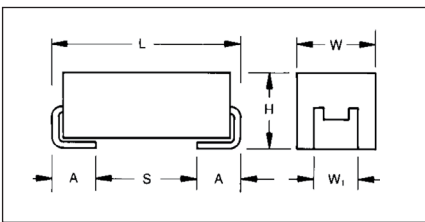


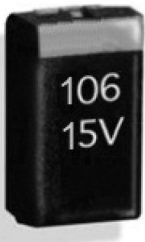
TAZ Series

CWR09 - MIL-PRF-55365/4 Established Reliability, COTS-Plus & Space Level



MARKING

(White marking on black body)



Polarity Stripe (+)

**Capacitance Code
Rated Voltage**

This is the original high reliability molded tantalum chip series and the case sizes still represent the most flexible of surface mount form factors. TAZ offers nine case sizes, eight of which (A through H) are fully qualified to MILPRF-55365/4, and also includes the original sub-miniature R case (non-QPL).

This series is fully interchangeable with CWR06 conformal types, while offering the advantages of molded body/compliant termination construction (ensuring no TCE mismatch with any substrate). This construction is compatible with a wide range of SMT board assembly processes including convection 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.

All 4V to 50V ratings are 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 ₁)	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
R	2.05 (0.081) ±0.20 (0.008)	1.30 (0.051) +0.20 (0.008) -0.10 (0.004)	1.20 (0.047) max	1.0±0.10 (0.039±0.004)	0.50 (0.020) +0.30 (0.012) -0.20 (0.008)	0.71 (0.028)	0.010

CWR09 MIL-PRF-55365/4

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

Capacitance		Rated Voltage DC (V _R) 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	R		R		A	A	B	C
0.47	474			R		B	B	C	D
0.68	684				A	B	B	C	D
1.0	105			A/R		B	C	D	E
1.5	155		A		B	C	D	E	F
2.2	225	A/R		B	C	D	E		F
3.3	335		B	C	D	E		F	G
4.7	475	B	C	D	E		F	G	H
6.8	685	C	D	E		F	G	H	
10	106	D	E		F		G		
15	156	E		F		G	H		
22	226		F		G	H			
33	336	F		G	H				
47	476		G	H					
68	686	G	H						
100	107	H							

TAZ Series

CWR09 - MIL-PRF-55365/4 Established Reliability, COTS-Plus & Space Level



HOW TO ORDER

COTS-PLUS & MIL QPL (CWR09):

TAZ	H	686	*	006	C	□	#	@	0	^	++
Type	Case Size	Capacitance Code pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	Capacitance Tolerance M = ±20% K = ±10% J = ±5%	Voltage Code 004 = 4Vdc 006 = 6Vdc 010 = 10Vdc 015 = 15Vdc 020 = 20Vdc 025 = 25Vdc 035 = 35Vdc 050 = 50Vdc	Standard or Low ESR Range C = Std ESR L = Low ESR	Packaging B = Bulk R = 7" T&R S = 13" T&R W = Waffle See page 8 for additional packaging options.	Inspection Level S = Std. Conformance L = Group A M = MIL (JAN) CWR09	Reliability Grade 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	Qualification Level 0 = N/A T = T Level 9 = SRC9000	Termination Finish H = Solder Plated 0 = Fused Solder Plated 8 = Hot Solder Dipped 9 = Gold Plated 7 = Matte Sn (COTS-Plus only)	Surge Test Option 00 = None 23 = 10 Cycles, +25°C 24 = 10 Cycles, -55°C & +85°C 45 = 10 cycles, -55°C & +85°C before Weibull

For RoHS compliant products, please select correct termination style.

CWR09 P/N CROSS REFERENCE:

CWR09	D	^	686	*	@	+	□
Type	Voltage Code C = 4Vdc D = 6Vdc F = 10Vdc H = 15Vdc J = 20Vdc K = 25Vdc M = 35Vdc N = 50Vdc	Termination Finish H = Solder Plated K = Solder Fused C = Hot Solder Dipped B = Gold Plated	Capacitance Code pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	Capacitance Tolerance M = ±20% K = ±10% J = ±5%	Reliability Grade 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	Surge Test Option A = 10 cycles, +25°C B = 10 cycles, -55°C & +85°C C = 10 cycles, -55°C & +85°C before Weibull If blank, None required	Packaging 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*:

TAZ	H	686	*	006	C	□	L	@	9	^	++
Type	Case Size	Capacitance Code pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	Capacitance Tolerance M = ±20% K = ±10% J = ±5%	Voltage Code 004 = 4Vdc 006 = 6Vdc 010 = 10Vdc 015 = 15Vdc 020 = 20Vdc 025 = 25Vdc 035 = 35Vdc 050 = 50Vdc	Standard or Low ESR Range C = Std ESR L = Low ESR	Packaging B = Bulk R = 7" T&R S = 13" T&R W = Waffle See page 8 for additional packaging options.	Inspection Level L = Group A	Reliability Grade Weibull: B = 0.1%/1000 hrs. 90% conf. C = 0.01%/1000 hrs. 90% conf. D = 0.001%/1000 hrs. 90% conf.	Qualification Level 9 = SRC9000	Termination Finish H = Solder Plated 0 = Fused Solder Plated 8 = Hot Solder Dipped 9 = Gold Plated	Surge Test Option 45 = 10 cycles, -55°C & +85°C before Weibull GC = Group C Testing and Data OR = TOR compliant testing and data

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 100 µF									
Capacitance Tolerance:	±5%; ±10%; ±20%									
Rated Voltage (V _R)	≤ 85°C:	4	6	10	15	20	25	35	50	
Category Voltage (V _C)	≤ 125°C:	2.7	4	6.7	10	13.3	16.7	23.3	33.3	
Surge Voltage (V _S)	≤ 85°C:	5.3	8	13.3	20	26.7	33.3	46.7	66.7	
Surge Voltage (V _S)	≤ 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

