

# 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.

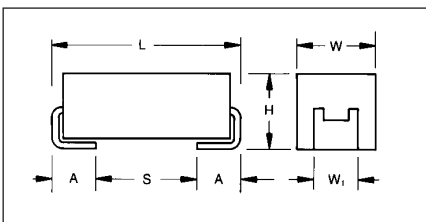
The parts also carry full polarity and capacitance / voltage marking. The five smaller cases are characterized by their low profile construction, with the A case being the world's smallest molded military tantalum chip.

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 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 <sub>t</sub> )	Term. Length (A) +0.25/-0.13 (+0.010/-0.005)	S min	Typical Weight (g)
A	2.54 (0.100)	1.27 (0.050)	1.27 (0.050)	1.27±0.13 (0.050±0.005)	0.76 (0.030)	0.38 (0.015)	0.016
B	3.81 (0.150)	1.27 (0.050)	1.27 (0.050)	1.27±0.13 (0.050±0.005)	0.76 (0.030)	1.65 (0.065)	0.025
C	5.08 (0.200)	1.27 (0.050)	1.27 (0.050)	1.27±0.13 (0.050±0.005)	0.76 (0.030)	2.92 (0.115)	0.035
D	3.81 (0.150)	2.54 (0.100)	1.27 (0.050)	2.41+0.13/-0.25 (0.095+0.005/-0.010)	0.76 (0.030)	1.65 (0.065)	0.045
E	5.08 (0.200)	2.54 (0.100)	1.27 (0.050)	2.41+0.13/-0.25 (0.095+0.005/-0.010)	0.76 (0.030)	2.92 (0.115)	0.065
F	5.59 (0.220)	3.43 (0.135)	1.78 (0.070)	3.30±0.13 (0.130±0.005)	0.76 (0.030)	3.43 (0.135)	0.125
G	6.73 (0.265)	2.79 (0.110)	2.79 (0.110)	2.67±0.13 (0.105±0.005)	1.27 (0.050)	3.56 (0.140)	0.205
H	7.24 (0.285)	3.81 (0.150)	2.79 (0.110)	3.68+0.13/-0.51 (0.145+0.005/-0.020)	1.27 (0.050)	4.06 (0.160)	0.335
R	2.05 (0.081) ±0.20 (0.008)	1.30 (0.051) +0.20 (0.008) -0.10 (0.004)	1.20 (0.047) max	1.0±0.10 (0.039±0.004)	0.50 (0.020) +0.30 (0.012) -0.20 (0.008)	0.71 (0.028)	0.010

### CWR09 MIL-PRF-55365/4

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

Capacitance		Rated Voltage DC (V <sub>R</sub> ) at 85°C							
µF	Code	4V (C)	6V (D)	10V (F)	15V (H)	20V (J)	25V (K)	35V (M)	50V (N)
0.10	104								A
0.15	154								A
0.22	224							A	B
0.33	334	R		R		A	A	B	B
0.47	474			R		A	B	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	F
3.3	335		B	C	D	E	F	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	G	H		
22	226		F		G	H			
33	336	F		G	H				
47	476		G	H					
68	686	G	H						
100	107	H							

### HOW TO ORDER

#### COTS-PLUS & MIL QPL (CWR09):

TAZ	H	686	*	006	C	□	#	@	0	^	++
<b>Type</b>	<b>Case Size</b>	<b>Capacitance Code</b> pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	<b>Capacitance Tolerance</b> M = ±20% K = ±10% J = ±5%	<b>Voltage Code</b> 004 = 4Vdc 006 = 6Vdc 010 = 10Vdc 015 = 15Vdc 020 = 20Vdc 025 = 25Vdc 035 = 35Vdc 050 = 50Vdc	<b>Standard or Low ESR Range</b> C = Std ESR L = Low ESR	<b>Packaging</b> B = Bulk R = 7" T&R S = 13" T&R W = Waffle  See page 8 for additional packaging options.	<b>Inspection Level</b> S = Std. Conformance L = Group A  M = MIL (JAN) CWR09	<b>Reliability Grade</b> Weibull: B = 0.1%/1000 hrs. 90% conf. C = 0.01%/1000 hrs. 90% conf. D = 0.001%/1000 hrs. 90% conf. Z = Non-ER	<b>Qualification Level</b> 0 = N/A T = T Level 9 = SRC9000	<b>Termination Finish</b> H = Solder Plated 0 = Fused Solder Plated 8 = Hot Solder Dipped 9 = Gold Plated 7 = Matte Sn (COTS-Plus only)	<b>Surge Test Option</b> 00 = None 23 = 10 Cycles, +25°C 24 = 10 Cycles, -55°C & +85°C 45 = 10 cycles, -55°C & +85°C before Weibull

For RoHS compliant products, please select correct termination style.

