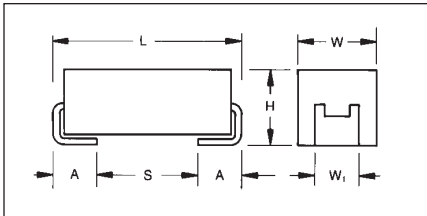


# TAZ Series



## 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 ASTM E-595.

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

### CASE DIMENSIONS:

millimeters (inches)

Case Code	Length (L) ±0.38 (0.015)	Width (W) ±0.38 (0.015)	Height (H) ±0.38 (0.015)	Term. Width (W <sub>t</sub> )	Term. Length (A) +0.25/-0.13 (+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 (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 (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 (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 (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 (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 (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 (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 (0.145+0.005/-0.020)	1.27 (0.050)	4.06 (0.160)	0.335
X	6.93 (0.273)	5.41 (0.213)	2.74 (0.108)	3.05±0.13 (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	D/E	E	F	G
6.8	685	A/C	B/D	B/C/D/E	D/E	E/F	F/G	G/H	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	X	
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						



# TAZ Series



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

### HOW TO ORDER

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

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

For RoHS compliant products, please select correct termination style.

#### CWR29 P/N CROSS REFERENCE:

<b>CWR29</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> C = 4Vdc D = 6Vdc F = 10Vdc H = 15Vdc J = 20Vdc K = 25Vdc M = 35Vdc N = 50Vdc	<b>Termination Finish</b> H = Solder Plated K = Solder Fused C = Hot Solder Dipped B = Gold Plated	<b>Capacitance Code</b> pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	<b>Capacitance Tolerance</b> M = ±20% K = ±10% J = ±5%	<b>Reliability Grade</b> Weibull: B = 0.1%/1000 hrs. 90% conf. C = 0.01%/1000 hrs. 90% conf. D = 0.001%/1000 hrs. 90% conf. T = T Level A = Non-ER	<b>Case Size</b>	<b>Surge Test Option</b> A = 10 cycles, +25°C B = 10 cycles, -55°C & +85°C C = 10 cycles, -55°C & +85°C before Weibull Z = None required	<b>Packaging</b> Bulk = Standard \TR = 7" T&R \TR13 = 13" T&R W = Waffle  See page 8 for additional packaging options.

For RoHS compliant products, please select correct termination style.

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

For RoHS compliant products, please select correct termination style.

\*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:	0.10 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	
Surge Voltage (V <sub>S</sub> )	≤ 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									