CWR09 - MIL-PRF-55365/4 Established Reliability, COTS-Plus & Space Level

RATING & PART NUMBER REFERENCE				Parametric Specifications by Rating per MIL-PRF-55365/4									Typical RMS		
				Cap @ 120Hz @ 25°C µF	DC Rated Voltage @ +85°C V	ESR @ 100kHz @ +25°C Ohms	DCL max			DF Max			Power Dissipation W	25°C Ripple A (100kHz)	85°C Ripple A (100kHz)
							+25°C (µA)	+85°C (µA)	+125°C (µA)	+25°C (%)	+(85/125)°C (%)	-55°C (%)			
CWR09 P/N	AVX MIL & COTS-Plus P/N	AVX SRC9000 P/N	Case												
	TAZ R 334 * 004 C □ # @ 0 ^ ++		R	0.33	4	45	1	10	12	6	8	8	0.030	0.03	0.02
	TAZ R 225 * 004 C □ # @ 0 ^ ++		R	2.2	4	12	1	10	12	6	8	8	0.030	0.05	0.05
CWR09C^225* @+	TAZ A 225 * 004 C □ # @ 0 ^ ++	TAZ A 225 * 004 C □ L @ 9 ^ ++	A	2.2	4	8	1	10	12	6	8	8	0.050	0.08	0.07
CWR09C^475* @+	TAZ B 475 * 004 C □ # @ 0 ^ ++	TAZ B 475 * 004 C □ L @ 9 ^ ++	B	4.7	4	8	1	10	12	6	8	8	0.070	0.09	0.08
CWR09C^685* @+	TAZ C 685 * 004 C □ # @ 0 ^ ++	TAZ C 685 * 004 C □ L @ 9 ^ ++	C	6.8	4	5.5	1	10	12	6	8	8	0.075	0.12	0.11
CWR09C^106* @+	TAZ D 106 * 004 C □ # @ 0 ^ ++	TAZ D 106 * 004 C □ L @ 9 ^ ++	D	10	4	4	1	10	12	8	8	10	0.080	0.14	0.13
CWR09C^156* @+	TAZ E 156 * 004 C □ # @ 0 ^ ++	TAZ E 156 * 004 C □ L @ 9 ^ ++	E	15	4	3.5	1	10	12	8	10	12	0.090	0.16	0.14
CWR09C^336* @+	TAZ F 336 * 004 C □ # @ 0 ^ ++	TAZ F 336 * 004 C □ L @ 9 ^ ++	F	33	4	2.2	2	20	24	8	10	12	0.100	0.21	0.19
CWR09C^686* @+	TAZ G 686 * 004 C □ # @ 0 ^ ++	TAZ G 686 * 004 C □ L @ 9 ^ ++	G	68	4	1.1	3	30	36	10	12	12	0.125	0.34	0.30
CWR09C^107* @+	TAZ H 107 * 004 C □ # @ 0 ^ ++	TAZ H 107 * 004 C □ L @ 9 ^ ++	H	100	4	0.9	4	40	48	10	12	12	0.150	0.41	0.37
CWR09D^155* @+	TAZ A 155 * 006 C □ # @ 0 ^ ++	TAZ A 155 * 006 C □ L @ 9 ^ ++	A	1.5	6	8	1	10	12	6	8	8	0.050	0.08	0.07
CWR09D^335* @+	TAZ B 335 * 006 C □ # @ 0 ^ ++	TAZ B 335 * 006 C □ L @ 9 ^ ++	B	3.3	6	8	1	10	12	6	8	8	0.070	0.09	0.08
CWR09D^475* @+	TAZ C 475 * 006 C □ # @ 0 ^ ++	TAZ C 475 * 006 C □ L @ 9 ^ ++	C	4.7	6	5.5	1	10	12	6	8	8	0.075	0.12	0.11
CWR09D^685* @+	TAZ D 685 * 006 C □ # @ 0 ^ ++	TAZ D 685 * 006 C □ L @ 9 ^ ++	D	6.8	6	4.5	1	10	12	6	8	8	0.080	0.13	0.12
CWR09D^106* @+	TAZ E 106 * 006 C □ # @ 0 ^ ++	TAZ E 106 * 006 C □ L @ 9 ^ ++	E	10	6	3.5	1	10	12	8	10	12	0.090	0.16	0.14
CWR09D^226* @+	TAZ F 226 * 006 C □ # @ 0 ^ ++	TAZ F 226 * 006 C □ L @ 9 ^ ++	F	22	6	2.2	2	20	24	8	10	12	0.100	0.21	0.19
CWR09D^476* @+	TAZ G 476 * 006 C □ # @ 0 ^ ++	TAZ G 476 * 006 C □ L @ 9 ^ ++	G	47	6	1.1	3	30	36	10	12	12	0.125	0.34	0.30
CWR09D^686* @+	TAZ H 686 * 006 C □ # @ 0 ^ ++	TAZ H 686 * 006 C □ L @ 9 ^ ++	H	68	6	0.9	4	40	48	10	12	12	0.150	0.41	0.37
	TAZ R 334 * 010 C □ # @ 0 ^ ++		R	0.33	10	50	1	10	12	6	8	8	0.030	0.02	0.02
	TAZ R 474 * 010 C □ # @ 0 ^ ++		R	0.47	10	50	1	10	12	6	8	8	0.030	0.02	0.02
	TAZ R 105 * 010 C □ # @ 0 ^ ++		R	1	10	10	1	10	12	6	8	8	0.030	0.05	0.05
CWR09F^105* @+	TAZ A 105 * 010 C □ # @ 0 ^ ++	TAZ A 105 * 010 C □ L @ 9 ^ ++	A	1	10	10	1	10	12	6	8	8	0.050	0.07	0.06
CWR09F^225* @+	TAZ B 225 * 010 C □ # @ 0 ^ ++	TAZ B 225 * 010 C □ L @ 9 ^ ++	B	2.2	10	8	1	10	12	6	8	8	0.070	0.09	0.08
CWR09F^335* @+	TAZ C 335 * 010 C □ # @ 0 ^ ++	TAZ C 335 * 010 C □ L @ 9 ^ ++	C	3.3	10	5.5	1	10	12	6	8	8	0.075	0.12	0.11
CWR09F^475* @+	TAZ D 475 * 010 C □ # @ 0 ^ ++	TAZ D 475 * 010 C □ L @ 9 ^ ++	D	4.7	10	4.5	1	10	12	6	8	8	0.080	0.13	0.12
CWR09F^685* @+	TAZ E 685 * 010 C □ # @ 0 ^ ++	TAZ E 685 * 010 C □ L @ 9 ^ ++	E	6.8	10	3.5	1	10	12	6	8	8	0.090	0.16	0.14
