

TAZ Series



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



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

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

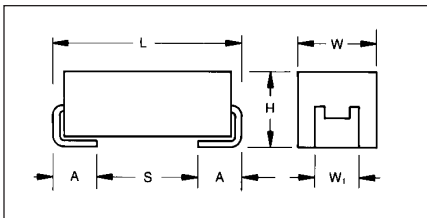
The four smaller cases are characterized by their low profile construction, with the A case being the world's smallest molded military tantalum chip.

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

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

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



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 _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)	0.335
X	6.93 (0.273)	5.41 (0.213)	2.74 (0.108)	3.05±0.13 (0.120±0.005)	1.19 (0.047)	N/A	0.420

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	
47	476	E	F	F/G	G/H	H/X		
68	686	E	F/G	G	G/H			
100	107	F	G	G/H	H			
150	157	G	G	H/X				
220	227	H	H	H				
330	337	H	H					



HOW TO ORDER

COTS-PLUS & MIL QPL (CWR19):

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

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 T&R = 7" T&R T&R13 = 13" T&R W = Waffle See page 8 for additional packaging options.

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

*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								

RATING & PART NUMBER REFERENCE			Parametric Specifications by Rating per MIL-PRF-55365/11										Typical RMS Ripple Data by Rating									
CWR19 P/N	AVX MIL & COTS-Plus P/N		Case	Cap @ 120Hz µF @ 25°C	DC Rated Voltage @ +85°C V	ESR @ 100kHz @ +25°C Ohms	DCL max		DF Max @ (65/125)°C (%)	Power Dissipation W	25°C Ripple (100kHz) A		85°C Ripple (100kHz) A		125°C Ripple (100kHz) A		25°C Ripple (100kHz) V		85°C Ripple (100kHz) V		125°C Ripple (100kHz) V	
	AVX SRC900 P/N	AVX SRC900 P/N					+25°C (µA)	+125°C (µA)			+25°C (%)	+125°C (%)	25°C (100kHz)	85°C (100kHz)	125°C (100kHz)	25°C (100kHz)	85°C (100kHz)	125°C (100kHz)	25°C (100kHz)	85°C (100kHz)	125°C (100kHz)	
CWR19C335@A+	TAZ A335*04C□□□□□@9++	TAZ A335*04C□□□□□@9++	A	3.3	4	12	1	10	12	6	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31				
CWR19C475@A+	TAZ A475*04C□□□□□@9++	TAZ A475*04C□□□□□@9++	A	4.7	4	12	1	10	12	6	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31				
CWR19C685@A+	TAZ A685*04C□□□□□@9++	TAZ A685*04C□□□□□@9++	A	6.8	4	12	1	10	12	6	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31				
CWR19C106@B+	TAZ B106*04C□□□□□@9++	TAZ B106*04C□□□□□@9++	B	10	4	8	1	10	12	8	10	0.070	0.09	0.08	0.04	0.75	0.67	0.30				
CWR19C156@B+	TAZ B156*04C□□□□□@9++	TAZ B156*04C□□□□□@9++	B	15	4	8	1	10	12	8	10	0.070	0.09	0.08	0.04	0.75	0.67	0.30				
