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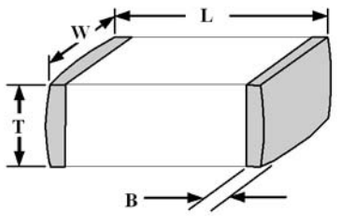
C06 0603

FUNCTIONAL APPLICATIONS

DC Blocking
Amplifier Matching Networks
VCO Frequency Stabilization
Filtering and Diplexers
Antenna Matching

BENEFITS

Stable TC
EIA 0603 Case Size
SMD Compatibility
-55 to +125 ^{0}C Operating Range



Mechanical Specifications

Product Code	Body Dimensions			Termination Code, Band Dimension and Material		
	Length (L)	Width (W)	Thickness (T)	Code	Band (B)	Material
C06	.063" ± .009" (1.6 ± 0.23)	.031" ± .008" (0.80 ± 0.20)	.031"Max (0.80) Max.	Z	.010" + .010" - .005" (.254 + .254 - .127)	Ni Barrier, Tin Plate
				S		Ni Barrier, Au Flash
				P		AgPd Termination
				U		Ni Barrier, Solder Plate

Laser Markings available in Horizontal orientation only, Code L.
The MS material system is available in Z termination only.
U termination is not available in the UL material system.

Capacitance Table

C06 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	0R9	0.9	A B C D	250V Code 9	3R9	3.9	A B C D	250V Code 9	240	24	F G J K	*250V** Code 9
R15	0.15			R95	0.95			4R3	4.3			270	27		
0R2	0.2			1R0	1.0			4R7	4.7			300	30		
R25	0.25			1R1	1.1			5R1	5.1			330	33		
0R3	0.3			1R2	1.2			5R6	5.6			360	36		
R35	0.35			1R3	1.3			6R2	6.2			390	39		
0R4	0.4			1R5	1.5			6R8	6.8			430	43		
R45	0.45			1R6	1.6			7R5	7.5			470	47		
0R5	0.5			1R8	1.8			8R2	8.2			510	51		*100V* Code 1
R55	0.55			2R0	2.0			9R1	9.1			560	56		
0R6	0.6			2R2	2.2			100	10	F G J K		620	62		
R65	0.65			2R4	2.4			120	12			680	68		
0R7	0.7			2R7	2.7			150	15			750	75		*50V* Code 5
R75	0.75			3R0	3.0			180	18			820	82		
0R8	0.8			3R3	3.3			200	20			101	100		
R85	0.85			3R6	3.6			220	22						

*MS capacitors in the cap range 36pF to 47pF are 150V rated, Code 8.
Cap values in **red** are available in MS only, in **blue** available in UL, CF, and AH only.

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			
CF	0 ± 15	0.05	250	625	10^{6}	10^{5}	None	None	None
UL	0 ± 30	0.05	250	625	10^{5}	10^{4}			
MS	0 ± 30	0.05	250 100 50	625 250 125	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%

Dielectric Laboratories

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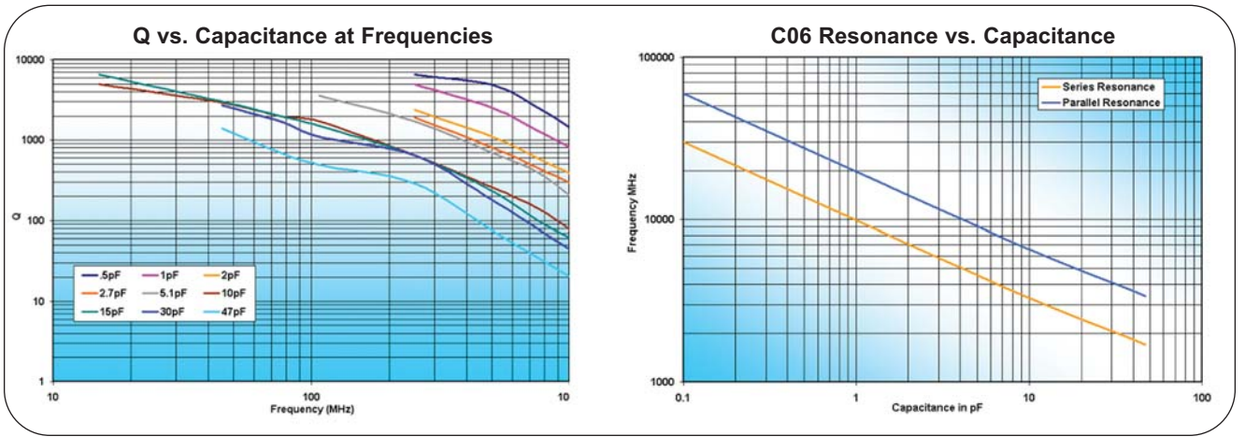