CWR09F^156* @+	TAZ F 156 * 010 C □ # @ 0 ^ ++	TAZ F 156 * 010 C □ L @ 9 ^ ++	F	15	10	2.5	2	20	24	8	10	12	0.100	0.20	0.18
CWR09F^336* @+	TAZ G 336 * 010 C □ # @ 0 ^ ++	TAZ G 336 * 010 C □ L @ 9 ^ ++	G	33	10	1.1	3	30	36	10	12	12	0.125	0.34	0.30
CWR09F^476* @+	TAZ H 476 * 010 C □ # @ 0 ^ ++	TAZ H 476 * 010 C □ L @ 9 ^ ++	H	47	10	0.9	5	50	60	10	12	12	0.150	0.41	0.37
CWR09H^684* @+	TAZ A 684 * 015 C □ # @ 0 ^ ++	TAZ A 684 * 015 C □ L @ 9 ^ ++	A	0.68	15	12	1	10	12	6	8	8	0.050	0.06	0.06
CWR09H^155* @+	TAZ B 155 * 015 C □ # @ 0 ^ ++	TAZ B 155 * 015 C □ L @ 9 ^ ++	B	1.5	15	8	1	10	12	6	8	8	0.070	0.09	0.08
CWR09H^225* @+	TAZ C 225 * 015 C □ # @ 0 ^ ++	TAZ C 225 * 015 C □ L @ 9 ^ ++	C	2.2	15	5.5	1	10	12	6	8	8	0.075	0.12	0.11
CWR09H^335* @+	TAZ D 335 * 015 C □ # @ 0 ^ ++	TAZ D 335 * 015 C □ L @ 9 ^ ++	D	3.3	15	5	1	10	12	6	8	8	0.080	0.13	0.11
CWR09H^475* @+	TAZ E 475 * 015 C □ # @ 0 ^ ++	TAZ E 475 * 015 C □ L @ 9 ^ ++	E	4.7	15	4	1	10	12	6	8	8	0.090	0.15	0.14
CWR09H^106* @+	TAZ F 106 * 015 C □ # @ 0 ^ ++	TAZ F 106 * 015 C □ L @ 9 ^ ++	F	10	15	2.5	2	20	24	6	8	8	0.100	0.20	0.18
CWR09H^226* @+	TAZ G 226 * 015 C □ # @ 0 ^ ++	TAZ G 226 * 015 C □ L @ 9 ^ ++	G	22	15	1.1	4	40	48	6	8	8	0.125	0.34	0.30
CWR09H^336* @+	TAZ H 336 * 015 C □ # @ 0 ^ ++	TAZ H 336 * 015 C □ L @ 9 ^ ++	H	33	15	0.9	5	50	60	8	10	12	0.150	0.41	0.37
CWR09J^474* @+	TAZ A 474 * 020 C □ # @ 0 ^ ++	TAZ A 474 * 020 C □ L @ 9 ^ ++	A	0.47	20	14	1	10	12	8	10	10	0.050	0.06	0.05
CWR09J^684* @+	TAZ B 684 * 020 C □ # @ 0 ^ ++	TAZ B 684 * 020 C □ L @ 9 ^ ++	B	0.68	20	10	1	10	12	6	8	8	0.070	0.08	0.08
CWR09J^105* @+	TAZ B 105 * 020 C □ # @ 0 ^ ++	TAZ B 105 * 020 C □ L @ 9 ^ ++	B	1	20	12	1	10	12	6	8	8	0.070	0.08	0.07
CWR09J^155* @+	TAZ C 155 * 020 C □ # @ 0 ^ ++	TAZ C 155 * 020 C □ L @ 9 ^ ++	C	1.5	20	6	1	10	12	6	8	8	0.075	0.11	0.10
CWR09J^225* @+	TAZ D 225 * 020 C □ # @ 0 ^ ++	TAZ D 225 * 020 C □ L @ 9 ^ ++	D	2.2	20	5	1	10	12	6	8	8	0.080	0.13	0.11
CWR09J^335* @+	TAZ E 335 * 020 C □ # @ 0 ^ ++	TAZ E 335 * 020 C □ L @ 9 ^ ++	E	3.3	20	4	1	10	12	6	8	8	0.090	0.15	0.14
CWR09J^685* @+	TAZ F 685 * 020 C □ # @ 0 ^ ++	TAZ F 685 * 020 C □ L @ 9 ^ ++	F	6.8	20	2.4	2	20	24	6	8	8	0.100	0.20	0.18
CWR09J^156* @+	TAZ G 156 * 020 C □ # @ 0 ^ ++	TAZ G 156 * 020 C □ L @ 9 ^ ++	G	15	20	1.1	3	30	36	6	8	8	0.125	0.34	0.30
CWR09J^226* @+	TAZ H 226 * 020 C □ # @ 0 ^ ++	TAZ H 226 * 020 C □ L @ 9 ^ ++	H	22	20	0.9	4	40	48	6	8	8	0.150	0.41	0.37
CWR09K^334* @+	TAZ A 334 * 025 C □ # @ 0 ^ ++	TAZ A 334 * 025 C □ L @ 9 ^ ++	A	0.33	25	15	1	10	12	6	8	8	0.050	0.06	0.05
CWR09K^684* @+	TAZ B 684 * 025 C □ # @ 0 ^ ++	TAZ B 684 * 025 C □ L @ 9 ^ ++	B	0.68	25	7.5	1	10	12	6	8	8	0.070	0.10	0.09
CWR09K^105* @+	TAZ C 105 * 025 C □ # @ 0 ^ ++	TAZ C 105 * 025 C □ L @ 9 ^ ++	C	1	25	6.5	1	10	12	6	8	8	0.075	0.11	0.10
CWR09K^155* @+	TAZ D 155 * 025 C □ # @ 0 ^ ++	TAZ D 155 * 025 C □ L @ 9 ^ ++	D	1.5	25	6.5	1	10	12	6	8	8	0.080	0.11	0.10
CWR09K^225* @+	TAZ E 225 * 025 C □ # @ 0 ^ ++	TAZ E 225 * 025 C □ L @ 9 ^ ++	E	2.2	25	3.5	1	10	12	6	8	8	0.090	0.16	0.14
CWR09K^475* @+	TAZ F 475 * 025 C □ # @ 0 ^ ++	TAZ F 475 * 025 C □ L @ 9 ^ ++	F	4.7	25	2.5	2	20	24	6	8	8	0.100	0.20	0.18
CWR09K^685* @+	TAZ G 685 * 025 C □ # @ 0 ^ ++	TAZ G 685 * 025 C □ L @ 9 ^ ++	G	6.8	25	1.2	2	20	24	6	8	8	0.125	0.32	0.29
CWR09K^106* @+	TAZ G 106 * 025 C □ # @ 0 ^ ++	TAZ G 106 * 025 C □ L @ 9 ^ ++	G	10	25	1.4	3	30	36	6	8	8	0.125	0.30	0.27

