

CSA Series – Edge-to-Edge Capacitors

This classic two-electrode design is the simplest and most widely used. The chip size, shape and electrical properties may be determined from the dielectric material data and the CSA Selection Chart. Compex is the leader in supplying the LC filter market with custom value parallel plate capacitors. We manufacture tight tolerance, custom filter capacitors to the required size, shape and value for minimization of post build tuning requirements. Thicknesses of up to 25+ mils are available, utilizing temperature-stable low-loss materials and special terminations to improve the all solder process.

DESCRIPTION

- Capacitance: 0.04 to 10,000 picofarads and beyond
- Square or rectangle, length or width .008" and up



CSA STANDARD CAPACITANCE TOLERANCE CODES

Class I Dielectrics: C-20 thru C-NR		Class II Dielectrics: C-80 thru C-400	
Tolerance	Code	Tolerance	Code
±50pF	D	-20% thru +80%	Z
±25pF	C	Guaranteed Min. Value	GMV
±10pF	B	± 20%	M
±.05pF	A	± 15%	L
±.01pF	P	± 10%	K
± 20%	M	± 5%	J
± 15%	L		
± 10%	K		
± 5%	J		
± 3%	H		
± 2%	G		

For H and G tolerances, part thickness has to be >10mils. Consult factory for H and G tolerance parts

CSA STANDARD DIMENSIONAL TOLERANCES

Material	L or W Dimension	Thickness	Tolerance
C-20 through C-140	< 20 mils	± 1.5 mils	± 15%
	≥ 20 mils		± 10%
C-200 and C-400	≤ 15 mils		± 2 mils
	>15 mils; ≤ 30 mils		± 3 mils
	> 30 mils	± 5 mils	

CSA ELECTRODE CONFIGURATION

Two electrodes



CSA CHIP DIMENSIONS



To determine rectangular chip dimensions, divide the total chip area by the required length or width to obtain the remaining dimension.

ORDERING INFORMATION – CSA SERIES – EDGE-TO-EDGE CAPACITORS

CSA Cap Style	200 Dielectric Type	10 x 10 Length x Width (mils)	x 6 Thickness (mils)	G Metallization	101 Capacitance (pF)	M Capacitance Tolerance
CSA	See Class I and Class II tables (page 29)	See CSA Chip Dimensions (at right)	See CSA Selection Chart (at right)	G = Gold S = Silver Custom	First two digits represent significant figures and the last, the number of zeros to follow. When required, the letter "R" is used as a decimal point and the succeeding digits represent significant figures only. e.g.: 101 = 100pF, 1R6 = 1.6pF	See CSA Standard Capacitance Tolerance Codes (Above)

Example shown: Compex Series CSA, dielectric type C-200, .010" x .010" x .005", gold, 2.7pF, ±20% tolerance
Please contact factory to request free samples.



CSA Series – Edge-to-Edge Capacitors

CSA SELECTION CHART

Note: Selection Chart is for guidance only. All Complex parts are built to specific customer requirements.

Capacitor Size in Mils

MATERIAL	10x10			12x12			15x15			20x20			25x25			30x30			35x35			40x40			50x50		
	MIN.	MAX.	Tolerance	MIN.	MAX.	Tolerance	MIN.	MAX.	Tolerance	MIN.	MAX.	Tolerance	MIN.	MAX.	Tolerance	MIN.	MAX.	Tolerance	MIN.	MAX.	Tolerance	MIN.	MAX.	Tolerance	MIN.	MAX.	Tolerance
C-20	0.01	0.03		0.01	0.04		0.02	0.06		0.04	0.10		0.06	0.15		0.09	0.23		0.13	0.31		0.16	0.28		0.25	0.44	
C-28	0.02	0.06		0.03	0.09		0.05	0.14		0.09	0.23		0.14	0.36		0.21	0.52		0.28	0.71		0.37	0.65		0.58	1	
C-30	0.02	0.07	P	0.03	0.1	P	0.05	0.15	A	0.1	0.26	A	0.16	0.4	A	0.23	0.57	B	0.31	0.77	B	0.4	0.71	B	0.63	1.1	B
C-35	0.02	0.07	P	0.03	0.1	P	0.05	0.16	A	0.1	0.26	A	0.16	0.41	A	0.23	0.59	B	0.31	0.79	B	0.41	0.72	B	0.64	1.1	B
C-37	0.03	0.09	P	0.04	0.13	A	0.07	0.2	A	0.13	0.33	A	0.21	0.52	A	0.3	0.75	B	0.4	1	B	0.53	0.9	B	0.83	1.4	C
C-40	0.05	0.14	A	0.07	0.2	A	0.1	0.32	A	0.21	0.53	B	0.32	0.82	B	0.47	1.2	C	0.64	1.6	C	0.84	1.4	C	1.3	2.3	C
C-50	0.09	0.29	A	0.14	0.42	A	0.21	0.65	B	0.41	1	B	0.66	1.6	C	0.94	2.4	C	1.3	3.2	D	1.7	3	C	2.6	4.6	D
C-55	0.12	0.37	A	0.17	0.52	A	0.26	0.82	B	0.53	1.4	C	0.82	2	C	1.2	3	C	1.6	4.1	D	2.1	3.7	D	3.2	5.8	D
C-58	0.22	0.67	B	0.31	0.9	B	0.49	1.5	C	0.98	2.5	C	1.5	3.8	D	2.2	5.5	D	3	7.6	K	3.9	6.9	K	6.1	11	K
C-NR	0.35	1.1	B	0.51	1.5	C	0.79	2.5	C	1.6	4	D	2.4	6.2	K	3.6	9	K	4.8	12	K	6.3	11	K	9.8	17	K
C-80	0.7	2.2	K	1.01	3.1	K	1.6	4.8	K	3.1	7.9	K	4.9	13	K	7.1	18	K	9.7	25	K	13	22	K	20	35	K
C-BD	1.8	5.8	K	2.6	8.3	K	4.3	13	K	8.4	21	K	13	33	K	18	48	K	25	65	K	33	60	K	53	90	K
C-BE	2.9	9	K	4.3	13	K	6.6	20	K	13	33	K	21	52	K	30	75	K	40	100	K	53	90	K	82	140	K
C-100	5.2	16	K	7.4	23	K	12	36	K	23	58	K	36	90	K	52	130	K	70	180	K	92	160	K	150	260	K
C-120	8.2	26	K	12	37	K	18	57	K	37	90	K	58	140	K	83	210	K	113	280	K	150	260	K	230	410	K
C-BN	10.2	31	K	15	46	K	23	71	K	46	120	K	72	180	K	104	260	K	140	360	K	180	320	K	290	510	K
C-140	25	80	M	37	110	M	58	180	M	120	290	M	180	450	M	260	650	M	360	900	M	460	820	M	720	1300	M
C-200	52	200	M	81	270	M	140	390	M	230	720	M	390	1100	M	590	1500	M	720	2200	M	990	2000	M	1600	2900	M
C-400	72	270	M	113	370	M	200	550	M	320	1000	M	550	1500	M	830	2100	M	1020	3100	M	1400	2700	M	2300	4100	M

