

# TCJ Series



## Tantalum Solid Electrolytic Chip Capacitors with Conductive Polymer Electrode



### FEATURES

- Conductive polymer electrode reduces ignition failure mode
- Lower ESR
- 3x reflow 260°C compatible
- CV range: 0.47-470µF / 2.5-125V
- 17 case sizes available

### APPLICATIONS

- Smart phone, Tablets, Notebook, LCD TV, Power supplies



Elektra Award 2010



### CASE DIMENSIONS: millimeters (inches)

| Code | EIA Code | EIA Metric | L±0.20 (0.008) | W+0.20 (0.008) -0.10 (0.004) | H+0.20 (0.008) -0.10 (0.004) | W <sub>1</sub> ±0.20 (0.008) | A+0.30 (0.012) -0.20 (0.008) | S Min.       |
|------|----------|------------|----------------|------------------------------|------------------------------|------------------------------|------------------------------|--------------|
| A    | 1206     | 3216-18    | 3.20 (0.126)   | 1.60 (0.063)                 | 1.60 (0.063)                 | 1.20 (0.047)                 | 0.80 (0.031)                 | 1.10 (0.043) |
| B    | 1210     | 3528-21    | 3.50 (0.138)   | 2.80 (0.110)                 | 1.90 (0.075)                 | 2.20 (0.087)                 | 0.80 (0.031)                 | 1.40 (0.055) |
| C    | 2312     | 6032-28    | 6.00 (0.236)   | 3.20 (0.126)                 | 2.60 (0.102)                 | 2.20 (0.087)                 | 1.30 (0.051)                 | 2.90 (0.114) |
| D    | 2917     | 7343-31    | 7.30 (0.287)   | 4.30 (0.169)                 | 2.90 (0.114)                 | 2.40 (0.094)                 | 1.30 (0.051)                 | 4.40 (0.173) |
| E    | 2917     | 7343-43    | 7.30 (0.287)   | 4.30 (0.169)                 | 4.10 (0.162)                 | 2.40 (0.094)                 | 1.30 (0.051)                 | 4.40 (0.173) |
| G    | 1206     | 3216-15    | 3.20 (0.126)   | 1.60 (0.063)                 | 1.50 (0.059) max             | 1.20 (0.047)                 | 0.80 (0.031)                 | 1.10 (0.043) |
| H    | 1210     | 3528-15    | 3.50 (0.138)   | 2.80 (0.110)                 | 1.50 (0.059) max             | 2.20 (0.087)                 | 0.80 (0.031)                 | 1.40 (0.055) |
| K    | 1206     | 3216-10    | 3.20 (0.126)   | 1.60 (0.063)                 | 1.00 (0.039) max             | 1.20 (0.047)                 | 0.80 (0.031)                 | 1.10 (0.043) |
| N    | 0805     | 2012-10    | 2.05 (0.081)   | 1.30 (0.051)                 | 1.00 (0.039) max             | 1.00 (0.039)                 | 0.50 (0.020)                 | 0.85 (0.033) |
| P    | 0805     | 2012-15    | 2.05 (0.081)   | 1.35 (0.050)                 | 1.50 (0.059) max             | 1.00±0.10 (0.039±0.004)      | 0.50 (0.020)                 | 0.85 (0.033) |
| R    | 0805     | 2012-12    | 2.05 (0.081)   | 1.30 (0.051)                 | 1.20 (0.047) max             | 1.00±0.10 (0.039±0.004)      | 0.50 (0.020)                 | 0.85 (0.033) |
| S    | 1206     | 3216-12    | 3.20 (0.126)   | 1.60 (0.063)                 | 1.20 (0.047) max             | 1.20 (0.047)                 | 0.80 (0.031)                 | 1.10 (0.043) |
| T    | 1210     | 3528-12    | 3.50 (0.138)   | 2.80 (0.110)                 | 1.20 (0.047) max             | 2.20 (0.087)                 | 0.80 (0.031)                 | 1.40 (0.055) |
| V    | 2924     | 7361-38    | 7.30 (0.287)   | 6.10 (0.240)                 | 3.55 (0.140)                 | 3.10 (0.120)                 | 1.30 (0.051)                 | 4.40 (0.173) |
| W    | 2312     | 6032-15    | 6.00 (0.236)   | 3.20 (0.126)                 | 1.50 (0.059) max             | 2.20 (0.087)                 | 1.30 (0.051)                 | 2.90 (0.114) |
| X    | 2917     | 7343-15    | 7.30 (0.287)   | 4.30 (0.169)                 | 1.50 (0.059) max             | 2.40 (0.094)                 | 1.30 (0.051)                 | 4.40 (0.173) |
| Y    | 2917     | 7343-20    | 7.30 (0.287)   | 4.30 (0.169)                 | 2.00 (0.079) max             | 2.40 (0.094)                 | 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, G, H, K, S, T, V, W, X, Y CASE



N, P, R CASE



### HOW TO ORDER

| TCJ  | A               | 226  | M         | 004  | R   | 0300      |
|------|-----------------|--|-----------|--|---|-----------|
| Type | Case Size       | Capacitance Code   | Tolerance | Rated DC Voltage   | Packaging                                     | ESR in mΩ |
|      | See table above | pF code: 1st two digits represent significant figures, 3rd digit represents multiplier (number of zeros to follow) | M = ±20%  | 002 = 2.5Vdc<br>004 = 4Vdc<br>006 = 6.3Vdc<br>010 = 10Vdc<br>016 = 16Vdc<br>020 = 20Vdc<br>025 = 25Vdc<br>035 = 35Vdc<br>050 = 50Vdc<br>063 = 63Vdc<br>075 = 75Vdc<br>100 = 100Vdc<br>125 = 125Vdc | R = Pure Tin 7" Reel<br>S = Pure Tin 13" Reel |           |

### TECHNICAL SPECIFICATIONS (Common for all TCJ series)

|                               |  |
|-------------------------------|--|
| Technical Data:               | All technical data relate to an ambient temperature of +25°C                                 |
| Capacitance Tolerance:        | ±20%   |
| Leakage Current DCL:          | 0.1CV  |
| Reliability:                  | 1% per 1000 hours at 85°C, V <sub>R</sub> with 0.1Ω/V series impedance, 60% confidence level |
| Resistance to soldering heat: | 3x260°C peak for max. 10s reflow   |



## Tantalum Solid Electrolytic Chip Capacitors with Conductive Polymer Electrode

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

| Cap  |      | Rated Voltage DC (V <sub>R</sub> ) to 85°C |        |          |         |         |         |         |         |         |         |         |          |   |
|------|------|--|--------|----------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---|
| µF   | Code | 2.5V (e)                                   | 4V (G) | 6.3V (J) | 10V (A) | 16V (C) | 20V (D) | 25V (E) | 35V (V) | 50V (T) | 63V (J) | 75V (P) | 100V (A) | 125V (B)  |
| 0.47 | 474  |  |        |          |         |         |         |         |         |         |         |         |          | B(400)  |
| 0.68 | 684  |  |        |          |         |         |         |         |         |         |         |         |          | B(400)<br>B(300)  |
| 1.0  | 105  |  |        |          |         |         |         | P(500)  |         |         |         |         |          | B(300)<br>C(300)  |
| 1.5  | 155  |  |        |          |         |         |         |         |         | B(200)  |         |         |          | B(300)<br>C(300)<br>C(300)  |
| 2.2  | 225  |  |        |          |         |         |         |         |         |         | B(200)  |         |          | C(300)<br>C(200)  |
| 3.3  | 335  |  |        |          |         |         |         |         |         |         | B(200)  |         |          | C(200)<br>C(200)<br>D(250)  |
| 4.7  | 475  |  |        |          |         |         |         |         |         |         |         |         |          | K(500)<br>R(500)<br>B(100,150)<br>B(200)<br>C(200)<br>C(200)<br>D(120)<br>D(120)<br>D(150)<br>D(250)  |
| 6.8  | 685  |  |        |          |         |         |         |         |         |         |         |         |          | A(200)<br>B(90,150)<br>T(100,150)<br>C(200)<br>C(200)<br>D(120)<br>D(120)<br>E(100,150)<br>D(120)   |
| 10   | 106  |  |        |          |         |         |         |         |         |         |         |         |          | A(300)<br>N(250,500)<br>R(500)<br>A(300)<br>A(200)<br>B(200)<br>T(150,200)<br>B(90,100,150)<br>B(200)<br>C(200)<br>Y(70)<br>D(120)<br>E(70,100)<br>E(100,150)<br>U*<br>U*                                 |
| 15   | 156  |  |        |          |         |         |         |         |         |         |         |         |          | A(300)<br>A(300)<br>A(200)<br>B(150)<br>B(100,150)<br>Y(90)<br>B(200), C(200)<br>D(70,100)<br>Y(70,100)<br>E(70,100)  |
| 22   | 226  |  |        |          |         |         |         |         |         |         |         |         |          | A(300)<br>A(300), K(400)<br>N(500), R(500)<br>S(400), T(150)<br>B(300)<br>T(70,150)<br>B(150)<br>B(90,150)<br>Y(70)<br>B(100,150), C(100)<br>D(60,100)<br>Y(70)<br>D(70,100)<br>Y*                        |
| 33   | 336  |  |        |          |         |         |         |         |         |         |         |         |          | A(300)<br>A(200)<br>B(70,200)<br>T(150)<br>B(70,200)<br>C(100)<br>T(70,150)<br>Y(45,60,70)<br>Y(70)<br>D(60,100)<br>X(70,100)<br>Y(60,70,100)<br>D(70,100)<br>E(55,70)                                    |
| 47   | 476  |  |        |          |         |         |         |         |         |         |         |         |          | A(200)<br>T(80)<br>A(70,100,200), B(70)<br>K(150,200,400)<br>P(500), R(500)<br>T(55,69,70,80,120)<br>B(70)<br>C(100)<br>X(45,70)<br>Y(45,70)<br>D(55)<br>X(55,70)<br>Y(70)<br>D(60,100)<br>E(50)<br>E(55) |
| 68   | 686  |  |        |          |         |         |         |         |         |         |         |         |          | A(250)<br>A(250)<br>B(70)<br>T(80)<br>B(55,70)<br>C(100)<br>T(200), W(70)<br>D(45,55)<br>Y(45,55)<br>D(50)<br>Y(50)<br>D(55)<br>E(45)<br>D(70)<br>E(50)   |
| 100  | 107  |  |        |          |         |         |         |         |         |         |         |         |          | A(200), B(70)<br>A(200)<br>B(40,70)<br>G(300)<br>T(150)<br>A(100,150)<br>B(45,55,69,70)<br>T(70,200)<br>D(45,55,80)<br>Y(25,45,55)<br>D(50), E(40)<br>Y(50)<br>D(55)<br>E(45)<br>D(55,70)<br>E(80)        |
| 150  | 157  |  |        |          |         |         |         |         |         |         |         |         |          | B(70)<br>B(70), Y(25,45)<br>B(25,35,45,55,69,70)<br>D(15,25,40)<br>H(70,200), W(40,70)<br>Y(15,25,40)<br>D(25,40,45,55)<br>Y(25,40,45,55)<br>D(40,50)<br>E(40)<br>Y(40,50)                                |
| 220  | 227  |  |        |          |         |         |         |         |         |         |         |         |          | B(35,45,70)<br>B(35,45,55,60,70)<br>D(15,25,40)<br>Y(15,25,40)<br>B(70,200)<br>D(25,35,40,50)<br>Y(15,25,35,40,50)<br>D(15,18,25,40,50)<br>Y(25,40,50)  |
| 330  | 337  |  |        |          |         |         |         |         |         |         |         |         |          | B(35,45,70)<br>Y(25,40)<br>D(25,40,50)<br>Y(25,40,50)<br>D(25,40,50)<br>Y(25,40,50)<br>E*   |
| 470  | 477  |  |        |          |         |         |         |         |         |         |         |         |          | D(15,25,40,50)<br>Y(15,25,40,50)<br>D(15,25,40,50)<br>Y(15,25,40,50)<br>X(55,100)   |
| 3300 | 208  |  |        |          |         |         |         |         |         |         |         |         |          | U*  |

