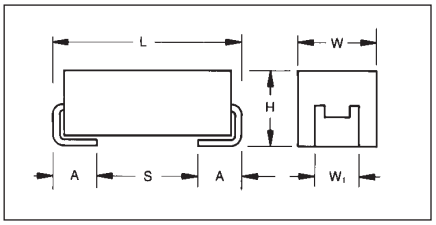
TAZ Series

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



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 MIL-PRF-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 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.

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 NASA SP-R-0022A.

MARKING

(White marking on black body)

Polarity Stripe (+)

Capacitance Code
Rated Voltage

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 55365/11

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	R		R			A		B
0.47	474			R		A		B	C
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							
150	157								
220	227								

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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 6 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

Not RoHS Compliant

LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT

RoHS COMPLIANT

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 6 for additional packaging options.

Not RoHS Compliant

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 6 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

Not RoHS Compliant

*Contact factory for AVX SRC9000 Space Level SCD details.

TECHNICAL SPECIFICATIONS

Technical Data:	Unless otherwise specified, all technical data relate to an ambient temperature of 25°C								
Capacitance Range:	0.1 µF to 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	7	10	13	17	23	33
Surge Voltage: (V_S)	≤85°C:	5.2	8	13	20	26	32	46	65
	125°C:	3.4	5	8	13	16	20	28	40
Temperature Range:	-55°C to +125°C								

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RATING & PART NUMBER REFERENCE				Parametric Specifications by Rating per MIL-PRF-55365/4										Typical Ripple Data by Rating						
				Cap @ 120Hz	DC Rated Voltage	ESR @ 100kHz	DCL max			DF Max			Power Dissipation	25°C Ripple	85°C Ripple	125°C Ripple	25°C Ripple	85°C Ripple	125°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)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)
	TAZ R 334 * 004 C ☐ # @ 0 ^ ++		R	0.33	4	45	1	10	12	6	8	8	0.030	0.03	0.02	0.01	1.16	1.05	0.46
	TAZ R 225 * 004 C ☐ # @ 0 ^ ++		R	2.2	4	12	1	10	12	6	8	8	0.030	0.05	0.05	0.02	0.60	0.54	0.24
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	0.03	0.63	0.57	0.25
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	0.04	0.75	0.67	0.30
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	0.05	0.64	0.58	0.26
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	0.06	0.57	0.51	0.23
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	0.06	0.56	0.51	0.22
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	0.09	0.47	0.42	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	0.13	0.37	0.33	0.15
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	0.16	0.37	0.33	0.15
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	0.03	0.63	0.57	0.25
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	0.04	0.75	0.67	0.30
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	0.05	0.64	0.58	0.26
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	0.05	0.60	0.54	0.24
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	0.06	0.56	0.51	0.22
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	0.09	0.47	0.42	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	0.13	0.37	0.33	0.15
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	0.16	0.37	0.33	0.15
	TAZ R 334 * 010 C ☐ # @ 0 ^ ++		R	0.33	10	50	1	10	12	6	8	8	0.030	0.02	0.02	0.01	1.22	1.10	0.49
	TAZ R 474 * 010 C ☐ # @ 0 ^ ++		R	0.47	10	50	1	10	12	6	8	8	0.030	0.02	0.02	0.01	1.22	1.10	0.49
	TAZ R 105 * 010 C ☐ # @ 0 ^ ++		R	1	10	10	1	10	12	6	8	8	0.030	0.05	0.05	0.02	0.55	0.49	0.22
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	0.03	0.71	0.64	0.28
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	0.04	0.75	0.67	0.30
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	0.05	0.64	0.58	0.26
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	0.05	0.60	0.54	0.24
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	0.06	0.56	0.51	0.22
CWR09F^156*@+	TAZ F 156 * 010 C ☐ # @ 0 ^ ++	TAZ F 156 * 010 C ☐ L @ 9 ^ ++	F	15	10	2.5	2	20	24	8	8	10	0.100	0.20	0.18	0.08	0.50	0.45	0.20
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	0.13	0.37	0.33	0.15
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	0.16	0.37	0.33	0.15
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	0.03	0.77	0.70	0.31
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	0.04	0.75	0.67	0.30
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	0.05	0.64	0.58	0.26
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	0.05	0.63	0.57	0.25
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	0.06	0.60	0.54	0.24
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	0.08	0.50	0.45	0.20
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	0.13	0.37	0.33	0.15
CWR09H^336*@+	TAZ H 336 * 015 C ☐ # @ 0 ^ ++	TAZ H 336 * 015 C ☐ L @ 9 ^ ++	H	33	15	0.9	5	50	60	8	8	10	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR09J^474*@+	TAZ A 474 * 020 C ☐ # @ 0 ^ ++	TAZ A 474 * 020 C ☐ L @ 9 ^ ++	A	0.47	20	14	1	10	12	8	8	10	0.050	0.06	0.05	0.02	0.84	0.75	0.33
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	0.03	0.84	0.75	0.33
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	0.03	0.92	0.82	0.37
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	0.04	0.67	0.60	0.27
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	0.05	0.63	0.57	0.25
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	0.06	0.60	0.54	0.24
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	0.08	0.49	0.44	0.20
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	0.13	0.37	0.33	0.15
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	0.16	0.37	0.33	0.15
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	0.02	0.87	0.78	0.35
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	0.04	0.72	0.65	0.29
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	0.04	0.70	0.63	0.28
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	0.04	0.72	0.65	0.29
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	0.06	0.56	0.51	0.22
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	0.08	0.50	0.45	0.20
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	0.13	0.39	0.35	0.15
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	0.12	0.42	0.38	0.17
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	0.15	0.39	0.35	0.15

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

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

TAZ Series

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

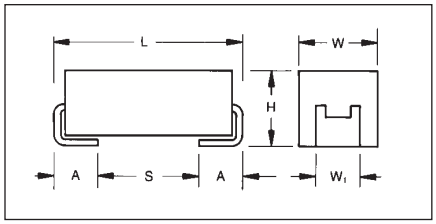
RATING & PART NUMBER REFERENCE				Parametric Specifications by Rating per MIL-PRF-55365/4									Typical Ripple Data by Rating						
				Cap	DC Rated	ESR @	DCL max			DF Max			Power	25°C	85°C	125°C	25°C	85°C	125°C
				@ 120Hz	Voltage	100kHz	+25°C	+85°C	+125°C	+25°C	+(85/125)°C	-55°C	Dissipation	Ripple	Ripple	Ripple	Ripple	Ripple	Ripple
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)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)
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	0.02	0.95	0.85	0.38
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	0.03	0.84	0.75	0.33
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	0.04	0.77	0.70	0.31
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	0.04	0.72	0.65	0.29
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	0.06	0.64	0.57	0.25
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	0.08	0.50	0.45	0.20
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	0.12	0.43	0.39	0.17
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	0.14	0.44	0.40	0.18
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	0.02	1.05	0.94	0.42
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	0.02	0.92	0.83	0.37
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	0.03	0.99	0.89	0.40
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	0.03	0.92	0.82	0.37
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	0.04	0.77	0.70	0.31
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	0.04	0.75	0.67	0.30
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	0.05	0.73	0.66	0.29
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	0.06	0.63	0.57	0.25
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	0.08	0.50	0.45	0.20
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	0.10	0.50	0.45	0.20
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	0.13	0.47	0.43	0.19

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

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

TAZ Series

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 wave or reflow solder, conductive epoxy or compression bonding techniques. The parts also carry full polarity and capacitance / voltage marking.

