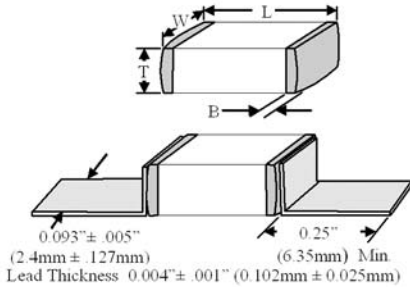## FUNCTIONAL APPLICATIONS
DC Blocking
Amplifier Matching Networks
VCO Frequency Stabilization
Filtering, Diplexers, and Antenna Matching
High RF Power Circuits

BENEFITS
Resonant Free Performance
High Q
SMD Compatibility
-55 to +125 °C Operating Range

Mechanical Specification

0.093"± .005"
(2.4mm ± .127mm)
Lead Thickness 0.004"± .001" (0.102mm ± 0.025mm)
0.25"
(6.35mm) Min.

Product Code	Body Dimensions			Termination Code, Band Dimension and Material		
	Length (L)	Width (W)	Thickness (T)	Code	Band (B)	Material
C17	.110" + .020" - .010" (2.79 + 0.51 - 0.25)	.110" ± .015" (2.79 ± .381)	.100" (2.54) Max.	Z	.015" ± .010" (.381 ± .254)	Ni Barrier, Tin Plate
				S		Ni Barrier, Au Flash
				P		AgPd Termination
				U		Ni Barrier, Solder Plate

Laser markings 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

C17 High Q Capacitance Values

CAP CODE	CAP (pF)	Tol.	Rated WVDC	CAP CODE	CAP (pF)	Tol.	Rated WVDC	CAP CODE	CAP (pF)	Tol.	Rated WVDC	CAP CODE	CAP (pF)	Tol.	Rated WVDC
0R1	0.1			2R0	2.0			130	13			101	100		
0R2	0.2			2R1	2.1			150	15			111	110		
R25	0.25			2R2	2.2			160	16			121	120		1000V* Code 7
0R3	0.3			2R4	2.4			180	18			151	150		
R35	0.35			2R7	2.7			200	20			181	180		
0R4	0.4			3R0	3.0			220	22			221	220		
R45	0.45			3R3	3.3			240	24			271	270		
0R5	0.5			3R6	3.6	A B C D		270	27	F G J K M		331	330	F G J K M	
0R6	0.6			3R9	3.9			300	30			391	390		500V** Code 4
0R7	0.7	A B C D	1000V Code 7	4R3	4.3		1000V Code 7	330	33		1000V Code 7	471	470		
0R8	0.8			4R7	4.7			360	36			511	510		
0R9	0.9			5R1	5.1			390	39			561	560		
1R0	1.0			5R6	5.6			430	43			621	620		
1R2	1.2			6R2	6.2			470	47			681	680		
1R3	1.3			6R8	6.8			510	51			821	820		250V*** Code 9
1R4	1.4			7R5	7.5			560	56			911	910		
1R5	1.5			8R2	8.2			620	62			102	1000		
1R6	1.6			9R1	9.1			680	68			122	1200		
1R7	1.7			100	10			750	75			152	1500		100V Code 1
1R8	1.8			110	11	FGJKM		820	82			182	1800		
1R9	1.9			120	12			910	91			222	2200		

All cap values shown in **red** are available in MS only, in **blue** are available in CF, AH, and UL only.
* All CF, AH, and UL capacitors in the cap range from 110pF to 220pF are 500V rated, Code 4.
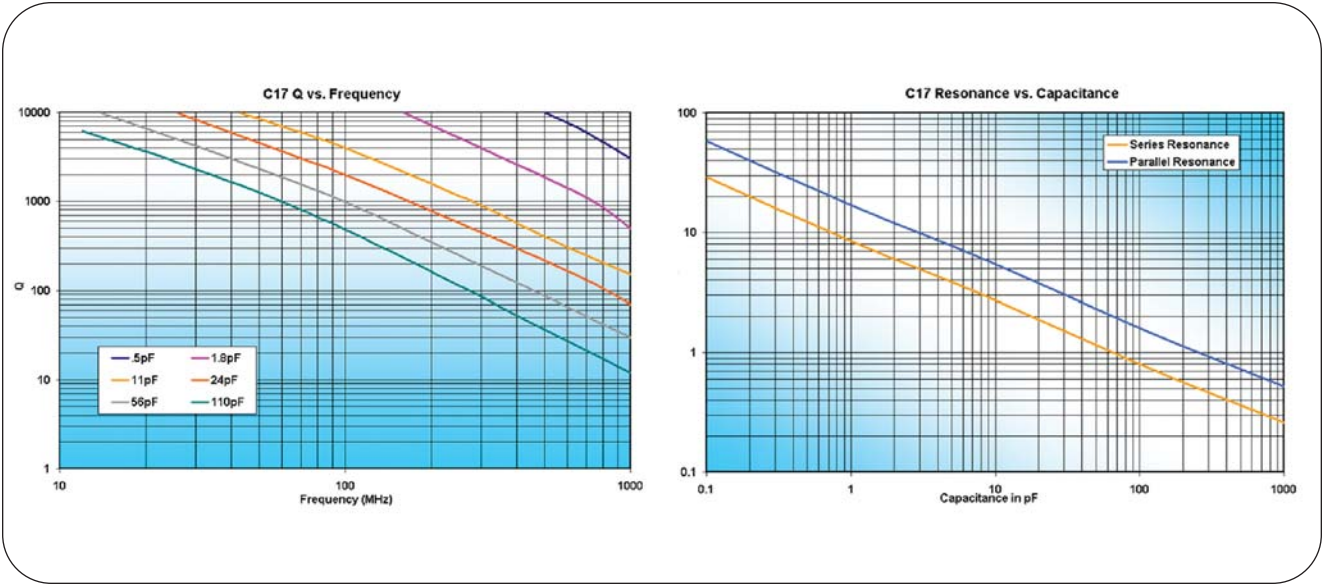** All CF, AH, and UL capacitors in the cap range from 270pF to 680pF are 200V rated, Code 6.
*** All CF, AH, and UL capacitors in the cap range from 820pF to 1000pF are 50V rated, Code 6.

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	1000 500 250	2500 1250 625	10^6	10^5	None	None	None
CF	0 ± 15	0.05							
UL	0 ± 30	0.05			10^5	10^4			
MS	0 ± 30	0.05	1000, 500, 250 ,100	2500, 1250 625,250	10^5	10^4			

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

C17 Q vs. Frequency

C17 Resonance vs. Capacitance
— Series Resonance
— Parallel Resonance

C17 ENGINEERING KIT

CODE	CAP
0R3	0.3pF
0R5	0.5pF
0R7	0.7pF
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
151	150pF
221	220pF
331	330pF
471	470pF
681	680pF
102	1000pF
C08BLBB1X5UX	2400pF Block

C17 DESIGNER KIT

KIT C	KIT D	KIT E	KIT F
0R1	1R0	5R6	390
0R2	1R2	6R8	470
0R3	1R5	8R2	560
0R4	1R8	100	620
0R5	2R2	120	820
0R6	2R7	150	101
0R7	3R3	180	221
0R8	3R9	220	471
0R9	4R7	270	681
1R0	5R1	330	102

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

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