Available Ratings, (ESR ratings in mOhms in brackets)

Engineering samples - please contact manufacturer

\*Codes under development – subject to change

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

# TCJ Series



## Tantalum Solid Electrolytic Chip Capacitors with Conductive Polymer Electrode

### RATINGS & PART NUMBER REFERENCE

| AVX Part No.           | Case Size | Cap (µF) | Rated Voltage (V) | Rated Temp. (°C) | Category Voltage (V) | Category Temp. (°C) | DCL (µA) Max. | DF % Max. | ESR Max. (mΩ) @ 100kHz | MSL | 100kHz RMS Current (mA) |      |       |       | Product Category |
|------------------------|-----------|----------|-------------------|------------------|----------------------|---------------------|---------------|-----------|------------------------|-----|-------------------------|------|-------|-------|------------------|
|                        |           |          |                   |                  |                      |                     |               |           |                        |     | 25°C                    | 85°C | 105°C | 125°C |                  |
| <b>2.5 Volt @ 85°C</b> |           |          |                   |                  |                      |                     |               |           |                        |     |                         |      |       |       |                  |
| TCJA686M002#0250       | A         | 68       | 2.5               | 85               | 2                    | 105                 | 17            | 6         | 250                    | 3   | 600                     | 400  | 300   | -     | 105°C            |
| TCJA107M002#0200       | A         | 100      | 2.5               | 85               | 2                    | 105                 | 25            | 6         | 200                    | 3   | 700                     | 500  | 300   | -     | 105°C            |
| TCJB107M002#0070       | B         | 100      | 2.5               | 85               | 1.7                  | 125                 | 25            | 6         | 70                     | 3   | 1300                    | 900  | 600   | 300   | 125°C            |
| TCJB157M002#0070       | B         | 150      | 2.5               | 85               | 2                    | 105                 | 37.5          | 6         | 70                     | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJB227M002#0035       | B         | 220      | 2.5               | 85               | 2                    | 105                 | 55            | 8         | 35                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJB227M002#0045       | B         | 220      | 2.5               | 85               | 2                    | 105                 | 55            | 8         | 45                     | 3   | 1700                    | 1200 | 800   | -     | 105°C            |
| TCJB227M002#0070       | B         | 220      | 2.5               | 85               | 2                    | 105                 | 55            | 8         | 70                     | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJB337M002#0035       | B         | 330      | 2.5               | 85               | 2                    | 105                 | 82.5          | 8         | 35                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJB337M002#0045       | B         | 330      | 2.5               | 85               | 2                    | 105                 | 82.5          | 8         | 45                     | 3   | 1700                    | 1200 | 800   | -     | 105°C            |
| TCJB337M002#0070       | B         | 330      | 2.5               | 85               | 2                    | 105                 | 82.5          | 8         | 70                     | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJY337M002#0025       | Y         | 330      | 2.5               | 85               | 2                    | 105                 | 82.5          | 6         | 25                     | 3   | 2700                    | 1900 | 1200  | -     | 105°C            |
| TCJY337M002#0040       | Y         | 330      | 2.5               | 85               | 2                    | 105                 | 82.5          | 6         | 40                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJD477M002#0015       | D         | 470      | 2.5               | 105              | 2.5                  | 105                 | 117.5         | 6         | 15                     | 3   | 3900                    | 2700 | 1800  | -     | 105°C            |
| TCJD477M002#0025       | D         | 470      | 2.5               | 85               | 2                    | 105                 | 117.5         | 6         | 25                     | 3   | 3000                    | 2100 | 1400  | -     | 105°C            |
| TCJD477M002#0040       | D         | 470      | 2.5               | 85               | 2                    | 105                 | 117.5         | 6         | 40                     | 3   | 2400                    | 1700 | 1100  | -     | 105°C            |
| TCJD477M002#0050       | D         | 470      | 2.5               | 85               | 2                    | 105                 | 117.5         | 6         | 50                     | 3   | 2100                    | 1500 | 900   | -     | 105°C            |
| TCJY477M002#0015       | Y         | 470      | 2.5               | 85               | 2.5                  | 85                  | 117.5         | 6         | 15                     | 3   | 3500                    | 2500 | -     | -     | 85°C             |
| TCJY477M002#0025       | Y         | 470      | 2.5               | 85               | 2                    | 105                 | 117.5         | 6         | 25                     | 3   | 2700                    | 1900 | 1200  | -     | 105°C            |
| TCJY477M002#0040       | Y         | 470      | 2.5               | 85               | 2                    | 105                 | 117.5         | 6         | 40                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJY477M002#0050       | Y         | 470      | 2.5               | 85               | 2                    | 105                 | 117.5         | 6         | 50                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| <b>4 Volt @ 85°C</b>   |           |          |                   |                  |                      |                     |               |           |                        |     |                         |      |       |       |                  |
| TCJA156M004#0300       | A         | 15       | 4                 | 85               | 2.7                  | 125                 | 6             | 6         | 300                    | 3   | 600                     | 400  | 300   | 200   | 125°C            |
| TCJA226M004#0300       | A         | 22       | 4                 | 85               | 2.7                  | 125                 | 8.8           | 6         | 300                    | 3   | 600                     | 400  | 300   | 200   | 125°C            |
| TCJA336M004#0300       | A         | 33       | 4                 | 85               | 2.7                  | 125                 | 13.2          | 6         | 300                    | 3   | 600                     | 400  | 300   | 200   | 125°C            |
| TCJA476M004#0200       | A         | 47       | 4                 | 85               | 3.2                  | 105                 | 18.8          | 6         | 200                    | 3   | 700                     | 500  | 300   | -     | 105°C            |
| TCJT476M004#0080       | T         | 47       | 4                 | 85               | 3.2                  | 105                 | 18.8          | 8         | 80                     | 3   | 1100                    | 800  | 500   | -     | 105°C            |
| TCJA686M004#0250       | A         | 68       | 4                 | 85               | 3.2                  | 105                 | 27.2          | 6         | 250                    | 3   | 600                     | 400  | 300   | -     | 105°C            |
| TCJB686M004#0070       | B         | 68       | 4                 | 85               | 2.7                  | 125                 | 27.2          | 6         | 70                     | 3   | 1300                    | 900  | 600   | 300   | 125°C            |
| TCJT686M004#0080       | T         | 68       | 4                 | 85               | 3.2                  | 105                 | 27.2          | 8         | 80                     | 3   | 1100                    | 800  | 500   | -     | 105°C            |
| TCJA107M004#0200       | A         | 100      | 4                 | 85               | 3.2                  | 105                 | 40            | 6         | 200                    | 3   | 700                     | 500  | 300   | -     | 105°C            |
| TCJB107M004#0040       | B         | 100      | 4                 | 85               | 3.2                  | 105                 | 40            | 8         | 40                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJB107M004#0070       | B         | 100      | 4                 | 85               | 2.7                  | 125                 | 40            | 8         | 70                     | 3   | 1300                    | 900  | 600   | 300   | 125°C            |
| TCJG107M004#0300       | G         | 100      | 4                 | 85               | 3.2                  | 105                 | 40            | 10        | 300                    | 3   | 600                     | 400  | 300   | -     | 105°C            |
| TCJT107M004#0150       | T         | 100      | 4                 | 85               | 3.2                  | 105                 | 40            | 8         | 150                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJB157M004#0070       | B         | 150      | 4                 | 85               | 3.2                  | 105                 | 60            | 6         | 70                     | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJY157M004#0025       | Y         | 150      | 4                 | 85               | 3.2                  | 105                 | 60            | 6         | 25                     | 3   | 2700                    | 1900 | 1200  | -     | 105°C            |
| TCJY157M004#0045       | Y         | 150      | 4                 | 85               | 3.2                  | 105                 | 60            | 6         | 45                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJB227M004#0035       | B         | 220      | 4                 | 85               | 3.2                  | 105                 | 88            | 10        | 35                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJB227M004#0045       | B         | 220      | 4                 | 85               | 3.2                  | 105                 | 88            | 10        | 45                     | 3   | 1700                    | 1200 | 800   | -     | 105°C            |
| TCJB227M004#0055       | B         | 220      | 4                 | 85               | 3.2                  | 105                 | 88            | 10        | 55                     | 3   | 1500                    | 1100 | 700   | -     | 105°C            |
| TCJB227M004#0060       | B         | 220      | 4                 | 85               | 3.2                  | 105                 | 88            | 10        | 60                     | 3   | 1400                    | 1000 | 600   | -     | 105°C            |
| TCJB227M004#0070       | B         | 220      | 4                 | 85               | 3.2                  | 105                 | 88            | 10        | 70                     | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJD227M004#0015       | D         | 220      | 4                 | 105              | 4                    | 105                 | 88            | 6         | 15                     | 3   | 3900                    | 2700 | 1800  | -     | 105°C            |
| TCJD227M004#0025       | D         | 220      | 4                 | 105              | 4                    | 105                 | 88            | 6         | 25                     | 3   | 3000                    | 2100 | 1400  | -     | 105°C            |
| TCJD227M004#0040       | D         | 220      | 4                 | 105              | 4                    | 105                 | 88            | 6         | 40                     | 3   | 2400                    | 1700 | 1100  | -     | 105°C            |
| TCJY227M004#0015       | Y         | 220      | 4                 | 85               | 4                    | 85                  | 88            | 6         | 15                     | 3   | 3500                    | 2500 | -     | -     | 85°C             |
| TCJY227M004#0025       | Y         | 220      | 4                 | 85               | 3.2                  | 105                 | 88            | 6         | 25                     | 3   | 2700                    | 1900 | 1200  | -     | 105°C            |
| TCJY227M004#0040       | Y         | 220      | 4                 | 85               | 3.2                  | 105                 | 88            | 6         | 40                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJD337M004#0025       | D         | 330      | 4                 | 85               | 3.2                  | 105                 | 132           | 6         | 25                     | 3   | 3000                    | 2100 | 1400  | -     | 105°C            |
| TCJD337M004#0040       | D         | 330      | 4                 | 85               | 3.2                  | 105                 | 132           | 6         | 40                     | 3   | 2400                    | 1700 | 1100  | -     | 105°C            |
| TCJD337M004#0050       | D         | 330      | 4                 | 85               | 3.2                  | 105                 | 132           | 6         | 50                     | 3   | 2100                    | 1500 | 900   | -     | 105°C            |
| TCJY337M004#0025       | Y         | 330      | 4                 | 85               | 3.2                  | 105                 | 132           | 6         | 25                     | 3   | 2700                    | 1900 | 1200  | -     | 105°C            |
| TCJY337M004#0040       | Y         | 330      | 4                 | 85               | 3.2                  | 105                 | 132           | 6         | 40                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJY337M004#0050       | Y         | 330      | 4                 | 85               | 3.2                  | 105                 | 132           | 6         | 50                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJD477M004#0015       | D         | 470      | 4                 | 105              | 4                    | 105                 | 188           | 6         | 15                     | 3   | 3900                    | 2700 | 1800  | -     | 105°C            |
| TCJD477M004#0025       | D         | 470      | 4                 | 85               | 3.2                  | 105                 | 188           | 6         | 25                     | 3   | 3000                    | 2100 | 1400  | -     | 105°C            |
| TCJD477M004#0040       | D         | 470      | 4                 | 105              | 4                    | 105                 | 188           | 6         | 40                     | 3   | 2400                    | 1700 | 1100  | -     | 105°C            |
| TCJD477M004#0050       | D         | 470      | 4                 | 105              | 4                    | 105                 | 188           | 6         | 50                     | 3   | 2100                    | 1500 | 900   | -     | 105°C            |
| TCJY477M004#0015       | Y         | 470      | 4                 | 85               | 4                    | 85                  | 188           | 6         | 15                     | 3   | 3500                    | 2500 | -     | -     | 85°C             |
| TCJY477M004#0025       | Y         | 470      | 4                 | 85               | 3.2                  | 105                 | 188           | 6         | 25                     | 3   | 2700                    | 1900 | 1200  | -     | 105°C            |
| TCJY477M004#0040       | Y         | 470      | 4                 | 85               | 3.2                  | 105                 | 188           | 6         | 40                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJY477M004#0050       | Y         | 470      | 4                 | 85               | 3.2                  | 105                 | 188           | 6         | 50                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| <b>6.3 Volt @ 85°C</b> |           |          |                   |                  |                      |                     |               |           |                        |     |                         |      |       |       |                  |
| TCJA106M006#0300       | A         | 10       | 6.3               | 85               | 4                    | 125                 | 6             | 6         | 300                    | 3   | 600                     | 400  | 300   | 200   | 125°C            |
| TCJN106M006#0250       | N         | 10       | 6.3               | 85               | 5                    | 105                 | 6             | 6         | 250                    | 3   | 600                     | 400  | 300   | -     | 105°C            |
| TCJN106M006#0500       | N         | 10       | 6.3               | 85               | 5                    | 105                 | 6             | 6         | 500                    | 3   | 400                     | 300  | 200   | -     | 105°C            |
| TCJR106M006#0500       | R         | 10       | 6.3               | 85               | 5                    | 105                 | 6             | 6         | 500                    | 3   | 400                     | 300  | 200   | -     | 105°C            |
| TCJA156M006#0300       | A         | 15       | 6.3               | 85               | 4                    | 125                 | 9             | 6         | 300                    | 3   | 600                     | 400  | 300   | 200   | 125°C            |
| TCJA226M006#0300       | A         | 22       | 6.3               | 85               | 4                    | 125                 | 13.2          | 6         | 300                    | 3   | 600                     | 400  | 300   | 200   | 125°C            |
| TCJK226M006#0400       | K         | 22       | 6.3               | 85               | 5                    | 105                 | 13.2          | 8         | 400                    | 3   | 500                     | 400  | 200   | -     | 105°C            |
| TCJN226M006#0500       | N         | 22       | 6.3               | 85               | 5                    | 105                 | 13.2          | 10        | 500                    | 3   | 400                     | 300  | 200   | -     | 105°C            |
| TCJR226M006#0500       | R         | 22       | 6.3               | 85               | 5                    | 105                 | 13.2          | 10        | 500                    | 3   | 400                     | 300  | 200   | -     | 105°C            |