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

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

CWR09 - MIL-PRF-55365/4 Established Reliability, COTS-Plus & Space Level

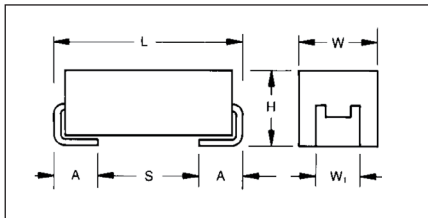
RATING & PART NUMBER REFERENCE				Parametric Specifications by Rating per MIL-PRF-55365/4									Typical RMS		
				Cap @ 120Hz	DC Rated Voltage	ESR @ 100kHz	DCL max			DF Max			Power Dissipation	25°C Ripple	85°C Ripple
							+25°C	+85°C	+125°C	+25°C	+(85/125)°C	-55°C			
CWR09 P/N	AVX MIL & COTS-Plus P/N	AVX SRC9000 P/N	Case	µF @ 25°C	V @ +85°C	Ohms @ +25°C	(µA)	(µA)	(µA)	(%)	(%)	(%)	W	A (100kHz)	A (100kHz)
CWR09K^156^@+	TAZ H 156 * 025 C □ # @ 0 ^ ++	TAZ H 156 * 025 C □ L @ 9 ^ ++	H	15	25	1	4	40	48	6	8	8	0.150	0.39	0.35
CWR09M^224^@+	TAZ A 224 * 035 C # @ 0 ^ ++	TAZ A 224 * 035 C L @ 9 ^ ++	A	0.22	35	18	1	10	12	6	8	8	0.050	0.05	0.05
CWR09M^474^@+	TAZ B 474 * 035 C # @ 0 ^ ++	TAZ B 474 * 035 C L @ 9 ^ ++	B	0.47	35	10	1	10	12	6	8	8	0.070	0.08	0.08
CWR09M^684^@+	TAZ C 684 * 035 C # @ 0 ^ ++	TAZ C 684 * 035 C L @ 9 ^ ++	C	0.68	35	8	1	10	12	6	8	8	0.075	0.10	0.09
CWR09M^105^@+	TAZ D 105 * 035 C # @ 0 ^ ++	TAZ D 105 * 035 C L @ 9 ^ ++	D	1	35	6.5	1	10	12	6	8	8	0.080	0.11	0.10
CWR09M^155^@+	TAZ E 155 * 035 C # @ 0 ^ ++	TAZ E 155 * 035 C L @ 9 ^ ++	E	1.5	35	4.5	1	10	12	6	8	8	0.090	0.14	0.13
CWR09M^335^@+	TAZ F 335 * 035 C # @ 0 ^ ++	TAZ F 335 * 035 C L @ 9 ^ ++	F	3.3	35	2.5	1	10	12	6	8	8	0.100	0.20	0.18
CWR09M^475^@+	TAZ G 475 * 035 C # @ 0 ^ ++	TAZ G 475 * 035 C L @ 9 ^ ++	G	4.7	35	1.5	2	20	24	6	8	8	0.125	0.29	0.26
CWR09M^685^@+	TAZ H 685 * 035 C # @ 0 ^ ++	TAZ H 685 * 035 C L @ 9 ^ ++	H	6.8	35	1.3	3	30	36	6	8	8	0.150	0.34	0.31
CWR09N^104^@+	TAZ A 104 * 050 C # @ 0 ^ ++	TAZ A 104 * 050 C L @ 9 ^ ++	A	0.1	50	22	1	10	12	6	8	8	0.050	0.05	0.04
CWR09N^154^@+	TAZ A 154 * 050 C # @ 0 ^ ++	TAZ A 154 * 050 C L @ 9 ^ ++	A	0.15	50	17	1	10	12	6	8	8	0.050	0.05	0.05
CWR09N^224^@+	TAZ B 224 * 050 C # @ 0 ^ ++	TAZ B 224 * 050 C L @ 9 ^ ++	B	0.22	50	14	1	10	12	6	8	8	0.070	0.07	0.06
CWR09N^334^@+	TAZ B 334 * 050 C # @ 0 ^ ++	TAZ B 334 * 050 C L @ 9 ^ ++	B	0.33	50	12	1	10	12	6	8	8	0.070	0.08	0.07
CWR09N^474^@+	TAZ C 474 * 050 C # @ 0 ^ ++	TAZ C 474 * 050 C L @ 9 ^ ++	C	0.47	50	8	1	10	12	6	8	8	0.075	0.10	0.09
CWR09N^684^@+	TAZ D 684 * 050 C # @ 0 ^ ++	TAZ D 684 * 050 C L @ 9 ^ ++	D	0.68	50	7	1	10	12	6	8	8	0.080	0.11	0.10
CWR09N^105^@+	TAZ E 105 * 050 C # @ 0 ^ ++	TAZ E 105 * 050 C L @ 9 ^ ++	E	1	50	6	1	10	12	6	8	8	0.090	0.12	0.11
CWR09N^155^@+	TAZ F 155 * 050 C # @ 0 ^ ++	TAZ F 155 * 050 C L @ 9 ^ ++	F	1.5	50	4	1	10	12	6	8	8	0.100	0.16	0.14
CWR09N^225^@+	TAZ F 225 * 050 C # @ 0 ^ ++	TAZ F 225 * 050 C L @ 9 ^ ++	F	2.2	50	2.5	2	20	24	6	8	8	0.100	0.20	0.18
CWR09N^335^@+	TAZ G 335 * 050 C # @ 0 ^ ++	TAZ G 335 * 050 C L @ 9 ^ ++	G	3.3	50	2	2	20	24	6	8	8	0.125	0.25	0.23
CWR09N^475^@+	TAZ H 475 * 050 C # @ 0 ^ ++	TAZ H 475 * 050 C L @ 9 ^ ++	H	4.7	50	1.5	3	30	36	6	8	8	0.150	0.32	0.28