CWR19C226@B+	TAZ B226*04C□□□□□@9++	TAZ B226*04C□□□□□@9++	B	22	4	8	1	10	12	8	10	0.070	0.09	0.08	0.04	0.75	0.67	0.30				
CWR19C336@D+	TAZ D336*04C□□□□□@9++	TAZ D336*04C□□□□□@9++	D	33	4	4	2	20	24	8	10	0.080	0.14	0.13	0.06	0.57	0.51	0.23				
CWR19C336@E+	TAZ E336*04C□□□□□@9++	TAZ E336*04C□□□□□@9++	E	33	4	3	2	20	24	8	10	0.090	0.17	0.16	0.07	0.52	0.47	0.21				
CWR19C686@E+	TAZ E686*04C□□□□□@9++	TAZ E686*04C□□□□□@9++	E	68	4	3	3	30	36	8	10	0.090	0.17	0.16	0.07	0.52	0.47	0.21				
CWR19C107@F+	TAZ F107*04C□□□□□@9++	TAZ F107*04C□□□□□@9++	F	100	4	2	4	40	48	10	12	0.125	0.22	0.20	0.09	0.45	0.40	0.18				
CWR19C157@G+	TAZ G157*04C□□□□□@9++	TAZ G157*04C□□□□□@9++	G	150	4	1	6	60	72	10	12	0.125	0.35	0.32	0.14	0.35	0.32	0.14				
CWR19C227@H+	TAZ H227*04C□□□□□@9++	TAZ H227*04C□□□□□@9++	H	220	4	1	8	80	96	10	12	0.150	0.39	0.35	0.15	0.39	0.35	0.15				
CWR19C337@H+	TAZ H337*04C□□□□□@9++	TAZ H337*04C□□□□□@9++	H	330	4	1	10	100	120	10	12	0.150	0.41	0.37	0.16	0.37	0.33	0.15				
CWR19C335@A+	TAZ A335*06C□□□□□@9++	TAZ A335*06C□□□□□@9++	A	3.3	6	12	1	10	12	6	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31				
CWR19D475@A+	TAZ A475*06C□□□□□@9++	TAZ A475*06C□□□□□@9++	A	4.7	6	12	1	10	12	6	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31				
CWR19D685@B+	TAZ B685*06C□□□□□@9++	TAZ B685*06C□□□□□@9++	B	6.8	6	8	1	10	12	6	8	0.070	0.09	0.08	0.04	0.75	0.67	0.30				
CWR19D106@B+	TAZ B106*06C□□□□□@9++	TAZ B106*06C□□□□□@9++	B	10	6	8	1	10	12	6	8	0.070	0.09	0.08	0.04	0.75	0.67	0.30				
CWR19D156@B+	TAZ B156*06C□□□□□@9++	TAZ B156*06C□□□□□@9++	B	15	6	8	1	10	12	6	8	0.070	0.09	0.08	0.04	0.75	0.67	0.30				
CWR19D226@D+	TAZ D226*06C□□□□□@9++	TAZ D226*06C□□□□□@9++	D	15	6	5	1	10	12	6	8	0.080	0.13	0.11	0.05	0.63	0.57	0.25				
CWR19D336@E+	TAZ E336*06C□□□□□@9++	TAZ E336*06C□□□□□@9++	E	15	6	3	1	10	12	6	8	0.080	0.17	0.16	0.07	0.52	0.47	0.21				
CWR19D476@E+	TAZ E476*06C□□□□□@9++	TAZ E476*06C□□□□□@9++	E	22	6	3.5	2	20	24	6	8	0.090	0.16	0.14	0.06	0.56	0.51	0.22				
CWR19D336@F+	TAZ F336*06C□□□□□@9++	TAZ F336*06C□□□□□@9++	F	33	6	3.5	3	30	36	6	8	0.090	0.16	0.14	0.06	0.56	0.51	0.22				
CWR19D476@F+	TAZ F476*06C□□□□□@9++	TAZ F476*06C□□□□□@9++	F	47	6	3.5	3	30	36	6	8	0.100	0.17	0.15	0.07	0.59	0.53	0.24				
CWR19D686@G+	TAZ G686*06C□□□□□@9++	TAZ G686*06C□□□□□@9++	G	68	6	1.5	4	40	48	10	12	0.125	0.26	0.23	0.10	0.39	0.35	0.15				
CWR19D107@G+	TAZ G107*06C□□□□□@9++	TAZ G107*06C□□□□□@9++	G	100	6	1.1	6	60	72	10	12	0.125	0.34	0.30	0.13	0.37	0.33	0.15				
CWR19D157@H+	TAZ H157*06C□□□□□@9++	TAZ H157*06C□□□□□@9++	H	150	6	1	10	100	120	10	12	0.125	0.34	0.30	0.13	0.37	0.33	0.15				
