

# TAZ Series



## CWR19 - MIL-PRF-55365/11 Established Reliability, COTS-Plus & Space Level



An extended range of capacitor ratings beyond CWR09 that is fully qualified to MIL-PRF-55365/11, this series represents the most flexible of surface mount form factors, offering nine case sizes (the original A through H of CWR09) and adds the new X case size.

The molded body / compliant termination construction ensures no TCE mismatch with any substrate. This construction is compatible with a wide range of SMT board assembly processes including wave or reflow solder, conductive epoxy or compression bonding techniques. The parts also carry full polarity and capacitance / voltage marking.

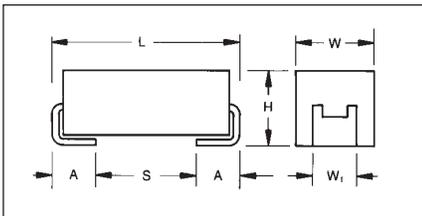
The four smaller cases are characterized by their low profile construction, with the A case being the world's smallest molded military tantalum chip.

The series is qualified to MIL-PRF-55365 Weibull "B", "C", "D" and "T" levels, with all surge options ("A", "B" & "C") available.

For Space Level applications, AVX SRC 9000 qualification is recommended (see ratings table for part number availability).

There are four termination finishes available: solder plated, fused solder plated, hot solder dipped and gold plated (these are "H", "K", "C" and "B" termination, respectively, per MIL-PRF-55365). In addition, the molding compound has been selected to meet the requirements of UL94V-0 (Flame Retardancy) and outgassing requirements of NASA SP-R-0022A.

The TAZ "X" case size components are considered to be MSL 3 in accordance with J-STD-020.



### MARKING

(White marking on black body)



**Polarity Stripe (+)**

**Capacitance Code  
Rated Voltage**

### CASE DIMENSIONS:

millimeters (inches)

| Case Code | Length (L)<br>±0.38 (0.015) | Width (W)<br>±0.38 (0.015) | Height (H)<br>±0.38 (0.015) | Term. Width (W <sub>t</sub> )           | Term. Length (A)<br>+0.25/-0.13<br>(+0.010/-0.005) | S min        | Typical Weight (g) |
|-----------|-----------------------------|----------------------------|-----------------------------|-----------------------------------------|----------------------------------------------------|--------------|--------------------|
| A         | 2.54 (0.100)                | 1.27 (0.050)               | 1.27 (0.050)                | 1.27±0.13<br>(0.050±0.005)              | 0.76 (0.030)                                       | 0.38 (0.015) | 0.016              |
| B         | 3.81 (0.150)                | 1.27 (0.050)               | 1.27 (0.050)                | 1.27±0.13<br>(0.050±0.005)              | 0.76 (0.030)                                       | 1.65 (0.065) | 0.025              |
| C         | 5.08 (0.200)                | 1.27 (0.050)               | 1.27 (0.050)                | 1.27±0.13<br>(0.050±0.005)              | 0.76 (0.030)                                       | 2.92 (0.115) | 0.035              |
| D         | 3.81 (0.150)                | 2.54 (0.100)               | 1.27 (0.050)                | 2.41+0.13/-0.25<br>(0.095+0.005/-0.010) | 0.76 (0.030)                                       | 1.65 (0.065) | 0.045              |
| E         | 5.08 (0.200)                | 2.54 (0.100)               | 1.27 (0.050)                | 2.41+0.13/-0.25<br>(0.095+0.005/-0.010) | 0.76 (0.030)                                       | 2.92 (0.115) | 0.065              |
| F         | 5.59 (0.220)                | 3.43 (0.135)               | 1.78 (0.070)                | 3.30±0.13<br>(0.130±0.005)              | 0.76 (0.030)                                       | 3.43 (0.135) | 0.125              |
| G         | 6.73 (0.265)                | 2.79 (0.110)               | 2.79 (0.110)                | 2.67±0.13<br>(0.105±0.005)              | 1.27 (0.050)                                       | 3.56 (0.140) | 0.205              |
| H         | 7.24 (0.285)                | 3.81 (0.150)               | 2.79 (0.110)                | 3.68+0.13/-0.51<br>(0.145+0.005/-0.020) | 1.27 (0.050)                                       | 4.06 (0.160) | 0.035              |
| X         | 6.93 Max<br>(0.273)         | 5.41 Max<br>(0.213)        | 2.74 Max<br>(0.108)         | 3.05±0.13<br>(0.120±0.005)              | 1.19 (0.047)                                       | N/A          | 0.420              |

### CWR19-MIL-PRF 55365/11

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

| Capacitance |      | Rated voltage DC (V <sub>R</sub> ) at 85°C |        |         |         |         |         |         |
|-------------|------|--------------------------------------------|--------|---------|---------|---------|---------|---------|
| µF          | Code | 4V (C)                                     | 6V (D) | 10V (F) | 15V (H) | 20V (J) | 25V (K) | 35V (M) |
| 0.10        | 104  |                                            |        |         |         |         |         |         |
| 0.15        | 154  |                                            |        |         |         |         |         |         |
| 0.22        | 224  |                                            |        |         |         |         |         |         |
| 0.33        | 334  |                                            |        |         |         |         |         | A       |
| 0.47        | 474  |                                            |        |         |         |         | A       |         |
| 0.68        | 684  |                                            |        |         |         | A       |         |         |
| 1.0         | 105  |                                            |        |         | A       | A       | B       |         |
| 1.5         | 155  |                                            |        |         | A       | B       |         |         |
| 2.2         | 225  |                                            |        | A       | A       | B       | D       |         |
| 3.3         | 335  | A                                          | A      | A       | B       | D       | E       |         |
| 4.7         | 475  | A                                          | A      | B/C     | B/C/D   | E       |         |         |
| 6.8         | 685  | A                                          | B      | B/C/D   | D/E     | E       | F       | G       |
| 10          | 106  | B                                          | B      | B/C/D/E | D/E     | E/F     | G       | H       |
| 15          | 156  | B                                          | B/D/E  | D/E     | E/F     | F       | G       |         |
| 22          | 226  | B/D                                        | D/E    | E       | F       | G       | G/H     |         |
| 33          | 336  | D/E                                        | E      | F       | F/G     | H       | H       |         |
| 47          | 476  | E                                          | F      | F/G     | G/H     | H/X     |         |         |
| 68          | 686  | E                                          | F/G    | G       | G/H     |         |         |         |
| 100         | 107  | F                                          | G      | G/H     | H       |         |         |         |
| 150         | 157  | G                                          | G      | H/X     |         |         |         |         |
| 220         | 227  | H                                          | H      | H       |         |         |         |         |
| 330         | 337  | H                                          | H      |         |         |         |         |         |



### HOW TO ORDER

#### COTS-PLUS & MIL QPL (CWR19):

|             |                  |                                                                                                                                                 |                                                                 |                                                                                                                            |                                                                |                                                                                                                             |                                                                                           |                                                                                                                                                       |                                                                     |                                                                                                                                                        |                                                                                                                                                 |
|-------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>TAZ</b>  | <b>H</b>         | <b>227</b>                                                                                                                                      | <b>*</b>                                                        | <b>006</b>                                                                                                                 | <b>C</b>                                                       | <b>□</b>                                                                                                                    | <b>#</b>                                                                                  | <b>@</b>                                                                                                                                              | <b>0</b>                                                            | <b>^</b>                                                                                                                                               | <b>++</b>                                                                                                                                       |
| <b>Type</b> | <b>Case Size</b> | <b>Capacitance Code</b><br>pF code:<br>1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) | <b>Capacitance Tolerance</b><br>M = ±20%<br>K = ±10%<br>J = ±5% | <b>Voltage Code</b><br>004 = 4Vdc<br>006 = 6Vdc<br>010 = 10Vdc<br>015 = 15Vdc<br>020 = 20Vdc<br>025 = 25Vdc<br>035 = 35Vdc | <b>Standard or Low ESR Range</b><br>C = Std ESR<br>L = Low ESR | <b>Packaging</b><br>B = Bulk<br>R = 7" T&R<br>S = 13" T&R<br>W = Waffle<br><br>See page 6 for additional packaging options. | <b>Inspection Level</b><br>S = Std. Conformance<br>L = Group A<br><br>M = MIL (JAN) CWR19 | <b>Reliability Grade</b><br>Weibull:<br>B = 0.1%/1000 hrs. 90% conf.<br>C = 0.01%/1000 hrs. 90% conf.<br>D = 0.001%/1000 hrs. 90% conf.<br>Z = Non-ER | <b>Qualification Level</b><br>0 = N/A<br>T = T Level<br>9 = SRC9000 | <b>Termination Finish</b><br>H = Solder Plated<br>0 = Fused Solder Plated<br>8 = Hot Solder Dipped<br>9 = Gold Plated<br>7 = Matte Sn (COTS-Plus only) | <b>Surge Test Option</b><br>00 = None<br>23 = 10 Cycles, +25°C<br>24 = 10 Cycles, -55°C & +85°C<br>45 = 10 cycles, -55°C & +85°C before Weibull |

For RoHS compliant products, please select correct termination style.

#### CWR19 P/N CROSS REFERENCE:

|              |                                                                                                              |                                                                                                                |                                                                                                                                                 |                                                                 |                                                                                                                                                                      |                  |                                                                                                                                                      |                                                                                                                                          |
|--------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CWR19</b> | <b>D</b>                                                                                                     | <b>^</b>                                                                                                       | <b>227</b>                                                                                                                                      | <b>*</b>                                                        | <b>@</b>                                                                                                                                                             | <b>H</b>         | <b>+</b>                                                                                                                                             | <b>□</b>                                                                                                                                 |
| <b>Type</b>  | <b>Voltage Code</b><br>C = 4Vdc<br>D = 6Vdc<br>F = 10Vdc<br>H = 15Vdc<br>J = 20Vdc<br>K = 25Vdc<br>M = 35Vdc | <b>Termination Finish</b><br>H = Solder Plated<br>K = Solder Fused<br>C = Hot Solder Dipped<br>B = Gold Plated | <b>Capacitance Code</b><br>pF code:<br>1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) | <b>Capacitance Tolerance</b><br>M = ±20%<br>K = ±10%<br>J = ±5% | <b>Reliability Grade</b><br>Weibull:<br>B = 0.1%/1000 hrs. 90% conf.<br>C = 0.01%/1000 hrs. 90% conf.<br>D = 0.001%/1000 hrs. 90% conf.<br>T = T Level<br>A = Non-ER | <b>Case Size</b> | <b>Surge Test Option</b><br>A = 10 cycles, +25°C<br>B = 10 cycles, -55°C & +85°C<br>C = 10 cycles, -55°C & +85°C before Weibull<br>Z = None required | <b>Packaging</b><br>Bulk = Standard<br>VTR = 7" T&R<br>VTR13 = 13" T&R<br>W = Waffle<br><br>See page 6 for additional packaging options. |

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

|             |                  |                                                                                                                                                 |                                                                 |                                                                                                                            |                                                                |                                                                                                                             |                                        |                                                                                                                                         |                                           |                                                                                                                       |                                                                          |
|-------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| <b>TAZ</b>  | <b>H</b>         | <b>227</b>                                                                                                                                      | <b>*</b>                                                        | <b>006</b>                                                                                                                 | <b>C</b>                                                       | <b>□</b>                                                                                                                    | <b>L</b>                               | <b>@</b>                                                                                                                                | <b>9</b>                                  | <b>^</b>                                                                                                              | <b>++</b>                                                                |
| <b>Type</b> | <b>Case Size</b> | <b>Capacitance Code</b><br>pF code:<br>1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) | <b>Capacitance Tolerance</b><br>M = ±20%<br>K = ±10%<br>J = ±5% | <b>Voltage Code</b><br>004 = 4Vdc<br>006 = 6Vdc<br>010 = 10Vdc<br>015 = 15Vdc<br>020 = 20Vdc<br>025 = 25Vdc<br>035 = 35Vdc | <b>Standard or Low ESR Range</b><br>C = Std ESR<br>L = Low ESR | <b>Packaging</b><br>B = Bulk<br>R = 7" T&R<br>S = 13" T&R<br>W = Waffle<br><br>See page 6 for additional packaging options. | <b>Inspection Level</b><br>L = Group A | <b>Reliability Grade</b><br>Weibull:<br>B = 0.1%/1000 hrs. 90% conf.<br>C = 0.01%/1000 hrs. 90% conf.<br>D = 0.001%/1000 hrs. 90% conf. | <b>Qualification Level</b><br>9 = SRC9000 | <b>Termination Finish</b><br>H = Solder Plated<br>0 = Fused Solder Plated<br>8 = Hot Solder Dipped<br>9 = Gold Plated | <b>Surge Test Option</b><br>45 = 10 cycles, -55°C & +85°C before Weibull |

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

### TECHNICAL SPECIFICATIONS

|                                     |                                                                                         |     |     |      |      |      |      |      |  |
|-------------------------------------|-----------------------------------------------------------------------------------------|-----|-----|------|------|------|------|------|--|
| Technical Data:                     | Unless otherwise specified, all technical data relate to an ambient temperature of 25°C |     |     |      |      |      |      |      |  |
| Capacitance Range:                  | 0.33 µF to 330 µF                                                                       |     |     |      |      |      |      |      |  |
| Capacitance Tolerance:              | ±5%; ±10%; ±20%                                                                         |     |     |      |      |      |      |      |  |
| Rated Voltage: (V <sub>R</sub> )    | ≤85°C:                                                                                  | 4   | 6   | 10   | 15   | 20   | 25   | 35   |  |
| Category Voltage: (V <sub>C</sub> ) | 125°C:                                                                                  | 2.7 | 4   | 6.7  | 10   | 13.3 | 16.7 | 23.3 |  |
| Surge Voltage: (V <sub>S</sub> )    | ≤85°C:                                                                                  | 5.3 | 8   | 13.3 | 20   | 26.7 | 33.3 | 46.7 |  |
|                                     | 125°C:                                                                                  | 3.5 | 5.3 | 8.7  | 13.3 | 17.8 | 22.2 | 31.1 |  |
| Temperature Range:                  | -55°C to +125°C                                                                         |     |     |      |      |      |      |      |  |