C06 ENGINEERING KIT

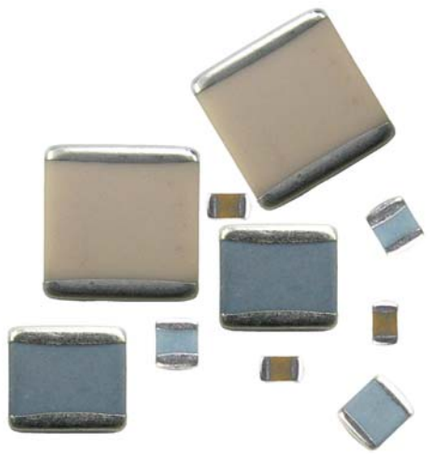
20 Pieces Each of 23 Values

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
100	10pF
120	12pF
150	15pF
180	18pF
220	22pF
270	27pF
330	33pF
470	47pF
560	56pF
680	68pF
820	82pF
101	100pF
C08BLBB1X5UX	2400pF Block

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

C06 DESIGNER KIT

KIT C	KIT D	KIT E
0R1	1R2	6R8
0R2	1R5	8R2
0R3	1R8	9R1
0R4	2R2	100
0R5	2R7	120
0R6	3R3	150
0R7	3R9	220
0R8	4R7	270
0R9	5R1	360
1R0	5R6	470



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C06CF240J-9UN-X1T C06CF0R6B-9UN-X1T C06CF300J-9UN-X1T C06CF180J-9UN-X1T C06CF5R6B-9UN-X1T C06CFR55B-9UN-X1T C06CF3R6B-9UN-X1T C06CF0R4B-9UN-X1T C06CF220J-9UN-X1T C06CF1R5B-9UN-X1T C06CF0R1B-9UN-X1T C06CFR85B-9UN-X1T C06CF0R5B-9UN-X1T C06CF5R1B-9UN-X1T C06CF100J-9UN-X1T C06CF270J-9UN-X1T C06CF3R3B-9UN-X1T C06CF330J-9UN-X1T C06CF0R7B-9UN-X1T C06CF0R3B-9UN-X1T C06CF8R2B-9UN-X1T C06CFR25B-9UN-X1T C06CF2R2B-9UN-X1T C06CF1R3B-9UN-X1T C06CF360J-9UN-X1T C06CFR65B-9UN-X1T C06CF2R0B-9UN-X1T C06CF2R4B-9UN-X1T C06CF120J-9UN-X1T C06CFR75B-9UN-X1T C06CFR15B-9UN-X1T C06CF1R1B-9UN-X1T C06CF470J-9UN-X1T C06CF390J-9UN-X1T C06CF200J-9UN-X1T C06CF0R8B-9UN-X1T C06CF4R3B-9UN-X1T C06CF6R2B-9UN-X1T C06CF0R9B-9UN-X1T C06CF430J-9UN-X1T C06CFR95B-9UN-X1T C06CF3R9B-9UN-X1T C06CF4R7B-9UN-X1T C06CF9R1B-9UN-X1T C06CF1R2B-9UN-X1T C06CF2R7B-9UN-X1T C06CFR35B-9UN-X1T C06CF7R5B-9UN-X1T C06CF6R8B-9UN-X1T C06CF1R8B-9UN-X1T C06CFR45B-9UN-X1T C06CF1R0B-9UN-X1T C06CF0R2B-9UN-X1T C06CF150J-9UN-X1T C06CF3R0B-9UN-X1T C06CF0R2B-9ZN-X1T C06CF0R3B-9ZN-X1T C06CF0R4B-9ZN-X1T C06CF0R5B-9ZN-X1T C06CF0R6B-9ZN-X1T C06CF0R7B-9ZN-X1T C06CF0R8B-9ZN-X1T C06CF3R9B-9ZN-X1T C06CF4R7B-9ZN-X1T C06CF5R6B-9ZN-X1T C06CF6R8B-9ZN-X1T C06CF9R1B-9ZN-X1T C06CF0R9B-9ZN-X1T C06CF1R0B-9ZN-X1T C06CF1R2B-9ZN-X1T C06CF1R5B-9ZN-X1T C06CF2R0B-9ZN-X1T C06CF2R7B-9ZN-X1T C06CF3R3B-9ZN-X1T C06CF120J-9ZN-X1T C06CF300J-9ZN-X1T C06CF330J-9ZN-X1T C06CF1R1D-9UN-X1T C06CF300K-9ZN-X1T C06CF120K-9UN-X1T C06CF100K-9UN-X1T C06CF390K-9UN-X1T C06CF5R6D-9UN-X1T C06CF0R2D-9ZN-X1T C06CF0R8D-9ZN-X1T C06CF1R0D-9ZN-X1T C06CF6R8D-9ZN-X1T C06CF200K-9UN-X1T C06CF1R0D-9UN-X1T C06CFR55D-9UN-X1T C06CF0R5D-9ZN-X1T C06CF300K-9UN-X1T C06CF0R3D-9UN-X1T C06CF0R6D-9UN-X1T C06CFR25D-9UN-X1T C06CF3R0D-9UN-X1T C06CF330K-9ZN-X1T C06CF3R6D-9UN-X1T C06CFR45D-9UN-X1T C06CF9R1D-9UN-X1T