CWR19D227@H+	TAZ H227*06C□□□□□@9++	TAZ H227*06C□□□□□@9++	H	220	6	0.9	10	100	120	10	12	0.150	0.41	0.37	0.16	0.37	0.33	0.15				
CWR19D337@H+	TAZ H337*06C□□□□□@9++	TAZ H337*06C□□□□□@9++	H	330	6	0.9	20	200	240	10	12	0.150	0.41	0.37	0.16	0.37	0.33	0.15				
CWR19F225@A+	TAZ A225*010C□□□□□@9++	TAZ A225*010C□□□□□@9++	A	2.2	10	12	1	10	12	6	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31				
CWR19F335@A+	TAZ A335*010C□□□□□@9++	TAZ A335*010C□□□□□@9++	A	3.3	10	12	1	10	12	6	8	0.050	0.06	0.06	0.03	0.77	0.70	0.31				
CWR19F475@B+	TAZ B475*010C□□□□□@9++	TAZ B475*010C□□□□□@9++	B	4.7	10	8	1	10	12	6	8	0.070	0.09	0.08	0.04	0.75	0.67	0.30				
CWR19F685@B+	TAZ B685*010C□□□□□@9++	TAZ B685*010C□□□□□@9++	B	6.8	10	8	1	10	12	6	8	0.070	0.09	0.08	0.04	0.75	0.67	0.30				
CWR19F106@B+	TAZ B106*010C□□□□□@9++	TAZ B106*010C□□□□□@9++	B	10	10	8	1	10	12	6	8	0.070	0.09	0.08	0.04	0.75	0.67	0.30				
CWR19F156@C+	TAZ C156*010C□□□□□@9++	TAZ C156*010C□□□□□@9++	C	4.7	10	5.5	1	10	12	6	8	0.075	0.12	0.11	0.05	0.64	0.58	0.26				
CWR19F226@C+	TAZ C226*010C□□□□□@9++	TAZ C226*010C□□□□□@9++	C	6.8	10	5.5	1	10	12	6	8	0.075	0.12	0.11	0.05	0.64	0.58	0.26				
CWR19F336@D+	TAZ D336*010C□□□□□@9++	TAZ D336*010C□□□□□@9++	D	6.8	10	5	1	10	12	6	8	0.080	0.13	0.11	0.05	0.63	0.57	0.25				
CWR19F476@D+	TAZ D476*010C□□□□□@9++	TAZ D476*010C□□□□□@9++	D	10	10	4	1	10	12	6	8	0.080	0.14	0.13	0.06	0.57	0.51	0.23				
CWR19F106@E+	TAZ E106*010C□□□□□@9++	TAZ E106*010C□□□□□@9++	E	10	10	3.5	1	10	12	6	8	0.080	0.16	0.14	0.06	0.56	0.51	0.22				
CWR19F156@E+	TAZ E156*010C□□□□□@9++	TAZ E156*010C□□□□□@9++	E	15	10	3	2	30	36	8	10	0.090	0.17	0.16	0.07	0.52	0.47	0.21				
CWR19F336@F+	TAZ F336*010C□□□□□@9++	TAZ F336*010C□□□□□@9++	F	33	10	1.5	3	30	36	8	10	0.100	0.26	0.23	0.10	0.39	0.35	0.15				
CWR19F476@F+	TAZ F476*010C□□□□□@9++	TAZ F476*010C□□□□□@9++	F	47	10	1.5	4	40	48	10	12	0.100	0.26	0.23	0.10	0.39	0.35	0.15				
CWR19F686@G+	TAZ G686*010C□□□□□@9++	TAZ G686*010C□□□□□@9++	G	68	10	1.1	6	60	72	10	12	0.125	0.34	0.30	0.13	0.37	0.33	0.15				
CWR19F107@G+	TAZ G107*010C□□□□□@9++	TAZ G107*010C□□□□□@9++	G	100	10	0.9	10	100	120	10	12	0.125	0.34	0.30	0.13	0.37	0.33	0.15				
CWR19F157@H+	TAZ H157*010C□□□□□@9++	TAZ H157*010C□□□□□@9++	H	150	10	0.9	15	150	180	10	12	0.150	0.41	0.37	0.16	0.37	0.33	0.15				
CWR19F227@H+	TAZ H227*010C□□□□□@9++	TAZ H227*010C□□□□□@9++	H	220	10	0.9	20	200	240	10	12	0.150	0.41	0.37	0.16	0.37	0.33	0.15				
CWR19F157@X+	TAZ X157*010C□□□□□@9++	TAZ X157*010C□□□□□@9++	X	150	10	0.9	15	150	180	10	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.