#### CWR09 P/N CROSS REFERENCE:

CWR09	D	^	686	*	@	+	□
<b>Type</b>	<b>Voltage Code</b> C = 4Vdc D = 6Vdc F = 10Vdc H = 15Vdc J = 20Vdc K = 25Vdc M = 35Vdc N = 50Vdc	<b>Termination Finish</b> H = Solder Plated K = Solder Fused C = Hot Solder Dipped B = Gold Plated	<b>Capacitance Code</b> pF code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow)	<b>Capacitance Tolerance</b> M = ±20% K = ±10% J = ±5%	<b>Reliability Grade</b> Weibull: B = 0.1%/1000 hrs. 90% conf. C = 0.01%/1000 hrs. 90% conf. D = 0.001%/1000 hrs. 90% conf. T = T Level A = Non-ER	<b>Surge Test Option</b> A = 10 cycles, +25°C B = 10 cycles, -55°C & +85°C C = 10 cycles, -55°C & +85°C before Weibull  If blank, None required	<b>Packaging</b> Bulk = Standard TR = 7" T&R TR13 = 13" T&R W = Waffle  See page 8 for additional packaging options.

For RoHS compliant products, please select correct termination style.

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

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

For RoHS compliant products, please select correct termination style.

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

### TECHNICAL SPECIFICATIONS

Technical Data:	Unless otherwise specified, all technical data relate to an ambient temperature of 25°C									
Capacitance Range:	0.10 µF to 100 µF									
Capacitance Tolerance:	±5%; ±10%; ±20%									
Rated Voltage (V <sub>R</sub> )	≤ 85°C:	4	6	10	15	20	25	35	50	
Category Voltage (V <sub>C</sub> )	≤ 125°C:	2.7	4	6.7	10	13.3	16.7	23.3	33.3	
Surge Voltage (V <sub>S</sub> )	≤ 85°C:	5.3	8	13.3	20	26.7	33.3	46.7	66.7	
Surge Voltage (V <sub>S</sub> )	≤ 125°C:	3.5	5.3	8.7	13.3	17.8	22.2	31.1	44.5	
Temperature Range:	-55°C to +125°C									



