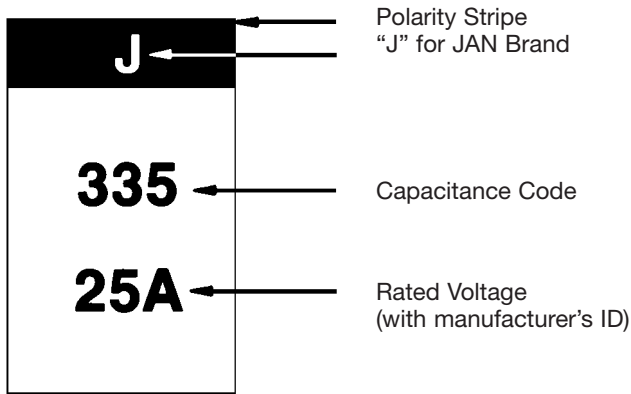


CWR11 Style

MIL-C-55365/8



MARKING



CASE DIMENSIONS: millimeters (inches)

Case Code	W	L	H	P		H ₂ (min)
				±0.1 (±0.004)	±0.3 (±0.012)	
A	1.6±0.2 (0.063±0.008)	3.2±0.2 (0.126±0.008)	1.6±0.2 (0.063±0.008)	1.2 (0.047)	0.8 (0.031)	0.7 (0.028)
B	2.8±0.2 (0.110±0.008)	3.5±0.2 (0.138±0.008)	1.9±0.2 (0.075±0.008)	2.2 (0.087)	0.8 (0.031)	0.7 (0.028)
C	3.2±0.3 (0.126±0.012)	6.0±0.3 (0.236±0.012)	2.5±0.3 (0.098±0.012)	2.2 (0.087)	1.3 (0.051)	1.0 (0.039)
D	4.3±0.3 (0.169±0.012)	7.3±0.3 (0.287±0.012)	2.8±0.3 (0.110±0.012)	2.4 (0.094)	1.3 (0.051)	1.0 (0.039)

HOW TO ORDER (MIL-C-55365/8)

CWR11

Type

F

Voltage
C=4
D=6
F=10
H=15
J=20
K=25
M=35
N=50

A

Termination Finish
B=Gold Plated
C=Hot Solder Dipped
K=Solder Fused

225

Capacitance Code

K

Tolerance
J=±5%
K=±10%
M=±20%

M

Failure Rate
Exponential:
M=1%/1000 hours
P=0.1%/1000 hours
R=0.01%/1000 hours
S=0.001%/1000 hours

Weibull:
B=0.1%/1000 hours
C=0.01%/1000 hours
D=0.001%/1000 hours

A

Optional Surge Current
A=10 cycles at 25°C
B=10 cycles at -55°C and +85°C

\TR

Packaging
Bulk (Standard if nothing is specified in this position)
\TR=7" Tape & Reel
\TR13=13" Tape & Reel
W=Waffle Pack