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

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

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

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

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_t)	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)	0.035
X	6.93 Max (0.273)	5.41 Max (0.213)	2.74 Max (0.108)	3.05±0.13 (0.120±0.005)	1.19 (0.047)	N/A	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 85ºC						
µF	Code	4V (C)	6V (D)	10V (F)	15V (H)	20V (J)	25V (K)	35V (M)
0.10	104							
0.15	154							
0.22	224							
0.33	334							A
0.47	474						A	
0.68	684					A		
1.0	105				A	A	B	
1.5	155				A	B		
2.2	225			A	A	B	D	
3.3	335	A	A	A	B	D	E	
4.7	475	A	A	B/C	B/C/D	E		
6.8	685	A	B	B/C/D	D/E	E	F	G
10	106	B	B	B/C/D/E	D/E	E/F		H
15	156	B	B/D/E	D/E	E/F	F	G	
22	226	B/D	D/E	E	F	G	G/H	
33	336	D/E	E	F	F/G	H	H	
47	476	E	F	F/G	G/H	H/X		
68	686	E	F/G	G	G/H			
100	107	F	G	G/H	H			
150	157	G	G	H/X				
220	227	H	H	H				
330	337	H	H					

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 6 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

Not RoHS Compliant

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 \TR = 7" T&R \TR13 = 13" T&R \W = Waffle See page 6 for additional packaging options.

Not RoHS Compliant

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 6 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

Not RoHS Compliant

*Contact factory for AVX SRC9000 Space Level SCD details.

TECHNICAL SPECIFICATIONS

Technical Data:		Unless otherwise specified, all technical data relate to an ambient temperature of 25°C						
Capacitance Range:		0.33 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	7	10	13	17	23
Surge Voltage: (V_S)	≤85°C:	5.2	8	13	20	26	32	46
	125°C:	3.4	5	8	13	16	20	28
Temperature Range:		-55°C to +125°C						