# TAZ Series



## CWR19 - MIL-PRF-55365/11 Established Reliability, COTS-Plus & Space Level

| RATING & PART NUMBER REFERENCE |                                |                                | Parametric Specifications by Rating per MIL-PRF-55365/11 |                               |                              |              |            |            |             |           |           | Typical Ripple Data by Rating |                           |                           |                            |                           |                           |                            |            |
|--------------------------------|--------------------------------|--------------------------------|----------------------------------------------------------|-------------------------------|------------------------------|--------------|------------|------------|-------------|-----------|-----------|-------------------------------|---------------------------|---------------------------|----------------------------|---------------------------|---------------------------|----------------------------|------------|
|                                |                                |                                | Cap @ 120Hz<br>μF @ 25°C                                 | DC Rated Voltage @ +85°C<br>V | ESR @ 100kHz @ +25°C<br>Ohms | DCL max      |            |            | DF Max      |           |           | Power Dissipation<br>W        | 25°C Ripple<br>A (100kHz) | 85°C Ripple<br>A (100kHz) | 125°C Ripple<br>A (100kHz) | 25°C Ripple<br>V (100kHz) | 85°C Ripple<br>V (100kHz) | 125°C Ripple<br>V (100kHz) |            |
| CWR19 P/N                      | AVX MIL & COTS-Plus P/N        | AVX SRC9000 P/N                | Case                                                     | μF @ 25°C                     | V @ +85°C                    | Ohms @ +25°C | +25°C (μA) | +85°C (μA) | +125°C (μA) | +25°C (%) | +85°C (%) | +125°C (%)                    | W                         | A (100kHz)                | A (100kHz)                 | A (100kHz)                | V (100kHz)                | V (100kHz)                 | V (100kHz) |
| CWR19C^335^@A+□                | TAZ A 335 * 004 C □ # @ 0 ^ ++ | TAZ A 335 * 004 C □ L @ 9 ^ ++ | A                                                        | 3.3                           | 4                            | 12           | 1          | 10         | 12          | 6         | 8         | 8                             | 0.050                     | 0.06                      | 0.06                       | 0.03                      | 0.77                      | 0.70                       | 0.31       |
| CWR19C^475^@A+□                | TAZ A 475 * 004 C □ # @ 0 ^ ++ | TAZ A 475 * 004 C □ L @ 9 ^ ++ | A                                                        | 4.7                           | 4                            | 12           | 1          | 10         | 12          | 6         | 8         | 8                             | 0.050                     | 0.06                      | 0.06                       | 0.03                      | 0.77                      | 0.70                       | 0.31       |
| CWR19C^685^@A+□                | TAZ A 685 * 004 C □ # @ 0 ^ ++ | TAZ A 685 * 004 C □ L @ 9 ^ ++ | A                                                        | 6.8                           | 4                            | 12           | 1          | 10         | 12          | 6         | 8         | 8                             | 0.050                     | 0.06                      | 0.06                       | 0.03                      | 0.77                      | 0.70                       | 0.31       |
| CWR19C^106^@B+□                | TAZ B 106 * 004 C □ # @ 0 ^ ++ | TAZ B 106 * 004 C □ L @ 9 ^ ++ | B                                                        | 10                            | 4                            | 8            | 1          | 10         | 12          | 8         | 10        | 10                            | 0.070                     | 0.09                      | 0.08                       | 0.04                      | 0.75                      | 0.67                       | 0.30       |
| CWR19C^156^@B+□                | TAZ B 156 * 004 C □ # @ 0 ^ ++ | TAZ B 156 * 004 C □ L @ 9 ^ ++ | B                                                        | 15                            | 4                            | 8            | 1          | 10         | 12          | 8         | 10        | 10                            | 0.070                     | 0.09                      | 0.08                       | 0.04                      | 0.75                      | 0.67                       | 0.30       |
| CWR19C^226^@B+□                | TAZ B 226 * 004 C □ # @ 0 ^ ++ | TAZ B 226 * 004 C □ L @ 9 ^ ++ | B                                                        | 22                            | 4                            | 8            | 1          | 10         | 12          | 8         | 10        | 10                            | 0.070                     | 0.09                      | 0.08                       | 0.04                      | 0.75                      | 0.67                       | 0.30       |
| CWR19C^226^@D+□                | TAZ D 226 * 004 C □ # @ 0 ^ ++ | TAZ D 226 * 004 C □ L @ 9 ^ ++ | D                                                        | 22                            | 4                            | 4            | 1          | 10         | 12          | 8         | 10        | 12                            | 0.080                     | 0.14                      | 0.13                       | 0.06                      | 0.57                      | 0.51                       | 0.23       |
| CWR19C^336^@D+□                | TAZ D 336 * 004 C □ # @ 0 ^ ++ | TAZ D 336 * 004 C □ L @ 9 ^ ++ | D                                                        | 33                            | 4                            | 4            | 2          | 20         | 24          | 8         | 10        | 12                            | 0.080                     | 0.14                      | 0.13                       | 0.06                      | 0.57                      | 0.51                       | 0.23       |
| CWR19C^336^@E+□                | TAZ E 336 * 004 C □ # @ 0 ^ ++ | TAZ E 336 * 004 C □ L @ 9 ^ ++ | E                                                        | 33                            | 4                            | 3            | 2          | 20         | 24          | 8         | 10        | 12                            | 0.090                     | 0.17                      | 0.16                       | 0.07                      | 0.52                      | 0.47                       | 0.21       |
| CWR19C^476^@E+□                | TAZ E 476 * 004 C □ # @ 0 ^ ++ | TAZ E 476 * 004 C □ L @ 9 ^ ++ | E                                                        | 47                            | 4                            | 3            | 2          | 20         | 24          | 8         | 10        | 12                            | 0.090                     | 0.17                      | 0.16                       | 0.07                      | 0.52                      | 0.47                       | 0.21       |
| CWR19C^686^@E+□                | TAZ E 686 * 004 C □ # @ 0 ^ ++ | TAZ E 686 * 004 C □ L @ 9 ^ ++ | E                                                        | 68                            | 4                            | 3            | 3          | 30         | 36          | 8         | 10        | 12                            | 0.090                     | 0.17                      | 0.16                       | 0.07                      | 0.52                      | 0.47                       | 0.21       |
| CWR19C^107^@F+□                | TAZ F 107 * 004 C □ # @ 0 ^ ++ | TAZ F 107 * 004 C □ L @ 9 ^ ++ | F                                                        | 100                           | 4                            | 2            | 4          | 40         | 48          | 10        | 12        | 12                            | 0.100                     | 0.22                      | 0.20                       | 0.09                      | 0.45                      | 0.40                       | 0.18       |
| CWR19C^157^@G+□                | TAZ G 157 * 004 C □ # @ 0 ^ ++ | TAZ G 157 * 004 C □ L @ 9 ^ ++ | G                                                        | 150                           | 4                            | 1            | 6          | 60         | 72          | 10        | 12        | 12                            | 0.125                     | 0.35                      | 0.32                       | 0.14                      | 0.35                      | 0.32                       | 0.14       |
| CWR19C^227^@H+□                | TAZ H 227 * 004 C □ # @ 0 ^ ++ | TAZ H 227 * 004 C □ L @ 9 ^ ++ | H                                                        | 220                           | 4                            | 1            | 8          | 80         | 96          | 10        | 12        | 12                            | 0.150                     | 0.39                      | 0.35                       | 0.15                      | 0.39                      | 0.35                       | 0.15       |
| CWR19C^337^@H+□                | TAZ H 337 * 004 C □ # @ 0 ^ ++ | TAZ H 337 * 004 C □ L @ 9 ^ ++ | H                                                        | 330                           | 4                            | 0.9          | 10         | 100        | 120         | 10        | 12        | 12                            | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15       |
| CWR19D^335^@A+□                | TAZ A 335 * 006 C □ # @ 0 ^ ++ | TAZ A 335 * 006 C □ L @ 9 ^ ++ | A                                                        | 3.3                           | 6                            | 12           | 1          | 10         | 12          | 6         | 8         | 8                             | 0.050                     | 0.06                      | 0.06                       | 0.03                      | 0.77                      | 0.70                       | 0.31       |
| CWR19D^475^@A+□                | TAZ A 475 * 006 C □ # @ 0 ^ ++ | TAZ A 475 * 006 C □ L @ 9 ^ ++ | A                                                        | 4.7                           | 6                            | 12           | 1          | 10         | 12          | 6         | 8         | 8                             | 0.050                     | 0.06                      | 0.06                       | 0.03                      | 0.77                      | 0.70                       | 0.31       |
| CWR19D^685^@B+□                | TAZ B 685 * 006 C □ # @ 0 ^ ++ | TAZ B 685 * 006 C □ L @ 9 ^ ++ | B                                                        | 6.8                           | 6                            | 8            | 1          | 10         | 12          | 6         | 8         | 8                             | 0.070                     | 0.09                      | 0.08                       | 0.04                      | 0.75                      | 0.67                       | 0.30       |
| CWR19D^106^@B+□                | TAZ B 106 * 006 C □ # @ 0 ^ ++ | TAZ B 106 * 006 C □ L @ 9 ^ ++ | B                                                        | 10                            | 6                            | 8            | 1          | 10         | 12          | 6         | 8         | 8                             | 0.070                     | 0.09                      | 0.08                       | 0.04                      | 0.75                      | 0.67                       | 0.30       |
| CWR19D^156^@B+□                | TAZ B 156 * 006 C □ # @ 0 ^ ++ | TAZ B 156 * 006 C □ L @ 9 ^ ++ | B                                                        | 15                            | 6                            | 8            | 1          | 10         | 12          | 8         | 10        | 10                            | 0.070                     | 0.09                      | 0.08                       | 0.04                      | 0.75                      | 0.67                       | 0.30       |
| CWR19D^156^@D+□                | TAZ D 156 * 006 C □ # @ 0 ^ ++ | TAZ D 156 * 006 C □ L @ 9 ^ ++ | D                                                        | 15                            | 6                            | 5            | 1          | 10         | 12          | 8         | 10        | 12                            | 0.080                     | 0.13                      | 0.11                       | 0.05                      | 0.63                      | 0.57                       | 0.25       |
| CWR19D^226^@D+□                | TAZ D 226 * 006 C □ # @ 0 ^ ++ | TAZ D 226 * 006 C □ L @ 9 ^ ++ | D                                                        | 22                            | 6                            | 5            | 1          | 10         | 12          | 6         | 8         | 8                             | 0.080                     | 0.13                      | 0.11                       | 0.05                      | 0.63                      | 0.57                       | 0.25       |
| CWR19D^156^@E+□                | TAZ E 156 * 006 C □ # @ 0 ^ ++ | TAZ E 156 * 006 C □ L @ 9 ^ ++ | E                                                        | 15                            | 6                            | 3            | 1          | 10         | 12          | 8         | 10        | 12                            | 0.090                     | 0.17                      | 0.16                       | 0.07                      | 0.52                      | 0.47                       | 0.21       |
| CWR19D^226^@E+□                | TAZ E 226 * 006 C □ # @ 0 ^ ++ | TAZ E 226 * 006 C □ L @ 9 ^ ++ | E                                                        | 22                            | 6                            | 3.5          | 2          | 20         | 24          | 8         | 10        | 12                            | 0.090                     | 0.16                      | 0.14                       | 0.06                      | 0.56                      | 0.51                       | 0.22       |
| CWR19D^336^@E+□                | TAZ E 336 * 006 C □ # @ 0 ^ ++ | TAZ E 336 * 006 C □ L @ 9 ^ ++ | E                                                        | 33                            | 6                            | 3.5          | 2          | 20         | 24          | 6         | 8         | 8                             | 0.090                     | 0.16                      | 0.14                       | 0.06                      | 0.56                      | 0.51                       | 0.22       |
| CWR19D^476^@F+□                | TAZ F 476 * 006 C □ # @ 0 ^ ++ | TAZ F 476 * 006 C □ L @ 9 ^ ++ | F                                                        | 47                            | 6                            | 3.5          | 3          | 30         | 36          | 8         | 10        | 12                            | 0.100                     | 0.17                      | 0.15                       | 0.07                      | 0.59                      | 0.53                       | 0.24       |
| CWR19D^686^@F+□                | TAZ F 686 * 006 C □ # @ 0 ^ ++ | TAZ F 686 * 006 C □ L @ 9 ^ ++ | F                                                        | 68                            | 6                            | 1.5          | 4          | 40         | 48          | 10        | 12        | 12                            | 0.100                     | 0.26                      | 0.23                       | 0.10                      | 0.39                      | 0.35                       | 0.15       |
| CWR19D^686^@G+□                | TAZ G 686 * 006 C □ # @ 0 ^ ++ | TAZ G 686 * 006 C □ L @ 9 ^ ++ | G                                                        | 68                            | 6                            | 1            | 4          | 40         | 48          | 10        | 12        | 12                            | 0.125                     | 0.35                      | 0.32                       | 0.14                      | 0.35                      | 0.32                       | 0.14       |
| CWR19D^107^@G+□                | TAZ G 107 * 006 C □ # @ 0 ^ ++ | TAZ G 107 * 006 C □ L @ 9 ^ ++ | G                                                        | 100                           | 6                            | 1.1          | 6          | 60         | 72          | 10        | 12        | 12                            | 0.125                     | 0.34                      | 0.30                       | 0.13                      | 0.37                      | 0.33                       | 0.15       |
| CWR19D^157^@G+□                | TAZ G 157 * 006 C □ # @ 0 ^ ++ | TAZ G 157 * 006 C □ L @ 9 ^ ++ | G                                                        | 150                           | 6                            | 1.1          | 10         | 100        | 120         | 10        | 12        | 12                            | 0.125                     | 0.34                      | 0.30                       | 0.13                      | 0.37                      | 0.33                       | 0.15       |
| CWR19D^227^@H+□                | TAZ H 227 * 006 C □ # @ 0 ^ ++ | TAZ H 227 * 006 C □ L @ 9 ^ ++ | H                                                        | 220                           | 6                            | 0.9          | 10         | 100        | 120         | 10        | 12        | 12                            | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15       |
| CWR19D^337^@H+□                | TAZ H 337 * 006 C □ # @ 0 ^ ++ | TAZ H 337 * 006 C □ L @ 9 ^ ++ | H                                                        | 330                           | 6                            | 0.9          | 20         | 200        | 240         | 10        | 12        | 12                            | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15       |
| CWR19F^225^@A+□                | TAZ A 225 * 010 C □ # @ 0 ^ ++ | TAZ A 225 * 010 C □ L @ 9 ^ ++ | A                                                        | 2.2                           | 10                           | 12           | 1          | 10         | 12          | 6         | 8         | 8                             | 0.050                     | 0.06                      | 0.06                       | 0.03                      | 0.77                      | 0.70                       | 0.31       |
| CWR19F^335^@A+□                | TAZ A 335 * 010 C □ # @ 0 ^ ++ | TAZ A 335 * 010 C □ L @ 9 ^ ++ | A                                                        | 3.3                           | 10                           | 12           | 1          | 10         | 12          | 6         | 8         | 8                             | 0.050                     | 0.06                      | 0.06                       | 0.03                      | 0.77                      | 0.70                       | 0.31       |
| CWR19F^475^@B+□                | TAZ B 475 * 010 C □ # @ 0 ^ ++ | TAZ B 475 * 010 C □ L @ 9 ^ ++ | B                                                        | 4.7                           | 10                           | 8            | 1          | 10         | 12          | 6         | 8         | 8                             | 0.070                     | 0.09                      | 0.08                       | 0.04                      | 0.75                      | 0.67                       | 0.30       |
| CWR19F^685^@B+□                | TAZ B 685 * 010 C □ # @ 0 ^ ++ | TAZ B 685 * 010 C □ L @ 9 ^ ++ | B                                                        | 6.8                           | 10                           | 8            | 1          | 10         | 12          | 6         | 8         | 8                             | 0.070                     | 0.09                      | 0.08                       | 0.04                      | 0.75                      | 0.67                       | 0.30       |
| CWR19F^106^@B+□                | TAZ B 106 * 010 C □ # @ 0 ^ ++ | TAZ B 106 * 010 C □ L @ 9 ^ ++ | B                                                        | 10                            | 10                           | 8            | 1          | 10         | 12          | 8         | 10        | 10                            | 0.070                     | 0.09                      | 0.08                       | 0.04                      | 0.75                      | 0.67                       | 0.30       |
| CWR19F^475^@C+□                | TAZ C 475 * 010 C □ # @ 0 ^ ++ | TAZ C 475 * 010 C □ L @ 9 ^ ++ | C                                                        | 4.7                           | 10                           | 5.5          | 1          | 10         | 12          | 6         | 8         | 8                             | 0.075                     | 0.12                      | 0.11                       | 0.05                      | 0.64                      | 0.58                       | 0.26       |
| CWR19F^685^@C+□                | TAZ C 685 * 010 C □ # @ 0 ^ ++ | TAZ C 685 * 010 C □ L @ 9 ^ ++ | C                                                        | 6.8                           | 10                           | 5.5          | 1          | 10         | 12          | 6         | 8         | 8                             | 0.075                     | 0.12                      | 0.11                       | 0.05                      | 0.64                      | 0.58                       | 0.26       |
| CWR19F^106^@C+□                | TAZ C 106 * 010 C □ # @ 0 ^ ++ | TAZ C 106 * 010 C □ L @ 9 ^ ++ | C                                                        | 10                            | 10                           | 5.5          | 1          | 10         | 12          | 6         | 8         | 8                             | 0.075                     | 0.12                      | 0.11                       | 0.05                      | 0.64                      | 0.58                       | 0.26       |
| CWR19F^685^@D+□                | TAZ D 685 * 010 C □ # @ 0 ^ ++ | TAZ D 685 * 010 C □ L @ 9 ^ ++ | D                                                        | 6.8                           | 10                           | 5            | 1          | 10         | 12          | 6         | 8         | 8                             | 0.080                     | 0.13                      | 0.11                       | 0.05                      | 0.63                      | 0.57                       | 0.25       |
| CWR19F^106^@D+□                | TAZ D 106 * 010 C □ # @ 0 ^ ++ | TAZ D 106 * 010 C □ L @ 9 ^ ++ | D                                                        | 10                            | 10                           | 4            | 1          | 10         | 12          | 6         | 8         | 8                             | 0.080                     | 0.14                      | 0.13                       | 0.06                      | 0.57                      | 0.51                       | 0.23       |
| CWR19F^156^@D+□                | TAZ D 156 * 010 C □ # @ 0 ^ ++ | TAZ D 156 * 010 C □ L @ 9 ^ ++ | D                                                        | 15                            | 10                           | 5            | 2          | 20         | 24          | 6         | 8         | 8                             | 0.080                     | 0.13                      | 0.11                       | 0.05                      | 0.63                      | 0.57                       | 0.25       |
| CWR19F^106^@E+□                | TAZ E 106 * 010 C □ # @ 0 ^ ++ | TAZ E 106 * 010 C □ L @ 9 ^ ++ | E                                                        | 10                            | 10                           | 3.5          | 1          | 10         | 12          | 6         | 8         | 8                             | 0.090                     | 0.16                      | 0.14                       | 0.06                      | 0.56                      | 0.51                       | 0.22       |
| CWR19F^156^@E+□                | TAZ E 156 * 010 C □ # @ 0 ^ ++ | TAZ E 156 * 010 C □ L @ 9 ^ ++ | E                                                        | 15                            | 10                           | 3            | 2          | 20         | 24          | 8         | 10        | 10                            | 0.090                     | 0.17                      | 0.16                       | 0.07                      | 0.52                      | 0.47                       | 0.21       |
| CWR19F^226^@E+□                | TAZ E 226 * 010 C □ # @ 0 ^ ++ | TAZ E 226 * 010 C □ L @ 9 ^ ++ | E                                                        | 22                            | 10                           | 2            | 3          | 30         | 36          | 8         | 10        | 10                            | 0.090                     | 0.21                      | 0.19                       | 0.08                      | 0.42                      | 0.38                       | 0.17       |
| CWR19F^336^@F+□                | TAZ F 336 * 010 C □ # @ 0 ^ ++ | TAZ F 336 * 010 C □ L @ 9 ^ ++ | F                                                        | 33                            | 10                           | 1.5          | 3          | 30         | 36          | 8         | 10        | 10                            | 0.100                     | 0.26                      | 0.23                       | 0.10                      | 0.39                      | 0.35                       | 0.15       |
| CWR19F^476^@F+□                | TAZ F 476 * 010 C □ # @ 0 ^ ++ | TAZ F 476 * 010 C □ L @ 9 ^ ++ | F                                                        | 47                            | 10                           | 1.5          | 4          | 40         | 48          | 10        | 12        | 12                            | 0.100                     | 0.26                      | 0.23                       | 0.10                      | 0.39                      | 0.35                       | 0.15       |
| CWR19F^476^@G+□                | TAZ G 476 * 010 C □ # @ 0 ^ ++ | TAZ G 476 * 010 C □ L @ 9 ^ ++ | G                                                        | 47                            | 10                           | 1            | 4          | 40         | 48          | 10        | 12        | 12                            | 0.125                     | 0.35                      | 0.32                       | 0.14                      | 0.35                      | 0.32                       | 0.14       |
| CWR19F^686^@G+□                | TAZ G 686 * 010 C □ # @ 0 ^ ++ | TAZ G 686 * 010 C □ L @ 9 ^ ++ | G                                                        | 68                            | 10                           | 1.1          | 6          | 60         | 72          | 10        | 12        | 12                            | 0.125                     | 0.34                      | 0.30                       | 0.13                      | 0.37                      | 0.33                       | 0.15       |
| CWR19F^107^@G+□                | TAZ G 107 * 010 C □ # @ 0 ^ ++ | TAZ G 107 * 010 C □ L @ 9 ^ ++ | G                                                        | 100                           | 10                           | 1.1          | 10         | 100        | 120         | 10        | 12        | 12                            | 0.125                     | 0.34                      | 0.30                       | 0.13                      | 0.37                      | 0.33                       | 0.15       |
| CWR19F^107^@H+□                | TAZ H 107 * 010 C □ # @ 0 ^ ++ | TAZ H 107 * 010 C □ L @ 9 ^ ++ | H                                                        | 100                           | 10                           | 0.9          | 10         | 100        | 120         | 10        | 12        | 12                            | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15       |
| CWR19F^157^@H+□                | TAZ H 157 * 010 C □ # @ 0 ^ ++ | TAZ H 157 * 010 C □ L @ 9 ^ ++ | H                                                        | 150                           | 10                           | 0.9          | 15         | 150        | 180         | 10        | 12        | 12                            | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15       |
| CWR19F^227^@H+□                | TAZ H 227 * 010 C □ # @ 0 ^ ++ | TAZ H 227 * 010 C □ L @ 9 ^ ++ | H                                                        | 220                           | 10                           | 0.9          | 20         | 200        | 240         | 10        | 12        | 12                            | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15       |
| CWR19F^157^@X+□                | TAZ X 157 * 010 C □ # @ 0 ^ ++ | TAZ X 157 * 010 C □ L @ 9 ^ ++ | X                                                        | 150                           | 10                           | 0.9          | 15         | 150        | 180         | 10        | 12        | 12                            | 0.200                     | 0.47                      | 0.42                       | 0.19                      | 0.42                      | 0.38                       | 0.17       |

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

**NOTE:** AVX reserves the right to supply a higher voltage rating or tighter tolerance part in the same case size, to the same reliability standards.



