms<br>@ +25°C | DCL max |       |        | DF Max |             |       | Power<br>Dissipation<br><br>W     | 25°C<br>Ripple Current<br><br>mA<br>(100kHz) | 85°C<br>Ripple Current<br><br>mA<br>(100kHz) | 125°C<br>Ripple Current<br><br>mA<br>(100kHz) | 25°C<br>Ripple Current<br><br>mV<br>(100kHz) | 85°C<br>Ripple Current<br><br>mV<br>(100kHz) | 125°C<br>Ripple Current<br><br>mV<br>(100kHz) |
|                                   |      |                                                         |                                         |                                            | +25°C   | +85°C | +125°C | +25°C  | +(85/125)°C | -55°C |                                   |                                              |                                              |                                               |                                              |                                              |                                               |
|                                   |      |                                                         |                                         |                                            | (µA)    | (µA)  | (µA)   | (%)    | (%)         | (%)   |                                   |                                              |                                              |                                               |                                              |                                              |                                               |
| AVX COTS-Plus P/N                 | Case |                                                         |                                         |                                            |         |       |        |        |             |       |                                   |                                              |                                              |                                               |                                              |                                              |                                               |
| 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.

**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.**