# TCJ Series



## Tantalum Solid Electrolytic Chip Capacitors with Conductive Polymer Electrode

### RATINGS & PART NUMBER REFERENCE

| AVX Part No.          | Case Size | Cap (µF) | Rated Voltage (V) | Rated Temp. (°C) | Category Voltage (V) | Category Temp. (°C) | DCL (µA) Max. | DF % Max. | ESR Max. (mΩ) @ 100kHz | MSL | 100kHz RMS Current (mA) |      |       |       | Product Category |
|-----------------------|-----------|----------|-------------------|------------------|----------------------|---------------------|---------------|-----------|------------------------|-----|-------------------------|------|-------|-------|------------------|
|                       |           |          |                   |                  |                      |                     |               |           |                        |     | 25°C                    | 85°C | 105°C | 125°C |                  |
| TCJW686M006#0070      | W         | 68       | 6.3               | 85               | 4                    | 125                 | 40.8          | 8         | 70                     | 3   | 1400                    | 1000 | 600   | 400   | 125°C            |
| TCJS226M006#0400      | S         | 22       | 6.3               | 85               | 5                    | 105                 | 13.2          | 8         | 400                    | 3   | 500                     | 400  | 200   | -     | 105°C            |
| TCJT226M006#0150      | T         | 22       | 6.3               | 85               | 5                    | 105                 | 13.2          | 6         | 150                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJA336M006#0200      | A         | 33       | 6.3               | 85               | 5                    | 105                 | 19.8          | 6         | 200                    | 3   | 700                     | 500  | 300   | -     | 105°C            |
| TCJB336M006#0070      | B         | 33       | 6.3               | 85               | 4                    | 125                 | 19.8          | 6         | 70                     | 3   | 1300                    | 900  | 600   | 300   | 125°C            |
| TCJB336M006#0200      | B         | 33       | 6.3               | 85               | 4                    | 125                 | 19.8          | 6         | 200                    | 3   | 800                     | 600  | 400   | 200   | 125°C            |
| TCJT336M006#0150      | T         | 33       | 6.3               | 85               | 5                    | 105                 | 19.8          | 8         | 150                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJA476M006#0070      | A         | 47       | 6.3               | 85               | 5                    | 105                 | 28.2          | 6         | 70                     | 3   | 1200                    | 800  | 500   | -     | 105°C            |
| TCJA476M006#0100      | A         | 47       | 6.3               | 85               | 5                    | 105                 | 28.2          | 6         | 100                    | 3   | 1000                    | 700  | 500   | -     | 105°C            |
| TCJA476M006#0200      | A         | 47       | 6.3               | 85               | 5                    | 105                 | 28.2          | 6         | 200                    | 3   | 700                     | 500  | 300   | -     | 105°C            |
| TCJB476M006#0070      | B         | 47       | 6.3               | 85               | 4                    | 125                 | 28.2          | 6         | 70                     | 3   | 1300                    | 900  | 600   | 300   | 125°C            |
| TCJK476M006#0150      | K         | 47       | 6.3               | 85               | 5                    | 105                 | 28.2          | 6         | 150                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJK476M006#0200      | K         | 47       | 6.3               | 85               | 5                    | 105                 | 28.2          | 6         | 200                    | 3   | 700                     | 500  | 300   | -     | 105°C            |
| TCJA476M006#0400      | K         | 47       | 6.3               | 85               | 5                    | 105                 | 28.2          | 6         | 400                    | 3   | 500                     | 400  | 200   | -     | 105°C            |
| TCJP476M006#0500      | P         | 47       | 6.3               | 85               | 5                    | 105                 | 28.2          | 10        | 500                    | 3   | 400                     | 300  | 200   | -     | 105°C            |
| TCJR476M006#0500      | R         | 47       | 6.3               | 85               | 5                    | 105                 | 28.2          | 10        | 500                    | 3   | 400                     | 300  | 200   | -     | 105°C            |
| TCJT476M006#0055      | T         | 47       | 6.3               | 85               | 5                    | 105                 | 28.2          | 8         | 55                     | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJT476M006#0070      | T         | 47       | 6.3               | 85               | 5                    | 105                 | 28.2          | 8         | 70                     | 3   | 1200                    | 800  | 500   | -     | 105°C            |
| TCJT476M006#0069      | T         | 47       | 6.3               | 85               | 5                    | 105                 | 20            | 8         | 69                     | 3   | 1200                    | 800  | 500   | -     | 105°C            |
| TCJT476M006#0080      | T         | 47       | 6.3               | 85               | 5                    | 105                 | 28.2          | 8         | 80                     | 3   | 1100                    | 800  | 500   | -     | 105°C            |
| TCJT476M006#0120      | T         | 47       | 6.3               | 85               | 5                    | 105                 | 28.2          | 8         | 120                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJB686M006#0055      | B         | 68       | 6.3               | 85               | 4                    | 125                 | 40.8          | 8         | 55                     | 3   | 1500                    | 1100 | 700   | 400   | 125°C            |
| TCJB686M006#0070      | B         | 68       | 6.3               | 85               | 4                    | 125                 | 40.8          | 8         | 70                     | 3   | 1300                    | 900  | 600   | 300   | 125°C            |
| TCJC686M006#0100      | C         | 68       | 6.3               | 85               | 4                    | 125                 | 40.8          | 6         | 100                    | 3   | 1300                    | 900  | 600   | 300   | 125°C            |
| TCJT686M006#0200      | T         | 68       | 6.3               | 85               | 5                    | 105                 | 40.8          | 8         | 200                    | 3   | 700                     | 500  | 300   | -     | 105°C            |
| TCJA107M006#0100      | A         | 100      | 6.3               | 85               | 6.3                  | 85                  | 60            | 10        | 100                    | 3   | 1000                    | 700  | -     | -     | 85°C             |
| TCJA107M006#0150      | A         | 100      | 6.3               | 85               | 6.3                  | 85                  | 60            | 10        | 150                    | 3   | 800                     | 600  | -     | -     | 85°C             |
| TCJB107M006#0045      | B         | 100      | 6.3               | 85               | 5                    | 105                 | 60            | 10        | 45                     | 3   | 1700                    | 1200 | 800   | -     | 105°C            |
| TCJB107M006#0055      | B         | 100      | 6.3               | 85               | 5                    | 105                 | 60            | 10        | 55                     | 3   | 1500                    | 1100 | 700   | -     | 105°C            |
| TCJB107M006#0069      | B         | 100      | 6.3               | 85               | 5                    | 105                 | 60            | 10        | 69                     | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJB107M006#0070      | B         | 100      | 6.3               | 85               | 5                    | 105                 | 60            | 10        | 70                     | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJT107M006#0070      | T         | 100      | 6.3               | 85               | 5                    | 105                 | 60            | 10        | 70                     | 3   | 1200                    | 800  | 500   | -     | 105°C            |
| TCJT107M006#0200      | T         | 100      | 6.3               | 85               | 5                    | 105                 | 60            | 10        | 200                    | 3   | 700                     | 500  | 300   | -     | 105°C            |
| TCJB157M006#0035      | B         | 150      | 6.3               | 85               | 5                    | 105                 | 90            | 10        | 35                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJB157M006#0045      | B         | 150      | 6.3               | 85               | 5                    | 105                 | 90            | 10        | 45                     | 3   | 1700                    | 1200 | 800   | -     | 105°C            |