TAZ Series

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

RATING & PART NUMBER REFERENCE				Parametric Specifications by Rating per MIL-PRF-55365/11										Typical Ripple Data by Rating						
				Cap @ 120Hz	DC Rated Voltage	ESR @ 100kHz	DCL max			DF Max			Power Dissipation	25°C Ripple	85°C Ripple	125°C Ripple	25°C Ripple	85°C Ripple	125°C Ripple
CWR19 P/N	AVX MIL & COTS-Plus P/N	AVX SRC9000 P/N	Case	µF @ 25°C	V @ +85°C	Ohms @ +25°C	+25°C (µA)	+85°C (µA)	+125°C (µA)	+25°C (%)	+(85/125)°C (%)	-55°C (%)	W	A (100kHz)	A (100kHz)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)
CWR19C^335*@A+□	TAZ A 335 * 004 C □ # @ 0 ^ ++	TAZ A 335 * 004 C □ L @ 9 ^ ++	A	3.3	4	12	1	10	12	6	8	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31
CWR19C^475*@A+□	TAZ A 475 * 004 C □ # @ 0 ^ ++	TAZ A 475 * 004 C □ L @ 9 ^ ++	A	4.7	4	12	1	10	12	6	8	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31
CWR19C^685*@A+□	TAZ A 685 * 004 C □ # @ 0 ^ ++	TAZ A 685 * 004 C □ L @ 9 ^ ++	A	6.8	4	12	1	10	12	6	8	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31
CWR19C^106*@B+□	TAZ B 106 * 004 C □ # @ 0 ^ ++	TAZ B 106 * 004 C □ L @ 9 ^ ++	B	10	4	8	1	10	12	8	10	10	0.070	0.09	0.08	0.04	0.75	0.67	0.30
CWR19C^156*@B+□	TAZ B 156 * 004 C □ # @ 0 ^ ++	TAZ B 156 * 004 C □ L @ 9 ^ ++	B	15	4	8	1	10	12	8	10	10	0.070	0.09	0.08	0.04	0.75	0.67	0.30
CWR19C^226*@B+□	TAZ B 226 * 004 C □ # @ 0 ^ ++	TAZ B 226 * 004 C □ L @ 9 ^ ++	B	22	4	8	1	10	12	8	10	10	0.070	0.09	0.08	0.04	0.75	0.67	0.30
CWR19C^226*@D+□	TAZ D 226 * 004 C □ # @ 0 ^ ++	TAZ D 226 * 004 C □ L @ 9 ^ ++	D	22	4	4	1	10	12	8	10	12	0.080	0.14	0.13	0.06	0.57	0.51	0.23
CWR19C^336*@D+□	TAZ D 336 * 004 C □ # @ 0 ^ ++	TAZ D 336 * 004 C □ L @ 9 ^ ++	D	33	4	4	2	20	24	8	10	12	0.080	0.14	0.13	0.06	0.57	0.51	0.23
CWR19C^336*@E+□	TAZ E 336 * 004 C □ # @ 0 ^ ++	TAZ E 336 * 004 C □ L @ 9 ^ ++	E	33	4	3	2	20	24	8	10	12	0.090	0.17	0.16	0.07	0.52	0.47	0.21
CWR19C^476*@E+□	TAZ E 476 * 004 C □ # @ 0 ^ ++	TAZ E 476 * 004 C □ L @ 9 ^ ++	E	47	4	3	2	20	24	8	10	12	0.090	0.17	0.16	0.07	0.52	0.47	0.21
CWR19C^686*@E+□	TAZ E 686 * 004 C □ # @ 0 ^ ++	TAZ E 686 * 004 C □ L @ 9 ^ ++	E	68	4	3	3	30	36	8	10	12	0.090	0.17	0.16	0.07	0.52	0.47	0.21
CWR19C^107*@F+□	TAZ F 107 * 004 C □ # @ 0 ^ ++	TAZ F 107 * 004 C □ L @ 9 ^ ++	F	100	4	2	4	40	48	10	12	12	0.100	0.22	0.20	0.09	0.45	0.40	0.18
CWR19C^157*@G+□	TAZ G 157 * 004 C □ # @ 0 ^ ++	TAZ G 157 * 004 C □ L @ 9 ^ ++	G	150	4	1	6	60	72	10	12	12	0.125	0.35	0.32	0.14	0.35	0.32	0.14
CWR19C^227*@H+□	TAZ H 227 * 004 C □ # @ 0 ^ ++	TAZ H 227 * 004 C □ L @ 9 ^ ++	H	220	4	1	8	80	96	10	12	12	0.150	0.39	0.35	0.15	0.39	0.35	0.15
CWR19C^337*@H+□	TAZ H 337 * 004 C □ # @ 0 ^ ++	TAZ H 337 * 004 C □ L @ 9 ^ ++	H	330	4	0.9	10	100	120	10	12	12	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR19D^335*@A+□	TAZ A 335 * 006 C □ # @ 0 ^ ++	TAZ A 335 * 006 C □ L @ 9 ^ ++	A	3.3	6	12	1	10	12	6	8	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31
CWR19D^475*@A+□	TAZ A 475 * 006 C □ # @ 0 ^ ++	TAZ A 475 * 006 C □ L @ 9 ^ ++	A	4.7	6	12	1	10	12	6	8	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31
CWR19D^685*@B+□	TAZ B 685 * 006 C □ # @ 0 ^ ++	TAZ B 685 * 006 C □ L @ 9 ^ ++	B	6.8	6	8	1	10	12	6	8	8	0.070	0.09	0.08	0.04	0.75	0.67	0.30
CWR19D^106*@B+□	TAZ B 106 * 006 C □ # @ 0 ^ ++	TAZ B 106 * 006 C □ L @ 9 ^ ++	B	10	6	8	1	10	12	6	8	8	0.070	0.09	0.08	0.04	0.75	0.67	0.30
CWR19D^156*@B+□	TAZ B 156 * 006 C □ # @ 0 ^ ++	TAZ B 156 * 006 C □ L @ 9 ^ ++	B	15	6	8	1	10	12	8	10	10	0.070	0.09	0.08	0.04	0.75	0.67	0.30
CWR19D^156*@D+□	TAZ D 156 * 006 C □ # @ 0 ^ ++	TAZ D 156 * 006 C □ L @ 9 ^ ++	D	15	6	5	1	10	12	8	10	12	0.080	0.13	0.11	0.05	0.63	0.57	0.25
CWR19D^226*@D+□	TAZ D 226 * 006 C □ # @ 0 ^ ++	TAZ D 226 * 006 C □ L @ 9 ^ ++	D	22	6	5	1	10	12	6	8	8	0.080	0.13	0.11	0.05	0.63	0.57	0.25
CWR19D^156*@E+□	TAZ E 156 * 006 C □ # @ 0 ^ ++	TAZ E 156 * 006 C □ L @ 9 ^ ++	E	15	6	3	1	10	12	8	10	12	0.090	0.17	0.16	0.07	0.52	0.47	0.21
CWR19D^226*@E+□	TAZ E 226 * 006 C □ # @ 0 ^ ++	TAZ E 226 * 006 C □ L @ 9 ^ ++	E	22	6	3.5	2	20	24	8	10	12	0.090	0.16	0.14	0.06	0.56	0.51	0.22
CWR19D^336*@E+□	TAZ E 336 * 006 C □ # @ 0 ^ ++	TAZ E 336 * 006 C □ L @ 9 ^ ++	E	33	6	3.5	2	20	24	6	8	8	0.090	0.16	0.14	0.06	0.56	0.51	0.22
CWR19D^476*@F+□	TAZ F 476 * 006 C □ # @ 0 ^ ++	TAZ F 476 * 006 C □ L @ 9 ^ ++	F	47	6	3.5	3	30	36	8	10	12	0.100	0.17	0.15	0.07	0.59	0.53	0.24
