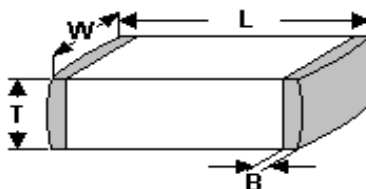


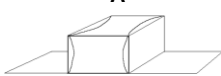
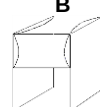
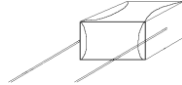
UL Series High Q Ultra-Low ESR Multilayer Capacitors



Dielectric Information				
Dielectric Code	Temperature Coefficient -55°C to +125°C (ppm/°C) Max	DF @ 1 MHz (% Max)	Insulation Resistance (MΩ)	
			@+25°C	@+125°C
UL	0 ± 30	0.05	>10 ⁵	>10 ⁴



Case Size Definitions							
Available Case Sizes	Available Terminations	Width Range (W)	Length Range (L)	Thickness (Max) (T)	Gap Min. (Between Bands)	Band Min (Plated) (B)	Band Max (Plated) (B)
04	S	0.020 ± 0.006	0.040 ± 0.008	0.028	0.006	0.003	0.019
06	U S Z	0.031 ± 0.011	0.063 ± 0.015	0.037	0.012	0.006	0.03
07	S Z	0.112 ± 0.026	0.072 ± 0.022	0.12	0.016	0.006	0.054
08	U S Z	0.051 ± 0.013	0.081 ± 0.020	0.061	0.008	0.012	0.0468
11	U S Z	0.056 ± 0.020	0.059 ± 0.018	0.06	0.012	0.006	0.033
17	U S Z	0.112 ± 0.026	0.116 ± 0.028	0.12	0.032	0.006	0.054
Dimensions listed include the termination							
All dimensions are in inches							

Case Size Definitions (Leaded Parts)									
Leaded Part Case Size	Lead Codes	Body Length	Body Width	Body Thickness	Max Lead Coverage (fillet)	Lead Length (Min.)	Lead Width	Lead Thickness	Offset Max
11 ribbon	A, B	.064 ± .024	.057 ± .021	0.060 max	50% max	0.2	.041 ± .009	.005 ± .002	--
17 ribbon	C	.137 ± .029	.112 ± .026	0.120 max			.086 ± .014	.004 ± .002	.030max
	A, B						--		
17 wire	E, F						.019 diameter	--	--
Lead Code Definitions	A		B		C		E		F
									
Body dimensions include termination, lead and ceramic. All dimensions are in inches									

NOTE: Please contact a sales representative for Laser Marking and Packaging availability.

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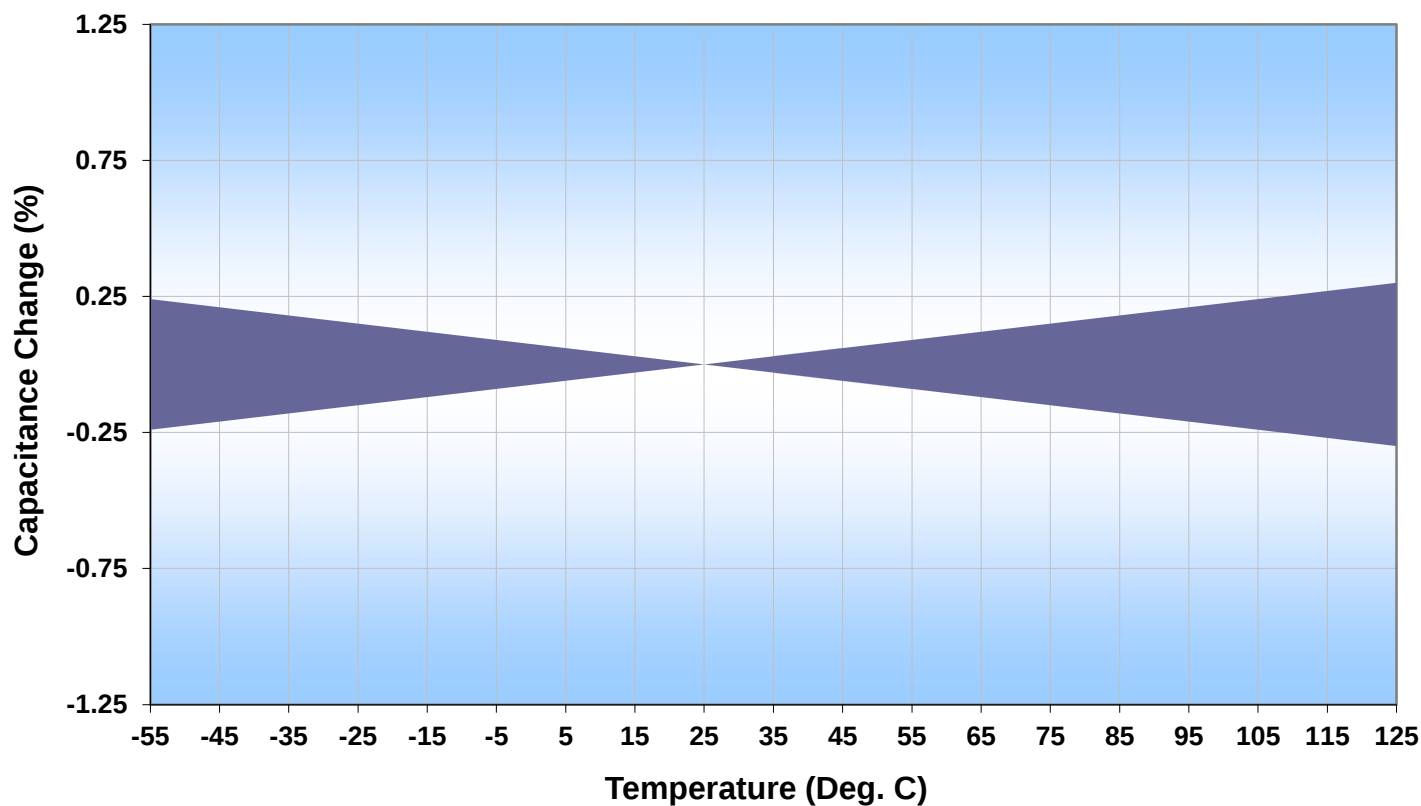
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UL Series Multilayer Capacitors