RATING & PART NUMBER REFERENCE			Parametric Specifications by Rating per MIL-PRF-55365/11										Typical RMS Ripple Data by Rating									
CWR29 P/N	AVX MIL & COTS-Plus P/N	AVX SRC9000 P/N	Case	DC Rated Voltage		Cap @ 25°C		ESR @ 100kHz		DF Max		Power Dissipation		25°C Ripple		85°C Ripple		125°C Ripple				
				@ +85°C	@ -55°C	(µF)	(µA)	(%)	(%)	(µA)	(µA)	(%)	(%)	(W)	(100kHz)	(100kHz)	(100kHz)	(100kHz)	(100kHz)	(100kHz)	(100kHz)	(100kHz)
CWR29F475@D+D	TAZ D 475 * 010 L □ □ □ □ 9 + + +	TAZ D 475 * 010 L □ □ □ □ 9 + + +	D	4.7	10	1.5	1	10	12	6	8	0.080	0.23	0.21	0.09	0.35	0.31	0.14				
CWR29F685@D+D	TAZ B 685 * 010 L □ □ □ □ 9 + + +	TAZ B 685 * 010 L □ □ □ □ 9 + + +	B	6.8	10	3.2	1	10	12	6	8	0.070	0.15	0.13	0.06	0.47	0.43	0.19				
CWR29F685@C+D	TAZ C 685 * 010 L □ □ □ □ 9 + + +	TAZ C 685 * 010 L □ □ □ □ 9 + + +	C	6.8	10	2.2	1	10	12	6	8	0.075	0.18	0.17	0.07	0.41	0.37	0.16				
CWR29F685@D+D	TAZ D 685 * 010 L □ □ □ □ 9 + + +	TAZ D 685 * 010 L □ □ □ □ 9 + + +	D	6.8	10	1.7	1	10	12	6	8	0.080	0.22	0.20	0.09	0.37	0.33	0.15				
CWR29F685@E+D	TAZ E 685 * 010 L □ □ □ □ 9 + + +	TAZ E 685 * 010 L □ □ □ □ 9 + + +	E	6.8	10	1	1	10	12	6	8	0.090	0.30	0.27	0.12	0.30	0.27	0.12				
CWR29F106@H+D	TAZ B 106 * 010 L □ □ □ □ 9 + + +	TAZ B 106 * 010 L □ □ □ □ 9 + + +	B	10	10	3.2	1	10	12	6	8	0.070	0.15	0.13	0.06	0.47	0.43	0.19				
CWR29F106@C+D	TAZ C 106 * 010 L □ □ □ □ 9 + + +	TAZ C 106 * 010 L □ □ □ □ 9 + + +	C	10	10	2.2	1	10	12	6	8	0.075	0.18	0.17	0.07	0.41	0.37	0.16				
CWR29F106@D+D	TAZ D 106 * 010 L □ □ □ □ 9 + + +	TAZ D 106 * 010 L □ □ □ □ 9 + + +	D	10	10	1.3	1	10	12	6	8	0.080	0.25	0.22	0.10	0.32	0.29	0.13				
CWR29F106@E+D	TAZ E 106 * 010 L □ □ □ □ 9 + + +	TAZ E 106 * 010 L □ □ □ □ 9 + + +	E	10	10	1	1	10	12	6	8	0.090	0.30	0.27	0.12	0.30	0.27	0.12				
CWR29F156@H+D	TAZ B 156 * 010 L □ □ □ □ 9 + + +	TAZ B 156 * 010 L □ □ □ □ 9 + + +	B	15	10	1.7	1	20	24	6	8	0.080	0.22	0.20	0.09	0.37	0.33	0.15				
CWR29F156@C+D	TAZ C 156 * 010 L □ □ □ □ 9 + + +	TAZ C 156 * 010 L □ □ □ □ 9 + + +	C	15	10	0.9	2	20	24	6	8	0.090	0.32	0.28	0.13	0.28	0.26	0.11				
CWR29F156@D+D	TAZ D 156 * 010 L □ □ □ □ 9 + + +	TAZ D 156 * 010 L □ □ □ □ 9 + + +	D	15	10	0.7	2	20	24	6	8	0.100	0.38	0.34	0.15	0.26	0.24	0.11				
