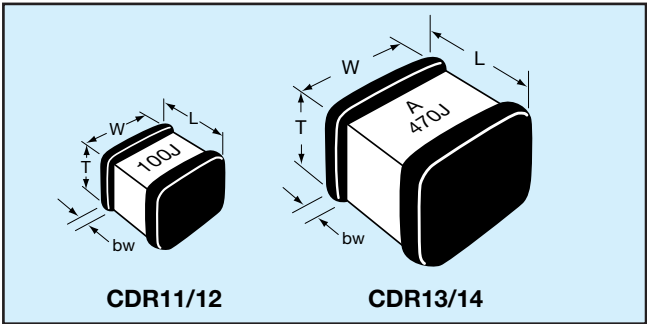


Microwave MLC's



CDR Series — MIL-PRF-55681 (RF/Microwave Chips)

MILITARY DESIGNATION PER MIL-PRF-55681



CROSS REFERENCE: AVX/MIL-PRF-55681

Per MIL-C-55681	AVX Style	Length (L)	Width (W)	Thickness (T)		Termination Band (bw)	
				Max	Min	Max	Min
CDR11	AQ11	.055±.015 (1.40±.381)	.055±.015 (1.40±.381)	.057 (1.45)	.020 (.508)	.020 (.508)	.005 (.127)
CDR12	AQ12	.055±.025 (1.40±.635)	.055±.015 (1.40±.381)	.057 (1.45)	.020 (.508)	.020 (.508)	.005 (.127)
CDR13	AQ13	.110±.020 (2.79±.508)	.110±.020 (2.79±.508)	.102 (2.59)	.030 (.762)	.025 (.635)	.005 (.127)
CDR14	AQ14	.110 +.035 -0.020 (2.79 +.889 -.508)	.110±.020 (2.79±.508)	.102 (2.59)	.030 (.762)	.025 (.635)	.005 (.127)

HOW TO ORDER

CDR12

MIL Style
CDR11, CDR12,
CDR13, CDR14

BG

**Voltage
Temperature
Limits**

BG = +90±20 ppm/°C with and without
rated voltage from -55°C to +125°C
BP = 0±30ppm/°C with and without
rated voltage from -55°C to +125°C

101

Capacitance

EIA Capacitance Code in pF.
First two digits = significant figures
or "R" for decimal place.
Third digit = number of zeros or
after "R" significant figures.

A

**Rated Voltage
Code**

A = 50V
B = 100V
C = 200V
D = 300V
E = 500V

K

**Capacitance
Tolerance
Code**

B = ±.1 pF
C = ±.25 pF
D = ±.5 pF
F = ±1%
G = ±2%
J = ±5%
K = ±10%
M = ±20%

U

**Termination
Finish (Military
Designations)
Code**

M = Palladium silver
N = Silver-nickel-gold
S = Solder coated final with a minimum of
4 percent lead
T = Silver
U = Base metallization-barrier metal-solder coated
(tin/lead alloy, with a minimum of 4 percent lead)
W = Base metallization-barrier metal-tinned (tin or
tin/lead alloy)
Y = Base metallization-barrier metal-tin (100 per-
cent)
Z = Base metallization-barrier metal-tinned
(tin/lead alloy, with a minimum of 4 percent lead)
*See MIL-PRF-55681 Specification for more details

S

**Failure Rate
Level**

M = 1.0%
P = .1%
R = .01%
S = .001%

PACKAGING

Standard Packaging Quantity

CDR11-12 = 100 pcs per waffle pack

CDR13-14 = 80 pcs per waffle pack

TAPE & REEL: All tape and reel specifications are in compliance with EIA RS481
(equivalent to IEC 286 part 3).

Sizes SQCA through SQCB, CDR11/12 through 13/14.

—8mm carrier

—7" reel: ≤0.040" thickness = 2000 pcs

≤0.075" thickness = 2000 pcs

—13" reel: ≤0.075" thickness = 10,000 pcs

Not RoHS Compliant



For RoHS compliant products,
please select correct termination style.