# TAZ Series



## CWR19 - MIL-PRF-55365/11 Established Reliability, COTS-Plus & Space Level

| RATING & PART NUMBER REFERENCE |                                |                                | Parametric Specifications by Rating per MIL-PRF-55365/11 |                               |                              |         |       |           |        |    |    | Typical Ripple Data by Rating |                           |                           |                            |                           |                           |                            |      |
|--------------------------------|--------------------------------|--------------------------------|----------------------------------------------------------|-------------------------------|------------------------------|---------|-------|-----------|--------|----|----|-------------------------------|---------------------------|---------------------------|----------------------------|---------------------------|---------------------------|----------------------------|------|
|                                |                                |                                | Cap @ 120Hz<br>µF @ 25°C                                 | DC Rated Voltage<br>V @ +85°C | ESR @ 100kHz<br>Ohms @ +25°C | DCL max |       |           | DF Max |    |    | Power Dissipation<br>W        | 25°C Ripple<br>A (100kHz) | 85°C Ripple<br>A (100kHz) | 125°C Ripple<br>A (100kHz) | 25°C Ripple<br>V (100kHz) | 85°C Ripple<br>V (100kHz) | 125°C Ripple<br>V (100kHz) |      |
| CWR19 P/N                      | AVX MIL & COTS-Plus P/N        | AVX SRC9000 P/N                | Case                                                     | +25°C                         | +85°C                        | +125°C  | +25°C | +85/125°C | -55°C  |    |    |                               |                           |                           |                            |                           |                           |                            |      |
| CWR19H^105^@A+□                | TAZ A 105 * 015 C □ # @ 0 ^ ++ | TAZ A 105 * 015 C □ L @ 9 ^ ++ | A                                                        | 1                             | 15                           | 15      | 1     | 10        | 12     | 6  | 8  | 8                             | 0.050                     | 0.06                      | 0.05                       | 0.02                      | 0.87                      | 0.78                       | 0.35 |
| CWR19H^155^@A+□                | TAZ A 155 * 015 C □ # @ 0 ^ ++ | TAZ A 155 * 015 C □ L @ 9 ^ ++ | A                                                        | 1.5                           | 15                           | 15      | 1     | 10        | 12     | 6  | 8  | 8                             | 0.050                     | 0.06                      | 0.05                       | 0.02                      | 0.87                      | 0.78                       | 0.35 |
| CWR19H^225^@A+□                | TAZ A 225 * 015 C □ # @ 0 ^ ++ | TAZ A 225 * 015 C □ L @ 9 ^ ++ | A                                                        | 2.2                           | 15                           | 15      | 1     | 10        | 12     | 6  | 8  | 8                             | 0.050                     | 0.06                      | 0.05                       | 0.02                      | 0.87                      | 0.78                       | 0.35 |
| CWR19H^335^@B+□                | TAZ B 335 * 015 C □ # @ 0 ^ ++ | TAZ B 335 * 015 C □ L @ 9 ^ ++ | B                                                        | 3.3                           | 15                           | 9       | 1     | 10        | 12     | 6  | 8  | 8                             | 0.070                     | 0.09                      | 0.08                       | 0.04                      | 0.79                      | 0.71                       | 0.32 |
| CWR19H^475^@B+□                | TAZ B 475 * 015 C □ # @ 0 ^ ++ | TAZ B 475 * 015 C □ L @ 9 ^ ++ | B                                                        | 4.7                           | 15                           | 5       | 1     | 10        | 12     | 6  | 8  | 8                             | 0.070                     | 0.12                      | 0.11                       | 0.05                      | 0.69                      | 0.53                       | 0.24 |
| CWR19H^475^@C+□                | TAZ C 475 * 015 C □ # @ 0 ^ ++ | TAZ C 475 * 015 C □ L @ 9 ^ ++ | C                                                        | 4.7                           | 15                           | 5.5     | 1     | 10        | 12     | 6  | 8  | 8                             | 0.075                     | 0.12                      | 0.11                       | 0.05                      | 0.64                      | 0.58                       | 0.26 |
| CWR19H^475^@D+□                | TAZ D 475 * 015 C □ # @ 0 ^ ++ | TAZ D 475 * 015 C □ L @ 9 ^ ++ | D                                                        | 4.7                           | 15                           | 6       | 1     | 10        | 12     | 6  | 8  | 8                             | 0.080                     | 0.12                      | 0.10                       | 0.05                      | 0.69                      | 0.62                       | 0.28 |
| CWR19H^685^@D+□                | TAZ D 685 * 015 C □ # @ 0 ^ ++ | TAZ D 685 * 015 C □ L @ 9 ^ ++ | D                                                        | 6.8                           | 15                           | 6       | 1     | 10        | 12     | 6  | 8  | 8                             | 0.080                     | 0.12                      | 0.10                       | 0.05                      | 0.69                      | 0.62                       | 0.28 |
| CWR19H^106^@D+□                | TAZ D 106 * 015 C □ # @ 0 ^ ++ | TAZ D 106 * 015 C □ L @ 9 ^ ++ | D                                                        | 10                            | 15                           | 6       | 2     | 20        | 24     | 6  | 8  | 8                             | 0.080                     | 0.12                      | 0.10                       | 0.05                      | 0.69                      | 0.62                       | 0.28 |
| CWR19H^685^@E+□                | TAZ E 685 * 015 C □ # @ 0 ^ ++ | TAZ E 685 * 015 C □ L @ 9 ^ ++ | E                                                        | 6.8                           | 15                           | 3       | 1     | 10        | 12     | 8  | 10 | 12                            | 0.090                     | 0.17                      | 0.16                       | 0.07                      | 0.52                      | 0.47                       | 0.21 |
| CWR19H^106^@E+□                | TAZ E 106 * 015 C □ # @ 0 ^ ++ | TAZ E 106 * 015 C □ L @ 9 ^ ++ | E                                                        | 10                            | 15                           | 4       | 2     | 20        | 24     | 6  | 8  | 8                             | 0.090                     | 0.15                      | 0.14                       | 0.06                      | 0.60                      | 0.54                       | 0.24 |
| CWR19H^156^@E+□                | TAZ E 156 * 015 C □ # @ 0 ^ ++ | TAZ E 156 * 015 C □ L @ 9 ^ ++ | E                                                        | 15                            | 15                           | 4       | 2     | 20        | 24     | 6  | 8  | 8                             | 0.090                     | 0.15                      | 0.14                       | 0.06                      | 0.60                      | 0.54                       | 0.24 |
| CWR19H^156^@F+□                | TAZ F 156 * 015 C □ # @ 0 ^ ++ | TAZ F 156 * 015 C □ L @ 9 ^ ++ | F                                                        | 15                            | 15                           | 3       | 2     | 20        | 24     | 8  | 10 | 10                            | 0.100                     | 0.18                      | 0.16                       | 0.07                      | 0.55                      | 0.49                       | 0.22 |
| CWR19H^226^@F+□                | TAZ F 226 * 015 C □ # @ 0 ^ ++ | TAZ F 226 * 015 C □ L @ 9 ^ ++ | F                                                        | 22                            | 15                           | 3       | 3     | 30        | 36     | 8  | 10 | 10                            | 0.100                     | 0.18                      | 0.16                       | 0.07                      | 0.55                      | 0.49                       | 0.22 |
| CWR19H^336^@F+□                | TAZ F 336 * 015 C □ # @ 0 ^ ++ | TAZ F 336 * 015 C □ L @ 9 ^ ++ | F                                                        | 33                            | 15                           | 3       | 5     | 50        | 60     | 6  | 8  | 8                             | 0.100                     | 0.18                      | 0.16                       | 0.07                      | 0.55                      | 0.49                       | 0.22 |
| CWR19H^336^@G+□                | TAZ G 336 * 015 C □ # @ 0 ^ ++ | TAZ G 336 * 015 C □ L @ 9 ^ ++ | G                                                        | 33                            | 15                           | 1.1     | 6     | 60        | 72     | 8  | 10 | 10                            | 0.125                     | 0.34                      | 0.30                       | 0.13                      | 0.37                      | 0.33                       | 0.15 |
| CWR19H^476^@G+□                | TAZ G 476 * 015 C □ # @ 0 ^ ++ | TAZ G 476 * 015 C □ L @ 9 ^ ++ | G                                                        | 47                            | 15                           | 1.1     | 10    | 100       | 120    | 8  | 10 | 10                            | 0.125                     | 0.34                      | 0.30                       | 0.13                      | 0.37                      | 0.33                       | 0.15 |
| CWR19H^686^@G+□                | TAZ G 686 * 015 C □ # @ 0 ^ ++ | TAZ G 686 * 015 C □ L @ 9 ^ ++ | G                                                        | 68                            | 15                           | 1.1     | 10    | 100       | 120    | 8  | 10 | 10                            | 0.125                     | 0.34                      | 0.30                       | 0.13                      | 0.37                      | 0.33                       | 0.15 |
| CWR19H^476^@H+□                | TAZ H 476 * 015 C □ # @ 0 ^ ++ | TAZ H 476 * 015 C □ L @ 9 ^ ++ | H                                                        | 47                            | 15                           | 0.9     | 10    | 100       | 120    | 8  | 10 | 10                            | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15 |
| CWR19H^686^@H+□                | TAZ H 686 * 015 C □ # @ 0 ^ ++ | TAZ H 686 * 015 C □ L @ 9 ^ ++ | H                                                        | 68                            | 15                           | 0.9     | 10    | 100       | 120    | 8  | 10 | 10                            | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15 |
| CWR19H^107^@H+□                | TAZ H 107 * 015 C □ # @ 0 ^ ++ | TAZ H 107 * 015 C □ L @ 9 ^ ++ | H                                                        | 100                           | 15                           | 0.9     | 15    | 150       | 180    | 10 | 12 | 12                            | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15 |
| CWR19J^684^@A+□                | TAZ A 684 * 020 C □ # @ 0 ^ ++ | TAZ A 684 * 020 C □ L @ 9 ^ ++ | A                                                        | 0.68                          | 20                           | 15      | 1     | 10        | 12     | 6  | 8  | 8                             | 0.050                     | 0.06                      | 0.05                       | 0.02                      | 0.87                      | 0.78                       | 0.35 |
| CWR19J^105^@A+□                | TAZ A 105 * 020 C □ # @ 0 ^ ++ | TAZ A 105 * 020 C □ L @ 9 ^ ++ | A                                                        | 1                             | 20                           | 15      | 1     | 10        | 12     | 6  | 8  | 8                             | 0.050                     | 0.06                      | 0.05                       | 0.02                      | 0.87                      | 0.78                       | 0.35 |
| CWR19J^155^@B+□                | TAZ B 155 * 020 C □ # @ 0 ^ ++ | TAZ B 155 * 020 C □ L @ 9 ^ ++ | B                                                        | 1.5                           | 20                           | 9       | 1     | 10        | 12     | 6  | 8  | 8                             | 0.070                     | 0.09                      | 0.08                       | 0.04                      | 0.79                      | 0.71                       | 0.32 |
| CWR19J^225^@B+□                | TAZ B 225 * 020 C □ # @ 0 ^ ++ | TAZ B 225 * 020 C □ L @ 9 ^ ++ | B                                                        | 2.2                           | 20                           | 9       | 1     | 10        | 12     | 6  | 8  | 8                             | 0.070                     | 0.09                      | 0.08                       | 0.04                      | 0.79                      | 0.71                       | 0.32 |
| CWR19J^335^@D+□                | TAZ D 335 * 020 C □ # @ 0 ^ ++ | TAZ D 335 * 020 C □ L @ 9 ^ ++ | D                                                        | 3.3                           | 20                           | 6       | 1     | 10        | 12     | 6  | 8  | 8                             | 0.080                     | 0.12                      | 0.10                       | 0.05                      | 0.69                      | 0.62                       | 0.28 |
| CWR19J^475^@E+□                | TAZ E 475 * 020 C □ # @ 0 ^ ++ | TAZ E 475 * 020 C □ L @ 9 ^ ++ | E                                                        | 4.7                           | 20                           | 6       | 1     | 10        | 12     | 6  | 8  | 8                             | 0.090                     | 0.12                      | 0.11                       | 0.05                      | 0.73                      | 0.66                       | 0.29 |
| CWR19J^685^@E+□                | TAZ E 685 * 020 C □ # @ 0 ^ ++ | TAZ E 685 * 020 C □ L @ 9 ^ ++ | E                                                        | 6.8                           | 20                           | 5       | 2     | 20        | 24     | 6  | 8  | 8                             | 0.090                     | 0.13                      | 0.12                       | 0.05                      | 0.67                      | 0.60                       | 0.27 |
| CWR19J^106^@E+□                | TAZ E 106 * 020 C □ # @ 0 ^ ++ | TAZ E 106 * 020 C □ L @ 9 ^ ++ | E                                                        | 10                            | 20                           | 5       | 2     | 20        | 24     | 6  | 8  | 8                             | 0.090                     | 0.13                      | 0.12                       | 0.05                      | 0.67                      | 0.60                       | 0.27 |
| CWR19J^106^@F+□                | TAZ F 106 * 020 C □ # @ 0 ^ ++ | TAZ F 106 * 020 C □ L @ 9 ^ ++ | F                                                        | 10                            | 20                           | 3       | 2     | 20        | 24     | 6  | 8  | 8                             | 0.100                     | 0.18                      | 0.16                       | 0.07                      | 0.55                      | 0.49                       | 0.22 |
| CWR19J^156^@F+□                | TAZ F 156 * 020 C □ # @ 0 ^ ++ | TAZ F 156 * 020 C □ L @ 9 ^ ++ | F                                                        | 15                            | 20                           | 3       | 3     | 30        | 36     | 6  | 8  | 8                             | 0.100                     | 0.18                      | 0.16                       | 0.07                      | 0.55                      | 0.49                       | 0.22 |
| CWR19J^226^@G+□                | TAZ G 226 * 020 C □ # @ 0 ^ ++ | TAZ G 226 * 020 C □ L @ 9 ^ ++ | G                                                        | 22                            | 20                           | 2.5     | 4     | 40        | 48     | 6  | 8  | 8                             | 0.125                     | 0.22                      | 0.20                       | 0.09                      | 0.56                      | 0.50                       | 0.22 |
| CWR19J^336^@H+□                | TAZ H 336 * 020 C □ # @ 0 ^ ++ | TAZ H 336 * 020 C □ L @ 9 ^ ++ | H                                                        | 33                            | 20                           | 0.9     | 6     | 60        | 72     | 8  | 10 | 10                            | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15 |
| CWR19J^476^@H+□                | TAZ H 476 * 020 C □ # @ 0 ^ ++ | TAZ H 476 * 020 C □ L @ 9 ^ ++ | H                                                        | 47                            | 20                           | 0.9     | 10    | 100       | 120    | 8  | 10 | 10                            | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15 |
| CWR19J^476^@X+□                | TAZ X 476 * 020 C □ # @ 0 ^ ++ | TAZ X 476 * 020 C □ L @ 9 ^ ++ | X                                                        | 47                            | 20                           | 0.9     | 10    | 100       | 120    | 8  | 10 | 10                            | 0.200                     | 0.47                      | 0.42                       | 0.19                      | 0.42                      | 0.38                       | 0.17 |
| CWR19K^474^@A+□                | TAZ A 474 * 025 C □ # @ 0 ^ ++ | TAZ A 474 * 025 C □ L @ 9 ^ ++ | A                                                        | 0.47                          | 25                           | 15      | 1     | 10        | 12     | 6  | 8  | 8                             | 0.050                     | 0.06                      | 0.05                       | 0.02                      | 0.87                      | 0.78                       | 0.35 |
| CWR19K^105^@B+□                | TAZ B 105 * 025 C □ # @ 0 ^ ++ | TAZ B 105 * 025 C □ L @ 9 ^ ++ | B                                                        | 1                             | 25                           | 10      | 1     | 10        | 12     | 6  | 8  | 8                             | 0.070                     | 0.08                      | 0.08                       | 0.03                      | 0.84                      | 0.75                       | 0.33 |
| CWR19K^225^@D+□                | TAZ D 225 * 025 C □ # @ 0 ^ ++ | TAZ D 225 * 025 C □ L @ 9 ^ ++ | D                                                        | 2.2                           | 25                           | 6       | 1     | 10        | 12     | 6  | 8  | 8                             | 0.080                     | 0.12                      | 0.10                       | 0.05                      | 0.69                      | 0.62                       | 0.28 |
| CWR19K^335^@E+□                | TAZ E 335 * 025 C □ # @ 0 ^ ++ | TAZ E 335 * 025 C □ L @ 9 ^ ++ | E                                                        | 3.3                           | 25                           | 4       | 1     | 10        | 12     | 6  | 8  | 8                             | 0.090                     | 0.15                      | 0.14                       | 0.06                      | 0.60                      | 0.54                       | 0.24 |
| CWR19K^685^@F+□                | TAZ F 685 * 025 C □ # @ 0 ^ ++ | TAZ F 685 * 025 C □ L @ 9 ^ ++ | F                                                        | 6.8                           | 25                           | 3       | 2     | 20        | 24     | 6  | 8  | 8                             | 0.100                     | 0.18                      | 0.16                       | 0.07                      | 0.55                      | 0.49                       | 0.22 |
| CWR19K^156^@G+□                | TAZ G 156 * 025 C □ # @ 0 ^ ++ | TAZ G 156 * 025 C □ L @ 9 ^ ++ | G                                                        | 15                            | 25                           | 1.4     | 4     | 40        | 48     | 6  | 8  | 8                             | 0.125                     | 0.30                      | 0.27                       | 0.12                      | 0.42                      | 0.38                       | 0.17 |
| CWR19K^226^@G+□                | TAZ G 226 * 025 C □ # @ 0 ^ ++ | TAZ G 226 * 025 C □ L @ 9 ^ ++ | G                                                        | 22                            | 25                           | 1.4     | 6     | 60        | 72     | 6  | 8  | 8                             | 0.125                     | 0.30                      | 0.27                       | 0.12                      | 0.42                      | 0.38                       | 0.17 |
| CWR19K^226^@H+□                | TAZ H 226 * 025 C □ # @ 0 ^ ++ | TAZ H 226 * 025 C □ L @ 9 ^ ++ | H                                                        | 22                            | 25                           | 0.9     | 6     | 60        | 72     | 6  | 8  | 8                             | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15 |
| CWR19K^336^@H+□                | TAZ H 336 * 025 C □ # @ 0 ^ ++ | TAZ H 336 * 025 C □ L @ 9 ^ ++ | H                                                        | 33                            | 25                           | 0.9     | 10    | 100       | 120    | 8  | 10 | 10                            | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15 |
| CWR19M^334^@A+□                | TAZ A 334 * 035 C □ # @ 0 ^ ++ | TAZ A 334 * 035 C □ L @ 9 ^ ++ | A                                                        | 0.33                          | 35                           | 22      | 1     | 10        | 12     | 6  | 8  | 8                             | 0.050                     | 0.05                      | 0.04                       | 0.02                      | 1.05                      | 0.94                       | 0.42 |
| CWR19M^685^@G+□                | TAZ G 685 * 035 C □ # @ 0 ^ ++ | TAZ G 685 * 035 C □ L @ 9 ^ ++ | G                                                        | 6.8                           | 35                           | 1.5     | 3     | 30        | 36     | 6  | 8  | 8                             | 0.125                     | 0.29                      | 0.26                       | 0.12                      | 0.43                      | 0.39                       | 0.17 |
| CWR19M^106^@H+□                | TAZ H 106 * 035 C □ # @ 0 ^ ++ | TAZ H 106 * 035 C □ L @ 9 ^ ++ | H                                                        | 10                            | 35                           | 0.9     | 4     | 40        | 48     | 8  | 10 | 10                            | 0.150                     | 0.41                      | 0.37                       | 0.16                      | 0.37                      | 0.33                       | 0.15 |

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

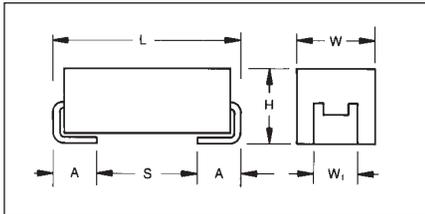
**NOTE:** AVX reserves the right to supply a higher voltage rating or tighter tolerance part in the same case size, to the same reliability standards.