CWR19D^686*@F+□	TAZ F 686 * 006 C □ # @ 0 ^ ++	TAZ F 686 * 006 C □ L @ 9 ^ ++	F	68	6	1.5	4	40	48	10	12	12	0.100	0.26	0.23	0.10	0.39	0.35	0.15
CWR19D^686*@G+□	TAZ G 686 * 006 C □ # @ 0 ^ ++	TAZ G 686 * 006 C □ L @ 9 ^ ++	G	68	6	1	4	40	48	10	12	12	0.125	0.35	0.32	0.14	0.35	0.32	0.14
CWR19D^107*@G+□	TAZ G 107 * 006 C □ # @ 0 ^ ++	TAZ G 107 * 006 C □ L @ 9 ^ ++	G	100	6	1.1	6	60	72	10	12	12	0.125	0.34	0.30	0.13	0.37	0.33	0.15
CWR19D^157*@G+□	TAZ G 157 * 006 C □ # @ 0 ^ ++	TAZ G 157 * 006 C □ L @ 9 ^ ++	G	150	6	1.1	10	100	120	10	12	12	0.125	0.34	0.30	0.13	0.37	0.33	0.15
CWR19D^227*@H+□	TAZ H 227 * 006 C □ # @ 0 ^ ++	TAZ H 227 * 006 C □ L @ 9 ^ ++	H	220	6	0.9	10	100	120	10	12	12	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR19D^337*@H+□	TAZ H 337 * 006 C □ # @ 0 ^ ++	TAZ H 337 * 006 C □ L @ 9 ^ ++	H	330	6	0.9	20	200	240	10	12	12	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR19F^225*@A+□	TAZ A 225 * 010 C □ # @ 0 ^ ++	TAZ A 225 * 010 C □ L @ 9 ^ ++	A	2.2	10	12	1	10	12	6	8	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31
CWR19F^335*@A+□	TAZ A 335 * 010 C □ # @ 0 ^ ++	TAZ A 335 * 010 C □ L @ 9 ^ ++	A	3.3	10	12	1	10	12	6	8	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31
CWR19F^475*@B+□	TAZ B 475 * 010 C □ # @ 0 ^ ++	TAZ B 475 * 010 C □ L @ 9 ^ ++	B	4.7	10	8	1	10	12	6	8	8	0.070	0.09	0.08	0.04	0.75	0.67	0.30
CWR19F^685*@B+□	TAZ B 685 * 010 C □ # @ 0 ^ ++	TAZ B 685 * 010 C □ L @ 9 ^ ++	B	6.8	10	8	1	10	12	6	8	8	0.070	0.09	0.08	0.04	0.75	0.67	0.30
CWR19F^106*@B+□	TAZ B 106 * 010 C □ # @ 0 ^ ++	TAZ B 106 * 010 C □ L @ 9 ^ ++	B	10	10	8	1	10	12	8	10	10	0.070	0.09	0.08	0.04	0.75	0.67	0.30
CWR19F^475*@C+□	TAZ C 475 * 010 C □ # @ 0 ^ ++	TAZ C 475 * 010 C □ L @ 9 ^ ++	C	4.7	10	5.5	1	10	12	6	8	8	0.075	0.12	0.11	0.05	0.64	0.58	0.26
CWR19F^685*@C+□	TAZ C 685 * 010 C □ # @ 0 ^ ++	TAZ C 685 * 010 C □ L @ 9 ^ ++	C	6.8	10	5.5	1	10	12	6	8	8	0.075	0.12	0.11	0.05	0.64	0.58	0.26
CWR19F^106*@C+□	TAZ C 106 * 010 C □ # @ 0 ^ ++	TAZ C 106 * 010 C □ L @ 9 ^ ++	C	10	10	5.5	1	10	12	6	8	8	0.075	0.12	0.11	0.05	0.64	0.58	0.26
CWR19F^685*@D+□	TAZ D 685 * 010 C □ # @ 0 ^ ++	TAZ D 685 * 010 C □ L @ 9 ^ ++	D	6.8	10	5	1	10	12	6	8	8	0.080	0.13	0.11	0.05	0.63	0.57	0.25
CWR19F^106*@D+□	TAZ D 106 * 010 C □ # @ 0 ^ ++	TAZ D 106 * 010 C □ L @ 9 ^ ++	D	10	10	4	1	10	12	6	8	8	0.080	0.14	0.13	0.06	0.57	0.51	0.23
CWR19F^156*@D+□	TAZ D 156 * 010 C □ # @ 0 ^ ++	TAZ D 156 * 010 C □ L @ 9 ^ ++	D	15	10	5	2	20	24	6	8	8	0.080	0.13	0.11	0.05	0.63	0.57	0.25
CWR19F^106*@E+□	TAZ E 106 * 010 C □ # @ 0 ^ ++	TAZ E 106 * 010 C □ L @ 9 ^ ++	E	10	10	3.5	1	10	12	6	8	8	0.090	0.16	0.14	0.06	0.56	0.51	0.22
CWR19F^156*@E+□	TAZ E 156 * 010 C □ # @ 0 ^ ++	TAZ E 156 * 010 C □ L @ 9 ^ ++	E	15	10	3	2	20	24	8	10	10	0.090	0.17	0.16	0.07	0.52	0.47	0.21
CWR19F^226*@E+□	TAZ E 226 * 010 C □ # @ 0 ^ ++	TAZ E 226 * 010 C □ L @ 9 ^ ++	E	22	10	2	3	30	36	8	10	10	0.090	0.21	0.19	0.08	0.42	0.38	0.17
CWR19F^336*@F+□	TAZ F 336 * 010 C □ # @ 0 ^ ++	TAZ F 336 * 010 C □ L @ 9 ^ ++	F	33	10	1.5	3	30	36	8	10	10	0.100	0.26	0.23	0.10	0.39	0.35	0.15
CWR19F^476*@F+□	TAZ F 476 * 010 C □ # @ 0 ^ ++	TAZ F 476 * 010 C □ L @ 9 ^ ++	F	47	10	1.5	4	40	48	10	12	12	0.100	0.26	0.23	0.10	0.39	0.35	0.15
CWR19F^476*@G+□	TAZ G 476 * 010 C □ # @ 0 ^ ++	TAZ G 476 * 010 C □ L @ 9 ^ ++	G	47	10	1	4	40	48	10	12	12	0.125	0.35	0.32	0.14	0.35	0.32	0.14
CWR19F^686*@G+□	TAZ G 686 * 010 C □ # @ 0 ^ ++	TAZ G 686 * 010 C □ L @ 9 ^ ++	G	68	10	1.1	6	60	72	10	12	12	0.125	0.34	0.30	0.13	0.37	0.33	0.15
CWR19F^107*@G+□	TAZ G 107 * 010 C □ # @ 0 ^ ++	TAZ G 107 * 010 C □ L @ 9 ^ ++	G	100	10	1.1	10	100	120	10	12	12	0.125	0.34	0.30	0.13	0.37	0.33	0.15
CWR19F^107*@H+□	TAZ H 107 * 010 C □ # @ 0 ^ ++	TAZ H 107 * 010 C □ L @ 9 ^ ++	H	100	10	0.9	10	100	120	10	12	12	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR19F^157*@H+□	TAZ H 157 * 010 C □ # @ 0 ^ ++	TAZ H 157 * 010 C □ L @ 9 ^ ++	H	150	10	0.9	15	150	180	10	12	12	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR19F^227*@H+□	TAZ H 227 * 010 C □ # @ 0 ^ ++	TAZ H 227 * 010 C □ L @ 9 ^ ++	H	220	10	0.9	20	200	240	10	12	12	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR19F^157*@X+□	TAZ X 157 * 010 C □ # @ 0 ^ ++	TAZ X 157 * 010 C □ L @ 9 ^ ++	X	150	10	0.9	15	150	180	10	12	12	0.200	0.47	0.42	0.19	0.42	0.38	0.17