TABLE I: STYLES CDR11 AND CDR12 CAPACITOR CHARACTERISTICS

Type Designation 1/	Capacitance in pF	Capacitance tolerance	Rated temperature and V/Temperature	WVDC	Type Designation 1/	Capacitance in pF	Capacitance tolerance	Rated temperature and V/Temperature	WVDC
CDR1 -B-0R1AB--	0.1	B	BG, BP	50	CDR1 -B-300A--	30	F, G, J, K, M	BG, BP	50
CDR1 -B-0R2AB--	0.2	B	BG, BP	50	CDR1 -B-330A--	33	F, G, J, K, M	BG, BP	50
CDR1 -B-0R3A--	0.3	B, C	BG, BP	50	CDR1 -B-360A--	36	F, G, J, K, M	BG, BP	50
CDR1 -B-0R4A--	0.4	B, C	BG, BP	50	CDR1 -B-390A--	39	F, G, J, K, M	BG, BP	50
CDR1 -B-0R5A--	0.5	B, C, D	BG, BP	50	CDR1 -B-430A--	43	F, G, J, K, M	BG, BP	50
CDR1 -B-0R6A--	0.6	B, C, D	BG, BP	50	CDR1 -B-470A--	47	F, G, J, K, M	BG, BP	50
CDR1 -B-0R7A--	0.7	B, C, D	BG, BP	50	CDR1 -B-510A--	51	F, G, J, K, M	BG, BP	50
CDR1 -B-0R8A--	0.8	B, C, D	BG, BP	50	CDR1 -B-560A--	56	F, G, J, K, M	BG, BP	50
CDR1 -B-0R9A--	0.9	B, C, D	BG, BP	50	CDR1 -B-620A--	62	F, G, J, K, M	BG, BP	50
CDR1 -B-1R0A--	1.0	B, C, D	BG, BP	50	CDR1 -B-680A--	68	F, G, J, K, M	BG, BP	50
CDR1 -B-1R1A--	1.1	B, C, D	BG, BP	50	CDR1 -B-750A--	75	F, G, J, K, M	BG, BP	50
CDR1 -B-1R2A--	1.2	B, C, D	BG, BP	50	CDR1 -B-820A--	82	F, G, J, K, M	BG, BP	50
CDR1 -B-1R3A--	1.3	B, C, D	BG, BP	50	CDR1 -B-910A--	91	F, G, J, K, M	BG, BP	50
CDR1 -B-1R4A--	1.4	B, C, D	BG, BP	50	CDR1 -B-101A--	100	F, G, J, K, M	BG, BP	50
CDR1 -B-1R5A--	1.5	B, C, D	BG, BP	50	CDR1 -B-111A--	110	F, G, J, K, M	BP	50
CDR1 -B-1R6A--	1.6	B, C, D	BG, BP	50	CDR1 -B-121A--	120	F, G, J, K, M	BP	50
CDR1 -B-1R7A--	1.7	B, C, D	BG, BP	50	CDR1 -B-131A--	130	F, G, J, K, M	BP	50
CDR1 -B-1R8A--	1.8	B, C, D	BG, BP	50	CDR1 -B-151A--	150	F, G, J, K, M	BP	50
CDR1 -B-1R9A--	1.9	B, C, D	BG, BP	50	CDR1 -B-161A--	160	F, G, J, K, M	BP	50
CDR1 -B-2R0A--	2.0	B, C, D	BG, BP	50	CDR1 -B-181A--	180	F, G, J, K, M	BP	50