# TAZ Series



## CWR29 - MIL-PRF-55365/11 Established Reliability, COTS-Plus & Space Level



### MARKING

(White marking on black body)



**Polarity Stripe (+)**

**Capacitance Code  
Rated Voltage**

A low ESR version of CWR09 and CWR19 that is fully qualified to MIL-PRF-55365/11, the CWR29 series represents the most flexible of surface mount form factors and the optimum power handling for all filtering applications. It is offered in nine case sizes (the original A through H of CWR09 and adding the new X case size).

The molded body / compliant termination construction ensures no TCE mismatch with any substrate. This construction is compatible with a wide range of SMT board assembly processes including wave or reflow solder, conductive epoxy or compression bonding techniques. The parts also carry full polarity and capacitance / voltage marking.

The five smaller cases are characterized by their low profile construction, with the A case being the world's smallest molded military tantalum chip.

The series is qualified to MIL-PRF-55365 Weibull "B", "C", "D" and "T" levels, with all surge options ("A", "B" & "C") available.

For Space Level applications, AVX SRC 9000 qualification is recommended (see ratings table for part number availability).

There are four termination finishes available: solder plated, fused solder plated, hot solder dipped and gold plated (these are "H", "K", "C" and "B" termination, respectively, per MIL-PRF-55365). In addition, the molding compound has been selected to meet the requirements of UL94V-0 (Flame Retardancy) and outgassing requirements of NASA SP-R-0022A.

The TAZ "X" case size components are considered to be MSL 3 in accordance with J-STD-020.

### CASE DIMENSIONS:

millimeters (inches)

| Case Code | Length (L)<br>±0.38 (0.015) | Width (W)<br>±0.38 (0.015) | Height (H)<br>±0.38 (0.015) | Term. Width (W <sub>t</sub> )           | Term. Length (A)<br>+0.25/-0.13<br>(+0.010/-0.005) | S min        | Typical Weight (g) |
|-----------|-----------------------------|----------------------------|-----------------------------|-----------------------------------------|----------------------------------------------------|--------------|--------------------|
| A         | 2.54 (0.100)                | 1.27 (0.050)               | 1.27 (0.050)                | 1.27±0.13<br>(0.050±0.005)              | 0.76 (0.030)                                       | 0.38 (0.015) | 0.016              |
| B         | 3.81 (0.150)                | 1.27 (0.050)               | 1.27 (0.050)                | 1.27±0.13<br>(0.050±0.005)              | 0.76 (0.030)                                       | 1.65 (0.065) | 0.025              |
| C         | 5.08 (0.200)                | 1.27 (0.050)               | 1.27 (0.050)                | 1.27±0.13<br>(0.050±0.005)              | 0.76 (0.030)                                       | 2.92 (0.115) | 0.035              |
| D         | 3.81 (0.150)                | 2.54 (0.100)               | 1.27 (0.050)                | 2.41+0.13/-0.25<br>(0.095+0.005/-0.010) | 0.76 (0.030)                                       | 1.65 (0.065) | 0.045              |
| E         | 5.08 (0.200)                | 2.54 (0.100)               | 1.27 (0.050)                | 2.41+0.13/-0.25<br>(0.095+0.005/-0.010) | 0.76 (0.030)                                       | 2.92 (0.115) | 0.065              |
| F         | 5.59 (0.220)                | 3.43 (0.135)               | 1.78 (0.070)                | 3.30±0.13<br>(0.130±0.005)              | 0.76 (0.030)                                       | 3.43 (0.135) | 0.125              |
| G         | 6.73 (0.265)                | 2.79 (0.110)               | 2.79 (0.110)                | 2.67±0.13<br>(0.105±0.005)              | 1.27 (0.050)                                       | 3.56 (0.140) | 0.205              |
| H         | 7.24 (0.285)                | 3.81 (0.150)               | 2.79 (0.110)                | 3.68+0.13/-0.51<br>(0.145+0.005/-0.020) | 1.27 (0.050)                                       | 4.06 (0.160) | 0.035              |
| X         | 6.93 Max<br>(0.273)         | 5.41 Max<br>(0.213)        | 2.74 Max<br>(0.108)         | 3.05±0.13<br>(0.120±0.005)              | 1.19 (0.047)                                       | N/A          | 0.420              |

### CWR29-MIL-PRF 55365/11

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

| Capacitance |      | Rated voltage DC (V <sub>R</sub> ) at 85°C |        |         |         |         |         |         |         |
|-------------|------|--------------------------------------------|--------|---------|---------|---------|---------|---------|---------|
| µF          | Code | 4V (C)                                     | 6V (D) | 10V (F) | 15V (H) | 20V (J) | 25V (K) | 35V (M) | 50V (N) |
| 0.10        | 104  |                                            |        |         |         |         |         |         | A       |
| 0.15        | 154  |                                            |        |         |         |         |         |         | A       |
| 0.22        | 224  |                                            |        |         |         |         |         | A       | B       |
| 0.33        | 334  |                                            |        |         |         |         | A       | A       | B       |
| 0.47        | 474  |                                            |        |         |         | A       | A       | B       | C       |
| 0.68        | 684  |                                            |        |         | A       | A/B     | B       | C       | D       |
| 1.0         | 105  |                                            |        | A       | A       | A/B     | B/C     | D       | E       |
| 1.5         | 155  |                                            | A      |         | A/B     | B/C     | D       | E       | F       |
| 2.2         | 225  | A                                          |        | A/B     | A/C     | B/D     | D/E     |         | F       |
| 3.3         | 335  | A                                          | A/B    | A/C     | B/D     | D/E     | E       | F       | G       |
| 4.7         | 475  | A/B                                        | A/C    | B/C/D   | B/C/D/E | E       | F       | G       | H       |
| 6.8         | 685  | A/C                                        | B/D    | B/C/D/E | D/E     | E/F     | F/G     | G/H     |         |
| 10          | 106  | B/D                                        | B/E    | B/C/D/E | D/E/F   | E/F     | G       | H       |         |
| 15          | 156  | B/E                                        | B/D/E  | D/E/F   | E/F     | F/G     | G/H     |         |         |
| 22          | 226  | B/D                                        | D/E/F  | E       | F/G     | G/H     | G/H     |         |         |
| 33          | 336  | D/E/F                                      | E      | F/G     | F/G/H   | H       | H       |         |         |
| 47          | 476  | E                                          | F/G    | F/G/H   | G/H     | H/X     |         |         |         |
| 68          | 686  | E/G                                        | F/G/H  | G       | G/H     |         |         |         |         |
| 100         | 107  | F/H                                        | G      | G/H     | H       |         |         |         |         |
| 150         | 157  | G                                          | G      | H/X     |         |         |         |         |         |
| 220         | 227  | H                                          | H      | H       |         |         |         |         |         |
| 330         | 337  | H                                          | H      |         |         |         |         |         |         |



### HOW TO ORDER

#### COTS-PLUS & MIL QPL (CWR29):

| TAZ         | H                | 227                                                                                                                                          | *                                                               | 006                                                                                                                                       | C                                                              | □                                                                                                                           | #                                                                                         | @                                                                                                                                                     | 0                                                                   | ^                                                                                                                                                      | ++                                                                                                                                              |
|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type</b> | <b>Case Size</b> | <b>Capacitance Code</b><br>pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) | <b>Capacitance Tolerance</b><br>M = ±20%<br>K = ±10%<br>J = ±5% | <b>Voltage Code</b><br>004 = 4Vdc<br>006 = 6Vdc<br>010 = 10Vdc<br>015 = 15Vdc<br>020 = 20Vdc<br>025 = 25Vdc<br>035 = 35Vdc<br>050 = 50Vdc | <b>Standard or Low ESR Range</b><br>C = Std ESR<br>L = Low ESR | <b>Packaging</b><br>B = Bulk<br>R = 7" T&R<br>S = 13" T&R<br>W = Waffle<br><br>See page 6 for additional packaging options. | <b>Inspection Level</b><br>S = Std. Conformance<br>L = Group A<br><br>M = MIL (JAN) CWR29 | <b>Reliability Grade</b><br>Weibull:<br>B = 0.1%/1000 hrs. 90% conf.<br>C = 0.01%/1000 hrs. 90% conf.<br>D = 0.001%/1000 hrs. 90% conf.<br>Z = Non-ER | <b>Qualification Level</b><br>0 = N/A<br>T = T Level<br>9 = SRC9000 | <b>Termination Finish</b><br>H = Solder Plated<br>0 = Fused Solder Plated<br>8 = Hot Solder Dipped<br>9 = Gold Plated<br>7 = Matte Sn (COTS-Plus only) | <b>Surge Test Option</b><br>00 = None<br>23 = 10 Cycles, +25°C<br>24 = 10 Cycles, -55°C & +85°C<br>45 = 10 cycles, -55°C & +85°C before Weibull |

**Not RoHS Compliant**

LEAD-FREE LEAD-FREE COMPATIBLE COMPONENT  
For RoHS compliant products, please select correct termination style.

#### CWR29 P/N CROSS REFERENCE:

| CWR29       | D                                                                                                                         | ^                                                                                                                     | 227                                                                                                                                          | *                                                               | @                                                                                                                                                                    | H                | +                                                                                                                                                    | □                                                                                                                                      |
|-------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type</b> | <b>Voltage Code</b><br>C = 4Vdc<br>D = 6Vdc<br>F = 10Vdc<br>H = 15Vdc<br>J = 20Vdc<br>K = 25Vdc<br>M = 35Vdc<br>N = 50Vdc | <b>Termination Finish</b><br>H = Solder Plated<br>K = Solder Fused Dipped<br>C = Hot Solder Dipped<br>B = Gold Plated | <b>Capacitance Code</b><br>pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) | <b>Capacitance Tolerance</b><br>M = ±20%<br>K = ±10%<br>J = ±5% | <b>Reliability Grade</b><br>Weibull:<br>B = 0.1%/1000 hrs. 90% conf.<br>C = 0.01%/1000 hrs. 90% conf.<br>D = 0.001%/1000 hrs. 90% conf.<br>T = T Level<br>A = Non-ER | <b>Case Size</b> | <b>Surge Test Option</b><br>A = 10 cycles, +25°C<br>B = 10 cycles, -55°C & +85°C<br>C = 10 cycles, -55°C & +85°C before Weibull<br>Z = None required | <b>Packaging</b><br>Bulk = Standard<br>TR = 7" T&R<br>TR13 = 13" T&R<br>W = Waffle<br><br>See page 6 for additional packaging options. |

**Not RoHS Compliant**

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

| TAZ         | H                | 227                                                                                                                                          | *                                                               | 006                                                                                                                                       | C                                                              | □                                                                                                                           | L                                      | @                                                                                                                                       | 9                                         | ^                                                                                                                     | ++                                                                       |
|-------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| <b>Type</b> | <b>Case Size</b> | <b>Capacitance Code</b><br>pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) | <b>Capacitance Tolerance</b><br>M = ±20%<br>K = ±10%<br>J = ±5% | <b>Voltage Code</b><br>004 = 4Vdc<br>006 = 6Vdc<br>010 = 10Vdc<br>015 = 15Vdc<br>020 = 20Vdc<br>025 = 25Vdc<br>035 = 35Vdc<br>050 = 50Vdc | <b>Standard or Low ESR Range</b><br>C = Std ESR<br>L = Low ESR | <b>Packaging</b><br>B = Bulk<br>R = 7" T&R<br>S = 13" T&R<br>W = Waffle<br><br>See page 6 for additional packaging options. | <b>Inspection Level</b><br>L = Group A | <b>Reliability Grade</b><br>Weibull:<br>B = 0.1%/1000 hrs. 90% conf.<br>C = 0.01%/1000 hrs. 90% conf.<br>D = 0.001%/1000 hrs. 90% conf. | <b>Qualification Level</b><br>9 = SRC9000 | <b>Termination Finish</b><br>H = Solder Plated<br>0 = Fused Solder Plated<br>8 = Hot Solder Dipped<br>9 = Gold Plated | <b>Surge Test Option</b><br>45 = 10 cycles, -55°C & +85°C before Weibull |

**Not RoHS Compliant**

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

### TECHNICAL SPECIFICATIONS

|                                     |                                                                                         |     |     |      |      |      |      |      |      |
|-------------------------------------|-----------------------------------------------------------------------------------------|-----|-----|------|------|------|------|------|------|
| Technical Data:                     | Unless otherwise specified, all technical data relate to an ambient temperature of 25°C |     |     |      |      |      |      |      |      |
| Capacitance Range:                  | 0.1 μF to 330 μF                                                                        |     |     |      |      |      |      |      |      |
| Capacitance Tolerance:              | ±5%; ±10%; ±20%                                                                         |     |     |      |      |      |      |      |      |
| Rated Voltage: (V <sub>R</sub> )    | ≤85°C:                                                                                  | 4   | 6   | 10   | 15   | 20   | 25   | 35   | 50   |
| Category Voltage: (V <sub>C</sub> ) | 125°C:                                                                                  | 2.7 | 4   | 6.7  | 10   | 13.3 | 16.7 | 23.3 | 33.3 |
| Surge Voltage: (V <sub>S</sub> )    | ≤85°C:                                                                                  | 5.3 | 8   | 13.3 | 20   | 26.7 | 33.3 | 46.7 | 66.7 |
|                                     | 125°C:                                                                                  | 3.5 | 5.3 | 8.7  | 13.3 | 17.8 | 22.2 | 31.1 | 44.5 |
| Temperature Range:                  | -55°C to +125°C                                                                         |     |     |      |      |      |      |      |      |