CWR29F226@H+D	TAZ E 226 * 010 L □ □ □ □ 9 + + +	TAZ E 226 * 010 L □ □ □ □ 9 + + +	E	22	10	0.6	3	30	36	8	10	0.090	0.30	0.35	0.15	0.23	0.21	0.09				
CWR29F336@E+D	TAZ F 336 * 010 L □ □ □ □ 9 + + +	TAZ F 336 * 010 L □ □ □ □ 9 + + +	F	33	10	0.4	3	30	36	8	10	0.100	0.50	0.45	0.20	0.20	0.18	0.08				
CWR29F336@G+D	TAZ G 336 * 010 L □ □ □ □ 9 + + +	TAZ G 336 * 010 L □ □ □ □ 9 + + +	G	33	10	0.275	3	30	36	10	12	0.125	0.67	0.61	0.27	0.19	0.17	0.07				
CWR29F476@H+D	TAZ H 476 * 010 L □ □ □ □ 9 + + +	TAZ H 476 * 010 L □ □ □ □ 9 + + +	H	47	10	0.18	4	40	48	10	12	0.125	0.71	0.64	0.28	0.18	0.16	0.07				
CWR29F476@C+D	TAZ C 476 * 010 L □ □ □ □ 9 + + +	TAZ C 476 * 010 L □ □ □ □ 9 + + +	C	47	10	0.25	4	40	48	10	12	0.150	0.91	0.82	0.37	0.16	0.15	0.07				
CWR29F476@E+D	TAZ E 476 * 010 L □ □ □ □ 9 + + +	TAZ E 476 * 010 L □ □ □ □ 9 + + +	E	47	10	0.4	4	40	48	10	12	0.160	1.00	0.91	0.42	0.20	0.18	0.08				
CWR29F686@G+D	TAZ G 686 * 010 L □ □ □ □ 9 + + +	TAZ G 686 * 010 L □ □ □ □ 9 + + +	G	68	10	0.275	5	50	60	10	12	0.125	0.67	0.61	0.27	0.19	0.17	0.07				
CWR29F107@G+D	TAZ G 107 * 010 L □ □ □ □ 9 + + +	TAZ G 107 * 010 L □ □ □ □ 9 + + +	G	100	10	0.275	10	100	120	10	12	0.125	0.67	0.61	0.27	0.19	0.17	0.07				
CWR29F107@H+D	TAZ H 107 * 010 L □ □ □ □ 9 + + +	TAZ H 107 * 010 L □ □ □ □ 9 + + +	H	100	10	0.18	10	100	120	10	12	0.150	0.91	0.82	0.37	0.16	0.15	0.07				
CWR29F157@H+D	TAZ H 157 * 010 L □ □ □ □ 9 + + +	TAZ H 157 * 010 L □ □ □ □ 9 + + +	H	150	10	0.18	15	150	180	10	12	0.150	0.91	0.82	0.37	0.16	0.15	0.07				
CWR29F157@X+D	TAZ X 157 * 010 L □ □ □ □ 9 + + +	TAZ X 157 * 010 L □ □ □ □ 9 + + +	X	150	10	0.065	15	150	180	10	12	0.200	1.75	1.58	0.70	0.11	0.10	0.05				
CWR29F227@H+D	TAZ H 227 * 010 L □ □ □ □ 9 + + +	TAZ H 227 * 010 L □ □ □ □ 9 + + +	H	220	10	0.18	20	200	240	10	12	0.150	0.91	0.82	0.37	0.16	0.15	0.07				
CWR29F684@A+D	TAZ A 684 * 015 L □ □ □ □ 9 + + +	TAZ A 684 * 015 L □ □ □ □ 9 + + +	A	0.68	15	6	1	10	12	6	8	0.050	0.09	0.08	0.04	0.55	0.49	0.22				
CWR29A105@A+D	TAZ A 105 * 015 L □ □ □ □ 9 + + +	TAZ A 105 * 015 L □ □ □ □ 9 + + +	A	1	15	7.5	1	10	12	6	8	0.050	0.08	0.07	0.03	0.61	0.55	0.24				
CWR29H155@A+D	TAZ A 155 * 015 L □ □ □ □ 9 + + +	TAZ A 155 * 015 L □ □ □ □ 9 + + +	A	1.5	15	7.5	1	10	12	6	8	0.050	0.08	0.07	0.03	0.61	0.55	0.24				
CWR29H155@B+D	TAZ B 155 * 015 L □ □ □ □ 9 + + +	TAZ B 155 * 015 L □ □ □ □ 9 + + +	B	1.5	15	3.2	1	10	12	6	8	0.070	0.15	0.13	0.06	0.47	0.43	0.19				