| TCJB157M006#0055      | B         | 150      | 6.3               | 85               | 5                    | 105                 | 90            | 10        | 55                     | 3   | 1500                    | 1100 | 700   | -     | 105°C            |
| TCJB157M006#0069      | B         | 150      | 6.3               | 85               | 5                    | 105                 | 90            | 10        | 69                     | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJB157M006#0070      | B         | 150      | 6.3               | 85               | 5                    | 105                 | 90            | 10        | 70                     | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJD157M006#0015      | D         | 150      | 6.3               | 105              | 6.3                  | 105                 | 90            | 6         | 15                     | 3   | 3900                    | 2700 | 1800  | -     | 105°C            |
| TCJD157M006#0025      | D         | 150      | 6.3               | 105              | 6.3                  | 105                 | 90            | 6         | 25                     | 3   | 3000                    | 2100 | 1400  | -     | 105°C            |
| TCJD157M006#0040      | D         | 150      | 6.3               | 105              | 6.3                  | 105                 | 90            | 6         | 40                     | 3   | 2400                    | 1700 | 1100  | -     | 105°C            |
| TCJH157M006#0200      | H         | 150      | 6.3               | 85               | 5                    | 105                 | 90            | 6         | 200                    | 3   | 700                     | 500  | 300   | -     | 105°C            |
| TCJW157M006#0040      | W         | 150      | 6.3               | 85               | 5                    | 105                 | 90            | 6         | 40                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJW157M006#0070      | W         | 150      | 6.3               | 85               | 5                    | 105                 | 90            | 6         | 70                     | 3   | 1400                    | 1000 | 600   | -     | 105°C            |
| TCJY157M006#0015      | Y         | 150      | 6.3               | 105              | 6.3                  | 105                 | 90            | 6         | 15                     | 3   | 3500                    | 2500 | 1600  | -     | 105°C            |
| TCJY157M006#0025      | Y         | 150      | 6.3               | 85               | 5                    | 105                 | 90            | 6         | 25                     | 3   | 2700                    | 1900 | 1200  | -     | 105°C            |
| TCJY157M006#0040      | Y         | 150      | 6.3               | 85               | 5                    | 105                 | 90            | 6         | 40                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJB227M006#0070      | B         | 220      | 6.3               | 85               | 5                    | 105                 | 132           | 10        | 70                     | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJB227M006#0200      | B         | 220      | 6.3               | 85               | 5                    | 105                 | 132           | 10        | 200                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJD227M006#0025      | D         | 220      | 6.3               | 85               | 5                    | 105                 | 132           | 6         | 25                     | 3   | 3000                    | 2100 | 1400  | -     | 105°C            |
| TCJD227M006#0035      | D         | 220      | 6.3               | 85               | 5                    | 105                 | 132           | 6         | 35                     | 3   | 2500                    | 1800 | 1100  | -     | 105°C            |
| TCJD227M006#0040      | D         | 220      | 6.3               | 85               | 5                    | 105                 | 132           | 6         | 40                     | 3   | 2400                    | 1700 | 1100  | -     | 105°C            |
| TCJD227M006#0050      | D         | 220      | 6.3               | 85               | 5                    | 105                 | 132           | 6         | 50                     | 3   | 2100                    | 1500 | 900   | -     | 105°C            |
| TCJY227M006#0025      | Y         | 220      | 6.3               | 85               | 5                    | 105                 | 132           | 6         | 25                     | 3   | 2700                    | 1900 | 1200  | -     | 105°C            |
| TCJY227M006#0035      | Y         | 220      | 6.3               | 85               | 5                    | 105                 | 132           | 6         | 35                     | 3   | 2300                    | 1600 | 1000  | -     | 105°C            |
| TCJY227M006#0040      | Y         | 220      | 6.3               | 85               | 5                    | 105                 | 132           | 6         | 40                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJY227M006#0050      | Y         | 220      | 6.3               | 85               | 5                    | 105                 | 132           | 6         | 50                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJD337M006#0025      | D         | 330      | 6.3               | 85               | 5                    | 105                 | 198           | 6         | 25                     | 3   | 3000                    | 2100 | 1400  | -     | 105°C            |
| TCJD337M006#0040      | D         | 330      | 6.3               | 105              | 6.3                  | 105                 | 198           | 6         | 40                     | 3   | 2400                    | 1700 | 1100  | -     | 105°C            |
| TCJD337M006#0050      | D         | 330      | 6.3               | 105              | 6.3                  | 105                 | 198           | 6         | 50                     | 3   | 2100                    | 1500 | 900   | -     | 105°C            |
| TCJY337M006#0025      | Y         | 330      | 6.3               | 85               | 5                    | 105                 | 198           | 12        | 25                     | 3   | 2700                    | 1900 | 1200  | -     | 105°C            |
| TCJY337M006#0040      | Y         | 330      | 6.3               | 85               | 5                    | 105                 | 198           | 12        | 40                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJY337M006#0050      | Y         | 330      | 6.3               | 85               | 5                    | 105                 | 198           | 12        | 50                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJX477M006#0055      | X         | 470      | 6.3               | 85               | 5                    | 105                 | 282           | 6         | 55                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJX477M006#0100      | X         | 470      | 6.3               | 85               | 5                    | 105                 | 282           | 6         | 100                    | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| <b>10 Volt @ 85°C</b> |           |          |                   |                  |                      |                     |               |           |                        |     |                         |      |       |       |                  |
| TCJK475M010#0500      | K         | 4.7      | 10                | 85               | 8                    | 105                 | 4.7           | 6         | 500                    | 3   | 400                     | 300  | 200   | -     | 105°C            |
| TCJR475M010#0500      | R         | 4.7      | 10                | 85               | 8                    | 105                 | 4.7           | 6         | 500                    | 3   | 400                     | 300  | 200   | -     | 105°C            |
| TCJA106M010#0300      | A         | 10       | 10                | 85               | 7                    | 125                 | 10            | 6         | 300                    | 3   | 600                     | 400  | 300   | 200   | 125°C            |
| TCJA156M010#0200      | A         | 15       | 10                | 85               | 7                    | 125                 | 15            | 6         | 200                    | 3   | 700                     | 500  | 300   | 200   | 125°C            |
| TCJB226M010#0300      | B         | 22       | 10                | 85               | 7                    | 125                 | 22            | 6         | 300                    | 3   | 600                     | 400  | 300   | 200   | 125°C            |
| TCJT226M010#0070      | T         | 22       | 10                | 85               | 8                    | 105                 | 22            | 6         | 70                     | 3   | 1200                    | 800  | 500   | -     | 105°C            |
| TCJT226M010#0150      | T         | 22       | 10                | 85               | 8                    | 105                 | 22            | 6         | 150                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJB336M010#0070      | B         | 33       | 10                | 85               | 7                    | 125                 | 33            | 6         | 70                     | 3   | 1300                    | 900  | 600   | 300   | 125°C            |
| TCJB336M010#0200      | B         | 33       | 10                | 85               | 7                    | 125                 | 33            | 6         | 200                    | 3   | 800                     | 600  | 400   | 200   | 125°C            |