# TAZ Series



## CWR29 - MIL-PRF-55365/11 Established Reliability, COTS-Plus & Space Level

| RATING & PART NUMBER REFERENCE |                                |                                | Parametric Specifications by Rating per MIL-PRF-55365/11 |                                     |                                    |         |       |       |        |       |       | Typical Ripple Data by Rating |                                 |                                 |                                  |                                 |                                 |                                  |      |
|--------------------------------|--------------------------------|--------------------------------|----------------------------------------------------------|-------------------------------------|------------------------------------|---------|-------|-------|--------|-------|-------|-------------------------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|---------------------------------|----------------------------------|------|
|                                |                                |                                | Cap<br>@ 120Hz<br>µF<br>@ 25°C                           | DC Rated<br>Voltage<br>V<br>@ +85°C | ESR<br>@ 100kHz<br>Ohms<br>@ +25°C | DCL max |       |       | DF Max |       |       | Power<br>Dissipation<br>W     | 25°C<br>Ripple<br>A<br>(100kHz) | 85°C<br>Ripple<br>A<br>(100kHz) | 125°C<br>Ripple<br>A<br>(100kHz) | 25°C<br>Ripple<br>V<br>(100kHz) | 85°C<br>Ripple<br>V<br>(100kHz) | 125°C<br>Ripple<br>V<br>(100kHz) |      |
| CWR29 P/N                      | AVX MIL & COTS-Plus P/N        | AVX SRC9000 P/N                | Case                                                     | +25°C                               | +85°C                              | +125°C  | +25°C | +85°C | +125°C | +25°C | +85°C | +125°C                        | W                               | A                               | A                                | A                               | V                               | V                                | V    |
| CWR29C^225^@A+□                | TAZ A 225 * 004 L □ # @ 0 ^ ++ | TAZ A 225 * 004 L □ L @ 9 ^ ++ | A                                                        | 2.2                                 | 4                                  | 4       | 1     | 10    | 12     | 6     | 8     | 8                             | 0.050                           | 0.11                            | 0.10                             | 0.04                            | 0.45                            | 0.40                             | 0.18 |
| CWR29C^335^@A+□                | TAZ A 335 * 004 L □ # @ 0 ^ ++ | TAZ A 335 * 004 L □ L @ 9 ^ ++ | A                                                        | 3.3                                 | 4                                  | 6       | 1     | 10    | 12     | 6     | 8     | 8                             | 0.050                           | 0.09                            | 0.08                             | 0.04                            | 0.55                            | 0.49                             | 0.22 |
| CWR29C^475^@A+□                | TAZ A 475 * 004 L □ # @ 0 ^ ++ | TAZ A 475 * 004 L □ L @ 9 ^ ++ | A                                                        | 4.7                                 | 4                                  | 6       | 1     | 10    | 12     | 6     | 8     | 8                             | 0.050                           | 0.09                            | 0.08                             | 0.04                            | 0.55                            | 0.49                             | 0.22 |
| CWR29C^475^@B+□                | TAZ B 475 * 004 L □ # @ 0 ^ ++ | TAZ B 475 * 004 L □ L @ 9 ^ ++ | B                                                        | 4.7                                 | 4                                  | 3.2     | 1     | 10    | 12     | 6     | 8     | 8                             | 0.070                           | 0.15                            | 0.13                             | 0.06                            | 0.47                            | 0.43                             | 0.19 |
| CWR29C^685^@A+□                | TAZ A 685 * 004 L □ # @ 0 ^ ++ | TAZ A 685 * 004 L □ L @ 9 ^ ++ | A                                                        | 6.8                                 | 4                                  | 6       | 1     | 10    | 12     | 6     | 8     | 8                             | 0.050                           | 0.09                            | 0.08                             | 0.04                            | 0.55                            | 0.49                             | 0.22 |
| CWR29C^685^@C+□                | TAZ C 685 * 004 L □ # @ 0 ^ ++ | TAZ C 685 * 004 L □ L @ 9 ^ ++ | C                                                        | 6.8                                 | 4                                  | 2.2     | 1     | 10    | 12     | 6     | 8     | 8                             | 0.075                           | 0.18                            | 0.17                             | 0.07                            | 0.41                            | 0.37                             | 0.16 |
| CWR29C^106^@B+□                | TAZ B 106 * 004 L □ # @ 0 ^ ++ | TAZ B 106 * 004 L □ L @ 9 ^ ++ | B                                                        | 10                                  | 4                                  | 3.2     | 1     | 10    | 12     | 8     | 10    | 10                            | 0.070                           | 0.15                            | 0.13                             | 0.06                            | 0.47                            | 0.43                             | 0.19 |
| CWR29C^106^@D+□                | TAZ D 106 * 004 L □ # @ 0 ^ ++ | TAZ D 106 * 004 L □ L @ 9 ^ ++ | D                                                        | 10                                  | 4                                  | 1.3     | 1     | 10    | 12     | 8     | 10    | 10                            | 0.080                           | 0.25                            | 0.22                             | 0.10                            | 0.32                            | 0.29                             | 0.13 |
| CWR29C^156^@B+□                | TAZ B 156 * 004 L □ # @ 0 ^ ++ | TAZ B 156 * 004 L □ L @ 9 ^ ++ | B                                                        | 15                                  | 4                                  | 3.2     | 1     | 10    | 12     | 8     | 10    | 10                            | 0.070                           | 0.15                            | 0.13                             | 0.06                            | 0.47                            | 0.43                             | 0.19 |
| CWR29C^156^@E+□                | TAZ E 156 * 004 L □ # @ 0 ^ ++ | TAZ E 156 * 004 L □ L @ 9 ^ ++ | E                                                        | 15                                  | 4                                  | 1       | 1     | 10    | 12     | 8     | 10    | 12                            | 0.090                           | 0.30                            | 0.27                             | 0.12                            | 0.30                            | 0.27                             | 0.12 |
| CWR29C^226^@B+□                | TAZ B 226 * 004 L □ # @ 0 ^ ++ | TAZ B 226 * 004 L □ L @ 9 ^ ++ | B                                                        | 22                                  | 4                                  | 3.2     | 1     | 10    | 12     | 8     | 10    | 10                            | 0.070                           | 0.15                            | 0.13                             | 0.06                            | 0.47                            | 0.43                             | 0.19 |
| CWR29C^226^@D+□                | TAZ D 226 * 004 L □ # @ 0 ^ ++ | TAZ D 226 * 004 L □ L @ 9 ^ ++ | D                                                        | 22                                  | 4                                  | 1.3     | 1     | 10    | 12     | 8     | 10    | 12                            | 0.080                           | 0.25                            | 0.22                             | 0.10                            | 0.32                            | 0.29                             | 0.13 |
| CWR29C^336^@D+□                | TAZ D 336 * 004 L □ # @ 0 ^ ++ | TAZ D 336 * 004 L □ L @ 9 ^ ++ | D                                                        | 33                                  | 4                                  | 1.3     | 2     | 20    | 24     | 8     | 10    | 12                            | 0.080                           | 0.25                            | 0.22                             | 0.10                            | 0.32                            | 0.29                             | 0.13 |
| CWR29C^336^@E+□                | TAZ E 336 * 004 L □ # @ 0 ^ ++ | TAZ E 336 * 004 L □ L @ 9 ^ ++ | E                                                        | 33                                  | 4                                  | 0.9     | 2     | 20    | 24     | 8     | 10    | 12                            | 0.090                           | 0.32                            | 0.28                             | 0.13                            | 0.28                            | 0.26                             | 0.11 |
| CWR29C^336^@F+□                | TAZ F 336 * 004 L □ # @ 0 ^ ++ | TAZ F 336 * 004 L □ L @ 9 ^ ++ | F                                                        | 33                                  | 4                                  | 0.6     | 2     | 20    | 24     | 8     | 10    | 12                            | 0.100                           | 0.41                            | 0.37                             | 0.16                            | 0.24                            | 0.22                             | 0.10 |
| CWR29C^476^@E+□                | TAZ E 476 * 004 L □ # @ 0 ^ ++ | TAZ E 476 * 004 L □ L @ 9 ^ ++ | E                                                        | 47                                  | 4                                  | 0.9     | 2     | 20    | 24     | 8     | 10    | 12                            | 0.090                           | 0.32                            | 0.28                             | 0.13                            | 0.28                            | 0.26                             | 0.11 |
| CWR29C^686^@E+□                | TAZ E 686 * 004 L □ # @ 0 ^ ++ | TAZ E 686 * 004 L □ L @ 9 ^ ++ | E                                                        | 68                                  | 4                                  | 0.9     | 3     | 30    | 36     | 8     | 10    | 12                            | 0.090                           | 0.32                            | 0.28                             | 0.13                            | 0.28                            | 0.26                             | 0.11 |
| CWR29C^686^@G+□                | TAZ G 686 * 004 L □ # @ 0 ^ ++ | TAZ G 686 * 004 L □ L @ 9 ^ ++ | G                                                        | 68                                  | 4                                  | 0.275   | 3     | 30    | 36     | 10    | 12    | 12                            | 0.125                           | 0.67                            | 0.61                             | 0.27                            | 0.19                            | 0.17                             | 0.07 |
| CWR29C^107^@F+□                | TAZ F 107 * 004 L □ # @ 0 ^ ++ | TAZ F 107 * 004 L □ L @ 9 ^ ++ | F                                                        | 100                                 | 4                                  | 0.55    | 4     | 40    | 48     | 10    | 12    | 12                            | 0.100                           | 0.43                            | 0.38                             | 0.17                            | 0.23                            | 0.21                             | 0.09 |
| CWR29C^107^@H+□                | TAZ H 107 * 004 L □ # @ 0 ^ ++ | TAZ H 107 * 004 L □ L @ 9 ^ ++ | H                                                        | 100                                 | 4                                  | 0.18    | 4     | 40    | 48     | 10    | 12    | 12                            | 0.150                           | 0.91                            | 0.82                             | 0.37                            | 0.16                            | 0.15                             | 0.07 |
| CWR29C^157^@G+□                | TAZ G 157 * 004 L □ # @ 0 ^ ++ | TAZ G 157 * 004 L □ L @ 9 ^ ++ | G                                                        | 150                                 | 4                                  | 0.25    | 6     | 60    | 72     | 10    | 12    | 12                            | 0.125                           | 0.71                            | 0.64                             | 0.28                            | 0.18                            | 0.16                             | 0.07 |
| CWR29C^227^@H+□                | TAZ H 227 * 004 L □ # @ 0 ^ ++ | TAZ H 227 * 004 L □ L @ 9 ^ ++ | H                                                        | 220                                 | 4                                  | 0.2     | 8     | 80    | 96     | 10    | 12    | 12                            | 0.150                           | 0.87                            | 0.78                             | 0.35                            | 0.17                            | 0.16                             | 0.07 |
| CWR29C^337^@H+□                | TAZ H 337 * 004 L □ # @ 0 ^ ++ | TAZ H 337 * 004 L □ L @ 9 ^ ++ | H                                                        | 330                                 | 4                                  | 0.18    | 10    | 100   | 120    | 10    | 12    | 12                            | 0.150                           | 0.91                            | 0.82                             | 0.37                            | 0.16                            | 0.15                             | 0.07 |
| CWR29D^155^@A+□                | TAZ A 155 * 006 L □ # @ 0 ^ ++ | TAZ A 155 * 006 L □ L @ 9 ^ ++ | A                                                        | 1.5                                 | 6                                  | 4       | 1     | 10    | 12     | 6     | 8     | 8                             | 0.050                           | 0.11                            | 0.10                             | 0.04                            | 0.45                            | 0.40                             | 0.18 |
| CWR29D^335^@A+□                | TAZ A 335 * 006 L □ # @ 0 ^ ++ | TAZ A 335 * 006 L □ L @ 9 ^ ++ | A                                                        | 3.3                                 | 6                                  | 6       | 1     | 10    | 12     | 6     | 8     | 8                             | 0.050                           | 0.09                            | 0.08                             | 0.04                            | 0.55                            | 0.49                             | 0.22 |
| CWR29D^335^@B+□                | TAZ B 335 * 006 L □ # @ 0 ^ ++ | TAZ B 335 * 006 L □ L @ 9 ^ ++ | B                                                        | 3.3                                 | 6                                  | 3.2     | 1     | 10    | 12     | 6     | 8     | 8                             | 0.070                           | 0.15                            | 0.13                             | 0.06                            | 0.47                            | 0.43                             | 0.19 |
| CWR29D^475^@A+□                | TAZ A 475 * 006 L □ # @ 0 ^ ++ | TAZ A 475 * 006 L □ L @ 9 ^ ++ | A                                                        | 4.7                                 | 6                                  | 6       | 1     | 10    | 12     | 6     | 8     | 8                             | 0.050                           | 0.09                            | 0.08                             | 0.04                            | 0.55                            | 0.49                             | 0.22 |
| CWR29D^475^@C+□                | TAZ C 475 * 006 L □ # @ 0 ^ ++ | TAZ C 475 * 006 L □ L @ 9 ^ ++ | C                                                        | 4.7                                 | 6                                  | 2.2     | 1     | 10    | 12     | 6     | 8     | 8                             | 0.075                           | 0.18                            | 0.17                             | 0.07                            | 0.41                            | 0.37                             | 0.16 |
| CWR29D^685^@B+□                | TAZ B 685 * 006 L □ # @ 0 ^ ++ | TAZ B 685 * 006 L □ L @ 9 ^ ++ | B                                                        | 6.8                                 | 6                                  | 3.2     | 1     | 10    | 12     | 6     | 8     | 8                             | 0.070                           | 0.15                            | 0.13                             | 0.06                            | 0.47                            | 0.43                             | 0.19 |
| CWR29D^685^@D+□                | TAZ D 685 * 006 L □ # @ 0 ^ ++ | TAZ D 685 * 006 L □ L @ 9 ^ ++ | D                                                        | 6.8                                 | 6                                  | 1.5     | 1     | 10    | 12     | 6     | 8     | 8                             | 0.080                           | 0.23                            | 0.21                             | 0.09                            | 0.35                            | 0.31                             | 0.14 |
| CWR29D^106^@B+□                | TAZ B 106 * 006 L □ # @ 0 ^ ++ | TAZ B 106 * 006 L □ L @ 9 ^ ++ | B                                                        | 10                                  | 6                                  | 3.2     | 1     | 10    | 12     | 6     | 8     | 8                             | 0.070                           | 0.15                            | 0.13                             | 0.06                            | 0.47                            | 0.43                             | 0.19 |
| CWR29D^106^@E+□                | TAZ E 106 * 006 L □ # @ 0 ^ ++ | TAZ E 106 * 006 L □ L @ 9 ^ ++ | E                                                        | 10                                  | 6                                  | 1       | 1     | 10    | 12     | 8     | 10    | 12                            | 0.090                           | 0.30                            | 0.27                             | 0.12                            | 0.30                            | 0.27                             | 0.12 |
| CWR29D^156^@B+□                | TAZ B 156 * 006 L □ # @ 0 ^ ++ | TAZ B 156 * 006 L □ L @ 9 ^ ++ | B                                                        | 15                                  | 6                                  | 3.2     | 1     | 10    | 12     | 8     | 10    | 10                            | 0.070                           | 0.15                            | 0.13                             | 0.06                            | 0.47                            | 0.43                             | 0.19 |
| CWR29D^156^@D+□                | TAZ D 156 * 006 L □ # @ 0 ^ ++ | TAZ D 156 * 006 L □ L @ 9 ^ ++ | D                                                        | 15                                  | 6                                  | 1.7     | 1     | 10    | 12     | 8     | 10    | 12                            | 0.080                           | 0.22                            | 0.20                             | 0.09                            | 0.37                            | 0.33                             | 0.15 |
| CWR29D^156^@E+□                | TAZ E 156 * 006 L □ # @ 0 ^ ++ | TAZ E 156 * 006 L □ L @ 9 ^ ++ | E                                                        | 15                                  | 6                                  | 0.9     | 1     | 10    | 12     | 8     | 10    | 12                            | 0.090                           | 0.32                            | 0.28                             | 0.13                            | 0.28                            | 0.26                             | 0.11 |
| CWR29D^226^@D+□                | TAZ D 226 * 006 L □ # @ 0 ^ ++ | TAZ D 226 * 006 L □ L @ 9 ^ ++ | D                                                        | 22                                  | 6                                  | 1.7     | 1     | 10    | 12     | 6     | 8     | 8                             | 0.080                           | 0.22                            | 0.20                             | 0.09                            | 0.37                            | 0.33                             | 0.15 |
| CWR29D^226^@E+□                | TAZ E 226 * 006 L □ # @ 0 ^ ++ | TAZ E 226 * 006 L □ L @ 9 ^ ++ | E                                                        | 22                                  | 6                                  | 1       | 1     | 10    | 12     | 6     | 8     | 10                            | 0.090                           | 0.30                            | 0.27                             | 0.12                            | 0.30                            | 0.27                             | 0.12 |
| CWR29D^226^@F+□                | TAZ F 226 * 006 L □ # @ 0 ^ ++ | TAZ F 226 * 006 L □ L @ 9 ^ ++ | F                                                        | 22                                  | 6                                  | 0.6     | 2     | 20    | 24     | 8     | 10    | 12                            | 0.100                           | 0.41                            | 0.37                             | 0.16                            | 0.24                            | 0.22                             | 0.10 |
| CWR29D^336^@E+□                | TAZ E 336 * 006 L □ # @ 0 ^ ++ | TAZ E 336 * 006 L □ L @ 9 ^ ++ | E                                                        | 33                                  | 6                                  | 1       | 2     | 20    | 24     | 6     | 8     | 8                             | 0.090                           | 0.30                            | 0.27                             | 0.12                            | 0.30                            | 0.27                             | 0.12 |
| CWR29D^476^@F+□                | TAZ F 476 * 006 L □ # @ 0 ^ ++ | TAZ F 476 * 006 L □ L @ 9 ^ ++ | F                                                        | 47                                  | 6                                  | 1       | 3     | 30    | 36     | 8     | 10    | 12                            | 0.100                           | 0.32                            | 0.28                             | 0.13                            | 0.32                            | 0.28                             | 0.13 |
| CWR29D^476^@G+□                | TAZ G 476 * 006 L □ # @ 0 ^ ++ | TAZ G 476 * 006 L □ L @ 9 ^ ++ | G                                                        | 47                                  | 6                                  | 0.275   | 3     | 30    | 36     | 10    | 12    | 12                            | 0.125                           | 0.67                            | 0.61                             | 0.27                            | 0.19                            | 0.17                             | 0.07 |
| CWR29D^686^@F+□                | TAZ F 686 * 006 L □ # @ 0 ^ ++ | TAZ F 686 * 006 L □ L @ 9 ^ ++ | F                                                        | 68                                  | 6                                  | 0.4     | 4     | 40    | 48     | 10    | 12    | 12                            | 0.100                           | 0.50                            | 0.45                             | 0.20                            | 0.20                            | 0.18                             | 0.08 |
| CWR29D^686^@G+□                | TAZ G 686 * 006 L □ # @ 0 ^ ++ | TAZ G 686 * 006 L □ L @ 9 ^ ++ | G                                                        | 68                                  | 6                                  | 0.25    | 4     | 40    | 48     | 10    | 12    | 12                            | 0.125                           | 0.71                            | 0.64                             | 0.28                            | 0.18                            | 0.16                             | 0.07 |
| CWR29D^686^@H+□                | TAZ H 686 * 006 L □ # @ 0 ^ ++ | TAZ H 686 * 006 L □ L @ 9 ^ ++ | H                                                        | 68                                  | 6                                  | 0.18    | 4     | 40    | 48     | 10    | 12    | 12                            | 0.150                           | 0.91                            | 0.82                             | 0.37                            | 0.16                            | 0.15                             | 0.07 |
| CWR29D^107^@G+□                | TAZ G 107 * 006 L □ # @ 0 ^ ++ | TAZ G 107 * 006 L □ L @ 9 ^ ++ | G                                                        | 100                                 | 6                                  | 0.275   | 6     | 60    | 72     | 10    | 12    | 12                            | 0.125                           | 0.67                            | 0.61                             | 0.27                            | 0.19                            | 0.17                             | 0.07 |
| CWR29D^157^@G+□                | TAZ G 157 * 006 L □ # @ 0 ^ ++ | TAZ G 157 * 006 L □ L @ 9 ^ ++ | G                                                        | 150                                 | 6                                  | 0.275   | 10    | 100   | 120    | 10    | 12    | 12                            | 0.125                           | 0.67                            | 0.61                             | 0.27                            | 0.19                            | 0.17                             | 0.07 |
| CWR29D^227^@H+□                | TAZ H 227 * 006 L □ # @ 0 ^ ++ | TAZ H 227 * 006 L □ L @ 9 ^ ++ | H                                                        | 220                                 | 6                                  | 0.18    | 10    | 100   | 120    | 10    | 12    | 12                            | 0.150                           | 0.91                            | 0.82                             | 0.37                            | 0.16                            | 0.15                             | 0.07 |
| CWR29D^337^@H+□                | TAZ H 337 * 006 L □ # @ 0 ^ ++ | TAZ H 337 * 006 L □ L @ 9 ^ ++ | H                                                        | 330                                 | 6                                  | 0.18    | 20    | 200   | 240    | 10    | 12    | 12                            | 0.150                           | 0.91                            | 0.82                             | 0.37                            | 0.16                            | 0.15                             | 0.07 |
| CWR29F^105^@A+□                | TAZ A 105 * 010 L □ # @ 0 ^ ++ | TAZ A 105 * 010 L □ L @ 9 ^ ++ | A                                                        | 1                                   | 10                                 | 5       | 1     | 10    | 12     | 6     | 8     | 8                             | 0.050                           | 0.10                            | 0.09                             | 0.04                            | 0.50                            | 0.45                             | 0.20 |
| CWR29F^225^@A+□                | TAZ A 225 * 010 L □ # @ 0 ^ ++ | TAZ A 225 * 010 L □ L @ 9 ^ ++ | A                                                        | 2.2                                 | 10                                 | 6       | 1     | 10    | 12     | 6     | 8     | 8                             | 0.050                           | 0.09                            | 0.08                             | 0.04                            | 0.55                            | 0.49                             | 0.22 |
| CWR29F^225^@B+□                | TAZ B 225 * 010 L □ # @ 0 ^ ++ | TAZ B 225 * 010 L □ L @ 9 ^ ++ | B                                                        | 2.2                                 | 10                                 | 3.2     | 1     | 10    | 12     | 6     | 8     | 8                             | 0.070                           | 0.15                            | 0.13                             | 0.06                            | 0.47                            | 0.43                             | 0.19 |
| CWR29F^335^@A+□                | TAZ A 335 * 010 L □ # @ 0 ^ ++ | TAZ A 335 * 010 L □ L @ 9 ^ ++ | A                                                        | 3.3                                 | 10                                 | 6       | 1     | 10    | 12     | 6     | 8     | 8                             | 0.050                           | 0.09                            | 0.08                             | 0.04                            | 0.55                            | 0.49                             | 0.22 |
| CWR29F^335^@C+□                | TAZ C 335 * 010 L □ # @ 0 ^ ++ | TAZ C 335 * 010 L □ L @ 9 ^ ++ | C                                                        | 3.3                                 | 10                                 | 2.2     | 1     | 10    | 12     | 6     | 8     | 8                             | 0.075                           | 0.18                            | 0.17                             | 0.07                            | 0.41                            | 0.37                             | 0.16 |
| CWR29F^475^@B+□                | TAZ B 475 * 010 L □ # @ 0 ^ ++ | TAZ B 475 * 010 L □ L @ 9 ^ ++ | B                                                        | 4.7                                 | 10                                 | 3.2     | 1     | 10    | 12     | 6     | 8     | 8                             | 0.070                           | 0.15                            | 0.13                             | 0.06                            | 0.47                            | 0.43                             | 0.19 |
| CWR29F^475^@C+□                | TAZ C 475 * 010 L □ # @ 0 ^ ++ | TAZ C 475 * 010 L □ L @ 9 ^ ++ | C                                                        | 4.7                                 | 10                                 | 2.2     | 1     | 10    | 12     | 6     | 8     | 8                             | 0.075                           | 0.18                            | 0.17                             | 0.07                            | 0.41                            | 0.37                             | 0.16 |

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

**NOTE:** AVX reserves the right to supply a higher voltage rating or tighter tolerance part in the same case size, to the same reliability standards.