CWR29H225@A+D	TAZ A 225 * 015 L □ □ □ □ 9 + + +	TAZ A 225 * 015 L □ □ □ □ 9 + + +	A	2.2	15	7.5	1	10	12	6	8	0.050	0.08	0.07	0.03	0.61	0.55	0.24				
CWR29H225@C+D	TAZ C 225 * 015 L □ □ □ □ 9 + + +	TAZ C 225 * 015 L □ □ □ □ 9 + + +	C	2.2	15	2.2	1	10	12	6	8	0.070	0.18	0.17	0.07	0.41	0.37	0.16				
CWR29H335@B+D	TAZ B 335 * 015 L □ □ □ □ 9 + + +	TAZ B 335 * 015 L □ □ □ □ 9 + + +	B	3.3	15	3.6	1	10	12	6	8	0.075	0.20	0.18	0.08	0.40	0.36	0.16				
CWR29H335@D+D	TAZ D 335 * 015 L □ □ □ □ 9 + + +	TAZ D 335 * 015 L □ □ □ □ 9 + + +	D	3.3	15	1.7	1	10	12	6	8	0.080	0.22	0.20	0.09	0.37	0.33	0.15				
CWR29H475@B+D	TAZ B 475 * 015 L □ □ □ □ 9 + + +	TAZ B 475 * 015 L □ □ □ □ 9 + + +	B	4.7	15	2	1	10	12	6	8	0.070	0.19	0.17	0.07	0.37	0.34	0.15				
CWR29H475@C+D	TAZ C 475 * 015 L □ □ □ □ 9 + + +	TAZ C 475 * 015 L □ □ □ □ 9 + + +	C	4.7	15	2.2	1	10	12	6	8	0.075	0.20	0.18	0.08	0.40	0.36	0.16				
CWR29H475@D+D	TAZ D 475 * 015 L □ □ □ □ 9 + + +	TAZ D 475 * 015 L □ □ □ □ 9 + + +	D	4.7	15	2	1	10	12	6	8	0.080	0.20	0.18	0.08	0.40	0.36	0.16				
CWR29H475@E+D	TAZ E 475 * 015 L □ □ □ □ 9 + + +	TAZ E 475 * 015 L □ □ □ □ 9 + + +	E	4.7	15	1.2	1	10	12	6	8	0.090	0.27	0.25	0.11	0.33	0.30	0.13				
CWR29H685@D+D	TAZ D 685 * 015 L □ □ □ □ 9 + + +	TAZ D 685 * 015 L □ □ □ □ 9 + + +	D	6.8	15	2	1	10	12	6	8	0.080	0.20	0.18	0.08	0.40	0.36	0.16				
CWR29H685@E+D	TAZ E 685 * 015 L □ □ □ □ 9 + + +	TAZ E 685 * 015 L □ □ □ □ 9 + + +	E	6.8	15	0.9	1	10	12	6	8	0.090	0.32	0.28	0.13	0.28	0.26	0.11				
CWR29H106@H+D	TAZ H 106 * 015 L □ □ □ □ 9 + + +	TAZ H 106 * 015 L □ □ □ □ 9 + + +	H	10	15	1.2	2	20	24	6	8	0.080	0.20	0.18	0.08	0.40	0.36	0.16				
CWR29H106@C+D	TAZ C 106 * 015 L □ □ □ □ 9 + + +	TAZ C 106 * 015 L □ □ □ □ 9 + + +	C	10	15	1.2	2	20	24	6	8	0.090	0.27	0.25	0.11	0.33	0.30	0.13				
CWR29H106@D+D	TAZ D 106 * 015 L □ □ □ □ 9 + + +	TAZ D 106 * 015 L □ □ □ □ 9 + + +	D	10	15	0.667	2	20	24	6	8	0.100	0.39	0.35	0.15	0.26	0.23	0.10				
CWR29H106@E+D	TAZ E 106 * 015 L □ □ □ □ 9 + + +	TAZ E 106 * 015 L □ □ □ □ 9 + + +	E	10	15	1.2	2	20	24	6	8	0.100	0.39	0.35	0.15	0.26	0.23	0.10				
CWR29H156@H+D	TAZ H 156 * 015 L □ □ □ □ 9 + + +	TAZ H 156 * 015 L □ □ □ □ 9 + + +	H	15	15	0.8	2	20	24	6	8	0.100	0.35	0.32	0.14	0.28	0.25	0.11				