# TCJ Series



## Tantalum Solid Electrolytic Chip Capacitors with Conductive Polymer Electrode

### RATINGS & PART NUMBER REFERENCE

| AVX Part No.          | Case Size | Cap (µF) | Rated Voltage (V) | Rated Temp. (°C) | Category Voltage (V) | Category Temp. (°C) | DCL (µA) Max. | DF % Max. | ESR Max. (mΩ) @ 100kHz | MSL | 100kHz RMS Current (mA) |      |       |       | Product Category |
|-----------------------|-----------|----------|-------------------|------------------|----------------------|---------------------|---------------|-----------|------------------------|-----|-------------------------|------|-------|-------|------------------|
|                       |           |          |                   |                  |                      |                     |               |           |                        |     | 25°C                    | 85°C | 105°C | 125°C |                  |
| TCJC336M010#0100      | C         | 33       | 10                | 85               | 7                    | 125                 | 33            | 6         | 100                    | 3   | 1300                    | 900  | 600   | 300   | 125°C            |
| TCJT336M010#0070      | T         | 33       | 10                | 85               | 8                    | 105                 | 33            | 6         | 70                     | 3   | 1200                    | 800  | 500   | -     | 105°C            |
| TCJT336M010#0150      | T         | 33       | 10                | 85               | 8                    | 105                 | 33            | 6         | 150                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJB476M010#0070      | B         | 47       | 10                | 85               | 8                    | 105                 | 47            | 6         | 70                     | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJC476M010#0100      | C         | 47       | 10                | 85               | 7                    | 125                 | 47            | 6         | 100                    | 3   | 1300                    | 900  | 600   | 300   | 125°C            |
| TCJD686M010#0045      | D         | 68       | 10                | 85               | 8                    | 105                 | 68            | 6         | 45                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJD686M010#0055      | D         | 68       | 10                | 85               | 8                    | 105                 | 68            | 6         | 55                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJY686M010#0045      | Y         | 68       | 10                | 85               | 8                    | 105                 | 68            | 6         | 45                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJY686M010#0055      | Y         | 68       | 10                | 85               | 8                    | 105                 | 68            | 6         | 55                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJD107M010#0045      | D         | 100      | 10                | 85               | 8                    | 105                 | 100           | 6         | 45                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJD107M010#0055      | D         | 100      | 10                | 85               | 8                    | 105                 | 100           | 6         | 55                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJD107M010#0080      | D         | 100      | 10                | 85               | 8                    | 105                 | 100           | 6         | 80                     | 3   | 1700                    | 1200 | 800   | -     | 105°C            |
| TCJY107M010#0025      | Y         | 100      | 10                | 85               | 8                    | 105                 | 100           | 6         | 25                     | 3   | 2700                    | 1900 | 1200  | -     | 105°C            |
| TCJY107M010#0045      | Y         | 100      | 10                | 85               | 8                    | 105                 | 100           | 6         | 45                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJY107M010#0055      | Y         | 100      | 10                | 85               | 8                    | 105                 | 100           | 6         | 55                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJD157M010#0025      | D         | 150      | 10                | 85               | 8                    | 105                 | 150           | 6         | 25                     | 3   | 3000                    | 2100 | 1400  | -     | 105°C            |
| TCJD157M010#0040      | D         | 150      | 10                | 85               | 8                    | 105                 | 150           | 6         | 40                     | 3   | 2400                    | 1700 | 1100  | -     | 105°C            |
| TCJD157M010#0045      | D         | 150      | 10                | 85               | 8                    | 105                 | 150           | 6         | 45                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJD157M010#0055      | D         | 150      | 10                | 85               | 8                    | 105                 | 150           | 6         | 55                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJY157M010#0025      | Y         | 150      | 10                | 85               | 8                    | 105                 | 150           | 6         | 25                     | 3   | 2700                    | 1900 | 1200  | -     | 105°C            |
| TCJY157M010#0040      | Y         | 150      | 10                | 85               | 8                    | 105                 | 150           | 6         | 40                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJY157M010#0045      | Y         | 150      | 10                | 85               | 8                    | 105                 | 150           | 6         | 45                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJY157M010#0055      | Y         | 150      | 10                | 85               | 8                    | 105                 | 150           | 6         | 55                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJD227M010#0025      | D         | 220      | 10                | 85               | 8                    | 105                 | 220           | 6         | 25                     | 3   | 3000                    | 2100 | 1400  | -     | 105°C            |
| TCJD227M010#0040      | D         | 220      | 10                | 85               | 8                    | 105                 | 220           | 6         | 40                     | 3   | 2400                    | 1700 | 1100  | -     | 105°C            |
| TCJD227M010#0050      | D         | 220      | 10                | 85               | 8                    | 105                 | 220           | 6         | 50                     | 3   | 2100                    | 1500 | 900   | -     | 105°C            |
| TCJY227M010#0025      | Y         | 220      | 10                | 85               | 8                    | 105                 | 220           | 6         | 25                     | 3   | 2700                    | 1900 | 1200  | -     | 105°C            |
| TCJY227M010#0040      | Y         | 220      | 10                | 85               | 8                    | 105                 | 220           | 6         | 40                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJY227M010#0050      | Y         | 220      | 10                | 85               | 8                    | 105                 | 220           | 6         | 50                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| <b>16 Volt @ 85°C</b> |           |          |                   |                  |                      |                     |               |           |                        |     |                         |      |       |       |                  |
| TCJA685M016#0200      | A         | 6.8      | 16                | 85               | 10                   | 125                 | 10.9          | 6         | 200                    | 3   | 700                     | 500  | 300   | 200   | 125°C            |
| TCJA106M016#0200      | A         | 10       | 16                | 85               | 10                   | 125                 | 16            | 6         | 200                    | 3   | 700                     | 500  | 300   | 200   | 125°C            |
| TCJB106M016#0200      | B         | 10       | 16                | 85               | 10                   | 125                 | 16            | 6         | 200                    | 3   | 800                     | 600  | 400   | 200   | 125°C            |
| TCJT106M016#0150      | T         | 10       | 16                | 85               | 10                   | 125                 | 16            | 6         | 150                    | 3   | 800                     | 600  | 400   | 200   | 125°C            |
| TCJT106M016#0200      | T         | 10       | 16                | 85               | 10                   | 125                 | 16            | 6         | 200                    | 3   | 700                     | 500  | 300   | 200   | 125°C            |
| TCJB156M016#0150      | B         | 15       | 16                | 85               | 10                   | 125                 | 24            | 6         | 150                    | 3   | 900                     | 600  | 400   | 200   | 125°C            |
| TCJB226M016#0150      | B         | 22       | 16                | 85               | 10                   | 125                 | 35.2          | 6         | 150                    | 3   | 900                     | 600  | 400   | 200   | 125°C            |
| TCJY336M016#0045      | Y         | 33       | 16                | 105              | 16                   | 105                 | 52.8          | 6         | 45                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJY336M016#0060      | Y         | 33       | 16                | 105              | 16                   | 105                 | 52.8          | 6         | 60                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJY336M016#0070      | Y         | 33       | 16                | 105              | 16                   | 105                 | 52.8          | 6         | 70                     | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJX476M016#0045      | X         | 47       | 16                | 105              | 16                   | 105                 | 75.2          | 6         | 45                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJX476M016#0070      | X         | 47       | 16                | 105              | 16                   | 105                 | 75.2          | 6         | 70                     | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJY476M016#0045      | Y         | 47       | 16                | 105              | 16                   | 105                 | 75.2          | 6         | 45                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJY476M016#0070      | Y         | 47       | 16                | 105              | 16                   | 105                 | 75.2          | 6         | 70                     | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJD686M016#0050      | D         | 68       | 16                | 105              | 16                   | 105                 | 108.8         | 6         | 50                     | 3   | 2100                    | 1500 | 900   | -     | 105°C            |
| TCJY686M016#0050      | Y         | 68       | 16                | 105              | 16                   | 105                 | 108.8         | 6         | 50                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJD107M016#0050      | D         | 100      | 16                | 105              | 16                   | 105                 | 160           | 6         | 50                     | 3   | 2100                    | 1500 | 900   | -     | 105°C            |
| TCJE107M016#0040      | E         | 100      | 16                | 105              | 16                   | 105                 | 160           | 6         | 40                     | 3   | 2500                    | 1800 | 1100  | -     | 105°C            |
| TCJY107M016#0050      | Y         | 100      | 16                | 105              | 16                   | 105                 | 160           | 6         | 50                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJD157M016#0040      | D         | 150      | 16                | 85               | 16                   | 85                  | 240           | 6         | 40                     | 3   | 2400                    | 1700 | -     | -     | 85°C             |
| TCJD157M016#0050      | D         | 150      | 16                | 85               | 16                   | 85                  | 240           | 6         | 50                     | 3   | 2100                    | 1500 | -     | -     | 85°C             |
| TCJE157M016#0040      | E         | 150      | 16                | 105              | 16                   | 105                 | 240           | 6         | 40                     | 3   | 2500                    | 1800 | 1100  | -     | 105°C            |
| TCJY157M016#0040      | Y         | 150      | 16                | 85               | 16                   | 85                  | 240           | 6         | 40                     | 3   | 2200                    | 1500 | -     | -     | 85°C             |
| TCJY157M016#0050      | Y         | 150      | 16                | 85               | 16                   | 85                  | 240           | 6         | 50                     | 3   | 1900                    | 1300 | -     | -     | 85°C             |
| <b>20 Volt @ 85°C</b> |           |          |                   |                  |                      |                     |               |           |                        |     |                         |      |       |       |                  |
| TCJB226M020#0090      | B         | 22       | 20                | 85               | 16                   | 105                 | 44            | 6         | 90                     | 3   | 1200                    | 800  | 500   | -     | 105°C            |
| TCJB226M020#0150      | B         | 22       | 20                | 85               | 16                   | 105                 | 44            | 6         | 150                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJY226M020#0070      | Y         | 22       | 20                | 105              | 20                   | 105                 | 44            | 6         | 70                     | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJY336M020#0070      | Y         | 33       | 20                | 105              | 20                   | 105                 | 66            | 6         | 70                     | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJD476M020#0055      | D         | 47       | 20                | 105              | 20                   | 105                 | 94            | 6         | 55                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJX476M020#0055      | X         | 47       | 20                | 85               | 16                   | 105                 | 94            | 6         | 55                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJX476M020#0070      | X         | 47       | 20                | 85               | 16                   | 105                 | 94            | 6         | 70                     | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJY476M020#0070      | Y         | 47       | 20                | 105              | 20                   | 105                 | 94            | 6         | 70                     | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJD686M020#0055      | D         | 68       | 20                | 85               | 16                   | 105                 | 136           | 6         | 55                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJE686M020#0045      | E         | 68       | 20                | 105              | 20                   | 105                 | 136           | 6         | 45                     | 3   | 2400                    | 1700 | 1100  | -     | 105°C            |
| TCJD107M020#0055      | D         | 100      | 20                | 85               | 16                   | 105                 | 200           | 6         | 55                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJE107M020#0045      | E         | 100      | 20                | 85               | 16                   | 105                 | 200           | 6         | 45                     | 3   | 2400                    | 1700 | 1100  | -     | 105°C            |
| <b>25 Volt @ 85°C</b> |           |          |                   |                  |                      |                     |               |           |                        |     |                         |      |       |       |                  |
| TCJP105M025#0500      | P         | 1.0      | 25                | 105              | 25                   | 105                 | 2.5           | 6         | 500                    | 3   | 400                     | 300  | 200   | -     | 105°C            |
| TCJB475M025#0100      | B         | 4.7      | 25                | 85               | 20                   | 105                 | 11.8          | 6         | 100                    | 3   | 1100                    | 800  | 500   | -     | 105°C            |
| TCJB475M025#0150      | B         | 4.7      | 25                | 85               | 20                   | 105                 | 11.8          | 6         | 150                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJB685M025#0090      | B         | 6.8      | 25                | 105              | 25                   | 105                 | 17            | 6         | 90                     | 3   | 1200                    | 800  | 500   | -     | 105°C            |
| TCJB685M025#0150      | B         | 6.8      | 25                | 85               | 20                   | 105                 | 17            | 6         | 150                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJT685M025#0100      | T         | 6.8      | 25                | 85               | 20                   | 105                 | 17            | 6         | 100                    | 3   | 1000                    | 700  | 500   | -     | 105°C            |
| TCJT685M025#0150      | T         | 6.8      | 25                | 85               | 20                   | 105                 | 17            | 6         | 150                    | 3   | 800                     | 600  | 400   | -     | 105°C            |