CDR1 -B-2R1A--	2.1	B, C, D	BG, BP	50	CDR1 -B-201A--	200	F, G, J, K, M	BP	50
CDR1 -B-2R2A--	2.2	B, C, D	BG, BP	50	CDR1 -B-221A--	220	F, G, J, K, M	BP	50
CDR1 -B-2R4A--	2.4	B, C, D	BG, BP	50	CDR1 -B-241A--	240	F, G, J, K, M	BP	50
CDR1 -B-2R7A--	2.7	B, C, D	BG, BP	50	CDR1 -B-271A--	270	F, G, J, K, M	BP	50
CDR1 -B-3R0A--	3.0	B, C, D	BG, BP	50	CDR1 -B-301A--	300	F, G, J, K, M	BP	50
CDR1 -B-3R3A--	3.3	B, C, D	BG, BP	50	CDR1 -B-331A--	330	F, G, J, K, M	BP	50
CDR1 -B-3R6A--	3.6	B, C, D	BG, BP	50	CDR1 -B-361A--	360	F, G, J, K, M	BP	50
CDR1 -B-3R9A--	3.9	B, C, D	BG, BP	50	CDR1 -B-391A--	390	F, G, J, K, M	BP	50
CDR1 -B-4R3A--	4.3	B, C, D	BG, BP	50	CDR1 -B-431A--	430	F, G, J, K, M	BP	50
CDR1 -B-4R7A--	4.7	B, C, D	BG, BP	50	CDR1 -B-471A--	470	F, G, J, K, M	BP	50
CDR1 -B-5R1A--	5.1	B, C, D	BG, BP	50	CDR1 -B-511A--	510	F, G, J, K, M	BP	50
CDR1 -B-5R6A--	5.6	B, C, D	BG, BP	50	CDR1 -B-561A--	560	F, G, J, K, M	BP	50
CDR1 -B-6R2A--	6.2	B, C, D	BG, BP	50	CDR1 -B-621A--	620	F, G, J, K, M	BP	50
CDR1 -B-6R8A--	6.8	B, C, J, K, M	BG, BP	50	CDR1 -B-681A--	680	F, G, J, K, M	BP	50
CDR1 -B-7R5A--	7.5	B, C, J, K, M	BG, BP	50	CDR1 -B-751A--	750	F, G, J, K, M	BP	50
CDR1 -B-8R2A--	8.2	B, C, J, K, M	BG, BP	50	CDR1 -B-821A--	820	F, G, J, K, M	BP	50
CDR1 -B-9R1A--	9.1	B, C, J, K, M	BG, BP	50	CDR1 -B-911A--	910	F, G, J, K, M	BP	50
CDR1 -B-100A--	10	F, G, J, K, M	BG, BP	50	CDR1 -B-102A--	1000	F, G, J, K, M	BP	50
CDR1 -B-110A--	11	F, G, J, K, M	BG, BP	50					
CDR1 -B-120A--	12	F, G, J, K, M	BG, BP	50					
CDR1 -B-130A--	13	F, G, J, K, M	BG, BP	50					
CDR1 -B-150A--	15	F, G, J, K, M	BG, BP	50					
CDR1 -B-160A--	16	F, G, J, K, M	BG, BP	50					
CDR1 -B-180A--	18	F, G, J, K, M	BG, BP	50					
CDR1 -B-200A--	20	F, G, J, K, M	BG, BP	50					
CDR1 -B-220A--	22	F, G, J, K, M	BG, BP	50					
CDR1 -B-240A--	24	F, G, J, K, M	BG, BP	50					
CDR1 -B-270A--	27	F, G, J, K, M	BG, BP	50					