CWR29H156@C+D	TAZ C 156 * 015 L □ □ □ □ 9 + + +	TAZ C 156 * 015 L □ □ □ □ 9 + + +	C	15	15	0.8	2	20	24	6	8	0.100	0.35	0.32	0.14	0.28	0.25	0.11				
CWR29H156@D+D	TAZ D 156 * 015 L □ □ □ □ 9 + + +	TAZ D 156 * 015 L □ □ □ □ 9 + + +	D	15	15	0.8	3	30	36	8	10	0.100	0.35	0.32	0.14	0.28	0.25	0.11				
CWR29H226@H+D	TAZ H 226 * 015 L □ □ □ □ 9 + + +	TAZ H 226 * 015 L □ □ □ □ 9 + + +	H	22	15	0.8	2	20	24	6	8	0.125	0.67	0.61	0.27	0.19	0.17	0.07				
CWR29H226@C+D	TAZ C 226 * 015 L □ □ □ □ 9 + + +	TAZ C 226 * 015 L □ □ □ □ 9 + + +	C	22	15	0.8	2	20	24	6	8	0.125	0.67	0.61	0.27	0.19	0.17	0.07				
CWR29H336@H+D	TAZ H 336 * 015 L □ □ □ □ 9 + + +	TAZ H 336 * 015 L □ □ □ □ 9 + + +	H	33	15	0.8	5	50	60	6	8	0.100	0.35	0.32	0.14	0.28	0.25	0.11				
CWR29H336@C+D	TAZ C 336 * 015 L □ □ □ □ 9 + + +	TAZ C 336 * 015 L □ □ □ □ 9 + + +	C	33	15	0.275	6	60	72	8	10	0.125	0.67	0.61	0.27	0.19	0.17	0.07				
CWR29H336@E+D	TAZ E 336 * 015 L □ □ □ □ 9 + + +	TAZ E 336 * 015 L □ □ □ □ 9 + + +	E	33	15	0.18	5	50	60	6	8	0.150	0.91	0.82	0.37	0.16	0.15	0.07				
CWR29H476@H+D	TAZ H 476 * 015 L □ □ □ □ 9 + + +	TAZ H 476 * 015 L □ □ □ □ 9 + + +	H	47	15	0.18	10	100	120	8	10	0.125	0.67	0.61	0.27	0.19	0.17	0.07				
CWR29H476@C+D	TAZ C 476 * 015 L □ □ □ □ 9 + + +	TAZ C 476 * 015 L □ □ □ □ 9 + + +	C	47	15	0.18	10	100	120	8	10	0.125	0.67	0.61	0.27	0.19	0.17	0.07				
CWR29H476@E+D	TAZ E 476 * 015 L □ □ □ □ 9 + + +	TAZ E 476 * 015 L □ □ □ □ 9 + + +	E	47	15	0.18	10	100	120	8	10	0.125	0.67	0.61	0.27	0.19	0.17	0.07				
CWR29H686@H+D	TAZ H 686 * 015 L □ □ □ □ 9 + + +	TAZ H 686 * 015 L □ □ □ □ 9 + + +	H	68	15	0.18	10	100	120	8	10	0.150	0.91	0.82	0.37	0.16	0.15	0.07				
CWR29H686@C+D	TAZ C 686 * 015 L □ □ □ □ 9 + + +	TAZ C 686 * 015 L □ □ □ □ 9 + + +	C	68	15	0.18	10	100	120	8	10	0.150	0.91	0.82	0.37	0.16	0.15	0.07				
CWR29H107@H+D	TAZ H 107 * 015 L □ □ □ □ 9 + + +	TAZ H 107 * 015 L □ □ □ □ 9 + + +	H	100	15	0.18	15	150	180	10	12	0.150	0.91	0.82	0.37	0.16	0.15	0.07				
CWR29J474@A+D	TAZ A 474 * 020 L □ □ □ □ 9 + + +	TAZ A 474 * 020 L □ □ □ □ 9 + + +	A	0.47	20	7.5	1	10	12	6	8	0.050	0.08	0.07	0.03	0.61	0.55	0.24				
CWR29J684@A+D	TAZ A 684 * 020 L □ □ □ □ 9 + + +	TAZ A 684 * 020 L □ □ □ □ 9 + + +	A	0.68	20	7.5	1	10	12	6	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.