# TAZ Series



## CWR29 - MIL-PRF-55365/11 Established Reliability, COTS-Plus & Space Level

| RATING & PART NUMBER REFERENCE |                                |                             |      | Parametric Specifications by Rating per MIL-PRF-55365/11 |                                     |                                    |         |           |       |        |    |    | Typical Ripple Data by Rating |                                 |                                 |                                  |                                 |                                 |                                  |
|--------------------------------|--------------------------------|-----------------------------|------|----------------------------------------------------------|-------------------------------------|------------------------------------|---------|-----------|-------|--------|----|----|-------------------------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|---------------------------------|----------------------------------|
|                                |                                |                             |      | Cap<br>@ 120Hz<br>µF<br>@ 25°C                           | DC Rated<br>Voltage<br>V<br>@ +85°C | ESR<br>@ 100kHz<br>Ohms<br>@ +25°C | DCL max |           |       | DF Max |    |    | Power<br>Dissipation<br>W     | 25°C<br>Ripple<br>A<br>(100kHz) | 85°C<br>Ripple<br>A<br>(100kHz) | 125°C<br>Ripple<br>A<br>(100kHz) | 25°C<br>Ripple<br>V<br>(100kHz) | 85°C<br>Ripple<br>V<br>(100kHz) | 125°C<br>Ripple<br>V<br>(100kHz) |
| CWR29 P/N                      | AVX MIL & COTS-Plus P/N        | AVX SRC9000 P/N             | Case | +25°C                                                    | +85°C                               | +125°C                             | +25°C   | +85/125°C | -55°C |        |    |    |                               |                                 |                                 |                                  |                                 |                                 |                                  |
| CWR29F^475^@D+□                | TAZ D 475 * 010 L □ # @ 0 ^ ++ | TAZ D 475 * 010 LL @ 9 ^ ++ | D    | 4.7                                                      | 10                                  | 1.5                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.080                         | 0.23                            | 0.21                            | 0.09                             | 0.35                            | 0.31                            | 0.14                             |
| CWR29F^685^@B+□                | TAZ B 685 * 010 L □ # @ 0 ^ ++ | TAZ B 685 * 010 LL @ 9 ^ ++ | B    | 6.8                                                      | 10                                  | 3.2                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.070                         | 0.15                            | 0.13                            | 0.06                             | 0.47                            | 0.43                            | 0.19                             |
| CWR29F^685^@C+□                | TAZ C 685 * 010 L □ # @ 0 ^ ++ | TAZ C 685 * 010 LL @ 9 ^ ++ | C    | 6.8                                                      | 10                                  | 2.2                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.075                         | 0.18                            | 0.17                            | 0.07                             | 0.41                            | 0.37                            | 0.16                             |
| CWR29F^685^@D+□                | TAZ D 685 * 010 L □ # @ 0 ^ ++ | TAZ D 685 * 010 LL @ 9 ^ ++ | D    | 6.8                                                      | 10                                  | 1.7                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.080                         | 0.22                            | 0.20                            | 0.09                             | 0.37                            | 0.33                            | 0.15                             |
| CWR29F^685^@E+□                | TAZ E 685 * 010 L □ # @ 0 ^ ++ | TAZ E 685 * 010 LL @ 9 ^ ++ | E    | 6.8                                                      | 10                                  | 1                                  | 1       | 10        | 12    | 6      | 8  | 8  | 0.090                         | 0.30                            | 0.27                            | 0.12                             | 0.30                            | 0.27                            | 0.12                             |
| CWR29F^106^@B+□                | TAZ B 106 * 010 L □ # @ 0 ^ ++ | TAZ B 106 * 010 LL @ 9 ^ ++ | B    | 10                                                       | 10                                  | 3.2                                | 1       | 10        | 12    | 8      | 10 | 10 | 0.070                         | 0.15                            | 0.13                            | 0.06                             | 0.47                            | 0.43                            | 0.19                             |
| CWR29F^106^@C+□                | TAZ C 106 * 010 L □ # @ 0 ^ ++ | TAZ C 106 * 010 LL @ 9 ^ ++ | C    | 10                                                       | 10                                  | 2.2                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.075                         | 0.18                            | 0.17                            | 0.07                             | 0.41                            | 0.37                            | 0.16                             |
| CWR29F^106^@D+□                | TAZ D 106 * 010 L □ # @ 0 ^ ++ | TAZ D 106 * 010 LL @ 9 ^ ++ | D    | 10                                                       | 10                                  | 1.3                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.080                         | 0.25                            | 0.22                            | 0.10                             | 0.32                            | 0.29                            | 0.13                             |
| CWR29F^106^@E+□                | TAZ E 106 * 010 L □ # @ 0 ^ ++ | TAZ E 106 * 010 LL @ 9 ^ ++ | E    | 10                                                       | 10                                  | 1                                  | 1       | 10        | 12    | 6      | 8  | 8  | 0.090                         | 0.30                            | 0.27                            | 0.12                             | 0.30                            | 0.27                            | 0.12                             |
| CWR29F^156^@D+□                | TAZ D 156 * 010 L □ # @ 0 ^ ++ | TAZ D 156 * 010 LL @ 9 ^ ++ | D    | 15                                                       | 10                                  | 1.7                                | 2       | 20        | 24    | 6      | 8  | 8  | 0.080                         | 0.22                            | 0.20                            | 0.09                             | 0.37                            | 0.33                            | 0.15                             |
| CWR29F^156^@E+□                | TAZ E 156 * 010 L □ # @ 0 ^ ++ | TAZ E 156 * 010 LL @ 9 ^ ++ | E    | 15                                                       | 10                                  | 0.9                                | 2       | 20        | 24    | 8      | 10 | 10 | 0.090                         | 0.32                            | 0.28                            | 0.13                             | 0.28                            | 0.26                            | 0.11                             |
| CWR29F^156^@F+□                | TAZ F 156 * 010 L □ # @ 0 ^ ++ | TAZ F 156 * 010 LL @ 9 ^ ++ | F    | 15                                                       | 10                                  | 0.7                                | 2       | 20        | 24    | 8      | 8  | 10 | 0.100                         | 0.38                            | 0.34                            | 0.15                             | 0.26                            | 0.24                            | 0.11                             |
| CWR29F^226^@E+□                | TAZ E 226 * 010 L □ # @ 0 ^ ++ | TAZ E 226 * 010 LL @ 9 ^ ++ | E    | 22                                                       | 10                                  | 0.6                                | 3       | 30        | 36    | 8      | 10 | 10 | 0.090                         | 0.39                            | 0.35                            | 0.15                             | 0.23                            | 0.21                            | 0.09                             |
| CWR29F^336^@F+□                | TAZ F 336 * 010 L □ # @ 0 ^ ++ | TAZ F 336 * 010 LL @ 9 ^ ++ | F    | 33                                                       | 10                                  | 0.4                                | 3       | 30        | 36    | 8      | 10 | 10 | 0.100                         | 0.50                            | 0.45                            | 0.20                             | 0.20                            | 0.18                            | 0.08                             |
| CWR29F^336^@G+□                | TAZ G 336 * 010 L □ # @ 0 ^ ++ | TAZ G 336 * 010 LL @ 9 ^ ++ | G    | 33                                                       | 10                                  | 0.275                              | 3       | 30        | 36    | 10     | 12 | 12 | 0.125                         | 0.67                            | 0.61                            | 0.27                             | 0.19                            | 0.17                            | 0.07                             |
| CWR29F^476^@F+□                | TAZ F 476 * 010 L □ # @ 0 ^ ++ | TAZ F 476 * 010 LL @ 9 ^ ++ | F    | 47                                                       | 10                                  | 0.4                                | 4       | 40        | 48    | 10     | 12 | 12 | 0.100                         | 0.50                            | 0.45                            | 0.20                             | 0.20                            | 0.18                            | 0.08                             |
| CWR29F^476^@G+□                | TAZ G 476 * 010 L □ # @ 0 ^ ++ | TAZ G 476 * 010 LL @ 9 ^ ++ | G    | 47                                                       | 10                                  | 0.25                               | 4       | 40        | 48    | 10     | 12 | 12 | 0.125                         | 0.71                            | 0.64                            | 0.28                             | 0.18                            | 0.16                            | 0.07                             |
| CWR29F^476^@H+□                | TAZ H 476 * 010 L □ # @ 0 ^ ++ | TAZ H 476 * 010 LL @ 9 ^ ++ | H    | 47                                                       | 10                                  | 0.18                               | 5       | 50        | 60    | 10     | 12 | 12 | 0.150                         | 0.91                            | 0.82                            | 0.37                             | 0.16                            | 0.15                            | 0.07                             |
| CWR29F^686^@G+□                | TAZ G 686 * 010 L □ # @ 0 ^ ++ | TAZ G 686 * 010 LL @ 9 ^ ++ | G    | 68                                                       | 10                                  | 0.275                              | 6       | 60        | 72    | 10     | 12 | 12 | 0.125                         | 0.67                            | 0.61                            | 0.27                             | 0.19                            | 0.17                            | 0.07                             |
| CWR29F^107^@G+□                | TAZ G 107 * 010 L □ # @ 0 ^ ++ | TAZ G 107 * 010 LL @ 9 ^ ++ | G    | 100                                                      | 10                                  | 0.275                              | 10      | 100       | 120   | 10     | 12 | 12 | 0.125                         | 0.67                            | 0.61                            | 0.27                             | 0.19                            | 0.17                            | 0.07                             |
| CWR29F^107^@H+□                | TAZ H 107 * 010 L □ # @ 0 ^ ++ | TAZ H 107 * 010 LL @ 9 ^ ++ | H    | 100                                                      | 10                                  | 0.18                               | 10      | 100       | 120   | 10     | 12 | 12 | 0.150                         | 0.91                            | 0.82                            | 0.37                             | 0.16                            | 0.15                            | 0.07                             |
| CWR29F^157^@H+□                | TAZ H 157 * 010 L □ # @ 0 ^ ++ | TAZ H 157 * 010 LL @ 9 ^ ++ | H    | 150                                                      | 10                                  | 0.18                               | 15      | 150       | 180   | 10     | 12 | 12 | 0.150                         | 0.91                            | 0.82                            | 0.37                             | 0.16                            | 0.15                            | 0.07                             |
| CWR29F^157^@X+□                | TAZ X 157 * 010 L □ # @ 0 ^ ++ | TAZ X 157 * 010 LL @ 9 ^ ++ | X    | 150                                                      | 10                                  | 0.065                              | 15      | 150       | 180   | 10     | 12 | 12 | 0.200                         | 1.75                            | 1.58                            | 0.70                             | 0.11                            | 0.10                            | 0.05                             |
| CWR29F^227^@H+□                | TAZ H 227 * 010 L □ # @ 0 ^ ++ | TAZ H 227 * 010 LL @ 9 ^ ++ | H    | 220                                                      | 10                                  | 0.18                               | 20      | 200       | 240   | 10     | 12 | 12 | 0.150                         | 0.91                            | 0.82                            | 0.37                             | 0.16                            | 0.15                            | 0.07                             |
| CWR29H^684^@A+□                | TAZ A 684 * 015 L □ # @ 0 ^ ++ | TAZ A 684 * 015 LL @ 9 ^ ++ | A    | 0.68                                                     | 15                                  | 6                                  | 1       | 10        | 12    | 6      | 8  | 8  | 0.050                         | 0.09                            | 0.08                            | 0.04                             | 0.55                            | 0.49                            | 0.22                             |
| CWR29H^105^@A+□                | TAZ A 105 * 015 L □ # @ 0 ^ ++ | TAZ A 105 * 015 LL @ 9 ^ ++ | A    | 1                                                        | 15                                  | 7.5                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.050                         | 0.08                            | 0.07                            | 0.03                             | 0.61                            | 0.55                            | 0.24                             |
| CWR29H^155^@A+□                | TAZ A 155 * 015 L □ # @ 0 ^ ++ | TAZ A 155 * 015 LL @ 9 ^ ++ | A    | 1.5                                                      | 15                                  | 7.5                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.050                         | 0.08                            | 0.07                            | 0.03                             | 0.61                            | 0.55                            | 0.24                             |
| CWR29H^155^@B+□                | TAZ B 155 * 015 L □ # @ 0 ^ ++ | TAZ B 155 * 015 LL @ 9 ^ ++ | B    | 1.5                                                      | 15                                  | 3.2                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.070                         | 0.15                            | 0.13                            | 0.06                             | 0.47                            | 0.43                            | 0.19                             |
| CWR29H^225^@A+□                | TAZ A 225 * 015 L □ # @ 0 ^ ++ | TAZ A 225 * 015 LL @ 9 ^ ++ | A    | 2.2                                                      | 15                                  | 7.5                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.050                         | 0.08                            | 0.07                            | 0.03                             | 0.61                            | 0.55                            | 0.24                             |
| CWR29H^225^@C+□                | TAZ C 225 * 015 L □ # @ 0 ^ ++ | TAZ C 225 * 015 LL @ 9 ^ ++ | C    | 2.2                                                      | 15                                  | 2.2                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.075                         | 0.18                            | 0.17                            | 0.07                             | 0.41                            | 0.37                            | 0.16                             |
| CWR29H^335^@B+□                | TAZ B 335 * 015 L □ # @ 0 ^ ++ | TAZ B 335 * 015 LL @ 9 ^ ++ | B    | 3.3                                                      | 15                                  | 3.6                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.070                         | 0.14                            | 0.13                            | 0.06                             | 0.50                            | 0.45                            | 0.20                             |
| CWR29H^335^@D+□                | TAZ D 335 * 015 L □ # @ 0 ^ ++ | TAZ D 335 * 015 LL @ 9 ^ ++ | D    | 3.3                                                      | 15                                  | 1.7                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.080                         | 0.22                            | 0.20                            | 0.09                             | 0.37                            | 0.33                            | 0.15                             |
| CWR29H^475^@B+□                | TAZ B 475 * 015 L □ # @ 0 ^ ++ | TAZ B 475 * 015 LL @ 9 ^ ++ | B    | 4.7                                                      | 15                                  | 2                                  | 1       | 10        | 12    | 6      | 8  | 8  | 0.070                         | 0.19                            | 0.17                            | 0.07                             | 0.37                            | 0.34                            | 0.15                             |
| CWR29H^475^@C+□                | TAZ C 475 * 015 L □ # @ 0 ^ ++ | TAZ C 475 * 015 LL @ 9 ^ ++ | C    | 4.7                                                      | 15                                  | 2.2                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.075                         | 0.18                            | 0.17                            | 0.07                             | 0.41                            | 0.37                            | 0.16                             |
| CWR29H^475^@D+□                | TAZ D 475 * 015 L □ # @ 0 ^ ++ | TAZ D 475 * 015 LL @ 9 ^ ++ | D    | 4.7                                                      | 15                                  | 2                                  | 1       | 10        | 12    | 6      | 8  | 8  | 0.080                         | 0.20                            | 0.18                            | 0.08                             | 0.40                            | 0.36                            | 0.16                             |
| CWR29H^475^@E+□                | TAZ E 475 * 015 L □ # @ 0 ^ ++ | TAZ E 475 * 015 LL @ 9 ^ ++ | E    | 4.7                                                      | 15                                  | 1.2                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.090                         | 0.27                            | 0.25                            | 0.11                             | 0.33                            | 0.30                            | 0.13                             |
| CWR29H^685^@D+□                | TAZ D 685 * 015 L □ # @ 0 ^ ++ | TAZ D 685 * 015 LL @ 9 ^ ++ | D    | 6.8                                                      | 15                                  | 2                                  | 1       | 10        | 12    | 6      | 8  | 8  | 0.080                         | 0.20                            | 0.18                            | 0.08                             | 0.40                            | 0.36                            | 0.16                             |
| CWR29H^685^@E+□                | TAZ E 685 * 015 L □ # @ 0 ^ ++ | TAZ E 685 * 015 LL @ 9 ^ ++ | E    | 6.8                                                      | 15                                  | 0.9                                | 1       | 10        | 12    | 8      | 10 | 12 | 0.090                         | 0.32                            | 0.28                            | 0.13                             | 0.28                            | 0.26                            | 0.11                             |
| CWR29H^106^@D+□                | TAZ D 106 * 015 L □ # @ 0 ^ ++ | TAZ D 106 * 015 LL @ 9 ^ ++ | D    | 10                                                       | 15                                  | 2                                  | 2       | 20        | 24    | 6      | 8  | 8  | 0.080                         | 0.20                            | 0.18                            | 0.08                             | 0.40                            | 0.36                            | 0.16                             |
| CWR29H^106^@E+□                | TAZ E 106 * 015 L □ # @ 0 ^ ++ | TAZ E 106 * 015 LL @ 9 ^ ++ | E    | 10                                                       | 15                                  | 1.2                                | 2       | 20        | 24    | 6      | 8  | 8  | 0.090                         | 0.27                            | 0.25                            | 0.11                             | 0.33                            | 0.30                            | 0.13                             |
| CWR29H^106^@F+□                | TAZ F 106 * 015 L □ # @ 0 ^ ++ | TAZ F 106 * 015 LL @ 9 ^ ++ | F    | 10                                                       | 15                                  | 0.667                              | 2       | 20        | 24    | 6      | 8  | 8  | 0.100                         | 0.39                            | 0.35                            | 0.15                             | 0.26                            | 0.23                            | 0.10                             |
| CWR29H^156^@E+□                | TAZ E 156 * 015 L □ # @ 0 ^ ++ | TAZ E 156 * 015 LL @ 9 ^ ++ | E    | 15                                                       | 15                                  | 1.2                                | 2       | 20        | 24    | 6      | 8  | 8  | 0.090                         | 0.27                            | 0.25                            | 0.11                             | 0.33                            | 0.30                            | 0.13                             |
| CWR29H^156^@F+□                | TAZ F 156 * 015 L □ # @ 0 ^ ++ | TAZ F 156 * 015 LL @ 9 ^ ++ | F    | 15                                                       | 15                                  | 0.8                                | 2       | 20        | 24    | 8      | 10 | 10 | 0.100                         | 0.35                            | 0.32                            | 0.14                             | 0.28                            | 0.25                            | 0.11                             |
| CWR29H^226^@F+□                | TAZ F 226 * 015 L □ # @ 0 ^ ++ | TAZ F 226 * 015 LL @ 9 ^ ++ | F    | 22                                                       | 15                                  | 0.8                                | 3       | 30        | 36    | 8      | 10 | 10 | 0.100                         | 0.35                            | 0.32                            | 0.14                             | 0.28                            | 0.25                            | 0.11                             |
| CWR29H^226^@G+□                | TAZ G 226 * 015 L □ # @ 0 ^ ++ | TAZ G 226 * 015 LL @ 9 ^ ++ | G    | 22                                                       | 15                                  | 0.275                              | 4       | 40        | 48    | 6      | 8  | 8  | 0.125                         | 0.67                            | 0.61                            | 0.27                             | 0.19                            | 0.17                            | 0.07                             |
| CWR29H^336^@F+□                | TAZ F 336 * 015 L □ # @ 0 ^ ++ | TAZ F 336 * 015 LL @ 9 ^ ++ | F    | 33                                                       | 15                                  | 0.8                                | 5       | 50        | 60    | 6      | 8  | 8  | 0.100                         | 0.35                            | 0.32                            | 0.14                             | 0.28                            | 0.25                            | 0.11                             |
| CWR29H^336^@G+□                | TAZ G 336 * 015 L □ # @ 0 ^ ++ | TAZ G 336 * 015 LL @ 9 ^ ++ | G    | 33                                                       | 15                                  | 0.275                              | 6       | 60        | 72    | 8      | 10 | 10 | 0.125                         | 0.67                            | 0.61                            | 0.27                             | 0.19                            | 0.17                            | 0.07                             |
| CWR29H^336^@H+□                | TAZ H 336 * 015 L □ # @ 0 ^ ++ | TAZ H 336 * 015 LL @ 9 ^ ++ | H    | 33                                                       | 15                                  | 0.18                               | 5       | 50        | 60    | 8      | 10 | 10 | 0.150                         | 0.91                            | 0.82                            | 0.37                             | 0.16                            | 0.15                            | 0.07                             |
| CWR29H^476^@G+□                | TAZ G 476 * 015 L □ # @ 0 ^ ++ | TAZ G 476 * 015 LL @ 9 ^ ++ | G    | 47                                                       | 15                                  | 0.275                              | 10      | 100       | 120   | 8      | 10 | 10 | 0.125                         | 0.67                            | 0.61                            | 0.27                             | 0.19                            | 0.17                            | 0.07                             |
| CWR29H^476^@H+□                | TAZ H 476 * 015 L □ # @ 0 ^ ++ | TAZ H 476 * 015 LL @ 9 ^ ++ | H    | 47                                                       | 15                                  | 0.18                               | 10      | 100       | 120   | 8      | 10 | 10 | 0.150                         | 0.91                            | 0.82                            | 0.37                             | 0.16                            | 0.15                            | 0.07                             |
| CWR29H^686^@G+□                | TAZ G 686 * 015 L □ # @ 0 ^ ++ | TAZ G 686 * 015 LL @ 9 ^ ++ | G    | 68                                                       | 15                                  | 0.275                              | 10      | 100       | 120   | 8      | 10 | 10 | 0.125                         | 0.67                            | 0.61                            | 0.27                             | 0.19                            | 0.17                            | 0.07                             |
| CWR29H^686^@H+□                | TAZ H 686 * 015 L □ # @ 0 ^ ++ | TAZ H 686 * 015 LL @ 9 ^ ++ | H    | 68                                                       | 15                                  | 0.18                               | 10      | 100       | 120   | 8      | 10 | 10 | 0.150                         | 0.91                            | 0.82                            | 0.37                             | 0.16                            | 0.15                            | 0.07                             |
| CWR29H^107^@H+□                | TAZ H 107 * 015 L □ # @ 0 ^ ++ | TAZ H 107 * 015 LL @ 9 ^ ++ | H    | 100                                                      | 15                                  | 0.18                               | 15      | 150       | 180   | 10     | 12 | 12 | 0.150                         | 0.91                            | 0.82                            | 0.37                             | 0.16                            | 0.15                            | 0.07                             |
| CWR29J^474^@A+□                | TAZ A 474 * 020 L □ # @ 0 ^ ++ | TAZ A 474 * 020 LL @ 9 ^ ++ | A    | 0.47                                                     | 20                                  | 7.5                                | 1       | 10        | 12    | 8      | 8  | 10 | 0.050                         | 0.08                            | 0.07                            | 0.03                             | 0.61                            | 0.55                            | 0.24                             |
| CWR29J^684^@A+□                | TAZ A 684 * 020 L □ # @ 0 ^ ++ | TAZ A 684 * 020 LL @ 9 ^ ++ | A    | 0.68                                                     | 20                                  | 7.5                                | 1       | 10        | 12    | 6      | 8  | 8  | 0.050                         | 0.08                            | 0.07                            | 0.03                             | 0.61                            | 0.55                            | 0.24                             |