1/Complete type designation will include additional symbols to indicate style, voltage-temperature limits, capacitance tolerance (where applicable), termination finish ("M" or "N" for style CDR11, and "S", "U", "W", "Y" or "Z" for style CDR12) and failure rate level.

TABLE II: STYLES CDR13 AND CDR14 CAPACITOR CHARACTERISTICS

Type Designation 1/	Capacitance in pF	Capacitance tolerance	Rated temperature and V/Temperature	WVDC	Type Designation 1/	Capacitance in pF	Capacitance tolerance	Rated temperature and V/Temperature	WVDC
CDR1 -B-0R1*B--	0.1	B	BG, BP	200/500	CDR1 -B-560*---	56	F, G, J, K, M	BG, BP	200/500
CDR1 -B-0R2*B--	0.2	B	BG, BP	200/500	CDR1 -B-620*---	62	F, G, J, K, M	BG, BP	200/500
CDR1 -B-0R3*---	0.3	B, C	BG, BP	200/500	CDR1 -B-680*---	68	F, G, J, K, M	BG, BP	200/500
CDR1 -B-0R4*---	0.4	B, C	BG, BP	200/500	CDR1 -B-750*---	75	F, G, J, K, M	BG, BP	200/500
CDR1 -B-0R5*---	0.5	B, C, D	BG, BP	200/500	CDR1 -B-820*---	82	F, G, J, K, M	BG, BP	200/500
CDR1 -B-0R6*---	0.6	B, C, D	BG, BP	200/500	CDR1 -B-910*---	91	F, G, J, K, M	BG, BP	200/500
CDR1 -B-0R7*---	0.7	B, C, D	BG, BP	200/500	CDR1 -B-101*---	100	F, G, J, K, M	BG, BP	200/500
CDR1 -B-0R8*---	0.8	B, C, D	BG, BP	200/500	CDR1 -B-111*---	110	F, G, J, K, M	BG, BP	200/300
CDR1 -B-0R9*---	0.9	B, C, D	BG, BP	200/500	CDR1 -B-121*---	120	F, G, J, K, M	BG, BP	200/300
CDR1 -B-1R0*---	1.0	B, C, D	BG, BP	200/500	CDR1 -B-131*---	130	F, G, J, K, M	BG, BP	200/300
CDR1 -B-1R1*---	1.1	B, C, D	BG, BP	200/500	CDR1 -B-151*---	150	F, G, J, K, M	BG, BP	200/300
CDR1 -B-1R2*---	1.2	B, C, D	BG, BP	200/500	CDR1 -B-161*---	160	F, G, J, K, M	BG, BP	200/300
CDR1 -B-1R3*---	1.3	B, C, D	BG, BP	200/500	CDR1 -B-181*---	180	F, G, J, K, M	BG, BP	200/300
CDR1 -B-1R4*---	1.4	B, C, D	BG, BP	200/500	CDR1 -B-201*---	200	F, G, J, K, M	BG, BP	200/300
CDR1 -B-1R5*---	1.5	B, C, D	BG, BP	200/500	CDR1 -B-221C---	220	F, G, J, K, M	BG, BP	200
CDR1 -B-1R6*---	1.6	B, C, D	BG, BP	200/500	CDR1 -B-241C---	240	F, G, J, K, M	BG, BP	200
CDR1 -B-1R7*---	1.7	B, C, D	BG, BP	200/500	CDR1 -B-271C---	270	F, G, J, K, M	BG, BP	200
CDR1 -B-1R8*---	1.8	B, C, D	BG, BP	200/500	CDR1 -B-301C---	300	F, G, J, K, M	BG, BP	200
CDR1 -B-1R9*---	1.9	B, C, D	BG, BP	200/500	CDR1 -B-331C---	330	F, G, J, K, M	BG, BP	200
CDR1 -B-2R0*---	2.0	B, C, D	BG, BP	200/500	CDR1 -B-361C---	360	F, G, J, K, M	BG, BP	200
CDR1 -B-2R1*---	2.1	B, C, D	BG, BP	200/500	CDR1 -B-391C---	390	F, G, J, K, M	BG, BP	200
CDR1 -B-2R2*---	2.2	B, C, D	BG, BP	200/500	CDR1 -B-431C---	430	F, G, J, K, M	BG, BP	200
CDR1 -B-2R4*---	2.4	B, C, D	BG, BP	200/500	CDR1 -B-471C---	470	F, G, J, K, M	BG, BP	200
CDR1 -B-2R7*---	2.7	B, C, D	BG, BP	200/500	CDR1 -B-511B---	510	F, G, J, K, M	BG, BP	100
CDR1 -B-3R0*---	3.0	B, C, D	BG, BP	200/500	CDR1 -B-561B---	560	F, G, J, K, M	BG, BP	100