CWR09 P/N	Parametric Specifications by Rating per MIL-PRF-55365/4				Typical RMS Ripple Data by Rating										
	DC Rated Voltage		ESR @ 100kHz		DF Max (+65/125°C)		85°C		125°C		25°C		125°C		
	Cap @ 120Hz	V @ +85°C	Ohms @ +25°C	+25°C	DF Max (+65/125°C)	+25°C	Power Dissipation	Ripple A (100kHz)	Ripple A (100kHz)	Ripple V (100kHz)	Ripple V (100kHz)	Ripple V (100kHz)	Ripple V (100kHz)	Ripple V (100kHz)	
	µF @ 25°C	V @ +85°C	Ω @ +25°C	(µA)	(%)	(%)	W	(100kHz)	(100kHz)	(100kHz)	(100kHz)	(100kHz)	(100kHz)	(100kHz)	
Rating & Part Number Reference															
Case	AVX MIL & COTS-Plus P/N		AVX SRC9000 P/N		DF Max (+65/125°C)										
R	TAZ R 334 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ R 334 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽												
R	TAZ R 225 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ R 225 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽												
A	TAZ A 225 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ A 225 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽												
B	TAZ B 475 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ B 475 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽												
C	TAZ C 685 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ C 685 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽												
D	TAZ D 106 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ D 106 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽												
E	TAZ E 156 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ E 156 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽												
F	TAZ F 336 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ F 336 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽												
G	TAZ G 686 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ G 686 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽												
H	TAZ H 107 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ H 107 * 04 C □ □ # @ 0 ▽ ▽ ▽ ▽												
A	TAZ A 155 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ A 155 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽												
B	TAZ B 335 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ B 335 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽												
C	TAZ C 475 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ C 475 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽												
D	TAZ D 685 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ D 685 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽												
E	TAZ E 106 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ E 106 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽												
F	TAZ F 226 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ F 226 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽												
G	TAZ G 476 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ G 476 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽												
H	TAZ H 686 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ H 686 * 06 C □ □ # @ 0 ▽ ▽ ▽ ▽												
R	TAZ R 334 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ R 334 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽												
R	TAZ R 474 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ R 474 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽												
R	TAZ R 105 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ R 105 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽												
A	TAZ A 105 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ A 105 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽												
B	TAZ B 225 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ B 225 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽												
C	TAZ C 335 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ C 335 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽												
D	TAZ D 475 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ D 475 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽												
E	TAZ E 685 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ E 685 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽												
F	TAZ F 156 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ F 156 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽												
G	TAZ G 336 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ G 336 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽												
H	TAZ H 476 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ H 476 * 010 C □ □ # @ 0 ▽ ▽ ▽ ▽												
A	TAZ A 684 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ A 684 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽												
B	TAZ B 155 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ B 155 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽												
C	TAZ C 225 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ C 225 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽												
D	TAZ D 335 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ D 335 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽												
E	TAZ E 475 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ E 475 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽												
F	TAZ F 106 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ F 106 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽												
G	TAZ G 226 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ G 226 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽												
H	TAZ H 336 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ H 336 * 015 C □ □ # @ 0 ▽ ▽ ▽ ▽												
A	TAZ A 474 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ A 474 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽												
B	TAZ B 684 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ B 684 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽												
C	TAZ C 155 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ C 155 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽												
D	TAZ D 225 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ D 225 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽												
E	TAZ E 335 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ E 335 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽												
F	TAZ F 685 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ F 685 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽												
G	TAZ G 156 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ G 156 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽												
H	TAZ H 226 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ H 226 * 020 C □ □ # @ 0 ▽ ▽ ▽ ▽												
A	TAZ A 334 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ A 334 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽												
B	TAZ B 684 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ B 684 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽												
C	TAZ C 105 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ C 105 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽												
D	TAZ D 155 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ D 155 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽												
E	TAZ E 225 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ E 225 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽												
F	TAZ F 475 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ F 475 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽												
G	TAZ G 685 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ G 685 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽												
H	TAZ H 106 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ H 106 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽												
A	TAZ A 156 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽		TAZ A 156 * 025 C □ □ # @ 0 ▽ ▽ ▽ ▽												