### RATING & PART NUMBER REFERENCE

CWR29 P/N	AVX MIL & COTS-Plus P/N		Case	Parametric Specifications by Rating per MIL-PRF-55365/11				Typical RMS Ripple Data by Rating											
	AVX MIL & COTS-Plus P/N	AVX SRC900 P/N		Cap @ 120Hz	DC Rated Voltage	ESR @ 100kHz	DF Max	Power Dissipation	25°C Ripple	85°C Ripple	125°C Ripple	25°C Ripple	85°C Ripple	125°C Ripple					
			µF @ 25°C	V @ ±85°C	Ohms @ ±25°C	+25°C	+85°C	W	A (100kHz)	A (100kHz)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)					
CWP29J1684@B+	TAZ B 684 * 020 L □ # 0 □ + +	TAZ B 684 * 020 L □ L □ 9 □ + +	B	0.68	20	5.6	1	10	12	6	8	8	0.070	0.11	0.10	0.04	0.63	0.56	0.25
CWP29J1105@A+	TAZ A 105 * 020 L □ # 0 □ + +	TAZ A 105 * 020 L □ L □ 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
CWP29J1105@B+	TAZ B 105 * 020 L □ # 0 □ + +	TAZ B 105 * 020 L □ L □ 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
CWP29J1155@B+	TAZ B 155 * 020 L □ # 0 □ + +	TAZ B 155 * 020 L □ L □ 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
CWP29J1155@C+	TAZ C 155 * 020 L □ # 0 □ + +	TAZ C 155 * 020 L □ L □ 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
CWP29J225@B+	TAZ B 225 * 020 L □ # 0 □ + +	TAZ B 225 * 020 L □ L □ 9 □ + +	B	2.2	20	3.6	1	10	12	6	8	8	0.080	0.22	0.20	0.09	0.37	0.33	0.15
CWP29J225@D+	TAZ D 225 * 020 L □ # 0 □ + +	TAZ D 225 * 020 L □ L □ 9 □ + +	D	2.2	20	1.7	1	10	12	6	8	8	0.080	0.20	0.18	0.08	0.40	0.36	0.16
CWP29J335@D+	TAZ D 335 * 020 L □ # 0 □ + +	TAZ D 335 * 020 L □ L □ 9 □ + +	D	3.3	20	2	1	10	12	6	8	8	0.090	0.27	0.25	0.11	0.33	0.30	0.13
CWP29J335@E+	TAZ E 335 * 020 L □ # 0 □ + +	TAZ E 335 * 020 L □ L □ 9 □ + +	E	3.3	20	1.2	1	10	12	6	8	8	0.090	0.23	0.21	0.09	0.39	0.35	0.16
CWP29J475@E+	TAZ E 475 * 020 L □ # 0 □ + +	TAZ E 475 * 020 L □ L □ 9 □ + +	E	4.7	20	1.7	1	10	12	6	8	8	0.090	0.27	0.25	0.11	0.33	0.30	0.13
CWP29J685@E+	TAZ E 685 * 020 L □ # 0 □ + +	TAZ E 685 * 020 L □ L □ 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
CWP29J685@F+	TAZ F 685 * 020 L □ # 0 □ + +	TAZ F 685 * 020 L □ L □ 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
CWP29J105@G+	TAZ G 105 * 020 L □ # 0 □ + +	TAZ G 105 * 020 L □ L □ 9 □ + +	G	10	20	1.5	2	20	24	6	8	8	0.090	0.24	0.22	0.10	0.37	0.33	0.15
CWP29J105@H+	TAZ H 105 * 020 L □ # 0 □ + +	TAZ H 105 * 020 L □ L □ 9 □ + +	H	10	20	0.8	2	20	24	6	8	8	0.100	0.35	0.32	0.14	0.28	0.25	0.11
CWP29J155@H+	TAZ H 155 * 020 L □ # 0 □ + +	TAZ H 155 * 020 L □ L □ 9 □ + +	H	15	20	0.8	3	30	36	6	8	8	0.100	0.35	0.32	0.14	0.28	0.25	0.11
CWP29J155@G+	TAZ G 155 * 020 L □ # 0 □ + +	TAZ G 155 * 020 L □ L □ 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
CWP29J225@G+	TAZ G 225 * 020 L □ # 0 □ + +	TAZ G 225 * 020 L □ L □ 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
CWP29J225@H+	TAZ H 225 * 020 L □ # 0 □ + +	TAZ H 225 * 020 L □ L □ 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
CWP29J335@H+	TAZ H 335 * 020 L □ # 0 □ + +	TAZ H 335 * 020 L □ L □ 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
CWP29J475@H+	TAZ H 475 * 020 L □ # 0 □ + +	TAZ H 475 * 020 L □ L □ 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
CWP29J475@X+	TAZ X 475 * 020 L □ # 0 □ + +	TAZ X 475 * 020 L □ L □ 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
CWP29K334@A+	TAZ A 334 * 025 L □ # 0 □ + +	TAZ A 334 * 025 L □ L □ 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
CWP29K474@A+	TAZ A 474 * 025 L □ # 0 □ + +	TAZ A 474 * 025 L □ L □ 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
CWP29K684@B+	TAZ B 684 * 025 L □ # 0 □ + +	TAZ B 684 * 025 L □ L □ 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