Capacitance Range and Voltage Rating Table								
Min Max	Cap Code	Cap (pF)	Case Size Code (EIA)					
			04 (0402)	06 (0603)	07 (0711)	08 (0805)	11 (0505)	17 (1111)
	0R1	0.1	Code 6 200 V	Code 9 250 V	Code 4 500 V	Code 9 250 V	Code 9 250 V	Code 7 1000 V
	100	10						
	110	11						
	330	33						
	360	36						
	470	47						
	510	51			Code 9 250 V	Code 8 150 V	Code 6 200 V	
	101	100						
	121	120						Code 4 500 V
	181	180						
	221	220						Code 6 200 V
	471	470						
	511	510						Code 1 100 V
	621	620						
	681	680						Code 5 50 V
	102	1000						

Temperature Coefficient of Capacitance
UL Material



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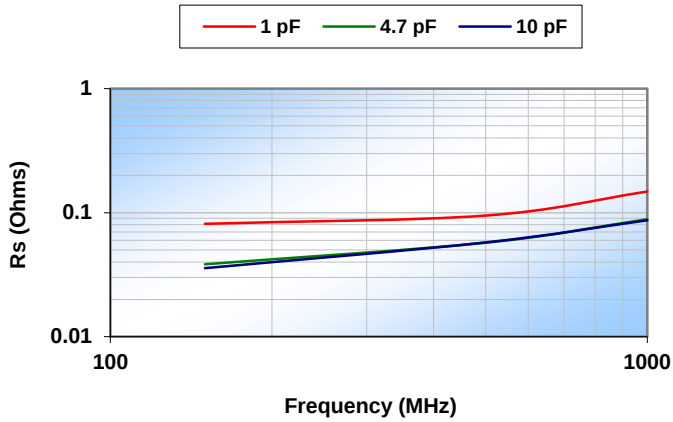
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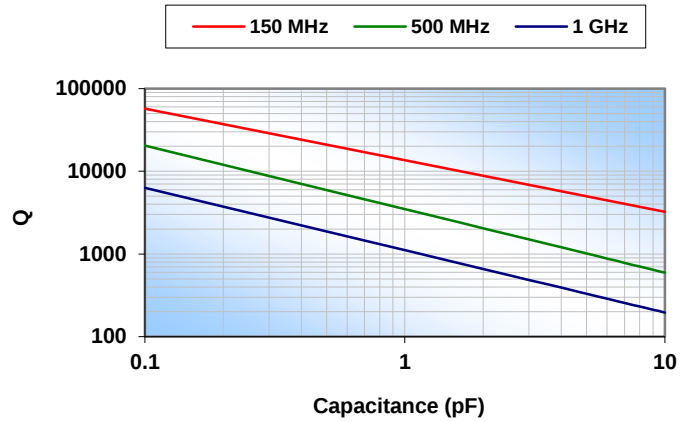
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UL Series Multilayer Capacitors