RATING & PART NUMBER REFERENCE			Parametric Specifications by Rating per MIL-PRF-55365/11										Typical RMS Ripple Data by Rating									
CWR19 P/N	AVX MIL & COTS-Plus P/N		AVX SRC9000 P/N		Case	Cap @ 120Hz µF @ 25°C	DC Rated Voltage @ +85°C V	ESR @ 100kHz Ohms @ +25°C	DF Max +(-65/125)°C		DCL Imax +85°C		Power Dissipation W	25°C Ripple (100kHz) A	85°C Ripple (100kHz) A	125°C Ripple (100kHz) A	25°C Ripple (100kHz) V	85°C Ripple (100kHz) V	125°C Ripple (100kHz) V			
	AVX MIL & COTS-Plus P/N	AVX SRC9000 P/N	Case	+25°C (µA)					+125°C (µA)	+25°C (%)	+125°C (%)	+25°C (µA)								+125°C (µA)	+25°C (%)	+125°C (%)
CWR19H105@A+	TAZ A 105 * 015 C □ □ @ 0 + +	TAZ A 105 * 015 C □ □ @ 0 + +	TAZ A 105 * 015 C □ □ @ 0 + +	A	1	15	15	15	6	8	8	0.050	0.06	0.05	0.02	0.87	0.78	0.35				
CWR19H155@A+	TAZ A 155 * 015 C □ □ @ 0 + +	TAZ A 155 * 015 C □ □ @ 0 + +	TAZ A 155 * 015 C □ □ @ 0 + +	A	1.5	15	15	15	6	8	8	0.050	0.06	0.05	0.02	0.87	0.78	0.35				
CWR19H225@A+	TAZ A 225 * 015 C □ □ @ 0 + +	TAZ A 225 * 015 C □ □ @ 0 + +	TAZ A 225 * 015 C □ □ @ 0 + +	A	2.2	15	15	15	6	8	8	0.050	0.06	0.05	0.02	0.87	0.78	0.35				
CWR19H335@B+	TAZ B 335 * 015 C □ □ @ 0 + +	TAZ B 335 * 015 C □ □ @ 0 + +	TAZ B 335 * 015 C □ □ @ 0 + +	B	3.3	15	9	9	6	8	8	0.070	0.09	0.08	0.04	0.79	0.71	0.32				
CWR19H475@B+	TAZ B 475 * 015 C □ □ @ 0 + +	TAZ B 475 * 015 C □ □ @ 0 + +	TAZ B 475 * 015 C □ □ @ 0 + +	B	4.7	15	5	5	6	8	8	0.070	0.12	0.11	0.05	0.59	0.53	0.24				
CWR19H475@D+	TAZ D 475 * 015 C □ □ @ 0 + +	TAZ D 475 * 015 C □ □ @ 0 + +	TAZ D 475 * 015 C □ □ @ 0 + +	D	4.7	15	5.5	5.5	6	8	8	0.080	0.12	0.10	0.05	0.64	0.58	0.28				
CWR19H685@D+	TAZ D 685 * 015 C □ □ @ 0 + +	TAZ D 685 * 015 C □ □ @ 0 + +	TAZ D 685 * 015 C □ □ @ 0 + +	D	6.8	15	6	6	6	8	8	0.080	0.12	0.10	0.05	0.69	0.62	0.28				
CWR19H106@E+	TAZ E 106 * 015 C □ □ @ 0 + +	TAZ E 106 * 015 C □ □ @ 0 + +	TAZ E 106 * 015 C □ □ @ 0 + +	E	10	15	6	6	6	8	8	0.090	0.12	0.10	0.05	0.69	0.62	0.28				
CWR19H156@E+	TAZ E 156 * 015 C □ □ @ 0 + +	TAZ E 156 * 015 C □ □ @ 0 + +	TAZ E 156 * 015 C □ □ @ 0 + +	E	15	15	6	6	6	8	8	0.090	0.15	0.14	0.06	0.80	0.54	0.24				
CWR19H226@F+	TAZ F 226 * 015 C □ □ @ 0 + +	TAZ F 226 * 015 C □ □ @ 0 + +	TAZ F 226 * 015 C □ □ @ 0 + +	F	22	15	3	3	6	8	10	0.100	0.18	0.16	0.07	0.55	0.49	0.22				
CWR19H336@G+	TAZ G 336 * 015 C □ □ @ 0 + +	TAZ G 336 * 015 C □ □ @ 0 + +	TAZ G 336 * 015 C □ □ @ 0 + +	G	33	15	1.1	1.1	6	8	10	0.100	0.18	0.16	0.07	0.55	0.49	0.22				