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

**NOTE:** AVX reserves the right to supply a higher voltage rating or tighter tolerance part in the same case size, to the same reliability standards.



# TAZ Series



## CWR29 - MIL-PRF-55365/11 Established Reliability, COTS-Plus & Space Level

| RATING & PART NUMBER REFERENCE |                                |                             |      | Parametric Specifications by Rating per MIL-PRF-55365/11 |                                     |                                    |               |               |                |              |                  |              | Typical Ripple Data by Rating |                                 |                                 |                                  |                                 |                                 |                                  |
|--------------------------------|--------------------------------|-----------------------------|------|----------------------------------------------------------|-------------------------------------|------------------------------------|---------------|---------------|----------------|--------------|------------------|--------------|-------------------------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|---------------------------------|----------------------------------|
|                                |                                |                             |      | Cap<br>@ 120Hz<br>µF<br>@ 25°C                           | DC Rated<br>Voltage<br>V<br>@ +85°C | ESR<br>@ 100kHz<br>Ohms<br>@ +25°C | DCL max       |               |                | DF Max       |                  |              | Power<br>Dissipation<br>W     | 25°C<br>Ripple<br>A<br>(100kHz) | 85°C<br>Ripple<br>A<br>(100kHz) | 125°C<br>Ripple<br>A<br>(100kHz) | 25°C<br>Ripple<br>V<br>(100kHz) | 85°C<br>Ripple<br>V<br>(100kHz) | 125°C<br>Ripple<br>V<br>(100kHz) |
|                                |                                |                             |      |                                                          |                                     |                                    | +25°C<br>(µA) | +85°C<br>(µA) | +125°C<br>(µA) | +25°C<br>(%) | +85/125°C<br>(%) | -55°C<br>(%) |                               |                                 |                                 |                                  |                                 |                                 |                                  |
| CWR29 P/N                      | AVX MIL & COTS-Plus P/N        | AVX SRC9000 P/N             | Case | µF<br>@ 25°C                                             | V<br>@ +85°C                        | Ohms<br>@ +25°C                    | (µA)          | (µA)          | (µA)           | (%)          | (%)              | (%)          | W                             | A<br>(100kHz)                   | A<br>(100kHz)                   | A<br>(100kHz)                    | V<br>(100kHz)                   | V<br>(100kHz)                   | V<br>(100kHz)                    |
| CWR29J^684^@B+□                | TAZ B 684 * 020 L □ # @ 0 ^ ++ | TAZ B 684 * 020 LL @ 9 ^ ++ | B    | 0.68                                                     | 20                                  | 5.6                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.070                         | 0.11                            | 0.10                            | 0.03                             | 0.63                            | 0.56                            | 0.25                             |
| CWR29J^105^@A+□                | TAZ A 105 * 020 L □ # @ 0 ^ ++ | TAZ A 105 * 020 LL @ 9 ^ ++ | A    | 1                                                        | 20                                  | 7.5                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.050                         | 0.08                            | 0.07                            | 0.03                             | 0.61                            | 0.55                            | 0.24                             |
| CWR29J^105^@B+□                | TAZ B 105 * 020 L □ # @ 0 ^ ++ | TAZ B 105 * 020 LL @ 9 ^ ++ | B    | 1                                                        | 20                                  | 4.8                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.070                         | 0.12                            | 0.11                            | 0.05                             | 0.58                            | 0.52                            | 0.23                             |
| CWR29J^155^@B+□                | TAZ B 155 * 020 L □ # @ 0 ^ ++ | TAZ B 155 * 020 LL @ 9 ^ ++ | B    | 1.5                                                      | 20                                  | 3.6                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.070                         | 0.14                            | 0.13                            | 0.06                             | 0.50                            | 0.45                            | 0.20                             |
| CWR29J^155^@C+□                | TAZ C 155 * 020 L □ # @ 0 ^ ++ | TAZ C 155 * 020 LL @ 9 ^ ++ | C    | 1.5                                                      | 20                                  | 2.4                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.075                         | 0.18                            | 0.16                            | 0.07                             | 0.42                            | 0.38                            | 0.17                             |
| CWR29J^225^@B+□                | TAZ B 225 * 020 L □ # @ 0 ^ ++ | TAZ B 225 * 020 LL @ 9 ^ ++ | B    | 2.2                                                      | 20                                  | 3.6                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.070                         | 0.14                            | 0.13                            | 0.06                             | 0.50                            | 0.45                            | 0.20                             |
| CWR29J^225^@D+□                | TAZ D 225 * 020 L □ # @ 0 ^ ++ | TAZ D 225 * 020 LL @ 9 ^ ++ | D    | 2.2                                                      | 20                                  | 1.7                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.080                         | 0.22                            | 0.20                            | 0.09                             | 0.37                            | 0.33                            | 0.15                             |
| CWR29J^335^@D+□                | TAZ D 335 * 020 L □ # @ 0 ^ ++ | TAZ D 335 * 020 LL @ 9 ^ ++ | D    | 3.3                                                      | 20                                  | 2                                  | 1             | 10            | 12             | 6            | 8                | 8            | 0.080                         | 0.20                            | 0.18                            | 0.08                             | 0.40                            | 0.36                            | 0.16                             |
| CWR29J^335^@E+□                | TAZ E 335 * 020 L □ # @ 0 ^ ++ | TAZ E 335 * 020 LL @ 9 ^ ++ | E    | 3.3                                                      | 20                                  | 1.2                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.090                         | 0.27                            | 0.25                            | 0.11                             | 0.33                            | 0.30                            | 0.13                             |
| CWR29J^475^@E+□                | TAZ E 475 * 020 L □ # @ 0 ^ ++ | TAZ E 475 * 020 LL @ 9 ^ ++ | E    | 4.7                                                      | 20                                  | 1.7                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.090                         | 0.23                            | 0.21                            | 0.09                             | 0.39                            | 0.35                            | 0.16                             |
| CWR29J^685^@E+□                | TAZ E 685 * 020 L □ # @ 0 ^ ++ | TAZ E 685 * 020 LL @ 9 ^ ++ | E    | 6.8                                                      | 20                                  | 1.5                                | 2             | 20            | 24             | 6            | 8                | 8            | 0.090                         | 0.24                            | 0.22                            | 0.10                             | 0.37                            | 0.33                            | 0.15                             |
| CWR29J^685^@F+□                | TAZ F 685 * 020 L □ # @ 0 ^ ++ | TAZ F 685 * 020 LL @ 9 ^ ++ | F    | 6.8                                                      | 20                                  | 0.7                                | 2             | 20            | 24             | 6            | 8                | 8            | 0.100                         | 0.38                            | 0.34                            | 0.15                             | 0.26                            | 0.24                            | 0.11                             |
| CWR29J^106^@E+□                | TAZ E 106 * 020 L □ # @ 0 ^ ++ | TAZ E 106 * 020 LL @ 9 ^ ++ | E    | 10                                                       | 20                                  | 1.5                                | 2             | 20            | 24             | 6            | 8                | 8            | 0.090                         | 0.24                            | 0.22                            | 0.10                             | 0.37                            | 0.33                            | 0.15                             |
| CWR29J^106^@F+□                | TAZ F 106 * 020 L □ # @ 0 ^ ++ | TAZ F 106 * 020 LL @ 9 ^ ++ | F    | 10                                                       | 20                                  | 0.8                                | 2             | 20            | 24             | 6            | 8                | 8            | 0.100                         | 0.35                            | 0.32                            | 0.14                             | 0.28                            | 0.25                            | 0.11                             |
| CWR29J^156^@F+□                | TAZ F 156 * 020 L □ # @ 0 ^ ++ | TAZ F 156 * 020 LL @ 9 ^ ++ | F    | 15                                                       | 20                                  | 0.8                                | 3             | 30            | 36             | 6            | 8                | 8            | 0.100                         | 0.35                            | 0.32                            | 0.14                             | 0.28                            | 0.25                            | 0.11                             |
| CWR29J^156^@G+□                | TAZ G 156 * 020 L □ # @ 0 ^ ++ | TAZ G 156 * 020 LL @ 9 ^ ++ | G    | 15                                                       | 20                                  | 0.275                              | 3             | 30            | 36             | 6            | 8                | 8            | 0.125                         | 0.67                            | 0.61                            | 0.27                             | 0.19                            | 0.17                            | 0.07                             |
| CWR29J^226^@G+□                | TAZ G 226 * 020 L □ # @ 0 ^ ++ | TAZ G 226 * 020 LL @ 9 ^ ++ | G    | 22                                                       | 20                                  | 0.625                              | 4             | 40            | 48             | 6            | 8                | 8            | 0.125                         | 0.45                            | 0.40                            | 0.18                             | 0.28                            | 0.25                            | 0.11                             |
| CWR29J^226^@H+□                | TAZ H 226 * 020 L □ # @ 0 ^ ++ | TAZ H 226 * 020 LL @ 9 ^ ++ | H    | 22                                                       | 20                                  | 0.18                               | 4             | 40            | 48             | 6            | 8                | 8            | 0.150                         | 0.91                            | 0.82                            | 0.37                             | 0.16                            | 0.15                            | 0.07                             |
| CWR29J^336^@H+□                | TAZ H 336 * 020 L □ # @ 0 ^ ++ | TAZ H 336 * 020 LL @ 9 ^ ++ | H    | 33                                                       | 20                                  | 0.18                               | 6             | 60            | 72             | 8            | 10               | 10           | 0.150                         | 0.91                            | 0.82                            | 0.37                             | 0.16                            | 0.15                            | 0.07                             |
| CWR29J^476^@H+□                | TAZ H 476 * 020 L □ # @ 0 ^ ++ | TAZ H 476 * 020 LL @ 9 ^ ++ | H    | 47                                                       | 20                                  | 0.18                               | 10            | 100           | 120            | 8            | 10               | 10           | 0.150                         | 0.91                            | 0.82                            | 0.37                             | 0.16                            | 0.15                            | 0.07                             |
| CWR29J^476^@X+□                | TAZ X 476 * 020 L □ # @ 0 ^ ++ | TAZ X 476 * 020 LL @ 9 ^ ++ | X    | 47                                                       | 20                                  | 0.11                               | 10            | 100           | 120            | 8            | 10               | 10           | 0.200                         | 1.35                            | 1.21                            | 0.54                             | 0.15                            | 0.13                            | 0.06                             |
| CWR29K^334^@A+□                | TAZ A 334 * 025 L □ # @ 0 ^ ++ | TAZ A 334 * 025 LL @ 9 ^ ++ | A    | 0.33                                                     | 25                                  | 7.5                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.050                         | 0.08                            | 0.07                            | 0.03                             | 0.61                            | 0.55                            | 0.24                             |
| CWR29K^474^@A+□                | TAZ A 474 * 025 L □ # @ 0 ^ ++ | TAZ A 474 * 025 LL @ 9 ^ ++ | A    | 0.47                                                     | 25                                  | 7.5                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.050                         | 0.08                            | 0.07                            | 0.03                             | 0.61                            | 0.55                            | 0.24                             |
| CWR29K^684^@B+□                | TAZ B 684 * 025 L □ # @ 0 ^ ++ | TAZ B 684 * 025 LL @ 9 ^ ++ | B    | 0.68                                                     | 25                                  | 4                                  | 1             | 10            | 12             | 6            | 8                | 8            | 0.070                         | 0.13                            | 0.12                            | 0.05                             | 0.53                            | 0.48                            | 0.21                             |
| CWR29K^105^@B+□                | TAZ B 105 * 025 L □ # @ 0 ^ ++ | TAZ B 105 * 025 LL @ 9 ^ ++ | B    | 1                                                        | 25                                  | 4                                  | 1             | 10            | 12             | 6            | 8                | 8            | 0.070                         | 0.13                            | 0.12                            | 0.05                             | 0.53                            | 0.48                            | 0.21                             |
| CWR29K^105^@C+□                | TAZ C 105 * 025 L □ # @ 0 ^ ++ | TAZ C 105 * 025 LL @ 9 ^ ++ | C    | 1                                                        | 25                                  | 2.6                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.075                         | 0.17                            | 0.15                            | 0.07                             | 0.44                            | 0.40                            | 0.18                             |
| CWR29K^155^@D+□                | TAZ D 155 * 025 L □ # @ 0 ^ ++ | TAZ D 155 * 025 LL @ 9 ^ ++ | D    | 1.5                                                      | 25                                  | 1.7                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.080                         | 0.22                            | 0.20                            | 0.09                             | 0.37                            | 0.33                            | 0.15                             |
| CWR29K^225^@D+□                | TAZ D 225 * 025 L □ # @ 0 ^ ++ | TAZ D 225 * 025 LL @ 9 ^ ++ | D    | 2.2                                                      | 25                                  | 2                                  | 1             | 10            | 12             | 6            | 8                | 8            | 0.080                         | 0.20                            | 0.18                            | 0.08                             | 0.40                            | 0.36                            | 0.16                             |
| CWR29K^225^@E+□                | TAZ E 225 * 025 L □ # @ 0 ^ ++ | TAZ E 225 * 025 LL @ 9 ^ ++ | E    | 2.2                                                      | 25                                  | 1                                  | 1             | 10            | 12             | 6            | 8                | 8            | 0.090                         | 0.30                            | 0.27                            | 0.12                             | 0.30                            | 0.27                            | 0.12                             |
| CWR29K^335^@E+□                | TAZ E 335 * 025 L □ # @ 0 ^ ++ | TAZ E 335 * 025 LL @ 9 ^ ++ | E    | 3.3                                                      | 25                                  | 1.2                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.090                         | 0.27                            | 0.25                            | 0.11                             | 0.33                            | 0.30                            | 0.13                             |
| CWR29K^475^@F+□                | TAZ F 475 * 025 L □ # @ 0 ^ ++ | TAZ F 475 * 025 LL @ 9 ^ ++ | F    | 4.7                                                      | 25                                  | 0.7                                | 2             | 20            | 24             | 6            | 8                | 8            | 0.100                         | 0.38                            | 0.34                            | 0.15                             | 0.26                            | 0.24                            | 0.11                             |
| CWR29K^685^@F+□                | TAZ F 685 * 025 L □ # @ 0 ^ ++ | TAZ F 685 * 025 LL @ 9 ^ ++ | F    | 6.8                                                      | 25                                  | 0.8                                | 2             | 20            | 24             | 6            | 8                | 8            | 0.100                         | 0.35                            | 0.32                            | 0.14                             | 0.28                            | 0.25                            | 0.11                             |
| CWR29K^685^@G+□                | TAZ G 685 * 025 L □ # @ 0 ^ ++ | TAZ G 685 * 025 LL @ 9 ^ ++ | G    | 6.8                                                      | 25                                  | 0.3                                | 2             | 20            | 24             | 6            | 8                | 8            | 0.125                         | 0.65                            | 0.58                            | 0.26                             | 0.19                            | 0.17                            | 0.08                             |
| CWR29K^106^@G+□                | TAZ G 106 * 025 L □ # @ 0 ^ ++ | TAZ G 106 * 025 LL @ 9 ^ ++ | G    | 10                                                       | 25                                  | 0.35                               | 3             | 30            | 36             | 6            | 8                | 8            | 0.125                         | 0.60                            | 0.54                            | 0.24                             | 0.21                            | 0.19                            | 0.08                             |
| CWR29K^156^@G+□                | TAZ G 156 * 025 L □ # @ 0 ^ ++ | TAZ G 156 * 025 LL @ 9 ^ ++ | G    | 15                                                       | 25                                  | 0.35                               | 4             | 40            | 48             | 6            | 8                | 8            | 0.125                         | 0.60                            | 0.54                            | 0.24                             | 0.21                            | 0.19                            | 0.08                             |
| CWR29K^156^@H+□                | TAZ H 156 * 025 L □ # @ 0 ^ ++ | TAZ H 156 * 025 LL @ 9 ^ ++ | H    | 15                                                       | 25                                  | 0.2                                | 4             | 40            | 48             | 6            | 8                | 8            | 0.150                         | 0.87                            | 0.78                            | 0.35                             | 0.17                            | 0.16                            | 0.07                             |
| CWR29K^226^@G+□                | TAZ G 226 * 025 L □ # @ 0 ^ ++ | TAZ G 226 * 025 LL @ 9 ^ ++ | G    | 22                                                       | 25                                  | 0.35                               | 6             | 60            | 72             | 6            | 8                | 8            | 0.125                         | 0.60                            | 0.54                            | 0.24                             | 0.21                            | 0.19                            | 0.08                             |
| CWR29K^226^@H+□                | TAZ H 226 * 025 L □ # @ 0 ^ ++ | TAZ H 226 * 025 LL @ 9 ^ ++ | H    | 22                                                       | 25                                  | 0.18                               | 6             | 60            | 72             | 6            | 8                | 8            | 0.150                         | 0.91                            | 0.82                            | 0.37                             | 0.16                            | 0.15                            | 0.07                             |
| CWR29K^336^@H+□                | TAZ H 336 * 025 L □ # @ 0 ^ ++ | TAZ H 336 * 025 LL @ 9 ^ ++ | H    | 33                                                       | 25                                  | 0.18                               | 10            | 100           | 120            | 8            | 10               | 10           | 0.150                         | 0.91                            | 0.82                            | 0.37                             | 0.16                            | 0.15                            | 0.07                             |
| CWR29M^224^@A+□                | TAZ A 224 * 035 L □ # @ 0 ^ ++ | TAZ A 224 * 035 LL @ 9 ^ ++ | A    | 0.22                                                     | 35                                  | 12                                 | 1             | 10            | 12             | 6            | 8                | 8            | 0.050                         | 0.06                            | 0.06                            | 0.03                             | 0.77                            | 0.70                            | 0.31                             |
| CWR29M^334^@A+□                | TAZ A 334 * 035 L □ # @ 0 ^ ++ | TAZ A 334 * 035 LL @ 9 ^ ++ | A    | 0.33                                                     | 35                                  | 12                                 | 1             | 10            | 12             | 6            | 8                | 8            | 0.050                         | 0.06                            | 0.06                            | 0.03                             | 0.77                            | 0.70                            | 0.31                             |
| CWR29M^474^@B+□                | TAZ B 474 * 035 L □ # @ 0 ^ ++ | TAZ B 474 * 035 LL @ 9 ^ ++ | B    | 0.47                                                     | 35                                  | 6.8                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.070                         | 0.10                            | 0.09                            | 0.04                             | 0.69                            | 0.62                            | 0.28                             |
| CWR29M^684^@C+□                | TAZ C 684 * 035 L □ # @ 0 ^ ++ | TAZ C 684 * 035 LL @ 9 ^ ++ | C    | 0.68                                                     | 35                                  | 4                                  | 1             | 10            | 12             | 6            | 8                | 8            | 0.075                         | 0.14                            | 0.12                            | 0.05                             | 0.55                            | 0.49                            | 0.22                             |
| CWR29M^105^@D+□                | TAZ D 105 * 035 L □ # @ 0 ^ ++ | TAZ D 105 * 035 LL @ 9 ^ ++ | D    | 1                                                        | 35                                  | 2.2                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.080                         | 0.19                            | 0.17                            | 0.08                             | 0.42                            | 0.38                            | 0.17                             |
| CWR29M^155^@E+□                | TAZ E 155 * 035 L □ # @ 0 ^ ++ | TAZ E 155 * 035 LL @ 9 ^ ++ | E    | 1.5                                                      | 35                                  | 1.3                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.090                         | 0.26                            | 0.24                            | 0.11                             | 0.34                            | 0.31                            | 0.14                             |
| CWR29M^335^@F+□                | TAZ F 335 * 035 L □ # @ 0 ^ ++ | TAZ F 335 * 035 LL @ 9 ^ ++ | F    | 3.3                                                      | 35                                  | 0.7                                | 1             | 10            | 12             | 6            | 8                | 8            | 0.100                         | 0.38                            | 0.34                            | 0.15                             | 0.26                            | 0.24                            | 0.11                             |
| CWR29M^475^@G+□                | TAZ G 475 * 035 L □ # @ 0 ^ ++ | TAZ G 475 * 035 LL @ 9 ^ ++ | G    | 4.7                                                      | 35                                  | 0.375                              | 2             | 20            | 24             | 6            | 8                | 8            | 0.125                         | 0.58                            | 0.52                            | 0.23                             | 0.22                            | 0.19                            | 0.09                             |
| CWR29M^685^@G+□                | TAZ G 685 * 035 L □ # @ 0 ^ ++ | TAZ G 685 * 035 LL @ 9 ^ ++ | G    | 6.8                                                      | 35                                  | 0.375                              | 3             | 30            | 36             | 6            | 8                | 8            | 0.125                         | 0.58                            | 0.52                            | 0.23                             | 0.22                            | 0.19                            | 0.09                             |
| CWR29M^685^@H+□                | TAZ H 685 * 035 L □ # @ 0 ^ ++ | TAZ H 685 * 035 LL @ 9 ^ ++ | H    | 6.8                                                      | 35                                  | 0.5                                | 3             | 30            | 36             | 6            | 8                | 8            | 0.150                         | 0.55                            | 0.49                            | 0.22                             | 0.27                            | 0.25                            | 0.11                             |
| CWR29M^106^@H+□                | TAZ H 106 * 035 L □ # @ 0 ^ ++ | TAZ H 106 * 035 LL @ 9 ^ ++ | H    | 10                                                       | 35                                  | 0.5                                | 4             | 40            | 48             | 8            | 10               | 10           | 0.150                         | 0.55                            | 0.49                            | 0.22                             | 0.27                            | 0.25                            | 0.11                             |
| CWR29N^104^@A+□                | TAZ A 104 * 050 L □ # @ 0 ^ ++ | TAZ A 104 * 050 LL @ 9 ^ ++ | A    | 0.1                                                      | 50                                  | 12                                 | 1             | 10            | 12             | 6            | 8                | 8            | 0.050                         | 0.06                            | 0.06                            | 0.03                             | 0.77                            | 0.70                            | 0.31                             |
| CWR29N^154^@A+□                | TAZ A 154 * 050 L □ # @ 0 ^ ++ | TAZ A 154 * 050 LL @ 9 ^ ++ | A    | 0.15                                                     | 50                                  | 12                                 | 1             | 10            | 12             | 6            | 8                | 8            | 0.050                         | 0.06                            | 0.06                            | 0.03                             | 0.77                            | 0.70                            | 0.31                             |