ELECTRICAL RATINGS FOR CWR11 CAPACITORS

MIL-C-55365/8 Part Number (See Note)	Case Size	Rated Voltage (85°C) (volts)	Capacitance (nom.) (μF)	DC Leakage (max.)			Dissipation Factor (max.)			Max. ESR 100 kHz (Ω)
				+25°C (μA)	+85°C (μA)	+125°C (μA)	+25°C (%)	+85/125°C (%)	-55°C (%)	
CWR11D*155†@Δ□	A	6	1.5	0.5	5.0	6.0	6	9	9	8.0
CWR11D*225†@Δ□	A	6	2.2	0.5	5.0	6.0	6	6	9	8.0
CWR11D*335†@Δ□	A	6	3.3	0.5	5.0	6.0	6	9	9	8.0
CWR11D*475†@Δ□	B	6	4.7	0.5	5.0	6.0	6	9	9	5.5
CWR11D*685†@Δ□	B	6	6.8	0.5	5.0	6.0	6	6	9	4.5
CWR11D*106†@Δ□	B	6	10.0	0.6	6.0	7.2	6	9	9	3.5
CWR11D*156†@Δ□	C	6	15.0	0.9	9.0	10.8	6	6	9	3.0
CWR11D*226†@Δ□	C	6	22.0	1.4	14.0	16.8	6	9	9	2.2
CWR11D*476†@Δ□	D	6	47.0	2.8	28.0	33.6	6	6	9	1.1
CWR11F*105†@Δ□	A	10	1.0	0.5	5.0	6.0	4	6	6	10.0
CWR11F*155†@Δ□	A	10	1.5	0.5	5.0	6.0	6	6	9	8.0
CWR11F*225†@Δ□	A	10	2.2	0.5	5.0	6.0	6	9	9	8.0
CWR11F*335†@Δ□	B	10	3.3	0.5	5.0	6.0	6	9	9	5.5
CWR11F*475†@Δ□	B	10	4.7	0.5	5.0	6.0	6	9	9	4.5
CWR11F*685†@Δ□	B	10	6.8	0.7	7.0	8.4	6	9	9	3.5
CWR11F*156†@Δ□	C	10	15.0	1.5	15.0	18.0	6	6	9	2.5
CWR11F*336†@Δ□	D	10	33.0	3.3	33.0	39.6	6	6	9	1.1
CWR11H*684†@Δ□	A	15	0.68	0.5	5.0	6.0	4	6	6	12.0
CWR11H*105†@Δ□	A	15	1.0	0.5	5.0	6.0	4	6	9	10.0
CWR11H*155†@Δ□	A	15	1.5	0.5	5.0	6.0	6	9	9	8.0
CWR11H*225†@Δ□	B	15	2.2	0.5	5.0	6.0	6	9	9	5.5
CWR11H*335†@Δ□	B	15	3.3	0.5	5.0	6.0	6	8	9	5.0
CWR11H*475†@Δ□	B	15	4.7	0.7	7.0	8.4	6	9	9	4.0
CWR11H*106†@Δ□	C	15	10.0	1.6	16.0	19.2	6	8	9	2.5
CWR11H*226†@Δ□	D	15	22.0	3.3	33.0	39.6	6	8	9	1.1
CWR11J*474†@Δ□	A	20	0.47	0.5	5.0	6.0	4	6	6	14.0
CWR11J*684†@Δ□	A	20	0.68	0.5	5.0	6.0	4	6	6	12.0
CWR11J*105†@Δ□	A	20	1.0	0.5	5.0	6.0	4	6	6	10.0
CWR11J*155†@Δ□	B	20	1.5	0.5	5.0	6.0	6	9	9	6.0
CWR11J*225†@Δ□	B	20	2.2	0.5	5.0	6.0	6	8	9	5.0
CWR11J*335†@Δ□	B	20	3.3	0.7	7.0	8.4	6	9	9	4.0
CWR11J*475†@Δ□	C	20	4.7	1.0	10.0	12.0	6	8	9	3.0
CWR11J*685†@Δ□	C	20	6.8	1.4	14.0	16.8	6	9	9	2.4
CWR11J*156†@Δ□	D	20	15.0	3.0	30.0	36.0	6	8	9	1.1

NOTE: To complete the MIL-C-55365/8 Part Number, additional information must be added:

Contact your local AVX sales office for latest qualification status.

*** = Termination Finish**
 B = Gold Plated
 C = Hot Solder Dipped
 K = Solder Fused

† = Tolerance Code
 J = ±5%
 K = ±10%
 M = ±20%

@ = Failure Rate Level
 Exponential:
 M = 1.0% per 1000 hours
 P = 0.1% per 1000 hours
 R = 0.01% per 1000 hours
 S = 0.001% per 1000 hours
 Weibull:
 B = 0.1% per 1000 hours
 C = 0.01% per 1000 hours
 D = 0.001% Per 1000 hours

Δ = Optional Surge Current
 A = 10 cycles at 25°C
 B = 10 cycles at -55°C and +85°C

□ = Packaging
 Bulk Standard
 \TR=7" Tape & Reel
 \TR13=13" Tape & Reel
 \W=Waffle Pack