# TCJ Series



## Tantalum Solid Electrolytic Chip Capacitors with Conductive Polymer Electrode

### RATINGS & PART NUMBER REFERENCE

| AVX Part No.          | Case Size | Cap (µF) | Rated Voltage (V) | Rated Temp. (°C) | Category Voltage (V) | Category Temp. (°C) | DCL (µA) Max. | DF % Max. | ESR Max. (mΩ) @ 100kHz | MSL | 100kHz RMS Current (mA) |      |       |       | Product Category |
|-----------------------|-----------|----------|-------------------|------------------|----------------------|---------------------|---------------|-----------|------------------------|-----|-------------------------|------|-------|-------|------------------|
|                       |           |          |                   |                  |                      |                     |               |           |                        |     | 25°C                    | 85°C | 105°C | 125°C |                  |
| TCJB106M025#0090      | B         | 10       | 25                | 105              | 25                   | 105                 | 25            | 6         | 90                     | 3   | 1200                    | 800  | 500   | -     | 105°C            |
| TCJB106M025#0100      | B         | 10       | 25                | 105              | 25                   | 105                 | 25            | 6         | 100                    | 3   | 1100                    | 800  | 500   | -     | 105°C            |
| TCJB106M025#0150      | B         | 10       | 25                | 105              | 25                   | 105                 | 25            | 6         | 150                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJB156M025#0100      | B         | 15       | 25                | 105              | 25                   | 105                 | 37.5          | 6         | 100                    | 3   | 1100                    | 800  | 500   | -     | 105°C            |
| TCJB156M025#0150      | B         | 15       | 25                | 105              | 25                   | 105                 | 37.5          | 6         | 150                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJY156M025#0090      | Y         | 15       | 25                | 105              | 25                   | 105                 | 37.5          | 6         | 90                     | 3   | 1400                    | 1000 | 600   | -     | 105°C            |
| TCJB226M025#0100      | B         | 22       | 25                | 85               | 20                   | 105                 | 55            | 6         | 100                    | 3   | 1100                    | 800  | 500   | -     | 105°C            |
| TCJB226M025#0150      | B         | 22       | 25                | 85               | 20                   | 105                 | 55            | 6         | 150                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJC226M025#0100      | C         | 22       | 25                | 85               | 20                   | 105                 | 55            | 6         | 100                    | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJD226M025#0060      | D         | 22       | 25                | 105              | 25                   | 105                 | 55            | 6         | 60                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJD226M025#0100      | D         | 22       | 25                | 105              | 25                   | 105                 | 55            | 6         | 100                    | 3   | 1500                    | 1100 | 700   | -     | 105°C            |
| TCJY226M025#0070      | Y         | 22       | 25                | 85               | 20                   | 105                 | 55            | 6         | 70                     | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJD336M025#0060      | D         | 33       | 25                | 105              | 25                   | 105                 | 82.5          | 6         | 60                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJD336M025#0100      | D         | 33       | 25                | 105              | 25                   | 105                 | 82.5          | 6         | 100                    | 3   | 1500                    | 1100 | 700   | -     | 105°C            |
| TCJX336M025#0070      | X         | 33       | 25                | 105              | 25                   | 105                 | 82.5          | 6         | 70                     | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJX336M025#0100      | X         | 33       | 25                | 105              | 25                   | 105                 | 82.5          | 6         | 100                    | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJY336M025#0060      | Y         | 33       | 25                | 105              | 25                   | 105                 | 82.5          | 6         | 60                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJY336M025#0070      | Y         | 33       | 25                | 105              | 25                   | 105                 | 82.5          | 6         | 70                     | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJY336M025#0100      | Y         | 33       | 25                | 105              | 25                   | 105                 | 82.5          | 6         | 100                    | 3   | 1400                    | 1000 | 600   | -     | 105°C            |
| TCJD476M025#0060      | D         | 47       | 25                | 85               | 20                   | 105                 | 117.5         | 6         | 60                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJD476M025#0100      | D         | 47       | 25                | 85               | 20                   | 105                 | 117.5         | 6         | 100                    | 3   | 1500                    | 1100 | 700   | -     | 105°C            |
| TCJE476M025#0050      | E         | 47       | 25                | 85               | 20                   | 105                 | 117.5         | 6         | 50                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJD686M025#0070      | D         | 68       | 25                | 105              | 25                   | 105                 | 170           | 6         | 70                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJE686M025#0050      | E         | 68       | 25                | 85               | 20                   | 105                 | 170           | 6         | 50                     | 3   | 2200                    | 1500 | 1000  | -     | 105°C            |
| TCJD107M025#0055      | D         | 100      | 25                | 105              | 25                   | 105                 | 250           | 6         | 55                     | 3   | 2000                    | 1400 | 900   | -     | 105°C            |
| TCJD107M025#0070      | D         | 100      | 25                | 105              | 25                   | 105                 | 250           | 6         | 70                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJE107M025#0080      | E         | 100      | 25                | 105              | 25                   | 105                 | 250           | 6         | 80                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| <b>35 Volt @ 85°C</b> |           |          |                   |                  |                      |                     |               |           |                        |     |                         |      |       |       |                  |
| TCJB155M035#0200      | B         | 1.5      | 35                | 105              | 35                   | 105                 | 5.3           | 6         | 200                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJB225M035#0200      | B         | 2.2      | 35                | 85               | 28                   | 105                 | 7.7           | 6         | 200                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJB335M035#0200      | B         | 3.3      | 35                | 85               | 28                   | 105                 | 11.6          | 6         | 200                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJB475M035#0200      | B         | 4.7      | 35                | 85               | 28                   | 105                 | 16.5          | 6         | 200                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJC475M035#0200      | C         | 4.7      | 35                | 85               | 28                   | 105                 | 16.5          | 6         | 200                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJC685M035#0200      | C         | 6.8      | 35                | 85               | 28                   | 105                 | 23.8          | 6         | 200                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJB106M035#0200      | B         | 10       | 35                | 85               | 28                   | 105                 | 35            | 6         | 200                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJC106M035#0200      | C         | 10       | 35                | 85               | 28                   | 105                 | 35            | 6         | 200                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJY106M035#0070      | Y         | 10       | 35                | 105              | 35                   | 105                 | 35            | 6         | 70                     | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJB156M035#0200      | B         | 15       | 35                | 85               | 28                   | 105                 | 52.5          | 10        | 200                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJC156M035#0200      | C         | 15       | 35                | 85               | 28                   | 105                 | 52.5          | 6         | 200                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJD156M035#0070      | D         | 15       | 35                | 85               | 28                   | 105                 | 52.5          | 6         | 70                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJD156M035#0100      | D         | 15       | 35                | 85               | 28                   | 105                 | 52.5          | 6         | 100                    | 3   | 1500                    | 1100 | 700   | -     | 105°C            |
| TCJY156M035#0070      | Y         | 15       | 35                | 85               | 28                   | 105                 | 52.5          | 6         | 70                     | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJY156M035#0100      | Y         | 15       | 35                | 85               | 28                   | 105                 | 52.5          | 6         | 100                    | 3   | 1400                    | 1000 | 600   | -     | 105°C            |
| TCJD226M035#0070      | D         | 22       | 35                | 105              | 35                   | 105                 | 77            | 6         | 70                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJD226M035#0100      | D         | 22       | 35                | 105              | 35                   | 105                 | 77            | 6         | 100                    | 3   | 1500                    | 1100 | 700   | -     | 105°C            |
| TCJD336M035#0070      | D         | 33       | 35                | 85               | 28                   | 105                 | 115.5         | 6         | 70                     | 3   | 1800                    | 1300 | 800   | -     | 105°C            |
| TCJD336M035#0100      | D         | 33       | 35                | 85               | 28                   | 105                 | 115.5         | 6         | 100                    | 3   | 1500                    | 1100 | 700   | -     | 105°C            |
| TCJE336M035#0055      | E         | 33       | 35                | 85               | 28                   | 105                 | 115.5         | 6         | 55                     | 3   | 2100                    | 1500 | 900   | -     | 105°C            |
| TCJE336M035#0070      | E         | 33       | 35                | 85               | 28                   | 105                 | 115.5         | 6         | 70                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJE476M035#0055      | E         | 47       | 35                | 85               | 28                   | 105                 | 164.5         | 6         | 55                     | 3   | 2100                    | 1500 | 900   | -     | 105°C            |
| <b>50 Volt @ 85°C</b> |           |          |                   |                  |                      |                     |               |           |                        |     |                         |      |       |       |                  |
| TCJB684M050#0400      | B         | 0.68     | 50                | 85               | 40                   | 105                 | 3.4           | 6         | 400                    | 3   | 600                     | 400  | 300   | -     | 105°C            |
| TCJB105M050#0300      | B         | 1.0      | 50                | 85               | 40                   | 105                 | 5             | 6         | 300                    | 3   | 600                     | 400  | 300   | -     | 105°C            |
| TCJB155M050#0300      | B         | 1.5      | 50                | 85               | 40                   | 105                 | 7.5           | 6         | 300                    | 3   | 600                     | 400  | 300   | -     | 105°C            |
| TCJC155M050#0300      | C         | 1.5      | 50                | 85               | 40                   | 105                 | 7.5           | 6         | 300                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJC225M050#0300      | C         | 2.2      | 50                | 85               | 40                   | 105                 | 11            | 6         | 300                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJC335M050#0200      | C         | 3.3      | 50                | 85               | 40                   | 105                 | 16.5          | 8         | 200                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJC475M050#0200      | C         | 4.7      | 50                | 85               | 40                   | 105                 | 23.5          | 8         | 200                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJC685M050#0200      | C         | 6.8      | 50                | 85               | 40                   | 105                 | 34            | 8         | 200                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJD685M050#0120      | D         | 6.8      | 50                | 85               | 40                   | 105                 | 34            | 10        | 120                    | 3   | 1400                    | 1000 | 600   | -     | 105°C            |
| TCJD106M050#0120      | D         | 10       | 50                | 85               | 40                   | 105                 | 50            | 10        | 120                    | 3   | 1400                    | 1000 | 600   | -     | 105°C            |
| TCJE106M050#0070      | E         | 10       | 50                | 85               | 40                   | 105                 | 50            | 6         | 70                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJE106M050#0100      | E         | 10       | 50                | 85               | 40                   | 105                 | 50            | 6         | 100                    | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJE156M050#0070      | E         | 15       | 50                | 85               | 40                   | 105                 | 75            | 6         | 70                     | 3   | 1900                    | 1300 | 900   | -     | 105°C            |
| TCJE156M050#0100      | E         | 15       | 50                | 85               | 40                   | 105                 | 75            | 6         | 100                    | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| <b>63 Volt @ 85°C</b> |           |          |                   |                  |                      |                     |               |           |                        |     |                         |      |       |       |                  |
| TCJB474M063#0400      | B         | 0.47     | 63                | 85               | 50                   | 105                 | 3             | 8         | 400                    | 3   | 600                     | 400  | 300   | -     | 105°C            |
| TCJB684M063#0300      | B         | 0.68     | 63                | 85               | 50                   | 105                 | 4.3           | 8         | 300                    | 3   | 600                     | 400  | 300   | -     | 105°C            |
| TCJB105M063#0300      | B         | 1.0      | 63                | 85               | 50                   | 105                 | 6.3           | 8         | 300                    | 3   | 600                     | 400  | 300   | -     | 105°C            |
| TCJC105M063#0300      | C         | 1.0      | 63                | 85               | 50                   | 105                 | 6.3           | 6         | 300                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJC155M063#0300      | C         | 1.5      | 63                | 85               | 50                   | 105                 | 9.5           | 6         | 300                    | 3   | 800                     | 600  | 400   | -     | 105°C            |
| TCJC225M063#0200      | C         | 2.2      | 63                | 85               | 50                   | 105                 | 13.9          | 6         | 200                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJC335M063#0200      | C         | 3.3      | 63                | 85               | 50                   | 105                 | 20.8          | 6         | 200                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJC475M063#0200      | C         | 4.7      | 63                | 85               | 50                   | 105                 | 29.6          | 6         | 200                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| TCJD475M063#0120      | D         | 4.7      | 63                | 85               | 50                   | 105                 | 29.6          | 6         | 120                    | 3   | 1400                    | 1000 | 600   | -     | 105°C            |
| TCJD685M063#0120      | D         | 6.8      | 63                | 85               | 50                   | 105                 | 42.8          | 6         | 120                    | 3   | 1400                    | 1000 | 600   | -     | 105°C            |



