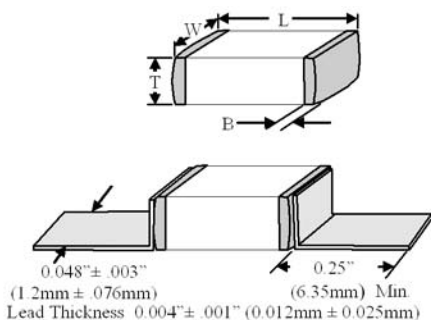


FUNCTIONAL APPLICATIONS

Impedance Matching
D.C. Blocking
Bypass
Coupling
Tuning and Feedback

BENEFITS

Oscillators
Timing Circuits
Filters
RF Power Amplifiers and Delay Lines
Stable TC, -55 to +125 °C Operating Range



Mechanical Specification

Product Code	Body Dimensions			Termination Code, Band Dimension and Material		
	Length (L)	Width (W)	Thickness (T)	Code	Band (B)	Material
C11	.055" + .015" - .010" (1.40 + .381 - .254)	.055" ± .015" (1.40 ± .381)	.050" Max (1.27) Max.	Z	.005" - .020" (0.130 - .050)	Ni Barrier, Tin Plate
				S		Ni Barrier, Au Flash
				P		AgPd Termination
				U		Ni Barrier, Solder Plate

Laser marking available in Horizontal and Vertical orientation. Codes L, V, D. The MS material system is available in Z and U terminations only. U termination is not available in the UL material system.

Capacitance Table

C11 High Q Capacitance Values															
CAP CODE	CAP (pF)	Cap Tol.	Rated WVDC	CAP CODE	CAP (pF)	Cap Tol.	Rated WVDC	CAP CODE	CAP (pF)	Cap Tol.	Rated WVDC	CAP CODE	CAP (pF)	Cap Tol.	Rated WVDC
0R1	0.1	A B C D	250V Code 9	1R5	1.5	A B C D	250V Code 9	5R6	5.6	A B C D	250V Code 9	300	30	F G J K M	250V* Code 9
0R2	0.2			1R6	1.6			6R2	6.2			330	33		
R25	0.25			1R7	1.7			6R8	6.8			360	36		
0R3	0.3			1R8	1.8			7R5	7.5			390	39		
R35	0.35			1R9	1.9			8R2	8.2			430	43		
0R4	0.4			2R0	2.0			9R1	9.1			470	47		
R45	0.45			2R1	2.1			100	10			510	51		
0R5	0.5			2R2	2.2			110	11			560	56		
0R6	0.6			2R4	2.4			120	12			620	62		
0R7	0.7			2R7	2.7			130	13			680	68		
0R8	0.8			3R0	3.0			150	15			750	75		
0R9	0.9			3R3	3.3			160	16			820	82		
1R0	1.0			3R6	3.6			180	18			910	91		
1R1	1.1			3R9	3.9			200	20			101	100		
1R2	1.2			4R3	4.3			220	22			121	120		
1R3	1.3			4R7	4.7			240	24			151	150		100V Code 1
1R4	1.4			5R1	5.1			270	27			181	180		50V Code 5
												221	220		

*AH, CF, and UL capacitors in the cap range from 33pF to 56pF are 200V rated, Code 6.

Cap values shown in **red** are available in MS only, in **blue** are available in AH, CF, and UL only.

**MS capacitors in the range from 62pF to 100pF are 150V rated, Code 8.

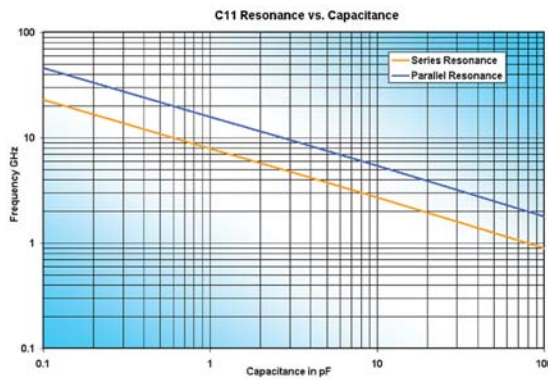
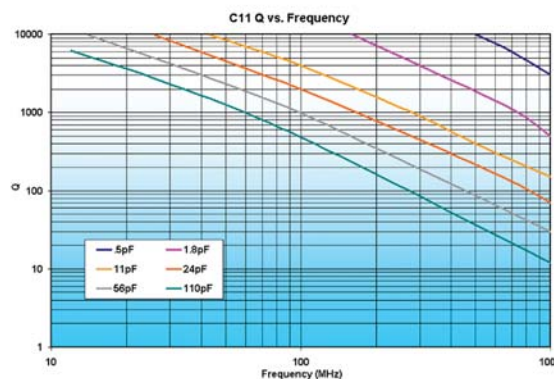
Electrical Specifications

Dielectric Material Code	Temperature Coefficient (ppm/°C Maximum)	Dissipation Factor (% @ 1MHz Maximum)	Dielectric Withstanding Voltage		Insulation Resistance (MΩ Minimum)		Aging	Piezoelectric Effects	Dielectric Absorption
			Voltage Rating (Volts)	DWV (Volts)	@ +25°C	@ +125°C			
AH	P90 ± 20	0.05	200	500	10 ⁶	10 ⁵	None	None	None
			250	625					
CF	0 ± 15	0.05	200	500	10 ⁶	10 ⁵			
			250	625					
UL	0 ± 30	0.05	200	500	10 ⁵	10 ⁴			
			250	625					
MS	0 ± 30	0.05	250, 200, 100, 50	625, 500, 250, 125	10 ⁵	10 ⁴			

Tolerance Codes

Code	Tolerance
A	± 0.05pF
B	± 0.10pF
C	± 0.25pF
D	± 0.50pF
F	± 1%
G	± 2%
J	± 5%
K	± 10%

Note: Dissipation Factor applies to values of 4.7pF or greater.



