

# TAZ Series

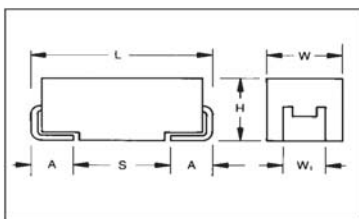
## CWR09 - MIL-PRF-55365/4



Fully qualified to MIL-PRF-55365/4, this series represents the most flexible of surface mount form factors, offering eight case sizes (A through H). This series is fully interchangeable with CWR06 conformal types, while offering the advantages of molded body/compliant termination construction, polarity and capacitance. The molded construction is compatible with a wide range of SMT board assembly processes including wave or reflow solder, conductive epoxy or compression bonding techniques. The five smaller cases are

characterized by their low profile construction, with the A case being the world's smallest molded military tantalum. There are three termination finishes available: fused solder plated ("K" per MIL-PRF-55365), hot solder dipped ("C") and gold plated ("B"). In addition, the molding compound has been selected to meet the requirements of UL94V-0 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 (W1)	Term. Length (A) ±0.13 (0.005)	S min
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)
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)
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)
D	3.81 (0.150)	2.54 (0.100)	1.27 (0.050)	2.41 <sup>+0.13</sup> <sub>(0.095<sup>+0.005</sup>-0.25</sub> -0.010)	0.76 (0.030)	1.65 (0.065)
E	5.08 (0.200)	2.54 (0.100)	1.27 (0.050)	2.41 <sup>+0.13</sup> <sub>(0.095<sup>+0.005</sup>-0.25</sub> -0.010)	0.76 (0.030)	2.92 (0.115)
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)
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)
H	7.24 (0.285)	3.81 (0.150)	2.79 (0.110)	3.68 <sup>+0.13</sup> <sub>(0.145<sup>+0.005</sup>-0.51</sub> -0.020)	1.27 (0.050)	4.06 (0.160)

### MARKING

(White marking on black body)



Polarity stripe (+)  
Capacitance Code  
Rated Voltage

### HOW TO ORDER

Type	Voltage Code	Termination Finish	Capacitance Code	Capacitance Tolerance	Reliability Grade	Surge Test Option	Packaging
CWR09	J	^	225	*	@	+	T
	C = 4Vdc D = 6Vdc F = 10Vdc H = 15Vdc J = 20Vdc K = 25Vdc M = 35Vdc N = 50Vdc	K = Solder Fused C = Hot solder dipped B = Gold Plated	pF code: 1 <sup>st</sup> two digits represent significant figures 3 <sup>rd</sup> digit represents multiplier (number of zeros to follow)	M = ±20% K = ±10% J = ±5%	Weibull: B = 0.1%/1000 Hrs. (90% C = 0.01%/1000 Hrs. conf.) Comm: Z = Non ER	A = 10 cycles, +25°C B = 10 cycles, -55°C & +85°C C = 10 cycles, -55°C & +85°C before Weibull	Bulk = Standard TR = 7" T&R TR13 = 13" T&R W = Waffle

### TECHNICAL SPECIFICATIONS

Technical Data: Unless otherwise specified, all technical data relate to an ambient temperature of 25°C

Capacitance Range:	0.1µF to 100µF									
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	7	10	13	17	23	33	
Surge Voltage (V <sub>S</sub> )	≤ +85°C:	5.2	8	13	20	26	32	46	65	
Surge Voltage (V <sub>S</sub> )	125°C:	3.4	5	8	13	16	20	28	40	
Temperature Range:	-55°C to +125°C									