# TCJ Series



## Tantalum Solid Electrolytic Chip Capacitors with Conductive Polymer Electrode

### RATINGS & PART NUMBER REFERENCE

| AVX Part No.           | Case Size | Cap (µF) | Rated Voltage (V) | Rated Temp. (°C) | Category Voltage (V) | Category Temp. (°C) | DCL (µA) Max. | DF % Max. | ESR Max. (mΩ) @ 100kHz | MSL | 100kHz RMS Current (mA) |      |       |       | Product Category |
|------------------------|-----------|----------|-------------------|------------------|----------------------|---------------------|---------------|-----------|------------------------|-----|-------------------------|------|-------|-------|------------------|
|                        |           |          |                   |                  |                      |                     |               |           |                        |     | 25°C                    | 85°C | 105°C | 125°C |                  |
| TCJE685M063#0100       | E         | 6.8      | 63                | 85               | 50                   | 105                 | 42.8          | 6         | 100                    | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJE685M063#0150       | E         | 6.8      | 63                | 85               | 50                   | 105                 | 42.8          | 6         | 150                    | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| TCJE106M063#0100       | E         | 10       | 63                | 85               | 50                   | 105                 | 63            | 6         | 100                    | 3   | 1600                    | 1100 | 700   | -     | 105°C            |
| TCJE106M063#0150       | E         | 10       | 63                | 85               | 50                   | 105                 | 63            | 6         | 150                    | 3   | 1300                    | 900  | 600   | -     | 105°C            |
| <b>75 Volt @ 85°C</b>  |           |          |                   |                  |                      |                     |               |           |                        |     |                         |      |       |       |                  |
| TCJD475M075#0150       | D         | 4.7      | 75                | 85               | 60                   | 105                 | 35.3          | 6         | 150                    | 3   | 1200                    | 800  | 500   | -     | 105°C            |
| TCJD685M075#0120       | D         | 6.8      | 75                | 85               | 60                   | 105                 | 51            | 6         | 120                    | 3   | 1400                    | 1000 | 600   | -     | 105°C            |
| <b>100 Volt @ 85°C</b> |           |          |                   |                  |                      |                     |               |           |                        |     |                         |      |       |       |                  |
| TCJD475M100#0250       | D         | 4.7      | 100               | 85               | 80                   | 105                 | 47            | 8         | 250                    | 3   | 900                     | 600  | 400   | -     | 105°C            |
| <b>125 Volt @ 85°C</b> |           |          |                   |                  |                      |                     |               |           |                        |     |                         |      |       |       |                  |
| TCJD335M125#0250       | D         | 3.3      | 125               | 85               | 100                  | 105                 | 41.2          | 8         | 250                    | 3   | 900                     | 600  | 400   | -     | 105°C            |

Moisture Sensitivity Level (MSL) is defined according to J-STD-020.

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5RMS with DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.

ESR allowed to move up to 1.25 times catalog limit post mounting.

For typical weight and composition see page 214.