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

**NOTE:** AVX reserves the right to supply a higher voltage rating or tighter tolerance part in the same case size, to the same reliability standards.



# TAZ Series



## CWR29 - MIL-PRF-55365/11 Established Reliability, COTS-Plus & Space Level

| RATING & PART NUMBER REFERENCE |                                |                              |      | Parametric Specifications by Rating per MIL-PRF-55365/11 |                                     |                                    |                          |               |                |              |              | Typical Ripple Data by Rating |              |                           |                                 |                                 |                                  |                                 |                                 |
|--------------------------------|--------------------------------|------------------------------|------|----------------------------------------------------------|-------------------------------------|------------------------------------|--------------------------|---------------|----------------|--------------|--------------|-------------------------------|--------------|---------------------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|---------------------------------|
|                                |                                |                              |      | Cap<br>@ 120Hz<br>μF<br>@ 25°C                           | DC Rated<br>Voltage<br>V<br>@ +85°C | ESR<br>@ 100kHz<br>Ohms<br>@ +25°C | DCL max<br>+25°C<br>(μA) | +85°C<br>(μA) | +125°C<br>(μA) | +25°C<br>(%) | +25°C<br>(%) | DF Max<br>+(85/125)°C<br>(%)  | -55°C<br>(%) | Power<br>Dissipation<br>W | 25°C<br>Ripple<br>A<br>(100kHz) | 85°C<br>Ripple<br>A<br>(100kHz) | 125°C<br>Ripple<br>A<br>(100kHz) | 25°C<br>Ripple<br>V<br>(100kHz) | 85°C<br>Ripple<br>V<br>(100kHz) |
| CWR29 P/N                      | AVX MIL & COTS-Plus P/N        | AVX SRC9000 P/N              | Case |                                                          |                                     |                                    |                          |               |                |              |              |                               |              |                           |                                 |                                 |                                  |                                 |                                 |
| CWR29N^224^@B+□                | TAZ B 224 * 050 L □ # @ 0 ^ ++ | TAZ B 224 * 050 L L @ 9 ^ ++ | B    | 0.22                                                     | 50                                  | 6.8                                | 1                        | 10            | 12             | 6            | 8            | 8                             | 0.070        | 0.10                      | 0.09                            | 0.04                            | 0.69                             | 0.62                            | 0.28                            |
| CWR29N^334^@B+□                | TAZ B 334 * 050 L □ # @ 0 ^ ++ | TAZ B 334 * 050 L L @ 9 ^ ++ | B    | 0.33                                                     | 50                                  | 4.8                                | 1                        | 10            | 12             | 6            | 8            | 8                             | 0.070        | 0.12                      | 0.11                            | 0.05                            | 0.58                             | 0.52                            | 0.23                            |
| CWR29N^474^@C+□                | TAZ C 474 * 050 L □ # @ 0 ^ ++ | TAZ C 474 * 050 L L @ 9 ^ ++ | C    | 0.47                                                     | 50                                  | 3.2                                | 1                        | 10            | 12             | 6            | 8            | 8                             | 0.075        | 0.15                      | 0.14                            | 0.06                            | 0.49                             | 0.44                            | 0.20                            |
| CWR29N^684^@D+□                | TAZ D 684 * 050 L □ # @ 0 ^ ++ | TAZ D 684 * 050 L L @ 9 ^ ++ | D    | 0.68                                                     | 50                                  | 2.3                                | 1                        | 10            | 12             | 6            | 8            | 8                             | 0.080        | 0.19                      | 0.17                            | 0.07                            | 0.43                             | 0.39                            | 0.17                            |
| CWR29N^105^@E+□                | TAZ E 105 * 050 L □ # @ 0 ^ ++ | TAZ E 105 * 050 L L @ 9 ^ ++ | E    | 1                                                        | 50                                  | 1.7                                | 1                        | 10            | 12             | 6            | 8            | 8                             | 0.090        | 0.23                      | 0.21                            | 0.09                            | 0.39                             | 0.35                            | 0.16                            |
| CWR29N^155^@F+□                | TAZ F 155 * 050 L □ # @ 0 ^ ++ | TAZ F 155 * 050 L L @ 9 ^ ++ | F    | 1.5                                                      | 50                                  | 1.1                                | 1                        | 10            | 12             | 6            | 8            | 8                             | 0.100        | 0.30                      | 0.27                            | 0.12                            | 0.33                             | 0.30                            | 0.13                            |
| CWR29N^225^@F+□                | TAZ F 225 * 050 L □ # @ 0 ^ ++ | TAZ F 225 * 050 L L @ 9 ^ ++ | F    | 2.2                                                      | 50                                  | 0.7                                | 2                        | 20            | 24             | 6            | 8            | 8                             | 0.100        | 0.38                      | 0.34                            | 0.15                            | 0.26                             | 0.24                            | 0.11                            |
| CWR29N^335^@G+□                | TAZ G 335 * 050 L □ # @ 0 ^ ++ | TAZ G 335 * 050 L L @ 9 ^ ++ | G    | 3.3                                                      | 50                                  | 0.5                                | 2                        | 20            | 24             | 6            | 8            | 8                             | 0.125        | 0.50                      | 0.45                            | 0.20                            | 0.25                             | 0.23                            | 0.10                            |
| CWR29N^475^@H+□                | TAZ H 475 * 050 L □ # @ 0 ^ ++ | TAZ H 475 * 050 L L @ 9 ^ ++ | H    | 4.7                                                      | 50                                  | 0.5                                | 3                        | 30            | 36             | 6            | 8            | 8                             | 0.150        | 0.55                      | 0.49                            | 0.22                            | 0.27                             | 0.25                            | 0.11                            |

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

**NOTE:** AVX reserves the right to supply a higher voltage rating or tighter tolerance part in the same case size, to the same reliability standards.



# TAZ Cots+, CWR09, CWR19 and CWR29 Series



## Tape and Reel Packaging

Solid Tantalum Chip TAZ Tape and reel packaging for automatic component placement.  
Please enter required Suffix on order. Bulk packaging is standard.

### TAZ TAPING SUFFIX TABLE

| Case Size reference | Tape width mm | P mm | 7" (180mm) reel |      | 13" reel (330mm) reel |      |
|---------------------|---------------|------|-----------------|------|-----------------------|------|
|                     |               |      | Suffix          | Qty. | Suffix                | Qty. |
| A                   | 8             | 4    | R               | 2500 | S                     | 9000 |
| B                   | 12            | 4    | R               | 2500 | S                     | 9000 |
| C                   | 12            | 4    | R               | 2500 | S                     | 9000 |
| D                   | 12            | 4    | R               | 2500 | S                     | 8000 |
| E                   | 12            | 4    | R               | 2500 | S                     | 8000 |
| F                   | 12            | 8    | R               | 1000 | S                     | 3000 |
| G                   | 12            | 8    | R               | 500  | S                     | 2500 |
| H                   | 12            | 8    | R               | 500  | S                     | 2500 |

| Total Tape Thickness – K max |                          |
|------------------------------|--------------------------|
| Case size reference          | Millimeters (Inches) DIM |
| A                            | 2.0 (0.079)              |
| B                            | 4.0 (0.157)              |
| D                            | 4.0 (0.157)              |
| E                            | 4.0 (0.157)              |
| F                            | 4.0 (0.157)              |
| G                            | 4.0 (0.157)              |
| H                            | 4.0 (0.157)              |

| Code           | 8mm Tape             |                                | 12mm Tape            |                                |
|----------------|----------------------|--------------------------------|----------------------|--------------------------------|
| P*             | 4±0.1<br>or<br>8±0.1 | (0.157±0.004)<br>(0.315±0.004) | 4±0.1<br>or<br>8±0.1 | (0.157±0.004)<br>(0.315±0.004) |
| G              | 0.75 min             | (0.03 min)                     | 0.75 min             | (0.03 min)                     |
| F              | 3.5±0.04             | (0.138±0.002)                  | 5.5±0.05             | (0.22±0.002)                   |
| E              | 1.75±0.1             | (0.069±0.004)                  | 1.75±0.1             | (0.069±0.004)                  |
| W              | 8±0.3                | (0.315±0.012)                  | 12±0.3               | (0.472±0.012)                  |
| P <sub>2</sub> | 2±0.05               | (0.079±0.002)                  | 2±0.05               | (0.079±0.002)                  |
| P <sub>0</sub> | 4±0.1                | (0.157±0.004)                  | 4±0.1                | (0.157±0.004)                  |
| D              | 1.5±0.1<br>-0        | (0.059±0.004)<br>(-0)          | 1.5±0.1<br>-0        | (0.059±0.004)<br>(-0)          |
| D <sub>1</sub> | 1.0 min              | (0.039 min)                    | 1.5 min              | (0.059 min)                    |

\*See taping suffix tables for actual P dimension (component pitch).

### TAPE SPECIFICATION

Tape dimensions comply to EIA RS 481 A  
Dimensions A<sub>0</sub> and B<sub>0</sub> of the pocket and the tape thickness, K, are dependent on the component size.

Tape materials do not affect component solderability during storage.

Carrier Tape Thickness <0.4mm