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-55365/4										Typical RMS Ripple Data by Rating									
CWR09 P/N	AVX MIL & COTS-Plus p/n	AVX SRC9000 P/N	Case	Cap @120kHz @ 25°C (µF)	DC Rated Voltage @ +85°C (V)	ESR @ 100kHz @ +25°C (Ohms)	DCL max		DF Max +65/125°C (%)	Power Dissipation (W)	25°C		125°C		25°C		85°C		125°C		
							+25°C (µA)	+85°C (µA)			+125°C (µA)	+25°C (%)	25°C Ripple (100kHz) (A)	25°C Ripple (100kHz) (V)	125°C Ripple (100kHz) (A)	125°C Ripple (100kHz) (V)	25°C Ripple (100kHz) (A)	25°C Ripple (100kHz) (V)	85°C Ripple (100kHz) (A)	85°C Ripple (100kHz) (V)	125°C Ripple (100kHz) (A)
CWR09M*224*0+	TAZ A 224*035 C □ □ # 0 +	TAZ A 224*035 C □ □ L @ 9 + +	A	0.22	35	18	1	10	12	6	8	0.050	0.05	0.02	0.95	0.85	0.38				
CWR09M*474*0+	TAZ B 474*035 C □ □ # 0 +	TAZ B 474*035 C □ □ L @ 9 + +	B	0.47	35	10	1	10	12	6	8	0.070	0.08	0.03	0.84	0.75	0.33				
CWR09M*684*0+	TAZ C 684*035 C □ □ # 0 +	TAZ C 684*035 C □ □ L @ 9 + +	C	0.68	35	8	1	10	12	6	8	0.075	0.10	0.04	0.77	0.70	0.31				
CWR09M*105*0+	TAZ D 105*035 C □ □ # 0 +	TAZ D 105*035 C □ □ L @ 9 + +	D	1	35	6.5	1	10	12	6	8	0.080	0.11	0.10	0.04	0.72	0.65				
CWR09M*155*0+	TAZ E 155*035 C □ □ # 0 +	TAZ E 155*035 C □ □ L @ 9 + +	E	1.5	35	4.5	1	10	12	6	8	0.090	0.14	0.13	0.06	0.64	0.57				
CWR09M*335*0+	TAZ F 335*035 C □ □ # 0 +	TAZ F 335*035 C □ □ L @ 9 + +	F	3.3	35	2.5	1	10	12	6	8	0.100	0.20	0.18	0.08	0.50	0.45				
CWR09M*475*0+	TAZ G 475*035 C □ □ # 0 +	TAZ G 475*035 C □ □ L @ 9 + +	G	4.7	35	1.5	2	20	24	6	8	0.125	0.29	0.26	0.12	0.43	0.39				
CWR09M*685*0+	TAZ H 685*035 C □ □ # 0 +	TAZ H 685*035 C □ □ L @ 9 + +	H	6.8	35	1.3	3	30	36	6	8	0.150	0.34	0.31	0.14	0.44	0.40				
CWR09M*104*0+	TAZ A 104*050 C □ □ # 0 +	TAZ A 104*050 C □ □ L @ 9 + +	A	0.1	50	22	1	10	12	6	8	0.050	0.05	0.04	0.02	1.05	0.94				
CWR09M*154*0+	TAZ A 154*050 C □ □ # 0 +	TAZ A 154*050 C □ □ L @ 9 + +	A	0.15	50	17	1	10	12	6	8	0.050	0.05	0.02	0.92	0.83	0.37				
CWR09M*224*0+	TAZ B 224*050 C □ □ # 0 +	TAZ B 224*050 C □ □ L @ 9 + +	B	0.22	50	14	1	10	12	6	8	0.070	0.07	0.06	0.03	0.89	0.89				
CWR09M*334*0+	TAZ B 334*050 C □ □ # 0 +	TAZ B 334*050 C □ □ L @ 9 + +	B	0.33	50	12	1	10	12	6	8	0.070	0.08	0.07	0.03	0.82	0.37				
CWR09M*474*0+	TAZ C 474*050 C □ □ # 0 +	TAZ C 474*050 C □ □ L @ 9 + +	C	0.47	50	8	1	10	12	6	8	0.075	0.10	0.09	0.04	0.77	0.70				
CWR09M*684*0+	TAZ D 684*050 C □ □ # 0 +	TAZ D 684*050 C □ □ L @ 9 + +	D	0.68	50	7	1	10	12	6	8	0.080	0.11	0.10	0.04	0.75	0.67				
CWR09M*105*0+	TAZ E 105*050 C □ □ # 0 +	TAZ E 105*050 C □ □ L @ 9 + +	E	1	50	6	1	10	12	6	8	0.090	0.12	0.11	0.05	0.73	0.66				
CWR09M*155*0+	TAZ F 155*050 C □ □ # 0 +	TAZ F 155*050 C □ □ L @ 9 + +	F	1.5	50	4	1	10	12	6	8	0.100	0.16	0.14	0.06	0.63	0.57				
CWR09M*225*0+	TAZ F 225*050 C □ □ # 0 +	TAZ F 225*050 C □ □ L @ 9 + +	F	2.2	50	2.5	2	20	24	6	8	0.100	0.20	0.18	0.08	0.50	0.45				
CWR09M*335*0+	TAZ G 335*050 C □ □ # 0 +	TAZ G 335*050 C □ □ L @ 9 + +	G	3.3	50	2	2	20	24	6	8	0.125	0.25	0.23	0.10	0.50	0.45				
CWR09M*475*0+	TAZ H 475*050 C □ □ # 0 +	TAZ H 475*050 C □ □ L @ 9 + +	H	4.7	50	1.5	3	30	36	6	8	0.150	0.32	0.28	0.13	0.47	0.43				

All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120kHz, 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.**