CWP29K105@B+	TAZ B 105 * 025 L □ # 0 □ + +	TAZ B 105 * 025 L □ L □ 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
CWP29K105@C+	TAZ C 105 * 025 L □ # 0 □ + +	TAZ C 105 * 025 L □ L □ 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
CWP29K155@D+	TAZ D 155 * 025 L □ # 0 □ + +	TAZ D 155 * 025 L □ L □ 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
CWP29K225@D+	TAZ D 225 * 025 L □ # 0 □ + +	TAZ D 225 * 025 L □ L □ 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
CWP29K225@E+	TAZ E 225 * 025 L □ # 0 □ + +	TAZ E 225 * 025 L □ L □ 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
CWP29K335@E+	TAZ E 335 * 025 L □ # 0 □ + +	TAZ E 335 * 025 L □ L □ 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
CWP29K475@E+	TAZ E 475 * 025 L □ # 0 □ + +	TAZ E 475 * 025 L □ L □ 9 □ + +	E	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
CWP29K685@E+	TAZ F 685 * 025 L □ # 0 □ + +	TAZ F 685 * 025 L □ L □ 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
CWP29K685@G+	TAZ G 685 * 025 L □ # 0 □ + +	TAZ G 685 * 025 L □ L □ 9 □ + +	G	6.8	25	0.3	3	30	36	6	8	8	0.125	0.65	0.58	0.26	0.19	0.17	0.08
CWP29K105@G+	TAZ G 105 * 025 L □ # 0 □ + +	TAZ G 105 * 025 L □ L □ 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
CWP29K155@G+	TAZ G 155 * 025 L □ # 0 □ + +	TAZ G 155 * 025 L □ L □ 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
CWP29K155@H+	TAZ H 155 * 025 L □ # 0 □ + +	TAZ H 155 * 025 L □ L □ 9 □ + +	H	15	25	0.2	4	40	48	6	8	8	0.125	0.87	0.78	0.35	0.17	0.16	0.07
CWP29K225@H+	TAZ H 225 * 025 L □ # 0 □ + +	TAZ H 225 * 025 L □ L □ 9 □ + +	H	22	25	0.35	6	60	72	6	8	8	0.125	0.60	0.54	0.24	0.21	0.19	0.08
CWP29K225@I+	TAZ I 225 * 025 L □ # 0 □ + +	TAZ I 225 * 025 L □ L □ 9 □ + +	I	22	25	0.18	6	60	72	6	8	8	0.150	0.91	0.82	0.37	0.16	0.15	0.07
CWP29K335@H+	TAZ H 335 * 025 L □ # 0 □ + +	TAZ H 335 * 025 L □ L □ 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
CWP29K335@I+	TAZ I 335 * 025 L □ # 0 □ + +	TAZ I 335 * 025 L □ L □ 9 □ + +	I	33	25	0.12	12	120	144	8	10	10	0.200	1.35	1.21	0.54	0.15	0.13	0.06
CWP29M224@A+	TAZ A 224 * 035 L □ # 0 □ + +	TAZ A 224 * 035 L □ L □ 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
CWP29M334@A+	TAZ A 334 * 035 L □ # 0 □ + +	TAZ A 334 * 035 L □ L □ 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
CWP29M474@B+	TAZ B 474 * 035 L □ # 0 □ + +	TAZ B 474 * 035 L □ L □ 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
CWP29M684@C+	TAZ C 684 * 035 L □ # 0 □ + +	TAZ C 684 * 035 L □ L □ 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
CWP29M105@D+	TAZ D 105 * 035 L □ # 0 □ + +	TAZ D 105 * 035 L □ L □ 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
CWP29M155@D+	TAZ D 155 * 035 L □ # 0 □ + +	TAZ D 155 * 035 L □ L □ 9 □ + +	D	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
CWP29M335@E+	TAZ E 335 * 035 L □ # 0 □ + +	TAZ E 335 * 035 L □ L □ 9 □ + +	E	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
CWP29M475@G+	TAZ G 475 * 035 L □ # 0 □ + +	TAZ G 475 * 035 L □ L □ 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
CWP29M685@G+	TAZ H 685 * 035 L □ # 0 □ + +	TAZ H 685 * 035 L □ L □ 9 □ + +	H	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
CWP29M105@H+	TAZ H 105 * 035 L □ # 0 □ + +	TAZ H 105 * 035 L □ L □ 9 □ + +	H	10	35	0.5	4	40	48	6	8	8	0.150	0.55	0.49	0.22	0.27	0.25	0.11
CWP29M155@H+	TAZ H 155 * 035 L □ # 0 □ + +	TAZ H 155 * 035 L □ L □ 9 □ + +	H	15	35	0.19	6	60	72	6	8	8	0.200	1.03	0.92	0.41	0.17	0.18	0.08
CWP29N104@A+	TAZ A 104 * 050 L □ # 0 □ + +	TAZ A 104 * 050 L □ L □ 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
CWP29N154@A+	TAZ A 154 * 050 L □ # 0 □ + +	TAZ A 154 * 050 L □ L □ 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.



