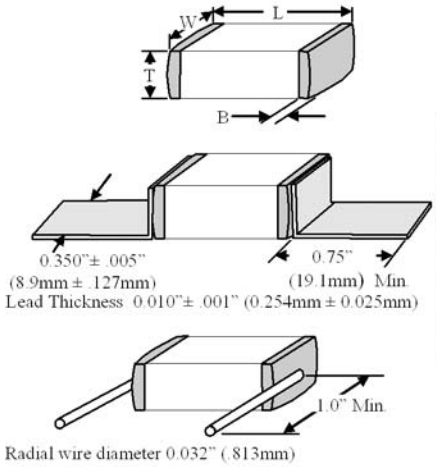
FUNCTIONAL APPLICATIONS

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

BENEFITS

Power Handling, High voltage
High Q and Low ESR
-55 to +125 °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
C40	.380" + .015" - .010" (9.65 + .381 - .254)	.380" ± .010" (9.65 ± .254)	.130" (3.30) Max.	Z	.020" (.508) Min. .030" (.762) Max.	Ni Barrier, Tin Plate
				S		Ni Barrier, Au Flash
				P		AgPd Termination
				U		Ni Barrier, Solder Plate

Laser marking available in Horizontal orientation only. Code L.

Capacitance Table

C40 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
1R0	1.0	A B C D	7200V Code H	100	10	F G J K M	7200V Code H	121	120	F G J K M	3600V Code D	821	820	F G J K M	1000V Code 7
1R2	1.2			120	12			151	150			102	1000		
1R5	1.5			150	15			181	180			122	1200		
1R8	1.8			180	18			221	220			152	1500		
2R2	2.2			220	22			271	270			182	1800		
2R7	2.7			270	27			331	330			222	2200		
3R3	3.3			330	33			391	390			272	2700		500V Code 4
3R9	3.9			390	39			471	470		2500V Code B	332	3300		
4R7	4.7			470	47			561	560			392	3900		
5R6	5.6			560	56			681	680			472	4700		
6R8	6.8			680	68							512	5100		
8R2	8.2			820	82										
				101	100										

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	7200	8700	10^6	10^5	None	None	None
			3600	4400					
			2500	3750					
CF	0 ± 15	0.05	1000	1500					
			500	1250					

Tolerance Codes

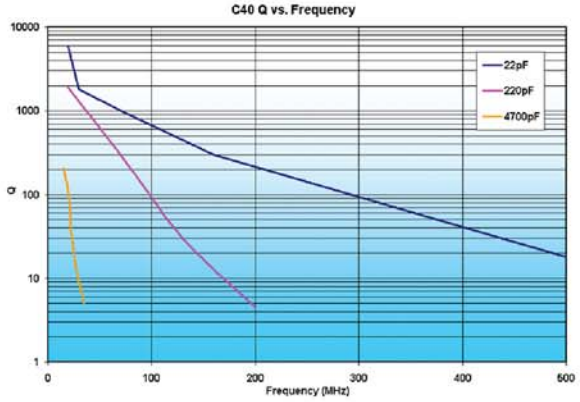
Code	Tolerance
A	± 0.05pF
B	± 0.10pF
C	± 0.25pF
F	± 1%
G	± 2%
J	± 5%
K	± 10%
M	± 20%

Note: Dissipation Factor applies to values > 4.7pF.
Parts rated >1000V are 100% IR tested @1000V