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

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

TAZ Series

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

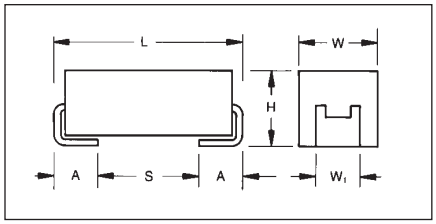
RATING & PART NUMBER REFERENCE				Parametric Specifications by Rating per MIL-PRF-55365/11										Typical Ripple Data by Rating						
				Cap @ 120Hz	DC Rated Voltage	ESR @ 100kHz	DCL max			DF Max			Power Dissipation	25°C Ripple	85°C Ripple	125°C Ripple	25°C Ripple	85°C Ripple	125°C Ripple
CWR19 P/N	AVX MIL & COTS-Plus P/N	AVX SRC9000 P/N	Case	µF @ 25°C	V @ +85°C	Ohms @ +25°C	+25°C (µA)	+85°C (µA)	+125°C (µA)	+25°C (%)	+(85/125)°C (%)	-55°C (%)	W	A (100kHz)	A (100kHz)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)
CWR19H^105*@A+□	TAZ A 105 * 015 C □ # @ 0 ^ ++	TAZ A 105 * 015 C □ L @ 9 ^ ++	A	1	15	15	1	10	12	6	8	8	0.050	0.06	0.05	0.02	0.87	0.78	0.35
CWR19H^155*@A+□	TAZ A 155 * 015 C □ # @ 0 ^ ++	TAZ A 155 * 015 C □ L @ 9 ^ ++	A	1.5	15	15	1	10	12	6	8	8	0.050	0.06	0.05	0.02	0.87	0.78	0.35
CWR19H^225*@A+□	TAZ A 225 * 015 C □ # @ 0 ^ ++	TAZ A 225 * 015 C □ L @ 9 ^ ++	A	2.2	15	15	1	10	12	6	8	8	0.050	0.06	0.05	0.02	0.87	0.78	0.35
CWR19H^335*@B+□	TAZ B 335 * 015 C □ # @ 0 ^ ++	TAZ B 335 * 015 C □ L @ 9 ^ ++	B	3.3	15	9	1	10	12	6	8	8	0.070	0.09	0.08	0.04	0.79	0.71	0.32
CWR19H^475*@B+□	TAZ B 475 * 015 C □ # @ 0 ^ ++	TAZ B 475 * 015 C □ L @ 9 ^ ++	B	4.7	15	5	1	10	12	6	8	8	0.070	0.12	0.11	0.05	0.59	0.53	0.24
CWR19H^475*@C+□	TAZ C 475 * 015 C □ # @ 0 ^ ++	TAZ C 475 * 015 C □ L @ 9 ^ ++	C	4.7	15	5.5	1	10	12	6	8	8	0.075	0.12	0.11	0.05	0.64	0.58	0.26
CWR19H^475*@D+□	TAZ D 475 * 015 C □ # @ 0 ^ ++	TAZ D 475 * 015 C □ L @ 9 ^ ++	D	4.7	15	6	1	10	12	6	8	8	0.080	0.12	0.10	0.05	0.69	0.62	0.28
CWR19H^685*@D+□	TAZ D 685 * 015 C □ # @ 0 ^ ++	TAZ D 685 * 015 C □ L @ 9 ^ ++	D	6.8	15	6	1	10	12	6	8	8	0.080	0.12	0.10	0.05	0.69	0.62	0.28
CWR19H^106*@D+□	TAZ D 106 * 015 C □ # @ 0 ^ ++	TAZ D 106 * 015 C □ L @ 9 ^ ++	D	10	15	6	2	20	24	6	8	8	0.080	0.12	0.10	0.05	0.69	0.62	0.28
CWR19H^685*@E+□	TAZ E 685 * 015 C □ # @ 0 ^ ++	TAZ E 685 * 015 C □ L @ 9 ^ ++	E	6.8	15	3	1	10	12	8	10	12	0.090	0.17	0.16	0.07	0.52	0.47	0.21
CWR19H^106*@E+□	TAZ E 106 * 015 C □ # @ 0 ^ ++	TAZ E 106 * 015 C □ L @ 9 ^ ++	E	10	15	4	2	20	24	6	8	8	0.090	0.15	0.14	0.06	0.60	0.54	0.24
CWR19H^156*@E+□	TAZ E 156 * 015 C □ # @ 0 ^ ++	TAZ E 156 * 015 C □ L @ 9 ^ ++	E	15	15	4	2	20	24	6	8	8	0.090	0.15	0.14	0.06	0.60	0.54	0.24
CWR19H^156*@F+□	TAZ F 156 * 015 C □ # @ 0 ^ ++	TAZ F 156 * 015 C □ L @ 9 ^ ++	F	15	15	3	2	20	24	8	10	10	0.100	0.18	0.16	0.07	0.55	0.49	0.22
CWR19H^226*@F+□	TAZ F 226 * 015 C □ # @ 0 ^ ++	TAZ F 226 * 015 C □ L @ 9 ^ ++	F	22	15	3	3	30	36	8	10	10	0.100	0.18	0.16	0.07	0.55	0.49	0.22
CWR19H^336*@F+□	TAZ F 336 * 015 C □ # @ 0 ^ ++	TAZ F 336 * 015 C □ L @ 9 ^ ++	F	33	15	3	5	50	60	6	8	8	0.100	0.18	0.16	0.07	0.55	0.49	0.22
CWR19H^336*@G+□	TAZ G 336 * 015 C □ # @ 0 ^ ++	TAZ G 336 * 015 C □ L @ 9 ^ ++	G	33	15	1.1	6	60	72	8	10	10	0.125	0.34	0.30	0.13	0.37	0.33	0.15
CWR19H^476*@G+□	TAZ G 476 * 015 C □ # @ 0 ^ ++	TAZ G 476 * 015 C □ L @ 9 ^ ++	G	47	15	1.1	10	100	120	8	10	10	0.125	0.34	0.30	0.13	0.37	0.33	0.15
CWR19H^686*@G+□	TAZ G 686 * 015 C □ # @ 0 ^ ++	TAZ G 686 * 015 C □ L @ 9 ^ ++	G	68	15	1.1	10	100	120	8	10	10	0.125	0.34	0.30	0.13	0.37	0.33	0.15
CWR19H^476*@H+□	TAZ H 476 * 015 C □ # @ 0 ^ ++	TAZ H 476 * 015 C □ L @ 9 ^ ++	H	47	15	0.9	10	100	120	8	10	10	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR19H^686*@H+□	TAZ H 686 * 015 C □ # @ 0 ^ ++	TAZ H 686 * 015 C □ L @ 9 ^ ++	H	68	15	0.9	10	100	120	8	10	10	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR19H^107*@H+□	TAZ H 107 * 015 C □ # @ 0 ^ ++	TAZ H 107 * 015 C □ L @ 9 ^ ++	H	100	15	0.9	15	150	180	10	12	12	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR19J^684*@A+□	TAZ A 684 * 020 C □ # @ 0 ^ ++	TAZ A 684 * 020 C □ L @ 9 ^ ++	A	0.68	20	15	1	10	12	6	8	8	0.050	0.06	0.05	0.02	0.87	0.78	0.35
CWR19J^105*@A+□	TAZ A 105 * 020 C □ # @ 0 ^ ++	TAZ A 105 * 020 C □ L @ 9 ^ ++	A	1	20	15	1	10	12	6	8	8	0.050	0.06	0.05	0.02	0.87	0.78	0.35
CWR19J^155*@B+□	TAZ B 155 * 020 C □ # @ 0 ^++	TAZ B 155 * 020 C □ L @ 9 ^++	B	1.5	20	9	1	10	12	6	8	8	0.070	0.09	0.08	0.04	0.79	0.71	0.32
CWR19J^225*@B+□	TAZ B 225 * 020 C □ # @ 0 ^ ++	TAZ B 225 * 020 C □ L @ 9 ^ ++	B	2.2	20	9	1	10	12	6	8	8	0.070	0.09	0.08	0.04	0.79	0.71	0.32
CWR19J^335*@D+□	TAZ D 335 * 020 C □ # @ 0 ^ ++	TAZ D 335 * 020 C □ L @ 9 ^ ++	D	3.3	20	6	1	10	12	6	8	8	0.080	0.12	0.10	0.05	0.69	0.62	0.28
CWR19J^475*@E+□	TAZ E 475 * 020 C □ # @ 0 ^ ++	TAZ E 475 * 020 C □ L @ 9 ^ ++	E	4.7	20	6	1	10	12	6	8	8	0.090	0.12	0.11	0.05	0.73	0.66	0.29
CWR19J^685*@E+□	TAZ E 685 * 020 C □ # @ 0 ^ ++	TAZ E 685 * 020 C □ L @ 9 ^ ++	E	6.8	20	5	2	20	24	6	8	8	0.090	0.13	0.12	0.05	0.67	0.60	0.27
CWR19J^106*@E+□	TAZ E 106 * 020 C □ # @ 0 ^ ++	TAZ E 106 * 020 C □ L @ 9 ^ ++	E	10	20	5	2	20	24	6	8	8	0.090	0.13	0.12	0.05	0.67	0.60	0.27
CWR19J^106*@F+□	TAZ F 106 * 020 C □ # @ 0 ^ ++	TAZ F 106 * 020 C □ L @ 9 ^ ++	F	10	20	3	2	20	24	6	8	8	0.100	0.18	0.16	0.07	0.55	0.49	0.22
CWR19J^156*@F+□	TAZ F 156 * 020 C □ # @ 0 ^ ++	TAZ F 156 * 020 C □ L @ 9 ^ ++	F	15	20	3	3	30	36	6	8	8	0.100	0.18	0.16	0.07	0.55	0.49	0.22
CWR19J^226*@G+□	TAZ G 226 * 020 C □ # @ 0 ^ ++	TAZ G 226 * 020 C □ L @ 9 ^ ++	G	22	20	2.5	4	40	48	6	8	8	0.125	0.22	0.20	0.09	0.56	0.50	0.22
CWR19J^336*@H+□	TAZ H 336 * 020 C □ # @ 0 ^ ++	TAZ H 336 * 020 C □ L @ 9 ^ ++	H	33	20	0.9	6	60	72	8	10	10	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR19J^476*@H+□	TAZ H 476 * 020 C □ # @ 0 ^ ++	TAZ H 476 * 020 C □ L @ 9 ^ ++	H	47	20	0.9	10	100	120	8	10	10	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR19J^476*@X+□	TAZ X 476 * 020 C □ # @ 0 ^ ++	TAZ X 476 * 020 C □ L @ 9 ^ ++	X	47	20	0.9	10	100	120	8	10	10	0.200	0.47	0.42	0.19	0.42	0.38	0.17
CWR19K^474*@A+□	TAZ A 474 * 025 C □ # @ 0 ^ ++	TAZ A 474 * 025 C □ L @ 9 ^ ++	A	0.47	25	15	1	10	12	6	8	8	0.050	0.06	0.05	0.02	0.87	0.78	0.35
CWR19K^105*@B+□	TAZ B 105 * 025 C □ # @ 0 ^ ++	TAZ B 105 * 025 C □ L @ 9 ^ ++	B	1	25	10	1	10	12	6	8	8	0.070	0.08	0.08	0.03	0.84	0.75	0.33
CWR19K^225*@D+□	TAZ D 225 * 025 C □ # @ 0 ^ ++	TAZ D 225 * 025 C □ L @ 9 ^ ++	D	2.2	25	6	1	10	12	6	8	8	0.080	0.12	0.10	0.05	0.69	0.62	0.28
CWR19K^335*@E+□	TAZ E 335 * 025 C □ # @ 0 ^ ++	TAZ E 335 * 025 C □ L @ 9 ^ ++	E	3.3	25	4	1	10	12	6	8	8	0.090	0.15	0.14	0.06	0.60	0.54	0.24
CWR19K^685*@F+□	TAZ F 685 * 025 C □ # @ 0 ^ ++	TAZ F 685 * 025 C □ L @ 9 ^ ++	F	6.8	25	3	2	20	24	6	8	8	0.100	0.18	0.16	0.07	0.55	0.49	0.22
CWR19K^156*@G+□	TAZ G 156 * 025 C □ # @ 0 ^ ++	TAZ G 156 * 025 C □ L @ 9 ^ ++	G	15	25	1.4	4	40	48	6	8	8	0.125	0.30	0.27	0.12	0.42	0.38	0.17
CWR19K^226*@G+□	TAZ G 226 * 025 C □ # @ 0 ^ ++	TAZ G 226 * 025 C □ L @ 9 ^ ++	G	22	25	1.4	6	60	72	6	8	8	0.125	0.30	0.27	0.12	0.42	0.38	0.17
CWR19K^226*@H+□	TAZ H 226 * 025 C □ # @ 0 ^ ++	TAZ H 226 * 025 C □ L @ 9 ^ ++	H	22	25	0.9	6	60	72	6	8	8	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR19K^336*@H+□	TAZ H 336 * 025 C □ # @ 0 ^ ++	TAZ H 336 * 025 C □ L @ 9 ^ ++	H	33	25	0.9	10	100	120	8	10	10	0.150	0.41	0.37	0.16	0.37	0.33	0.15
CWR19M^334*@A+□	TAZ A 334 * 035 C □ # @ 0 ^ ++	TAZ A 334 * 035 C □ L @ 9 ^ ++	A	0.33	35	22	1	10	12	6	8	8	0.050	0.05	0.04	0.02	1.05	0.94	0.42
CWR19M^685*@G+□	TAZ G 685 * 035 C □ # @ 0 ^ ++	TAZ G 685 * 035 C □ L @ 9 ^ ++	G	6.8	35	1.5	3	30	36	6	8	8	0.125	0.29	0.26	0.12	0.43	0.39	0.17
CWR19M^106*@H+□	TAZ H 106 * 035 C □ # @ 0 ^ ++	TAZ H 106 * 035 C □ L @ 9 ^ ++	H	10	35	0.9	4	40	48	8	10	10	0.150	0.41	0.37	0.16	0.37	0.33	0.15

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

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

TAZ Series

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



MARKING

(White marking on black body)

Polarity Stripe (+)

Capacitance Code
Rated Voltage

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

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

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

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

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

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

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)	0.035
X	6.93 Max (0.273)	5.41 Max (0.213)	2.74 Max (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_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		
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):

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 6 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

Not RoHS Compliant

LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT
RoHS COMPLIANT

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 6 for additional packaging options.