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

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.

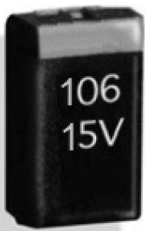
TAZ Series

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



MARKING

(White marking on black body)



Polarity Stripe (+)

**Capacitance Code
Rated Voltage**

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 convection 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 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 (W1)	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)	3.67 (0.144)	0.420

CWR19-MIL-PRF 55365/11

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

Capacitance		Rated Voltage DC (V _R) at 85°C						
µF	Code	4V (C)	6V (D)	10V (F)	15V (H)	20V (J)	25V (K)	35V (M)
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		H
15	156	B	B/D/E	D/E	E/F	F	G	X
22	226	B/D	D/E	E	F	G	G/H	
33	336	D/E	E	F	F/G	H	H/X	
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					

TAZ Series

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



HOW TO ORDER

COTS-PLUS & MIL QPL (CWR19):

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

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

CWR19 P/N CROSS REFERENCE:

CWR19	D	^	227	*	@	H	+	□
Type	Voltage Code C = 4Vdc D = 6Vdc F = 10Vdc H = 15Vdc J = 20Vdc K = 25Vdc M = 35Vdc	Termination Finish H = Solder Plated K = Solder Fused C = Hot Solder Dipped B = Gold Plated	Capacitance Code pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	Capacitance Tolerance M = ±20% K = ±10% J = ±5%	Reliability Grade 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	Case Size	Surge Test Option A = 10 cycles, +25°C B = 10 cycles, -55°C & +85°C C = 10 cycles, -55°C & +85°C before Weibull Z = None required	Packaging Bulk = Standard VTR = 7" T&R VTR13 = 13" T&R W = Waffle See page 8 for additional packaging options.

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

SPACE LEVEL OPTIONS TO SRC9000*:

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

LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT
RoHS COMPLIANT
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:	0.33 μF to 330 μF							
Capacitance Tolerance:	±5%; ±10%; ±20%							
Rated Voltage (V _R)	≤ 85°C:	4	6	10	15	20	25	35
Category Voltage (V _C)	≤ 125°C:	2.7	4	6.7	10	13.3	16.7	23.3
Surge Voltage (V _S)	≤ 85°C:	5.3	8	13.3	20	26.7	33.3	46.7
Surge Voltage (V _S)	≤ 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-55365/4									Typical RMS		
				Cap @ 120Hz µF @ 25°C	DC Rated Voltage V @ +85°C	ESR @ 100kHz Ohms @ +25°C	DCL max			DF Max			Power Dissipation W	25°C Ripple A (100kHz)	85°C Ripple A (100kHz)
							+25°C (µA)	+85°C (µA)	+125°C (µA)	+25°C (%)	+85/125°C (%)	-55°C (%)			
CWR09 P/N	AVX MIL & COTS-Plus P/N	AVX SRC9000 P/N	Case												
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
CWR19D^476^@F+□	TAZ F 476 * 006 C □ # @ 0 ^ + +	TAZ F 476 * 006 C □ L @ 9 ^ + +	F	47	6	3.5	2	30	36	8	10	12	0.100	0.17	0.15
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

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

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

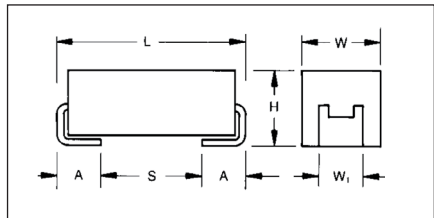
RATING & PART NUMBER REFERENCE				Parametric Specifications by Rating per MIL-PRF-55365/4									Typical RMS		
				Cap @ 120Hz @ 25°C	DC Rated Voltage V @ +85°C	ESR @ 100kHz Ohms @ +25°C	DCL max			DF Max			Power Dissipation W	25°C Ripple A (100kHz)	85°C Ripple A (100kHz)
							+25°C	+85°C	+125°C	+25°C	+(85/125)°C	-55°C			
CWR09 P/N	AVX MIL & COTS-Plus P/N	AVX SRC9000 P/N	Case	µF	V	Ohms	(µA)	(µA)	(µA)	(%)	(%)	(%)			
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
CWR19H 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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
CWR19K ³³⁶ @X+□	TAZ X 336 * 025 C □ # @ 0 ^ + +	TAZ X 336 * 025 C □ L @ 9 ^ + +	X	33	25	0.9	10	100	120	8	10	10	0.200	0.47	0.42
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
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
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
CWR19M ¹⁵⁶ @X+□	TAZ X 156 * 035 C □ # @ 0 ^ + +	TAZ X 156 * 035 C □ L @ 9 ^ + +	X	15	35	0.9	6	60	72	6	8	8	0.200	0.47	0.42

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

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 convection 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 (W1)	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)	3.67 (0.144)	0.420

CWR29-MIL-PRF 55365/11

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

Capacitance		Rated Voltage DC (V _R) 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	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/X		
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):

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

For RoHS compliant products, please select correct termination style.

CWR29 P/N CROSS REFERENCE:

CWR29	D	^	227	*	@	H	+	□
Type	Voltage Code C = 4Vdc D = 6Vdc F = 10Vdc H = 15Vdc J = 20Vdc K = 25Vdc M = 35Vdc N = 50Vdc	Termination Finish H = Solder Plated K = Solder Fused C = Hot Solder Dipped B = Gold Plated	Capacitance Code pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	Capacitance Tolerance M = ±20% K = ±10% J = ±5%	Reliability Grade 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	Case Size	Surge Test Option A = 10 cycles, +25°C B = 10 cycles, -55°C & +85°C C = 10 cycles, -55°C & +85°C before Weibull Z = None required	Packaging 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*:

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

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 _R)	≤ 85°C:	4	6	10	15	20	25	35	50
Category Voltage (V _C)	≤ 125°C:	2.7	4	6.7	10	13.3	16.7	23.3	33.3
Surge Voltage (V _S)	≤ 85°C:	5.3	8	13.3	20	26.7	33.3	46.7	66.7
Surge Voltage (V _S)	≤ 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 RMS		
				Cap @ 120Hz @ 25°C µF	DC Rated Voltage @ +85°C V	ESR @ 100kHz @ +25°C Ohms	DCL max			DF Max			Power Dissipation W	25°C Ripple A (100kHz)	85°C Ripple A (100kHz)
							+25°C (µA)	+85°C (µA)	+125°C (µA)	+25°C (%)	+(85/125)°C (%)	-55°C (%)			
CWR29 P/N	AVX MIL & COTS-Plus P/N	AVX SRC9000 P/N	Case												
CWR29C*225*@A+□	TAZA225*004L□#@0^++	TAZA225*004L□L@9^++	A	2.2	4	4	1	10	12	6	8	8	0.050	0.11	0.10
CWR29C*335*@A+□	TAZA335*004L□#@0^++	TAZA335*004L□L@9^++	A	3.3	4	6	1	10	12	6	8	8	0.050	0.09	0.08
CWR29C*475*@A+□	TAZA475*004L□#@0^++	TAZA475*004L□L@9^++	A	4.7	4	6	1	10	12	6	8	8	0.050	0.09	0.08
CWR29C*475*@B+□	TAZB475*004L□#@0^++	TAZB475*004L□L@9^++	B	4.7	4	3.2	1	10	12	6	8	8	0.070	0.15	0.13
CWR29C*685*@A+□	TAZA685*004L□#@0^++	TAZA685*004L□L@9^++	A	6.8	4	6	1	10	12	6	8	8	0.050	0.09	0.08
CWR29C*685*@C+□	TAZC685*004L□#@0^++	TAZC685*004L□L@9^++	C	6.8	4	2.2	1	10	12	6	8	8	0.075	0.18	0.17
CWR29C*106*@B+□	TAZB106*004L□#@0^++	TAZB106*004L□L@9^++	B	10	4	3.2	1	10	12	8	10	10	0.070	0.15	0.13
CWR29C*106*@D+□	TAZD106*004L□#@0^++	TAZD106*004L□L@9^++	D	10	4	1.3	1	10	12	8	8	10	0.080	0.25	0.22
CWR29C*156*@B+□	TAZB156*004L□#@0^++	TAZB156*004L□L@9^++	B	15	4	3.2	1	10	12	8	10	10	0.070	0.15	0.13
CWR29C*156*@E+□	TAZE156*004L□#@0^++	TAZE156*004L□L@9^++	E	15	4	1	1	10	12	8	10	12	0.090	0.30	0.27
CWR29C*226*@B+□	TAZB226*004L□#@0^++	TAZB226*004L□L@9^++	B	22	4	3.2	1	10	12	8	10	10	0.070	0.15	0.13
CWR29C*226*@D+□	TAZD226*004L□#@0^++	TAZD226*004L□L@9^++	D	22	4	1.3	1	10	12	8	10	12	0.080	0.25	0.22
CWR29C*336*@D+□	TAZD336*004L□#@0^++	TAZD336*004L□L@9^++	D	33	4	1.3	2	20	24	8	10	12	0.080	0.25	0.22
CWR29C*336*@E+□	TAZE336*004L□#@0^++	TAZE336*004L□L@9^++	E	33	4	0.9	2	20	24	8	10	12	0.090	0.32	0.28
CWR29C*336*@F+□	TAZF336*004L□#@0^++	TAZF336*004L□L@9^++	F	33	4	0.6	2	20	24	8	10	12	0.100	0.41	0.37
CWR29C*476*@E+□	TAZE476*004L□#@0^++	TAZE476*004L□L@9^++	E	47	4	0.9	2	20	24	8	10	12	0.090	0.32	0.28
CWR29C*686*@E+□	TAZE686*004L□#@0^++	TAZE686*004L□L@9^++	E	68	4	0.9	3	30	36	8	10	12	0.090	0.32	0.28
CWR29C*686*@G+□	TAZG686*004L□#@0^++	TAZG686*004L□L@9^++	G	68	4	0.275	3	30	36	10	12	12	0.125	0.67	0.61
CWR29C*107*@F+□	TAZF107*004L□#@0^++	TAZF107*004L□L@9^++	F	100	4	0.55	4	40	48	10	12	12	0.100	0.43	0.38
CWR29C*107*@H+□	TAZH107*004L□#@0^++	TAZH107*004L□L@9^++	H	100	4	0.18	4	40	48	10	12	12	0.150	0.91	0.82
CWR29C*157*@G+□	TAZG157*004L□#@0^++	TAZG157*004L□L@9^++	G	150	4	0.25	6	60	72	10	12	12	0.125	0.71	0.64
CWR29C*227*@H+□	TAZH227*004L□#@0^++	TAZH227*004L□L@9^++	H	220	4	0.2	8	80	96	10	12	12	0.150	0.87	0.78
CWR29C*337*@H+□	TAZH337*004L□#@0^++	TAZH337*004L□L@9^++	H	330	4	0.18	10	100	120	10	12	12	0.150	0.91	0.82
CWR29D*155*@A+□	TAZA155*006L□#@0^++	TAZA155*006L□L@9^++	A	1.5	6	4	1	10	12	6	8	8	0.050	0.11	0.10
CWR29D*335*@A+□	TAZA335*006L□#@0^++	TAZA335*006L□L@9^++	A	3.3	6	6	1	10	12	6	8	8	0.050	0.09	0.08
CWR29D*335*@B+□	TAZB335*006L□#@0^++	TAZB335*006L□L@9^++	B	3.3	6	3.2	1	10	12	6	8	8	0.070	0.15	0.13
CWR29D*475*@A+□	TAZA475*006L□#@0^++	TAZA475*006L□L@9^++	A	4.7	6	6	1	10	12	6	8	8	0.050	0.09	0.08
CWR29D*475*@C+□	TAZC475*006L□#@0^++	TAZC475*006L□L@9^++	C	4.7	6	2.2	1	10	12	6	8	8	0.075	0.18	0.17
CWR29D*685*@B+□	TAZB685*006L□#@0^++	TAZB685*006L□L@9^++	B	6.8	6	3.2	1	10	12	6	8	8	0.070	0.15	0.13
CWR29D*685*@D+□	TAZD685*006L□#@0^++	TAZD685*006L□L@9^++	D	6.8	6	1.5	1	10	12	6	8	8	0.080	0.23	0.21
CWR29D*106*@B+□	TAZB106*006L□#@0^++	TAZB106*006L□L@9^++	B	10	6	3.2	1	10	12	6	8	8	0.070	0.15	0.13
CWR29D*106*@E+□	TAZE106*006L□#@0^++	TAZE106*006L□L@9^++	E	10	6	1	1	10	12	8	10	12	0.090	0.30	0.27
CWR29D*156*@B+□	TAZB156*006L□#@0^++	TAZB156*006L□L@9^++	B	15	6	3.2	1	10	12	8	10	10	0.070	0.15	0.13
CWR29D*156*@D+□	TAZD156*006L□#@0^++	TAZD156*006L□L@9^++	D	15	6	1.7	1	10	12	8	10	12	0.080	0.22	0.20
CWR29D*156*@E+□	TAZE156*006L□#@0^++	TAZE156*006L□L@9^++	E	15	6	0.9	1	10	12	8	10	12	0.090	0.32	0.28
CWR29D*226*@D+□	TAZD226*006L□#@0^++	TAZD226*006L□L@9^++	D	22	6	1.7	1	10	12	6	8	8	0.080	0.22	0.20
CWR29D*226*@E+□	TAZE226*006L□#@0^++	TAZE226*006L□L@9^++	E	22	6	1	2	20	24	8	10	12	0.090	0.30	0.27
CWR29D*226*@F+□	TAZF226*006L□#@0^++	TAZF226*006L□L@9^++	F	22	6	0.6	2	20	24	8	10	12	0.100	0.41	0.37
CWR29D*336*@E+□	TAZE336*006L□#@0^++	TAZE336*006L□L@9^++	E	33	6	1	2	20	24	6	8	8	0.090	0.30	0.27
CWR29D*476*@F+□	TAZF476*006L□#@0^++	TAZF476*006L□L@9^++	F	47	6	1	3	30	36	8	10	12	0.100	0.32	0.28
CWR29D*476*@G+□	TAZG476*006L□#@0^++	TAZG476*006L□L@9^++	G	47	6	0.275	3	30	36	10	12	12	0.125	0.67	0.61
CWR29D*686*@F+□	TAZF686*006L□#@0^++	TAZF686*006L□L@9^++	F	68	6	0.4	4	40	48	10	12	12	0.100	0.50	0.45
CWR29D*686*@G+□	TAZG686*006L□#@0^++	TAZG686*006L□L@9^++	G	68	6	0.25	4	40	48	10	12	12	0.125	0.71	0.64
CWR29D*686*@H+□	TAZH686*006L□#@0^++	TAZH686*006L□L@9^++	H	68	6	0.18	4	40	48	10	12	12	0.150	0.91	0.82
CWR29D*107*@G+□	TAZG107*006L□#@0^++	TAZG107*006L□L@9^++	G	100	6	0.275	6	60	72	10	12	12	0.125	0.67	0.61
CWR29D*157*@G+□	TAZG157*006L□#@0^++	TAZG157*006L□L@9^++	G	150	6	0.275	10	100	120	10	12	12	0.125	0.67	0.61
CWR29D*227*@H+□	TAZH227*006L□#@0^++	TAZH227*006L□L@9^++	H	220	6	0.18	10	100	120	10	12	12	0.150	0.91	0.82
CWR29D*337*@H+□	TAZH337*006L□#@0^++	TAZH337*006L□L@9^++	H	330	6	0.18	20	200	240	10	12	12	0.150	0.91	0.82
CWR29F*105*@A+□	TAZA105*010L□#@0^++	TAZA105*010L□L@9^++	A	1	10	5	1	10	12	6	8	8	0.050	0.10	0.09
CWR29F*225*@A+□	TAZA225*010L□#@0^++	TAZA225*010L□L@9^++	A	2.2	10	6	1	10	12	6	8	8	0.050	0.09	0.08
CWR29F*225*@B+□	TAZB225*010L□#@0^++	TAZB225*010L□L@9^++	B	2.2	10	3.2	1	10	12	6	8	8	0.070	0.15	0.13
CWR29F*335*@A+□	TAZA335*010L□#@0^++	TAZA335*010L□L@9^++	A	3.3	10	6	1	10	12	6	8	8	0.050	0.09	0.08
CWR29F*335*@C+□	TAZC335*010L□#@0^++	TAZC335*010L□L@9^++	C	3.3	10	2.2	1	10	12	6	8	8	0.075	0.18	0.17
CWR29F*475*@B+□	TAZB475*010L□#@0^++	TAZB475*010L□L@9^++	B	4.7	10	3.2	1	10	12	6	8	8	0.070	0.15	0.13