RATING & PART NUMBER REFERENCE			Parametric Specifications by Rating per MIL-PRF-55365/11										Typical RMS Ripple Data by Rating									
CWR29 P/N	AVX MIL & COTS-Plus P/N	AVX SRC9000 P/N	Case	Cap @ 120Hz	DC Rated Voltage @ +85°C	ESR @ 100kHz	DCL max +25°C	DCL max +85°C	DF Max +65/125°C	+25°C	+125°C	+25°C	85°C	125°C	25°C	85°C	125°C	25°C	85°C	125°C		
				µF @ 25°C	V @ +85°C	Ohms @ +25°C	(µA)	(µA)	(%)	(%)	(µA)	(%)	W	A (100kHz)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)		
CWR29N224@B+□	TAZ B 224 * 050 L □ # @ 0 ^ + +	TAZ B 224 * 050 L □ L @ 9 ^ + +	B	0.22	50	6.8	1	10	6	8	12	8	0.070	0.10	0.09	0.04	0.69	0.62	0.28	0.28		
CWR29N334@B+□	TAZ B 334 * 050 L □ # @ 0 ^ + +	TAZ B 334 * 050 L □ L @ 9 ^ + +	B	0.33	50	4.8	1	10	6	8	12	8	0.070	0.12	0.11	0.05	0.58	0.52	0.23	0.23		
CWR29N474@C+□	TAZ C 474 * 050 L □ # @ 0 ^ + +	TAZ C 474 * 050 L □ L @ 9 ^ + +	C	0.47	50	3.2	1	10	6	8	12	8	0.075	0.15	0.14	0.06	0.49	0.44	0.20	0.20		
CWR29N684@D+□	TAZ D 684 * 050 L □ # @ 0 ^ + +	TAZ D 684 * 050 L □ L @ 9 ^ + +	D	0.68	50	2.3	1	10	6	8	12	8	0.080	0.19	0.17	0.07	0.43	0.39	0.17	0.17		
CWR29N105@E+□	TAZ E 105 * 050 L □ # @ 0 ^ + +	TAZ E 105 * 050 L □ L @ 9 ^ + +	E	1	50	1.7	1	10	6	8	12	8	0.090	0.23	0.21	0.09	0.39	0.35	0.16	0.16		
CWR29N155@F+□	TAZ F 155 * 050 L □ # @ 0 ^ + +	TAZ F 155 * 050 L □ L @ 9 ^ + +	F	1.5	50	1.1	1	10	6	8	12	8	0.100	0.30	0.27	0.12	0.33	0.30	0.13	0.13		
CWR29N225@F+□	TAZ F 225 * 050 L □ # @ 0 ^ + +	TAZ F 225 * 050 L □ L @ 9 ^ + +	F	2.2	50	0.7	2	20	6	8	24	6	0.100	0.38	0.34	0.15	0.26	0.24	0.11	0.11		
CWR29N335@G+□	TAZ G 335 * 050 L □ # @ 0 ^ + +	TAZ G 335 * 050 L □ L @ 9 ^ + +	G	3.3	50	0.5	2	20	6	8	24	6	0.125	0.50	0.45	0.20	0.25	0.23	0.10	0.10		
CWR29N475@H+□	TAZ H 475 * 050 L □ # @ 0 ^ + +	TAZ H 475 * 050 L □ L @ 9 ^ + +	H	4.7	50	0.5	3	30	6	8	36	6	0.150	0.55	0.49	0.22	0.27	0.25	0.11	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.**