Not RoHS Compliant

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 6 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

Not RoHS Compliant

*Contact factory for AVX SRC9000 Space Level SCD details.

TECHNICAL SPECIFICATIONS

Technical Data:		Unless otherwise specified, all technical data relate to an ambient temperature of 25°C							
Capacitance Range:		0.1 µF to 330 µF							
Capacitance Tolerance:		±5%; ±10%; ±20%							
Rated Voltage: (V_R)	≤85°C:	4	6	10	15	20	25	35	50
Category Voltage: (V_C)	125°C:	2.7	4	7	10	13	17	23	33
Surge Voltage: (V_S)	≤85°C:	5.2	8	13	20	26	32	46	65
	125°C:	3.4	5	8	13	16	20	28	40
Temperature Range:		-55°C to +125°C							

TAZ Series

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

RATING & PART NUMBER REFERENCE

				Parametric Specifications by Rating per MIL-PRF-55365/11										Typical Ripple Data by Rating						
				Cap	DC Rated	ESR @	DCL max			DF Max			Power	25°C	85°C	125°C	25°C	85°C	125°C
				@ 120Hz	Voltage	100kHz	+25°C	+85°C	+125°C	+25°C	+(85/125)°C	-55°C	Dissipation	Ripple	Ripple	Ripple	Ripple	Ripple	Ripple
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)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)
CWR29C^225*@A+□	TAZ A 225 * 004 L □ # @ 0 ^ ++	TAZ A 225 * 004 L □ L @ 9 ^ ++	A	2.2	4	4	1	10	12	6	8	8	0.050	0.11	0.10	0.04	0.45	0.40	0.18
CWR29C^335*@A+□	TAZ A 335 * 004 L □ # @ 0 ^ ++	TAZ A 335 * 004 L □ L @ 9 ^ ++	A	3.3	4	6	1	10	12	6	8	8	0.050	0.09	0.08	0.04	0.55	0.49	0.22
CWR29C^475*@A+□	TAZ A 475 * 004 L □ # @ 0 ^ ++	TAZ A 475 * 004 L □ L @ 9 ^ ++	A	4.7	4	6	1	10	12	6	8	8	0.050	0.09	0.08	0.04	0.55	0.49	0.22
CWR29C^475*@B+□	TAZ B 475 * 004 L □ # @ 0 ^ ++	TAZ B 475 * 004 L □ L @ 9 ^ ++	B	4.7	4	3.2	1	10	12	6	8	8	0.070	0.15	0.13	0.06	0.47	0.43	0.19
CWR29C^685*@A+□	TAZ A 685 * 004 L □ # @ 0 ^ ++	TAZ A 685 * 004 L □ L @ 9 ^ ++	A	6.8	4	6	1	10	12	6	8	8	0.050	0.09	0.08	0.04	0.55	0.49	0.22
CWR29C^685*@C+□	TAZ C 685 * 004 L □ # @ 0 ^ ++	TAZ C 685 * 004 L □ L @ 9 ^ ++	C	6.8	4	2.2	1	10	12	6	8	8	0.075	0.18	0.17	0.07	0.41	0.37	0.16
CWR29C^106*@B+□	TAZ B 106 * 004 L □ # @ 0 ^ ++	TAZ B 106 * 004 L □ L @ 9 ^ ++	B	10	4	3.2	1	10	12	8	10	10	0.070	0.15	0.13	0.06	0.47	0.43	0.19
CWR29C^106*@D+□	TAZ D 106 * 004 L □ # @ 0 ^ ++	TAZ D 106 * 004 L □ L @ 9 ^ ++	D	10	4	1.3	1	10	12	8	8	10	0.080	0.25	0.22	0.10	0.32	0.29	0.13
CWR29C^156*@B+□	TAZ B 156 * 004 L □ # @ 0 ^ ++	TAZ B 156 * 004 L □ L @ 9 ^ ++	B	15	4	3.2	1	10	12	8	10	10	0.070	0.15	0.13	0.06	0.47	0.43	0.19
CWR29C^156*@E+□	TAZ E 156 * 004 L □ # @ 0 ^ ++	TAZ E 156 * 004 L □ L @ 9 ^ ++	E	15	4	1	1	10	12	8	10	12	0.090	0.30	0.27	0.12	0.30	0.27	0.12
CWR29C^226*@B+□	TAZ B 226 * 004 L □ # @ 0 ^ ++	TAZ B 226 * 004 L □ L @ 9 ^ ++	B	22	4	3.2	1	10	12	8	10	10	0.070	0.15	0.13	0.06	0.47	0.43	0.19
CWR29C^226*@D+□	TAZ D 226 * 004 L □ # @ 0 ^ ++	TAZ D 226 * 004 L □ L @ 9 ^ ++	D	22	4	1.3	1	10	12	8	10	12	0.080	0.25	0.22	0.10	0.32	0.29	0.13
CWR29C^336*@D+□	TAZ D 336 * 004 L □ # @ 0 ^ ++	TAZ D 336 * 004 L □ L @ 9 ^ ++	D	33	4	1.3	2	20	24	8	10	12	0.080	0.25	0.22	0.10	0.32	0.29	0.13
CWR29C^336*@E+□	TAZ E 336 * 004 L □ # @ 0 ^ ++	TAZ E 336 * 004 L □ L @ 9 ^ ++	E	33	4	0.9	2	20	24	8	10	12	0.090	0.32	0.28	0.13	0.28	0.26	0.11
CWR29C^336*@F+□	TAZ F 336 * 004 L □ # @ 0 ^ ++	TAZ F 336 * 004 L □ L @ 9 ^ ++	F	33	4	0.6	2	20	24	8	10	12	0.100	0.41	0.37	0.16	0.24	0.22	0.10
CWR29C^476*@E+□	TAZ E 476 * 004 L □ # @ 0 ^ ++	TAZ E 476 * 004 L □ L @ 9 ^ ++	E	47	4	0.9	2	20	24	8	10	12	0.090	0.32	0.28	0.13	0.28	0.26	0.11
CWR29C^686*@E+□	TAZ E 686 * 004 L □ # @ 0 ^ ++	TAZ E 686 * 004 L □ L @ 9 ^ ++	E	68	4	0.9	3	30	36	8	10	12	0.090	0.32	0.28	0.13	0.28	0.26	0.11
CWR29C^686*@G+□	TAZ G 686 * 004 L □ # @ 0 ^ ++	TAZ G 686 * 004 L □ L @ 9 ^ ++	G	68	4	0.275	3	30	36	10	12	12	0.125	0.67	0.61	0.27	0.19	0.17	0.07
CWR29C^107*@F+□	TAZ F 107 * 004 L □ # @ 0 ^ ++	TAZ F 107 * 004 L □ L @ 9 ^ ++	F	100	4	0.55	4	40	48	10	12	12	0.100	0.43	0.38	0.17	0.23	0.21	0.09
CWR29C^107*@H+□	TAZ H 107 * 004 L □ # @ 0 ^ ++	TAZ H 107 * 004 L □ L @ 9 ^ ++	H	100	4	0.18	4	40	48	10	12	12	0.150	0.91	0.82	0.37	0.16	0.15	0.07
CWR29C^157*@G+□	TAZ G 157 * 004 L □ # @ 0 ^ ++	TAZ G 157 * 004 L □ L @ 9 ^ ++	G	150	4	0.25	6	60	72	10	12	12	0.125	0.71	0.64	0.28	0.18	0.16	0.07
CWR29C^227*@H+□	TAZ H 227 * 004 L □ # @ 0 ^ ++	TAZ H 227 * 004 L □ L @ 9 ^ ++	H	220	4	0.2	8	80	96	10	12	12	0.150	0.87	0.78	0.35	0.17	0.16	0.07
CWR29C^337*@H+□	TAZ H 337 * 004 L □ # @ 0 ^ ++	TAZ H 337 * 004 L □ L @ 9 ^ ++	H	330	4	0.18	10	100	120	10	12	12	0.150	0.91	0.82	0.37	0.16	0.15	0.07