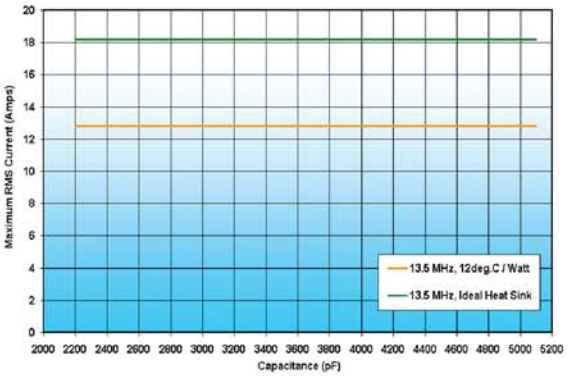
Dielectric Laboratories

DLI DIELECTRIC LABORATORIES A DOVER COMPANY

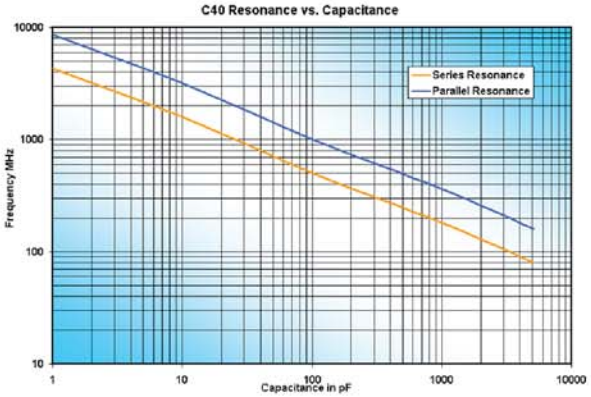
C40 Q vs. Frequency



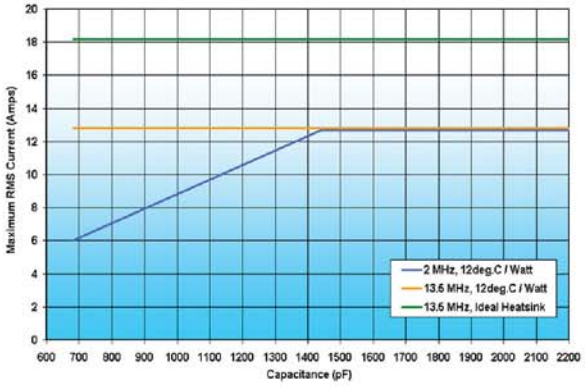
C40 Max Current vs Capacitance Value
500VDC Rated Capacitors



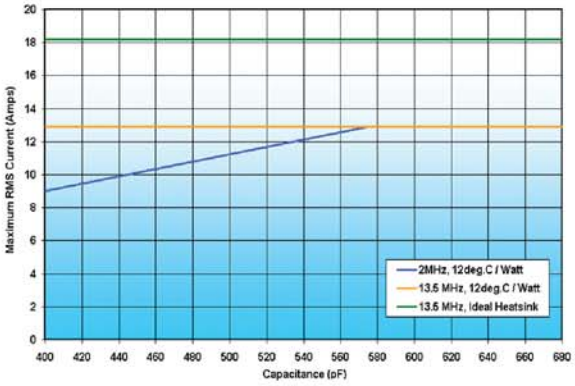
C40 Resonance vs. Capacitance



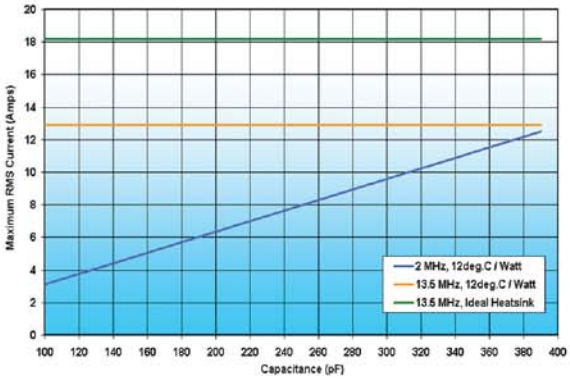
C40 Max Current vs Capacitance Value
1000VDC Rated Capacitors



C40 Max Current vs Capacitance Value
2500VDC Rated Capacitors



C40 Max Current vs Capacitance Value
3600VDC Rated Capacitors



C40 Max Current vs Capacitance Value
7200VDC Rated Capacitors