CWR19H476@G+	TAZ G 476 * 015 C □ □ @ 0 + +	TAZ G 476 * 015 C □ □ @ 0 + +	TAZ G 476 * 015 C □ □ @ 0 + +	G	47	15	1.1	1.1	6	8	10	0.125	0.34	0.30	0.13	0.37	0.33	0.15				
CWR19H686@H+	TAZ H 686 * 015 C □ □ @ 0 + +	TAZ H 686 * 015 C □ □ @ 0 + +	TAZ H 686 * 015 C □ □ @ 0 + +	H	68	15	0.9	0.9	6	8	10	0.150	0.41	0.37	0.16	0.37	0.33	0.15				
CWR19H107@H+	TAZ H 107 * 015 C □ □ @ 0 + +	TAZ H 107 * 015 C □ □ @ 0 + +	TAZ H 107 * 015 C □ □ @ 0 + +	H	100	15	0.9	0.9	6	8	10	0.150	0.41	0.37	0.16	0.37	0.33	0.15				
CWR19A684@A+	TAZ A 684 * 020 C □ □ @ 0 + +	TAZ A 684 * 020 C □ □ @ 0 + +	TAZ A 684 * 020 C □ □ @ 0 + +	A	0.68	20	15	15	6	8	8	0.050	0.06	0.05	0.02	0.87	0.78	0.35				
CWR19A105@A+	TAZ A 105 * 020 C □ □ @ 0 + +	TAZ A 105 * 020 C □ □ @ 0 + +	TAZ A 105 * 020 C □ □ @ 0 + +	A	1	20	15	15	6	8	8	0.050	0.06	0.05	0.02	0.87	0.78	0.35				
CWR19A155@B+	TAZ B 155 * 020 C □ □ @ 0 + +	TAZ B 155 * 020 C □ □ @ 0 + +	TAZ B 155 * 020 C □ □ @ 0 + +	B	1.5	20	9	9	6	8	8	0.070	0.09	0.08	0.04	0.79	0.71	0.32				
CWR19A225@B+	TAZ B 225 * 020 C □ □ @ 0 + +	TAZ B 225 * 020 C □ □ @ 0 + +	TAZ B 225 * 020 C □ □ @ 0 + +	B	2.2	20	9	9	6	8	8	0.070	0.09	0.08	0.04	0.79	0.71	0.32				
CWR19A335@D+	TAZ D 335 * 020 C □ □ @ 0 + +	TAZ D 335 * 020 C □ □ @ 0 + +	TAZ D 335 * 020 C □ □ @ 0 + +	D	3.3	20	6	6	6	8	8	0.080	0.12	0.10	0.05	0.69	0.62	0.28				
CWR19A475@E+	TAZ E 475 * 020 C □ □ @ 0 + +	TAZ E 475 * 020 C □ □ @ 0 + +	TAZ E 475 * 020 C □ □ @ 0 + +	E	4.7	20	6	6	6	8	8	0.090	0.12	0.11	0.05	0.73	0.66	0.29				
CWR19A685@E+	TAZ E 685 * 020 C □ □ @ 0 + +	TAZ E 685 * 020 C □ □ @ 0 + +	TAZ E 685 * 020 C □ □ @ 0 + +	E	6.8	20	5	5	6	8	8	0.090	0.13	0.12	0.05	0.67	0.60	0.27				
CWR19A106@E+	TAZ E 106 * 020 C □ □ @ 0 + +	TAZ E 106 * 020 C □ □ @ 0 + +	TAZ E 106 * 020 C □ □ @ 0 + +	E	10	20	5	5	6	8	8	0.090	0.13	0.12	0.05	0.67	0.60	0.27				
CWR19A156@F+	TAZ F 156 * 020 C □ □ @ 0 + +	TAZ F 156 * 020 C □ □ @ 0 + +	TAZ F 156 * 020 C □ □ @ 0 + +	F	15	20	3	3	6	8	8	0.100	0.18	0.16	0.07	0.55	0.49	0.22				
CWR19A226@G+	TAZ G 226 * 020 C □ □ @ 0 + +	TAZ G 226 * 020 C □ □ @ 0 + +	TAZ G 226 * 020 C □ □ @ 0 + +	G	22	20	2.5	2.5	4	6	8	0.125	0.22	0.20	0.09	0.56	0.50	0.22				
CWR19A336@H+	TAZ H 336 * 020 C □ □ @ 0 + +	TAZ H 336 * 020 C □ □ @ 0 + +	TAZ H 336 * 020 C □ □ @ 0 + +	H	33	20	0.9	0.9	6	8	10	0.150	0.41	0.37	0.16	0.37	0.33	0.15				