CWR11 Style



MIL-C-55365/8

ELECTRICAL RATINGS FOR CWR11 CAPACITORS

MIL-C-55365/8 Part Number (See Note)	Case Size	Rated Voltage (85°C) (volts)	Capacitance (nom.) (µF)	DC Leakage (max.)			Dissipation Factor (max.)			Max. ESR 100 kHz (Ω)
				+25°C (µA)	+85°C (µA)	+125°C (µA)	+25°C (%)	+85/125°C (%)	-55°C (%)	
CWR11K*334†@△□	A	25	0.33	0.5	5.0	6.0	4	6	6	15.0
CWR11K*474†@△□	A	25	0.47	0.5	5.0	6.0	4	6	6	14.0
CWR11K*684†@△□	B	25	0.68	0.5	5.0	6.0	4	6	6	7.5
CWR11K*105†@△□	B	25	1.0	0.5	5.0	6.0	4	6	6	6.5
CWR11K*155†@△□	B	25	1.5	0.5	5.0	6.0	6	8	9	6.5
CWR11K*225†@△□	C	25	2.2	0.6	6.0	7.2	6	9	9	3.5
CWR11K*335†@△□	C	25	3.3	0.9	9.0	10.8	6	8	9	3.5
CWR11K*475†@△□	C	25	4.7	1.2	12.0	14.4	6	9	9	2.5
CWR11K*685†@△□	D	25	6.8	1.7	17.0	20.4	6	9	9	1.4
CWR11K*106†@△□	D	25	10.0	2.5	25.0	30.0	6	8	9	1.2
CWR11M*104†@△□	A	35	0.10	0.5	5.0	6.0	4	6	6	24.0
CWR11M*154†@△□	A	35	0.15	0.5	5.0	6.0	4	6	6	21.0
CWR11M*224†@△□	A	35	0.22	0.5	5.0	6.0	4	6	6	18.0
CWR11M*334†@△□	A	35	0.33	0.5	5.0	6.0	4	6	6	15.0
CWR11M*474†@△□	B	35	0.47	0.5	5.0	6.0	4	6	6	10.0
CWR11M*684†@△□	B	35	0.68	0.5	5.0	6.0	4	6	6	8.0
CWR11M*105†@△□	B	35	1.0	0.5	5.0	6.0	4	6	6	6.5
CWR11M*155†@△□	C	35	1.5	0.5	5.0	6.0	6	8	9	4.5
CWR11M*225†@△□	C	35	2.2	0.8	8.0	9.6	6	8	9	3.5
CWR11M*335†@△□	C	35	3.3	1.2	12.0	14.4	6	8	9	2.5
CWR11M*475†@△□	D	35	4.7	1.7	17.0	20.4	6	8	9	1.5
CWR11N*104†@△□	A	50	0.10	0.5	5.0	6.0	4	6	6	22.0
CWR11N*154†@△□	B	50	0.15	0.5	5.0	6.0	4	6	6	17.0
CWR11N*224†@△□	B	50	0.22	0.5	5.0	6.0	4	6	6	14.0
CWR11N*334†@△□	B	50	0.33	0.5	5.0	6.0	4	6	6	12.0
CWR11N*474†@△□	C	50	0.47	0.5	5.0	6.0	4	6	6	8.0
CWR11N*684†@△□	C	50	0.68	0.5	5.0	6.0	6	6	6	7.0
CWR11N*105†@△□	C	50	1.0	0.5	5.0	6.0	6	6	6	6.0
CWR11N*155†@△□	D	50	1.5	0.8	8.0	9.6	6	8	9	4.0
CWR11N*225†@△□	D	50	2.2	1.1	11.0	13.2	6	8	9	2.5

NOTE: To complete the MIL-C-55365/8 Part Number, additional information must be added:

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*** = Termination Finish**
 Designator:
 B = Gold Plated
 C = Hot Solder Dipped
 K = Solder Fused