CWR29D^155*@A+□	TAZ A 155 * 006 L □ # @ 0 ^ ++	TAZ A 155 * 006 L □ L @ 9 ^ ++	A	1.5	6	4	1	10	12	6	8	8	0.050	0.11	0.10	0.04	0.45	0.40	0.18
CWR29D^335*@A+□	TAZ A 335 * 006 L □ # @ 0 ^ ++	TAZ A 335 * 006 L □ L @ 9 ^ ++	A	3.3	6	6	1	10	12	6	8	8	0.050	0.09	0.08	0.04	0.55	0.49	0.22
CWR29D^335*@B+□	TAZ B 335 * 006 L □ # @ 0 ^ ++	TAZ B 335 * 006 L □ L @ 9 ^ ++	B	3.3	6	3.2	1	10	12	6	8	8	0.070	0.15	0.13	0.06	0.47	0.43	0.19
CWR29D^475*@A+□	TAZ A 475 * 006 L □ # @ 0 ^ ++	TAZ A 475 * 006 L □ L @ 9 ^ ++	A	4.7	6	6	1	10	12	6	8	8	0.050	0.09	0.08	0.04	0.55	0.49	0.22
CWR29D^475*@C+□	TAZ C 475 * 006 L □ # @ 0 ^ ++	TAZ C 475 * 006 L □ L @ 9 ^ ++	C	4.7	6	2.2	1	10	12	6	8	8	0.075	0.18	0.17	0.07	0.41	0.37	0.16
CWR29D^685*@B+□	TAZ B 685 * 006 L □ # @ 0 ^ ++	TAZ B 685 * 006 L □ L @ 9 ^ ++	B	6.8	6	3.2	1	10	12	6	8	8	0.070	0.15	0.13	0.06	0.47	0.43	0.19
CWR29D^685*@D+□	TAZ D 685 * 006 L □ # @ 0 ^ ++	TAZ D 685 * 006 L □ L @ 9 ^ ++	D	6.8	6	1.5	1	10	12	6	8	8	0.080	0.23	0.21	0.09	0.35	0.31	0.14
CWR29D^106*@B+□	TAZ B 106 * 006 L □ # @ 0 ^ ++	TAZ B 106 * 006 L □ L @ 9 ^ ++	B	10	6	3.2	1	10	12	6	8	8	0.070	0.15	0.13	0.06	0.47	0.43	0.19
CWR29D^106*@E+□	TAZ E 106 * 006 L □ # @ 0 ^ ++	TAZ E 106 * 006 L □ L @ 9 ^ ++	E	10	6	1	1	10	12	8	10	12	0.090	0.30	0.27	0.12	0.30	0.27	0.12
CWR29D^156*@B+□	TAZ B 156 * 006 L □ # @ 0 ^ ++	TAZ B 156 * 006 L □ L @ 9 ^ ++	B	15	6	3.2	1	10	12	8	10	10	0.070	0.15	0.13	0.06	0.47	0.43	0.19
CWR29D^156*@D+□	TAZ D 156 * 006 L □ # @ 0 ^ ++	TAZ D 156 * 006 L □ L @ 9 ^ ++	D	15	6	1.7	1	10	12	8	10	12	0.080	0.22	0.20	0.09	0.37	0.33	0.15
CWR29D^156*@E+□	TAZ E 156 * 006 L □ # @ 0 ^ ++	TAZ E 156 * 006 L □ L @ 9 ^ ++	E	15	6	0.9	1	10	12	8	10	12	0.090	0.32	0.28	0.13	0.28	0.26	0.11
CWR29D^226*@D+□	TAZ D 226 * 006 L □ # @ 0 ^ ++	TAZ D 226 * 006 L □ L @ 9 ^ ++	D	22	6	1.7	1	10	12	6	8	8	0.080	0.22	0.20	0.09	0.37	0.33	0.15
CWR29D^226*@E+□	TAZ E 226 * 006 L □ # @ 0 ^ ++	TAZ E 226 * 006 L □ L @ 9 ^ ++	E	22	6	1	2	20	24	8	10	12	0.090	0.30	0.27	0.12	0.30	0.27	0.12
CWR29D^226*@F+□	TAZ F 226 * 006 L □ # @ 0 ^ ++	TAZ F 226 * 006 L □ L @ 9 ^ ++	F	22	6	0.6	2	20	24	8	10	12	0.100	0.41	0.37	0.16	0.24	0.22	0.10
CWR29D^336*@E+□	TAZ E 336 * 006 L □ # @ 0 ^ ++	TAZ E 336 * 006 L □ L @ 9 ^ ++	E	33	6	1	2	20	24	6	8	8	0.090	0.30	0.27	0.12	0.30	0.27	0.12
CWR29D^476*@F+□	TAZ F 476 * 006 L □ # @ 0 ^ ++	TAZ F 476 * 006 L □ L @ 9 ^ ++	F	47	6	1	3	30	36	8	10	12	0.100	0.32	0.28	0.13	0.32	0.28	0.13
CWR29D^476*@G+□	TAZ G 476 * 006 L □ # @ 0 ^ ++	TAZ G 476 * 006 L □ L @ 9 ^ ++	G	47	6	0.275	3	30	36	10	12	12	0.125	0.67	0.61	0.27	0.19	0.17	0.07
CWR29D^686*@F+□	TAZ F 686 * 006 L □ # @ 0 ^ ++	TAZ F 686 * 006 L □ L @ 9 ^ ++	F	68	6	0.4	4	40	48	10	12	12	0.100	0.50	0.45	0.20	0.20	0.18	0.08
CWR29D^686*@G+□	TAZ G 686 * 006 L □ # @ 0 ^ ++	TAZ G 686 * 006 L □ L @ 9 ^ ++	G	68	6	0.25	4	40	48	10	12	12	0.125	0.71	0.64	0.28	0.18	0.16	0.07
CWR29D^686*@H+□	TAZ H 686 * 006 L □ # @ 0 ^ ++	TAZ H 686 * 006 L □ L @ 9 ^ ++	H	68	6	0.18	4	40	48	10	12	12	0.150	0.91	0.82	0.37	0.16	0.15	0.07
CWR29D^107*@G+□	TAZ G 107 * 006 L □ # @ 0 ^ ++	TAZ G 107 * 006 L □ L @ 9 ^ ++	G	100	6	0.275	6	60	72	10	12	12	0.125	0.67	0.61	0.27	0.19	0.17	0.07
CWR29D^157*@G+□	TAZ G 157 * 006 L □ # @ 0 ^ ++	TAZ G 157 * 006 L □ L @ 9 ^ ++	G	150	6	0.275	10	100	120	10	12	12	0.125	0.67	0.61	0.27	0.19	0.17	0.07
CWR29D^227*@H+□	TAZ H 227 * 006 L □ # @ 0 ^ ++	TAZ H 227 * 006 L □ L @ 9 ^ ++	H	220	6	0.18	10	100	120	10	12	12	0.150	0.91	0.82	0.37	0.16	0.15	0.07
CWR29D^337*@H+□	TAZ H 337 * 006 L □ # @ 0 ^ ++	TAZ H 337 * 006 L □ L @ 9 ^ ++	H	330	6	0.18	20	200	240	10	12	12	0.150	0.91	0.82	0.37	0.16	0.15	0.07
CWR29F^105*@A+□	TAZ A 105 * 010 L □ # @ 0 ^ ++	TAZ A 105 * 010 L □ L @ 9 ^ ++	A	1	10	5	1	10	12	6	8	8	0.050	0.10	0.09	0.04	0.50	0.45	0.20
CWR29F^225*@A+□	TAZ A 225 * 010 L □ # @ 0 ^ ++	TAZ A 225 * 010 L □ L @ 9 ^ ++	A	2.2	10	6	1	10	12	6	8	8	0.050	0.09	0.08	0.04	0.55	0.49	0.22
CWR29F^225*@B+□	TAZ B 225 * 010 L □ # @ 0 ^ ++	TAZ B 225 * 010 L □ L @ 9 ^ ++	B	2.2	10	3.2	1	10	12	6	8	8	0.070	0.15	0.13	0.06	0.47	0.43	0.19
CWR29F^335*@A+□	TAZ A 335 * 010 L □ # @ 0 ^ ++	TAZ A 335 * 010 L □ L @ 9 ^ ++	A	3.3	10	6	1	10	12	6	8	8	0.050	0.09	0.08	0.04	0.55	0.49	0.22
CWR29F^335*@C+□	TAZ C 335 * 010 L □ # @ 0 ^ ++	TAZ C 335 * 010 L □ L @ 9 ^ ++	C	3.3	10	2.2	1	10	12	6	8	8	0.075	0.18	0.17	0.07	0.41	0.37	0.16
CWR29F^475*@B+□	TAZ B 475 * 010 L □ # @ 0 ^ ++	TAZ B 475 * 010 L □ L @ 9 ^ ++	B	4.7	10	3.2	1	10	12	6	8	8	0.070	0.15	0.13	0.06	0.47	0.43	0.19
CWR29F^475*@C+□	TAZ C 475 * 010 L □ # @ 0 ^ ++	TAZ C 475 * 010 L □ L @ 9 ^ ++	C	4.7	10	2.2	1	10	12	6	8	8	0.075	0.18	0.17	0.07	0.41	0.37	0.16