CWR19A476@H+	TAZ H 476 * 020 C □ □ @ 0 + +	TAZ H 476 * 020 C □ □ @ 0 + +	TAZ H 476 * 020 C □ □ @ 0 + +	H	47	20	0.9	0.9	6	8	10	0.150	0.41	0.37	0.16	0.37	0.33	0.15				
CWR19A686@X+	TAZ X 686 * 020 C □ □ @ 0 + +	TAZ X 686 * 020 C □ □ @ 0 + +	TAZ X 686 * 020 C □ □ @ 0 + +	X	47	20	0.9	0.9	6	8	10	0.150	0.41	0.37	0.16	0.37	0.33	0.15				
CWR19K474@A+	TAZ A 474 * 025 C □ □ @ 0 + +	TAZ A 474 * 025 C □ □ @ 0 + +	TAZ A 474 * 025 C □ □ @ 0 + +	A	0.47	25	15	15	6	8	8	0.050	0.06	0.05	0.02	0.87	0.78	0.35				
CWR19K105@B+	TAZ B 105 * 025 C □ □ @ 0 + +	TAZ B 105 * 025 C □ □ @ 0 + +	TAZ B 105 * 025 C □ □ @ 0 + +	B	1	25	10	10	6	8	8	0.070	0.08	0.08	0.03	0.84	0.75	0.33				
CWR19K225@D+	TAZ D 225 * 025 C □ □ @ 0 + +	TAZ D 225 * 025 C □ □ @ 0 + +	TAZ D 225 * 025 C □ □ @ 0 + +	D	2.2	25	6	6	6	8	8	0.080	0.12	0.10	0.05	0.69	0.62	0.28				
CWR19K335@E+	TAZ E 335 * 025 C □ □ @ 0 + +	TAZ E 335 * 025 C □ □ @ 0 + +	TAZ E 335 * 025 C □ □ @ 0 + +	E	3.3	25	4	4	6	8	8	0.090	0.15	0.14	0.06	0.60	0.54	0.24				
CWR19K476@G+	TAZ G 476 * 025 C □ □ @ 0 + +	TAZ G 476 * 025 C □ □ @ 0 + +	TAZ G 476 * 025 C □ □ @ 0 + +	G	4.7	25	3	3	6	8	8	0.100	0.18	0.16	0.07	0.55	0.49	0.22				
CWR19K685@G+	TAZ G 685 * 025 C □ □ @ 0 + +	TAZ G 685 * 025 C □ □ @ 0 + +	TAZ G 685 * 025 C □ □ @ 0 + +	G	6.8	25	1.4	1.4	4	6	8	0.125	0.30	0.27	0.12	0.42	0.38	0.17				
CWR19K226@H+	TAZ H 226 * 025 C □ □ @ 0 + +	TAZ H 226 * 025 C □ □ @ 0 + +	TAZ H 226 * 025 C □ □ @ 0 + +	H	22	25	1.4	1.4	4	6	8	0.125	0.30	0.27	0.12	0.42	0.38	0.17				
CWR19K336@H+	TAZ H 336 * 025 C □ □ @ 0 + +	TAZ H 336 * 025 C □ □ @ 0 + +	TAZ H 336 * 025 C □ □ @ 0 + +	H	33	25	0.9	0.9	6	8	8	0.150	0.41	0.37	0.16	0.37	0.33	0.15				
CWR19M334@A+	TAZ A 334 * 035 C □ □ @ 0 + +	TAZ A 334 * 035 C □ □ @ 0 + +	TAZ A 334 * 035 C □ □ @ 0 + +	A	0.33	35	22	22	10	10	10	0.050	0.06	0.04	0.02	1.05	0.94	0.42				
CWR19M685@G+	TAZ G 685 * 035 C □ □ @ 0 + +	TAZ G 685 * 035 C □ □ @ 0 + +	TAZ G 685 * 035 C □ □ @ 0 + +	G	6.8	35	1.5	1.5	3	6	8	0.125	0.29	0.26	0.12	0.43	0.39	0.17				
CWR19M106@H+	TAZ H 106 * 035 C □ □ @ 0 + +	TAZ H 106 * 035 C □ □ @ 0 + +	TAZ H 106 * 035 C □ □ @ 0 + +	H	10	35	0.9	0.9	4	6	8	0.150	0.41	0.37	0.16	0.37	0.33	0.15				
CWR19M156@X+	TAZ X 156 * 035 C □ □ @ 0 + +	TAZ X 156 * 035 C □ □ @ 0 + +	TAZ X 156 * 035 C □ □ @ 0 + +	X	15	35	0.9	0.9	6	8	8	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.