C11 ENGINEERING KIT

20 Pieces Each of 30 Values

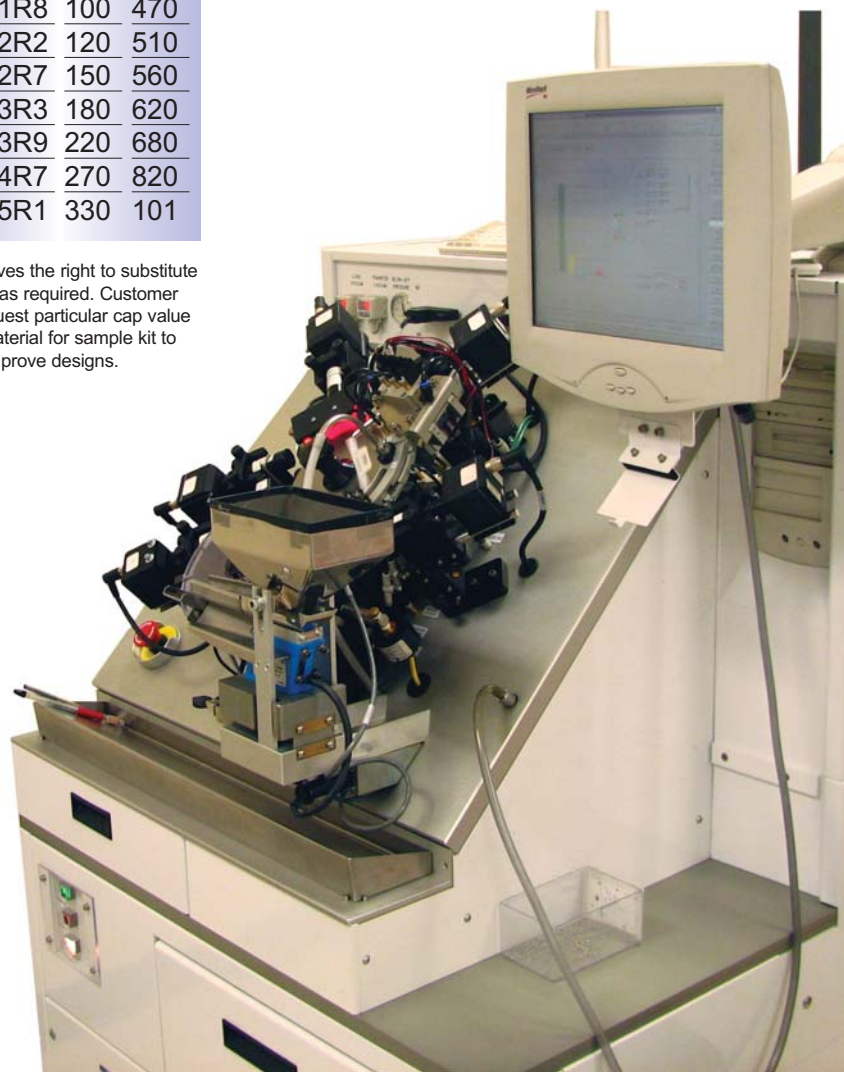
CODE	CAP
0R3	0.3pF
0R5	0.5pF
1R0	1.0pF
1R2	1.2pF
1R5	1.5pF
1R8	1.8pF
2R0	2.0pF
2R2	2.2pF
2R7	2.7pF
3R3	3.3pF
3R9	3.9pF
4R7	4.7pF
5R6	5.6pF
6R8	6.8pF
8R2	8.2pF
100	10pF
120	12pF
150	15pF
180	18pF
220	22pF
270	27pF
330	33pF
390	39pF
470	47pF
560	56pF
680	68pF
820	82pF
101	100pF

C08BLBB1X5UX 2400pF Block

C11 DESIGNER KIT

KIT C	KIT D	KIT E	KIT F
0R1	1R0	5R6	270
0R2	1R2	6R8	330
0R3	1R5	8R2	390
0R4	1R8	100	470
0R5	2R2	120	510
0R6	2R7	150	560
0R7	3R3	180	620
0R8	3R9	220	680
0R9	4R7	270	820
1R0	5R1	330	101

DLI reserves the right to substitute values as required. Customer may request particular cap value and material for sample kit to prove designs.



Dielectric Laboratories

Mouser Electronics

Authorized Distributor

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Dielectric Laboratories:

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[C11CF0R4B-9ZN-X1T](#) [C11CF0R5B-9ZN-X1T](#) [C11CF0R7B-9ZN-X1T](#) [C11CF3R9B-9ZN-X1T](#) [C11CF4R7B-9ZN-X1T](#)
[C11CF5R6B-9ZN-X1T](#) [C11CF6R8B-9ZN-X1T](#) [C11CF8R2B-9ZN-X1T](#) [C11CF9R1B-9ZN-X1T](#) [C11CF0R9B-9ZN-X1T](#)
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[C11CF2R7B-9ZN-X1T](#) [C11CF3R3B-9ZN-X1T](#) [C11CF270J-9ZN-X1T](#) [C11CF100J-9ZN-X1T](#) [C11CF110J-9ZN-X1T](#)
[C11CF330J-9ZN-X1T](#) [C11CF100F-9ZN-X1B](#) [C11CF150F-9UN-X1B](#) [C11CF180F-9UN-X1B](#) [C11CF330F-9ZN-X1B](#)
[C11CF390F-6UN-X1B](#) [C11CF430F-6UN-X1B](#) [C11CF620F-6UN-X1B](#) [C11CF680F-6UN-X1B](#)

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