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

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

TAZ Series

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

RATING & PART NUMBER REFERENCE

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

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

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

TAZ Series

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

RATING & PART NUMBER REFERENCE

				Parametric Specifications by Rating per MIL-PRF-55365/11										Typical Ripple Data by Rating						
				Cap	DC Rated	ESR @	DCL max			DF Max			Power	25ºC	85ºC	125ºC	25ºC	85ºC	125ºC
				@ 120Hz	Voltage	100kHz	+25ºC	+85ºC	+125ºC	+25ºC	+(85/125)ºC	-55ºC	Dissipation	Ripple	Ripple	Ripple	Ripple	Ripple	Ripple
CWR29 P/N	AVX MIL & COTS-Plus P/N	AVX SRC9000 P/N	Case	µF @ 25ºC	V @ +85ºC	Ohms @ +25ºC	(µA)	(µA)	(µA)	(%)	(%)	(%)	W	A (100kHz)	A (100kHz)	A (100kHz)	V (100kHz)	V (100kHz)	V (100kHz)
CWR29J^684*@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
CWR29J^105*@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
CWR29J^105*@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
CWR29J^155*@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
CWR29J^155*@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
CWR29J^225*@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	0.06	0.50	0.45	0.20
CWR29J^225*@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	0.09	0.37	0.33	0.15
CWR29J^335*@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	0.08	0.40	0.36	0.16
CWR29J^335*@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	0.11	0.33	0.30	0.13
CWR29J^475*@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	0.09	0.39	0.35	0.16
CWR29J^685*@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
CWR29J^685*@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
CWR29J^106*@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	0.10	0.37	0.33	0.15
CWR29J^106*@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	0.14	0.28	0.25	0.11
CWR29J^156*@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	0.14	0.28	0.25	0.11
CWR29J^156*@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	0.27	0.19	0.17	0.07
CWR29J^226*@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	0.18	0.28	0.25	0.11
CWR29J^226*@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	0.37	0.16	0.15	0.07
CWR29J^336*@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	0.37	0.16	0.15	0.07
CWR29J^476*@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	0.37	0.16	0.15	0.07
CWR29J^476*@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	0.54	0.15	0.13	0.06
CWR29K^334*@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
CWR29K^474*@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
CWR29K^684*@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
CWR29K^105*@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
CWR29K^105*@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
CWR29K^155*@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
CWR29K^225*@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
CWR29K^225*@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
CWR29K^335*@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
CWR29K^475*@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	0.15	0.26	0.24	0.11
CWR29K^685*@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	0.14	0.28	0.25	0.11
CWR29K^685*@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	0.26	0.19	0.17	0.08
CWR29K^106*@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	0.24	0.21	0.19	0.08
CWR29K^156*@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	0.24	0.21	0.19	0.08
CWR29K^156*@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	0.35	0.17	0.16	0.07
CWR29K^226*@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	0.24	0.21	0.19	0.08
CWR29K^226*@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	0.37	0.16	0.15	0.07
CWR29K^336*@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	0.37	0.16	0.15	0.07
CWR29M^224*@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
CWR29M^334*@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
CWR29M^474*@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
CWR29M^684*@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
CWR29M^105*@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
CWR29M^155*@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	0.11	0.34	0.31	0.14
CWR29M^335*@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	0.15	0.26	0.24	0.11
CWR29M^475*@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
CWR29M^685*@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	0.23	0.22	0.19	0.09
CWR29M^685*@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	0.22	0.27	0.25	0.11
CWR29M^106*@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	0.22	0.27	0.25	0.11
CWR29N^104*@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
CWR29N^154*@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.

TAZ Series

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

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

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

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

TAZ Cots+, CWR09, CWR19 and CWR29 Series

Tape and Reel Packaging

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

TAZ TAPING SUFFIX TABLE

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

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

Code	8mm Tape		12mm Tape	
P*	4±0.1 or 8±0.1	(0.157±0.004) (0.315±0.004)	4±0.1 or 8±0.1	(0.157±0.004) (0.315±0.004)
G	0.75 min	(0.03 min)	0.75 min	(0.03 min)
F	3.5±0.04	(0.138±0.002)	5.5±0.05	(0.22±0.002)
E	1.75±0.1	(0.069±0.004)	1.75±0.1	(0.069±0.004)
W	8±0.3	(0.315±0.012)	12±0.3	(0.472±0.012)
P_2	2±0.05	(0.079±0.002)	2±0.05	(0.079±0.002)
P_0	4±0.1	(0.157±0.004)	4±0.1	(0.157±0.004)
D	1.5±0.1 -0	(0.059±0.004) (-0)	1.5±0.1 -0	(0.059±0.004) (-0)
D_1	1.0 min	(0.039 min)	1.5 min	(0.059 min)

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

TAPE SPECIFICATION

Tape dimensions comply to EIA RS 481 A

Dimensions A_0 and B_0 of the pocket and the tape thickness, K, are dependent on the component size.

Tape materials do not affect component solderability during storage.

Carrier Tape Thickness <0.4mm