† = Tolerance Code
 J = ±5%
 K = ±10%
 M = ±20%

@ = Failure Rate Level
 Exponential:
 M = 1.0% per 1000 hours
 P = 0.1% per 1000 hours
 R = 0.01% per 1000 hours
 S = 0.001% per 1000 hours
 Weibull:
 B = 0.1% per 1000 hours
 C = 0.01% per 1000 hours
 D = 0.001% per 1000 hours

△ = Optional Surge Current
 A = 10 cycles at 25°C
 B = 10 cycles at -55°C
 and +85°C

□ = Packaging
 Bulk Standard
 \TR=7" Tape & Reel
 \TR13=13" Tape & Reel
 \W=Waffle Pack



TAZ, CWR09, CWR11 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		13" reel (330mm) reel	
			Suffix	Qty.	Suffix	Qty.
A	8	4	R	2500	S	9000
B	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	
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±0.05	(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)

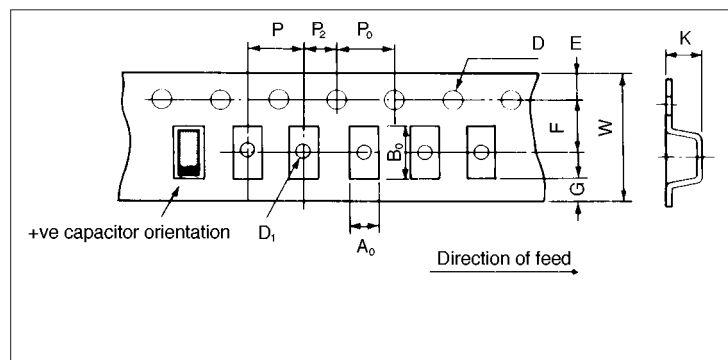
*See taping suffix tables for actual P dimension (component pitch).

TAPE SPECIFICATION

Tape dimensions comply to EIA RS 481 A
Dimensions A₀ and B₀ 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

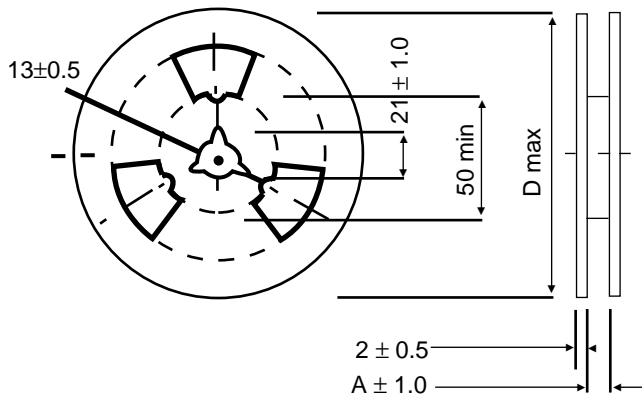


TAZ, CWR09, CWR11 Series



Tape and Reel Packaging

PLASTIC TAPE REEL DIMENSIONS



Standard Dimensions mm

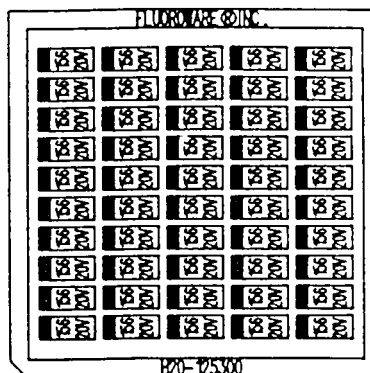
A: 9.5mm (8mm tape)
13.0mm (12mm tape)

Cover Tape Dimensions

Thickness: 75±25μ
Width of tape:
5.5mm + 0.2mm (8mm tape)
9.5mm + 0.2mm (12mm tape)

Waffle Packaging - 2" x 2" hard plastic waffle trays. To order Waffle packaging use a "W" in part numbers packaging position.

Case Size	Maximum Quantity Per Waffle
TAZ A	160
TAZ B	112
TAZ D	88
TAZ E	60
TAZ F	48
TAZ G	50
TAZ H	28
CWR11 A	96
CWR11 B	72
CWR11 C	54
CWR11 D	28



NOTE: Orientation of parts in waffle packs varies by case size.