# TAZ Series

## CWR09 - MIL-PRF-55365/4



### RATINGS & PART NUMBER REFERENCE

Part Number	Case Size	Cap (nom) (µF)	DC rated voltage (85°C) (volts)	ESR (max) 100 kHz +25°C (Ohms)	DC Leakage (max)			Discipation Factor (max)		
					+25°C (µA)	+85°C (µA)	+125°C (µA)	+25°C (%)	+85/125°C (%)	-55°C (%)
CWR09C^225*@+	A	2.2	4	8	1	10	12	6	8	8
CWR09C^475*@+	B	4.7	4	8	1	10	12	6	8	8
CWR09C^685*@+	C	6.8	4	5.5	1	10	12	6	8	8
CWR09C^106*@+	D	10	4	4	1	10	12	8	8	10
CWR09C^156*@+	E	15	4	3.5	1	10	12	8	10	12
CWR09C^336*@+	F	33	4	2.2	2	20	24	8	10	12
CWR09C^686*@+	G	68	4	1.1	3	30	36	10	12	12
CWR09C^107*@+	H	100	4	0.9	4	40	48	10	12	12
CWR09D^155*@+	A	1.5	6	8	1	10	12	6	8	8
CWR09D^335*@+	B	3.3	6	8	1	10	12	6	8	8
CWR09D^475*@+	C	4.7	6	5.5	1	10	12	6	8	8
CWR09D^685*@+	D	6.8	6	4.5	1	10	12	6	8	8
CWR09D^106*@+	E	10	6	3.5	1	10	12	8	10	12
CWR09D^226*@+	F	22	6	2.2	2	20	24	8	10	12
CWR09D^476*@+	G	47	6	1.1	3	30	36	10	12	12
CWR09D^686*@+	H	68	6	0.9	4	40	48	10	12	12
CWR09F^105*@+	A	1	10	10	1	10	12	6	8	8
CWR09F^225*@+	B	2.2	10	8	1	10	12	6	8	8
CWR09F^335*@+	C	3.3	10	5.5	1	10	12	6	8	8
CWR09F^475*@+	D	4.7	10	4.5	1	10	12	6	8	8
CWR09F^685*@+	E	6.8	10	3.5	1	10	12	6	8	8
CWR09F^156*@+	F	15	10	2.5	2	20	24	8	8	10
CWR09F^336*@+	G	33	10	1.1	3	30	36	10	12	12
CWR09F^476*@+	H	47	10	0.9	5	50	60	10	12	12
CWR09H^684*@+	A	0.68	15	12	1	10	12	6	8	8
CWR09H^155*@+	B	1.5	15	8	1	10	12	6	8	8
CWR09H^225*@+	C	2.2	15	5.5	1	10	12	6	8	8
CWR09H^335*@+	D	3.3	15	5	1	10	12	6	8	8
CWR09H^475*@+	E	4.7	15	4	1	10	12	6	8	8
CWR09H^106*@+	F	10	15	2.5	2	20	24	6	8	8
CWR09H^226*@+	G	22	15	1.1	4	40	48	6	8	8
CWR09H^336*@+	H	33	15	0.9	5	50	60	8	8	10
CWR09J^474*@+	A	0.47	20	14	1	10	12	8	10	10
CWR09J^684*@+	B	0.68	20	10	1	10	12	6	8	8
CWR09J^105*@+	B	1	20	12	1	10	12	6	8	8
CWR09J^155*@+	C	1.5	20	6	1	10	12	6	8	8
CWR09J^225*@+	D	2.2	20	5	1	10	12	6	8	8
CWR09J^335*@+	E	3.3	20	4	1	10	12	6	8	8
CWR09J^685*@+	F	6.8	20	2.4	2	20	24	6	8	8
CWR09J^156*@+	G	15	20	1.1	3	30	36	6	8	8
CWR09J^226*@+	H	22	20	0.9	4	40	48	6	8	8
CWR09K^334*@+	A	0.33	25	15	1	10	12	6	8	8
CWR09K^684*@+	B	0.68	25	7.5	1	10	12	6	8	8
CWR09K^105*@+	C	1	25	6.5	1	10	12	6	8	8
CWR09K^155*@+	D	1.5	25	6.5	1	10	12	6	8	8
CWR09K^225*@+	E	2.2	25	3.5	1	10	12	6	8	8
CWR09K^475*@+	F	4.7	25	2.5	2	20	24	6	8	8
CWR09K^685*@+	G	6.8	25	1.2	2	20	24	6	8	8
CWR09K^106*@+	G	10	25	1.4	3	30	36	6	8	8
CWR09K^156*@+	H	15	25	1	4	40	48	6	8	8
CWR09M^224*@+	A	0.22	35	18	1	10	12	6	8	8
CWR09M^474*@+	B	0.47	35	10	1	10	12	6	8	8
CWR09M^684*@+	C	0.68	35	8	1	10	12	6	8	8
CWR09M^105*@+	D	1	35	6.5	1	10	12	6	8	8
CWR09M^155*@+	E	1.5	35	4.5	1	10	12	6	8	8
CWR09M^335*@+	F	3.3	35	2.5	1	10	12	6	8	8
CWR09M^475*@+	G	4.7	35	1.5	2	20	24	6	8	8
CWR09M^685*@+	H	6.8	35	1.3	3	30	36	6	8	8
CWR09N^104*@+	A	0.1	50	22	1	10	12	6	8	8
CWR09N^154*@+	A	0.15	50	17	1	10	12	6	8	8
CWR09N^224*@+	B	0.22	50	14	1	10	12	6	8	8
CWR09N^334*@+	B	0.33	50	12	1	10	12	6	8	8
CWR09N^474*@+	C	0.47	50	8	1	10	12	6	8	8
CWR09N^684*@+	D	0.68	50	7	1	10	12	6	8	8
CWR09N^105*@+	E	1	50	6	1	10	12	6	8	8
CWR09N^155*@+	F	1.5	50	4	1	10	12	6	8	8
CWR09N^225*@+	F	2.2	50	2.5	2	20	24	6	8	8
CWR09N^335*@+	G	3.3	50	2	2	20	24	6	8	8
CWR09N^475*@+	H	4.7	50	1.5	3	30	36	6	8	8