CDR1 -B-3R3*---	3.3	B, C, D	BG, BP	200/500	CDR1 -B-621B---	620	F, G, J, K, M	BG, BP	100
CDR1 -B-3R6*---	3.6	B, C, D	BG, BP	200/500	CDR1 -B-681A---	680	F, G, J, K, M	BG, BP	50
CDR1 -B-3R9*---	3.9	B, C, D	BG, BP	200/500	CDR1 -B-751A---	750	F, G, J, K, M	BG, BP	50
CDR1 -B-4R3*---	4.3	B, C, D	BG, BP	200/500	CDR1 -B-821A---	820	F, G, J, K, M	BG, BP	50
CDR1 -B-4R7*---	4.7	B, C, D	BG, BP	200/500	CDR1 -B-911A---	910	F, G, J, K, M	BG, BP	50
CDR1 -B-5R1*---	5.1	B, C, D	BG, BP	200/500	CDR1 -B-102A---	1000	F, G, J, K, M	BG, BP	50
CDR1 -B-5R6*---	5.6	B, C, D	BG, BP	200/500	CDR1 -B-112A---	1100	F, G, J, K, M	BP	50
CDR1 -B-6R2*---	6.2	B, C, D	BG, BP	200/500	CDR1 -B-122A---	1200	F, G, J, K, M	BP	50
CDR1 -B-6R8*---	6.8	B, C, J, K, M	BG, BP	200/500	CDR1 -B-132A---	1300	F, G, J, K, M	BP	50
CDR1 -B-7R5*---	7.5	B, C, J, K, M	BG, BP	200/500	CDR1 -B-152A---	1500	F, G, J, K, M	BP	50
CDR1 -B-8R2*---	8.2	B, C, J, K, M	BG, BP	200/500	CDR1 -B-162A---	1600	F, G, J, K, M	BP	50
CDR1 -B-9R1*---	9.1	B, C, J, K, M	BG, BP	200/500	CDR1 -B-182A---	1800	F, G, J, K, M	BP	50
CDR1 -B-100*---	10	F, G, J, K, M	BG, BP	200/500	CDR1 -B-202A---	2000	F, G, J, K, M	BP	50
CDR1 -B-110*---	11	F, G, J, K, M	BG, BP	200/500	CDR1 -B-222A---	2200	F, G, J, K, M	BP	50
CDR1 -B-120*---	12	F, G, J, K, M	BG, BP	200/500	CDR1 -B-242A---	2400	F, G, J, K, M	BP	50
CDR1 -B-130*---	13	F, G, J, K, M	BG, BP	200/500	CDR1 -B-272A---	2700	F, G, J, K, M	BP	50
CDR1 -B-150*---	15	F, G, J, K, M	BG, BP	200/500	CDR1 -B-302A---	3000	F, G, J, K, M	BP	50
CDR1 -B-160*---	16	F, G, J, K, M	BG, BP	200/500	CDR1 -B-332A---	3300	F, G, J, K, M	BP	50
CDR1 -B-180*---	18	F, G, J, K, M	BG, BP	200/500	CDR1 -B-362A---	3600	F, G, J, K, M	BP	50
CDR1 -B-200*---	20	F, G, J, K, M	BG, BP	200/500	CDR1 -B-392A---	3900	F, G, J, K, M	BP	50
CDR1 -B-220*---	22	F, G, J, K, M	BG, BP	200/500	CDR1 -B-432A---	4300	F, G, J, K, M	BP	50
CDR1 -B-240*---	24	F, G, J, K, M	BG, BP	200/500	CDR1 -B-472A---	4700	F, G, J, K, M	BP	50
CDR1 -B-270*---	27	F, G, J, K, M	BG, BP	200/500	CDR1 -B-502A---	5000	F, G, J, K, M	BP	50
CDR1 -B-300*---	30	F, G, J, K, M	BG, BP	200/500	CDR1 -B-512A---	5100	F, G, J, K, M	BP	50
CDR1 -B-330*---	33	F, G, J, K, M	BG, BP	200/500					
CDR1 -B-360*---	36	F, G, J, K, M	BG, BP	200/500					
CDR1 -B-390*---	39	F, G, J, K, M	BG, BP	200/500					
CDR1 -B-430*---	43	F, G, J, K, M	BG, BP	200/500					
CDR1 -B-470*---	47	F, G, J, K, M	BG, BP	200/500					
CDR1 -B-510*---	51	F, G, J, K, M	BG, BP	200/500					

1/Complete type designation will include additional symbols to indicate style, voltage-temperature limits, capacitance tolerance (where applicable), termination finish ("M" or "N" for style CDR13, and "S", "U", "W", "Y" or "Z" for style CDR14) and failure rate level.

*C=200V; E=500V.

‡C=200V; D=300V.