**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.**

### PRODUCT CATEGORY 125°C

| TEST                         | 125°C series (Temperature range -55°C to +125°C)   |               |               |                    |                                  |           |       |           |            |       |
|------------------------------|--|---------------|---------------|--------------------|----------------------------------|-----------|-------|-----------|------------|-------|
|                              | Condition  |               |               | Characteristics    |                                  |           |       |           |            |       |
| <b>Endurance</b>             | Determine after application of rated voltage for 2000 +48/-0 hours at 85±2°C and then leaving 1-2 hours at room temperature. Also determine of 125°C temperature, category voltage for 2000 +48/-0 hours and then leaving 1-2 hours at room temperature. Power supply impedance to be ≤0.1Ω/V. |               |               | Visual examination | no visible damage                |           |       |           |            |       |
|                              |  |               |               | DCL                | 1.25 x initial limit             |           |       |           |            |       |
|                              |  |               |               | ΔC/C               | within +20/-30% of initial value |           |       |           |            |       |
|                              |  |               |               | DF                 | 1.5 x initial limit              |           |       |           |            |       |
|                              |  |               |               | ESR                | 2 x initial limit                |           |       |           |            |       |
| <b>Storage Life</b>          | 125°C, 0V, 2000h   |               |               | Visual examination | no visible damage                |           |       |           |            |       |
|                              |  |               |               | DCL                | 2 x initial limit                |           |       |           |            |       |
|                              |  |               |               | ΔC/C               | within ±20% of initial value     |           |       |           |            |       |
|                              |  |               |               | DF                 | 1.5 x initial limit              |           |       |           |            |       |
|                              |  |               |               | ESR                | 2 x initial limit                |           |       |           |            |       |
| <b>Humidity</b>              | Determine after storage without applied voltage at 65±2°C and 95±2% relative humidity for 500 hours and then recovery 1-2 hours at room temperature.   |               |               | Visual examination | no visible damage                |           |       |           |            |       |
|                              |  |               |               | DCL                | 3 x initial limit                |           |       |           |            |       |
|                              |  |               |               | ΔC/C               | within +30/-20% of initial value |           |       |           |            |       |
|                              |  |               |               | DF                 | 1.5 x initial limit              |           |       |           |            |       |
|                              |  |               |               | ESR                | 2 x initial limit                |           |       |           |            |       |
| <b>Temperature Stability</b> | Step   | Temperature°C | Duration(min) |                    | +20°C                            | -55°C     | +20°C | +85°C     | +125°C     | +20°C |
|                              | 1  | +20±2         | 15            | DCL                | IL*                              | n/a       | IL*   | 10 x IL*  | 12.5 x IL* | IL*   |
|                              | 2  | -55+0/-3      | 15            |                    |                                  |           |       |           |            |       |
|                              | 3  | +20±2         | 15            | ΔC/C               | n/a                              | +0/-20%   | ±5%   | +20/-0%   | +30/-0%    | ±5%   |
|                              | 4  | +85+3/-0      | 15            |                    |                                  |           |       |           |            |       |
|                              | 5  | +125+3/-0     | 15            | DF                 | IL*                              | 1.5 x IL* | IL*   | 1.5 x IL* | 2 x IL*    | IL*   |
|                              | 6  | +20±2         | 15            |                    |                                  |           |       |           |            |       |
| <b>Surge Voltage</b>         | Test temperature: 125°C+3/0°C<br>Test voltage: Category voltage at 125°C<br>Surge voltage: 1.3 x category voltage at 125°C<br>Series protection resistance 1000±100Ω<br>Discharge resistance: 1000Ω<br>Number of cycles: 1000x<br>Cycle duration: 6 min; 30 sec charge, 5 min 30 sec discharge |               |               | Visual examination | no visible damage                |           |       |           |            |       |
|                              |  |               |               | DCL                | initial limit                    |           |       |           |            |       |
|                              |  |               |               | ΔC/C               | within +20/-30% of initial value |           |       |           |            |       |
|                              |  |               |               | DF                 | 1.25 x initial limit             |           |       |           |            |       |

\*Initial Limit

## Tantalum Solid Electrolytic Chip Capacitors with Conductive Polymer Electrode

### PRODUCT CATEGORY 105°C

| TEST                  | 105°C series (Temperature range -55°C to +105°C)   |               |               |                            |                                  |  |  |  |
|-----------------------|--|---------------|---------------|----------------------------|----------------------------------|--|--|--|
|                       | Condition  |               |               | Characteristics            |                                  |  |  |  |
| Endurance             | Determine after application of rated voltage for 2000 +48/-0 hours at 85±2°C and then leaving 1-2 hours at room temperature. Also determine after application of 105°C temperature, category voltage for 2000 +48/-0 hours and then leaving 1-2 hours at room temperature. Power supply impedance to be ≤0.1Ω/V. |               |               | Visual examination         | no visible damage                |  |  |  |
|                       |  |               |               | DCL                        | 1.25 x initial limit             |  |  |  |
|                       |  |               |               | ΔC/C                       | within +20/-30% of initial value |  |  |  |
|                       |  |               |               | DF                         | 1.5 x initial limit              |  |  |  |
|                       |  |               |               | ESR                        | 2 x initial limit                |  |  |  |
| Storage Life          | 105°C, 0V, 2000h   |               |               | Visual examination         | no visible damage                |  |  |  |
|                       |  |               |               | DCL (V <sub>R</sub> ≤ 75V) | 1.25 x initial limit             |  |  |  |
|                       |  |               |               | DCL (V <sub>R</sub> > 75V) | 2 x initial limit                |  |  |  |
|                       |  |               |               | ΔC/C                       | within ±20% of initial value     |  |  |  |
|                       |  |               |               | DF                         | 1.5 x initial limit              |  |  |  |
|                       |  |               |               | ESR                        | 2 x initial limit                |  |  |  |
| Humidity              | Determine after storage without applied voltage at 65±2°C and 95±2% relative humidity for 500 hours and then recovery 1-2 hours at room temperature.   |               |               | Visual examination         | no visible damage                |  |  |  |
|                       |  |               |               | DCL                        | 3 x initial limit                |  |  |  |
|                       |  |               |               | ΔC/C                       | within +30/-20% of initial value |  |  |  |
|                       |  |               |               | DF                         | 1.5 x initial limit              |  |  |  |
|                       |  |               |               | ESR                        | 2 x initial limit                |  |  |  |
| Temperature Stability | Step   | Temperature°C | Duration(min) |                            |                                  |  |  |  |
|                       | 1  | +20±2         | 15            |                            |                                  |  |  |  |
|                       | 2  | -55+0/-3      | 15            |                            |                                  |  |  |  |
|                       | 3  | +20±2         | 15            |                            |                                  |  |  |  |
|                       | 4  | +85+3/-0      | 15            |                            |                                  |  |  |  |
|                       | 5  | +105+3/-0     | 15            |                            |                                  |  |  |  |
|                       | 6  | +20±2         | 15            |                            |                                  |  |  |  |
| Surge Voltage         | Test temperature: 105°C+3/0°C<br>Test voltage: Category voltage at 105°C<br>Surge voltage: 1.3 x category voltage at 105°C<br>Series protection resistance 1000±100Ω<br>Discharge resistance: 1000Ω<br>Number of cycles: 1000x<br>Cycle duration: 6 min; 30 sec charge, 5 min 30 sec discharge                   |               |               | Visual examination         | no visible damage                |  |  |  |
|                       |  |               |               | DCL                        | initial limit                    |  |  |  |
|                       |  |               |               | ΔC/C                       | within +20/-30% of initial value |  |  |  |
|                       |  |               |               | DF                         | 1.25 x initial limit             |  |  |  |

\*Initial Limit

### PRODUCT CATEGORY 85°C

| TEST                  | 85°C series (Temperature range -55°C to +85°C)   |               |               |                    |                                  |  |  |  |
|-----------------------|--|---------------|---------------|--------------------|----------------------------------|--|--|--|
|                       | Condition  |               |               | Characteristics    |                                  |  |  |  |
| Endurance             | Determine after application of rated voltage for 2000 +48/-0 hours at 85±2°C and then leaving 1-2 hours at room temperature. Power supply impedance to be ≤0.1Ω/V.   |               |               | Visual examination | no visible damage                |  |  |  |
|                       |  |               |               | DCL                | 1.25 x initial limit             |  |  |  |
|                       |  |               |               | ΔC/C               | within +20/-30% of initial value |  |  |  |
|                       |  |               |               | DF                 | 1.5 x initial limit              |  |  |  |
|                       |  |               |               | ESR                | 2 x initial limit                |  |  |  |
| Storage Life          | 85°C, 0V, 2000h  |               |               | Visual examination | no visible damage                |  |  |  |
|                       |  |               |               | DCL                | 1.25 x initial limit             |  |  |  |
|                       |  |               |               | ΔC/C               | within ±20% of initial value     |  |  |  |
|                       |  |               |               | DF                 | 1.5 x initial limit              |  |  |  |
|                       |  |               |               | ESR                | 2 x initial limit                |  |  |  |
|                       |  |               |               |                    |                                  |  |  |  |
| Humidity              | Determine after storage without applied voltage at 65±2°C and 95±2% relative humidity for 500 hours and then recovery 1-2 hours at room temperature.   |               |               | Visual examination | no visible damage                |  |  |  |
|                       |  |               |               | DCL                | 5 x initial limit                |  |  |  |
|                       |  |               |               | ΔC/C               | within +40/-20% of initial value |  |  |  |
|                       |  |               |               | DF                 | 1.5 x initial limit              |  |  |  |
|                       |  |               |               | ESR                | 2 x initial limit                |  |  |  |
| Temperature Stability | Step   | Temperature°C | Duration(min) |                    |                                  |  |  |  |
|                       | 1  | +20±2         | 15            |                    |                                  |  |  |  |
|                       | 2  | -55+0/-3      | 15            |                    |                                  |  |  |  |
|                       | 3  | +20±2         | 15            |                    |                                  |  |  |  |
|                       | 4  | +85+3/-0      | 15            |                    |                                  |  |  |  |
|                       | 5  | +20±2         | 15            |                    |                                  |  |  |  |
| Surge Voltage         | Test temperature: 85+3/0°C<br>Test voltage: Rated voltage<br>Surge voltage: 1.3 x rated voltage<br>Series protection resistance 1000±100Ω.<br>Discharge resistance: 1000Ω<br>Number of cycles: 1000x<br>Cycle duration: 6 min; 30 sec charge, 5 min 30 sec discharge |               |               | Visual examination | no visible damage                |  |  |  |
|                       |  |               |               | DCL                | initial limit                    |  |  |  |
|                       |  |               |               | ΔC/C               | within +20/-30% of initial value |  |  |  |
|                       |  |               |               | DF                 | 1.25 x initial limit             |  |  |  |

\*Initial Limit



## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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