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

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 RMS		
				Cap @ 120Hz	DC Rated Voltage	ESR @ 100kHz	DCL max			DF Max			Power Dissipation	25°C Ripple	85°C Ripple
							+25°C	+85°C	+125°C	+25°C	+(85/125)°C	-55°C			
CWR29 P/N	AVX MIL & COTS-Plus P/N	AVX SRC9000 P/N	Case	µF @ 25°C	V @ +85°C	Ohms @ +25°C	(µA)	(µA)	(µA)	(%)	(%)	(%)	W	A (100kHz)	A (100kHz)
CWR29F475@C+□	TAZC475*010L□#@0^++	TAZC475*010L□L@9^++	C	4.7	10	2.2	1	10	12	6	8	8	0.075	0.18	0.17
CWR29F475@D+□	TAZD475*010L□#@0^++	TAZD475*010L□L@9^++	D	4.7	10	1.5	1	10	12	6	8	8	0.080	0.23	0.21
CWR29F685@B+□	TAZB685*010L□#@0^++	TAZB685*010L□L@9^++	B	6.8	10	3.2	1	10	12	6	8	8	0.070	0.15	0.13
CWR29F685@C+□	TAZC685*010L□#@0^++	TAZC685*010L□L@9^++	C	6.8	10	2.2	1	10	12	6	8	8	0.075	0.18	0.17
CWR29F685@D+□	TAZD685*010L□#@0^++	TAZD685*010L□L@9^++	D	6.8	10	1.7	1	10	12	6	8	8	0.080	0.22	0.20
CWR29F685@E+□	TAZE685*010L□#@0^++	TAZE685*010L□L@9^++	E	6.8	10	1	1	10	12	6	8	8	0.090	0.30	0.27
CWR29F106@B+□	TAZB106*010L□#@0^++	TAZB106*010L□L@9^++	B	10	10	3.2	1	10	12	6	8	8	0.070	0.15	0.13
CWR29F106@C+□	TAZC106*010L□#@0^++	TAZC106*010L□L@9^++	C	10	10	2.2	1	10	12	6	8	8	0.075	0.18	0.17
CWR29F106@D+□	TAZD106*010L□#@0^++	TAZD106*010L□L@9^++	D	10	10	1.3	1	10	12	6	8	8	0.080	0.25	0.22
CWR29F106@E+□	TAZE106*010L□#@0^++	TAZE106*010L□L@9^++	E	10	10	1	1	10	12	6	8	8	0.090	0.30	0.27
CWR29F156@D+□	TAZD156*010L□#@0^++	TAZD156*010L□L@9^++	D	15	10	1.7	2	20	24	6	8	8	0.080	0.22	0.20
CWR29F156@E+□	TAZE156*010L□#@0^++	TAZE156*010L□L@9^++	E	15	10	0.9	2	20	24	8	10	10	0.090	0.32	0.28
CWR29F156@F+□	TAZF156*010L□#@0^++	TAZF156*010L□L@9^++	F	15	10	0.7	2	20	24	8	8	8	0.100	0.38	0.34
CWR29F226@E+□	TAZE226*010L□#@0^++	TAZE226*010L□L@9^++	E	22	10	0.6	3	30	36	8	10	10	0.090	0.39	0.35
CWR29F336@F+□	TAZF336*010L□#@0^++	TAZF336*010L□L@9^++	F	33	10	0.4	3	30	36	8	10	10	0.100	0.50	0.45
CWR29F336@G+□	TAZG336*010L□#@0^++	TAZG336*010L□L@9^++	G	33	10	0.275	3	30	36	10	12	12	0.125	0.67	0.61
CWR29F476@F+□	TAZF476*010L□#@0^++	TAZF476*010L□L@9^++	F	47	10	0.4	4	40	48	10	12	12	0.100	0.50	0.45
CWR29F476@G+□	TAZG476*010L□#@0^++	TAZG476*010L□L@9^++	G	47	10	0.25	4	40	48	10	12	12	0.125	0.71	0.64
CWR29F476@H+□	TAZH476*010L□#@0^++	TAZH476*010L□L@9^++	H	47	10	0.18	5	50	60	10	12	12	0.150	0.91	0.82
CWR29F686@G+□	TAZG686*010L□#@0^++	TAZG686*010L□L@9^++	G	68	10	0.275	6	60	72	10	12	12	0.125	0.67	0.61
CWR29F107@G+□	TAZG107*010L□#@0^++	TAZG107*010L□L@9^++	G	100	10	0.275	10	100	120	10	12	12	0.125	0.67	0.61
CWR29F107@H+□	TAZH107*010L□#@0^++	TAZH107*010L□L@9^++	H	100	10	0.18	10	100	120	10	12	12	0.150	0.91	0.82
CWR29F157@H+□	TAZH157*010L□#@0^++	TAZH157*010L□L@9^++	H	150	10	0.18	15	150	180	10	12	12	0.150	0.91	0.82
CWR29F157@X+□	TAZX157*010L□#@0^++	TAZX157*010L□L@9^++	X	150	10	0.065	15	150	180	10	12	12	0.200	1.75	1.58
CWR29F227@H+□	TAZH227*010L□#@0^++	TAZH227*010L□L@9^++	H	220	10	0.18	20	200	240	10	12	12	0.150	0.91	0.82
CWR29H684@A+□	TAZA684*015L□#@0^++	TAZA684*015L□L@9^++	A	0.68	15	6	1	10	12	6	8	8	0.050	0.09	0.08
CWR29H105@A+□	TAZA105*015L□#@0^++	TAZA105*015L□L@9^++	A	1	15	7.5	1	10	12	6	8	8	0.050	0.08	0.07
CWR29H155@A+□	TAZA155*015L□#@0^++	TAZA155*015L□L@9^++	A	1.5	15	7.5	1	10	12	6	8	8	0.050	0.08	0.07
CWR29H155@B+□	TAZB155*015L□#@0^++	TAZB155*015L□L@9^++	B	1.5	15	3.2	1	10	12	6	8	8	0.070	0.15	0.13
CWR29H225@A+□	TAZA225*015L□#@0^++	TAZA225*015L□L@9^++	A	2.2	15	7.5	1	10	12	6	8	8	0.050	0.08	0.07
CWR29H225@C+□	TAZC225*015L□#@0^++	TAZC225*015L□L@9^++	C	2.2	15	2.2	1	10	12	6	8	8	0.075	0.18	0.17
CWR29H335@B+□	TAZB335*015L□#@0^++	TAZB335*015L□L@9^++	B	3.3	15	3.6	1	10	12	6	8	8	0.070	0.14	0.13
CWR29H335@D+□	TAZD335*015L□#@0^++	TAZD335*015L□L@9^++	D	3.3	15	1.7	1	10	12	6	8	8	0.080	0.22	0.20
CWR29H475@B+□	TAZB475*015L□#@0^++	TAZB475*015L□L@9^++	B	4.7	15	2	1	10	12	6	8	8	0.070	0.19	0.17
CWR29H475@C+□	TAZC475*015L□#@0^++	TAZC475*015L□L@9^++	C	4.7	15	2.2	1	10	12	6	8	8	0.075	0.18	0.17
CWR29H475@D+□	TAZD475*015L□#@0^++	TAZD475*015L□L@9^++	D	4.7	15	2	1	10	12	6	8	8	0.080	0.20	0.18
CWR29H475@E+□	TAZE475*015L□#@0^++	TAZE475*015L□L@9^++	E	4.7	15	1.2	1	10	12	6	8	8	0.090	0.27	0.25
CWR29H685@D+□	TAZD685*015L□#@0^++	TAZD685*015L□L@9^++	D	6.8	15	2	1	10	12	6	8	8	0.080	0.20	0.18
CWR29H685@E+□	TAZE685*015L□#@0^++	TAZE685*015L□L@9^++	E	6.8	15	0.9	1	10	12	6	8	10	0.090	0.32	0.28
CWR29H106@D+□	TAZD106*015L□#@0^++	TAZD106*015L□L@9^++	D	10	15	2	2	20	24	6	8	8	0.080	0.20	0.18
CWR29H106@E+□	TAZE106*015L□#@0^++	TAZE106*015L□L@9^++	E	10	15	1.2	2	20	24	6	8	8	0.090	0.27	0.25
CWR29H106@F+□	TAZF106*015L□#@0^++	TAZF106*015L□L@9^++	F	10	15	0.667	2	20	24	6	8	8	0.100	0.39	0.35
CWR29H156@E+□	TAZE156*015L□#@0^++	TAZE156*015L□L@9^++	E	15	15	1.2	2	20	24	6	8	8	0.090	0.27	0.25
CWR29H156@F+□	TAZF156*015L□#@0^++	TAZF156*015L□L@9^++	F	15	15	0.8	2	20	24	8	10	10	0.100	0.35	0.32
CWR29H226@F+□	TAZF226*015L□#@0^++	TAZF226*015L□L@9^++	F	22	15	0.8	3	30	36	8	10	10	0.100	0.35	0.32
CWR29H226@G+□	TAZG226*015L□#@0^++	TAZG226*015L□L@9^++	G	22	15	0.275	4	40	48	6	8	8	0.125	0.67	0.61
CWR29H336@F+□	TAZF336*015L□#@0^++	TAZF336*015L□L@9^++	F	33	15	0.8	5	50	60	6	8	8	0.100	0.35	0.32
CWR29H336@G+□	TAZG336*015L□#@0^++	TAZG336*015L□L@9^++	G	33	15	0.275	6	60	72	8	10	10	0.125	0.67	0.61
CWR29H336@H+□	TAZH336*015L□#@0^++	TAZH336*015L□L@9^++	H	33	15	0.18	5	50	60	8	10	10	0.150	0.91	0.82
CWR29H476@G+□	TAZG476*015L□#@0^++	TAZG476*015L□L@9^++	G	47	15	0.275	10	100	120	8	10	10	0.125	0.67	0.61
CWR29H476@H+□	TAZH476*015L□#@0^++	TAZH476*015L□L@9^++	H	47	15	0.18	10	100	120	8	10	10	0.150	0.91	0.82
CWR29H686@G+□	TAZG686*015L□#@0^++	TAZG686*015L□L@9^++	G	68	15	0.275	10	100	120	8	10	10	0.125	0.67	0.61
CWR29H686@H+□	TAZH686*015L□#@0^++	TAZH686*015L□L@9^++	H	68	15	0.18	10	100	120	8	10	10	0.150	0.91	0.82
CWR29H107@H+□	TAZH107*015L□#@0^++	TAZH107*015L□L@9^++	H	100	15	0.18	15	150	180	10	12	12	0.150	0.91	0.82

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

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 RMS		
				Cap @ 120Hz µF	DC Rated Voltage V @ +85°C	ESR @ 100kHz Ohms @ +25°C	DCL max			DF Max			Power Dissipation W	25°C Ripple A (100kHz)	85°C Ripple A (100kHz)
							+25°C (µA)	+85°C (µA)	+125°C (µA)	+25°C (%)	+85°C (%)	+125°C (%)			
CWR29 P/N	AVX MIL & COTS-Plus P/N	AVX SRC9000 P/N	Case	µF @ 25°C	V @ +85°C	Ohms @ +25°C	(µA)	(µA)	(µA)	(%)	(%)	(%)	W	A (100kHz)	A (100kHz)
CWR29J474* A +□	TAZ A 474 * 020 L □ # @ 0 ++	TAZ A 474 * 020 L □ L @ 9 ++	A	0.47	20	7.5	1	10	12	8	8	10	0.050	0.08	0.07
CWR29J684* A +□	TAZ A 684 * 020 L □ # @ 0 ++	TAZ A 684 * 020 L □ L @ 9 ++	A	0.68	20	7.5	1	10	12	6	8	8	0.050	0.08	0.07
CWR29J684* 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
CWR29J105* 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
CWR29J105* 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
CWR29J155* 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
CWR29J155* 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
CWR29J225* 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	0.070	0.14	0.13
CWR29J225* 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	0.22	0.20
CWR29J335* 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	0.080	0.20	0.18
CWR29J335* 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	0.27	0.25
CWR29J475* 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	0.23	0.21
CWR29J685* 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
CWR29J685* 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
CWR29J106* E +□	TAZ E 106 * 020 L □ # @ 0 ++	TAZ E 106 * 020 L □ L @ 9 ++	E	10	20	1.5	2	20	24	6	8	8	0.090	0.24	0.22
CWR29J106* F +□	TAZ F 106 * 020 L □ # @ 0 ++	TAZ F 106 * 020 L □ L @ 9 ++	F	10	20	0.8	2	20	24	6	8	8	0.100	0.35	0.32
CWR29J156* F +□	TAZ F 156 * 020 L □ # @ 0 ++	TAZ F 156 * 020 L □ L @ 9 ++	F	15	20	0.8	3	30	36	6	8	8	0.100	0.35	0.32
CWR29J156* G +□	TAZ G 156 * 020 L □ # @ 0 ++	TAZ G 156 * 020 L □ L @ 9 ++	G	15	20	0.275	3	30	36	6	8	8	0.125	0.67	0.61
CWR29J226* G +□	TAZ G 226 * 020 L □ # @ 0 ++	TAZ G 226 * 020 L □ L @ 9 ++	G	22	20	0.625	4	40	48	6	8	8	0.125	0.45	0.40
CWR29J226* H +□	TAZ H 226 * 020 L □ # @ 0 ++	TAZ H 226 * 020 L □ L @ 9 ++	H	22	20	0.18	4	40	48	6	8	8	0.150	0.91	0.82
CWR29J336* H +□	TAZ H 336 * 020 L □ # @ 0 ++	TAZ H 336 * 020 L □ L @ 9 ++	H	33	20	0.18	6	60	72	8	10	10	0.150	0.91	0.82
CWR29J476* H +□	TAZ H 476 * 020 L □ # @ 0 ++	TAZ H 476 * 020 L □ L @ 9 ++	H	47	20	0.18	10	100	120	8	10	10	0.150	0.91	0.82
CWR29J476* X +□	TAZ X 476 * 020 L □ # @ 0 ++	TAZ X 476 * 020 L □ L @ 9 ++	X	47	20	0.11	10	100	120	8	10	10	0.200	1.35	1.21
CWR29K334* 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
CWR29K474* 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
CWR29K684* 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
CWR29K105* 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
CWR29K105* 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
CWR29K155* 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
CWR29K225* 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
CWR29K225* 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
CWR29K335* 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
CWR29K475* F +□	TAZ F 475 * 025 L □ # @ 0 ++	TAZ F 475 * 025 L □ L @ 9 ++	F	4.7	25	0.7	2	20	24	6	8	8	0.100	0.38	0.34
CWR29K685* F +□	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
CWR29K685* G +□	TAZ G 685 * 025 L □ # @ 0 ++	TAZ G 685 * 025 L □ L @ 9 ++	G	6.8	25	0.3	2	20	24	6	8	8	0.125	0.65	0.58
CWR29K106* G +□	TAZ G 106 * 025 L □ # @ 0 ++	TAZ G 106 * 025 L □ L @ 9 ++	G	10	25	0.35	3	30	36	6	8	8	0.125	0.60	0.54
CWR29K156* G +□	TAZ G 156 * 025 L □ # @ 0 ++	TAZ G 156 * 025 L □ L @ 9 ++	G	15	25	0.35	4	40	48	6	8	8	0.125	0.60	0.54
CWR29K156* H +□	TAZ H 156 * 025 L □ # @ 0 ++	TAZ H 156 * 025 L □ L @ 9 ++	H	15	25	0.2	4	40	48	6	8	8	0.150	0.87	0.78
CWR29K226* G +□	TAZ G 226 * 025 L □ # @ 0 ++	TAZ G 226 * 025 L □ L @ 9 ++	G	22	25	0.35	6	60	72	6	8	8	0.125	0.60	0.54
CWR29K226* H +□	TAZ H 226 * 025 L □ # @ 0 ++	TAZ H 226 * 025 L □ L @ 9 ++	H	22	25	0.18	6	60	72	6	8	8	0.150	0.91	0.82
CWR29K336* H +□	TAZ H 336 * 025 L □ # @ 0 ++	TAZ H 336 * 025 L □ L @ 9 ++	H	33	25	0.18	10	100	120	8	10	10	0.150	0.91	0.82
CWR29K336* X +□	TAZ X 336 * 025 L □ # @ 0 ++	TAZ X 336 * 025 L □ L @ 9 ++	X	33	25	0.13	10	100	120	8	10	10	0.200	1.24	1.12
CWR29M224* 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
CWR29M334* 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
CWR29M474* 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
CWR29M684* 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
CWR29M105* 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
CWR29M155* E +□	TAZ E 155 * 035 L □ # @ 0 ++	TAZ E 155 * 035 L □ L @ 9 ++	E	1.5	35	1.3	1	10	12	6	8	8	0.090	0.26	0.24
CWR29M335* F +□	TAZ F 335 * 035 L □ # @ 0 ++	TAZ F 335 * 035 L □ L @ 9 ++	F	3.3	35	0.7	1	10	12	6	8	8	0.100	0.38	0.34
CWR29M475* 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
CWR29M685* G +□	TAZ G 685 * 035 L □ # @ 0 ++	TAZ G 685 * 035 L □ L @ 9 ++	G	6.8	35	0.375	3	30	36	6	8	8	0.125	0.58	0.52
CWR29M685* H +□	TAZ H 685 * 035 L □ # @ 0 ++	TAZ H 685 * 035 L □ L @ 9 ++	H	6.8	35	0.5	3	30	36	6	8	8	0.150	0.55	0.49
CWR29M106* H +□	TAZ H 106 * 035 L □ # @ 0 ++	TAZ H 106 * 035 L □ L @ 9 ++	H	10	35	0.5	4	40	48	8	10	10	0.150	0.55	0.49
CWR29M156* X +□	TAZ X 156 * 035 L □ # @ 0 ++	TAZ X 156 * 035 L □ L @ 9 ++	X	15	35	0.19	6	60	72	6	8	8	0.200	1.03	0.92
CWR29N104* 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
CWR29N154* 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

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 and 2.2V bias. **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 RMS		
				Cap @ 120Hz	DC Rated Voltage	ESR @ 100kHz	DCL max			DF Max			Power Dissipation	25°C Ripple	85°C Ripple
CWR29 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 (%)	+(85/125)°C (%)	-55°C (%)	W	A (100kHz)	A (100kHz)
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
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
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
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
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
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
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
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
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

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

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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Tantalum Capacitors - Solid SMD category:](#)

Click to view products by [AVX manufacturer:](#)

Other Similar products are found below :

[B45197-A2157-M509](#) [B45197A5226M409](#) [293D686X0020E8T](#) [CWR09JC105KCB\M100](#) [CWR11CH107KBA](#) [TCSCS1A336KBAR](#) [419-2060-501](#) [B45196-H5106-K309](#) [B45196-H6226-K509](#) [CWR29JC106KBEZ](#) [T83D475K050RCCL](#) [591D158X06R3R2T20H](#) [M39006/22-0640H](#) [M39003/01-2596](#) [TCSCS1A476KBAR](#) [T83E107K016RCCL](#) [T83D685K035RCCL](#) [293D475X0035B2DE3](#) [TMCMB1C475KTRF](#) [293D155X9020A2DE3](#) [298W476X06R3M2T](#) [298W107X0004M2T](#) [CWR29NC225KDFC](#) [CWR29HH155KCBB](#) [CWR29HC106KCDC](#) [293D476X9035E2TE3](#) [CWR29KC226JCGC](#) [T495D156K025ATE2757005](#) [T513X227K016BH4585](#) [CWR29DC337KCHC](#) [T97H107M040HSA](#) [595D686X9010B2T](#) [T25D337M016CSZ](#) [591D156X9025R8T15H](#) [594D686X9016C2T](#) [595D106X0025C8T](#) [CWR29DC226KBDA\TR](#) [CWR29FC106KBBA\TR](#) [CWR29FC686KBGA\TR](#) [CWR29FC157KBXA\TR](#) [CWR29HC105KBAA\TR](#) [CA55-B6R3M107T](#) [CA55-E025M107T](#) [TC212B475K035Y](#) [TAZH685K035LBSB0824](#) [TAZG107K010LBSB0800](#) [TAZH475K050LBSB0H23](#) [TAZH156K025CBSZ0824](#) [TBJD156K025CBSZ0824](#) [TMCSA1V154MTRF](#)