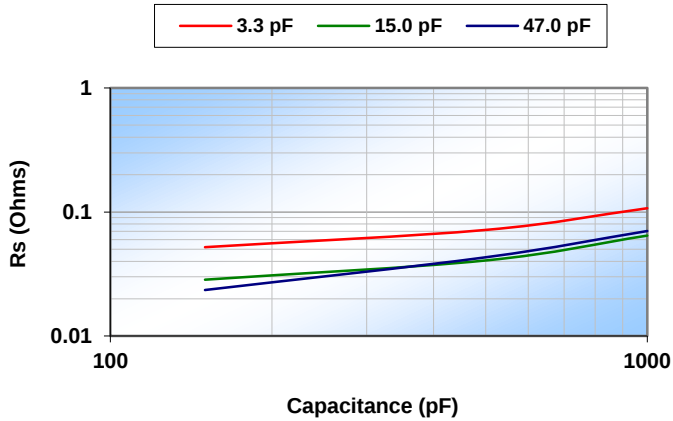
ESR vs Frequency
DLI C04 UL Series



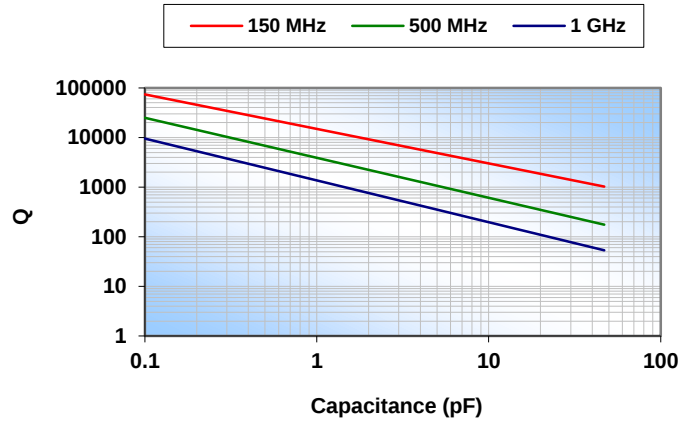
Q vs Capacitance
DLI C04 UL Series



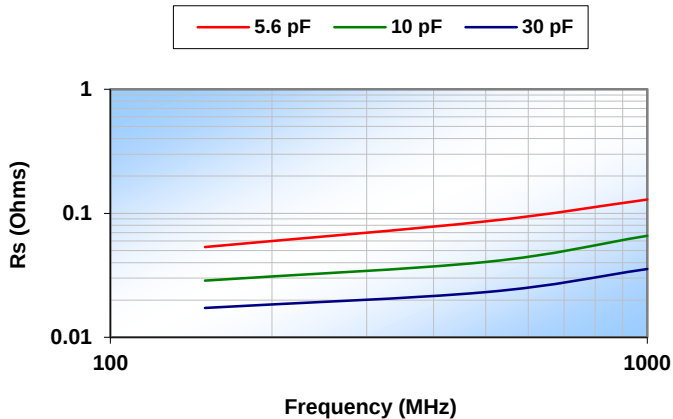
ESR vs Frequency
DLI C06 UL Series



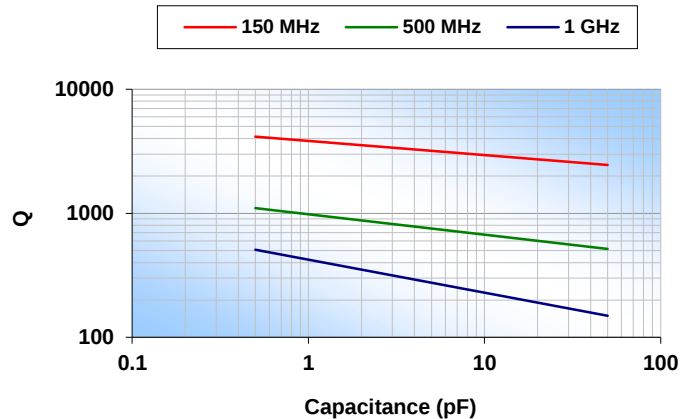
Q vs Capacitance
DLI C06 UL Series



ESR vs Frequency
DLI C07 UL Series



Q vs Capacitance
DLI C07 UL Series



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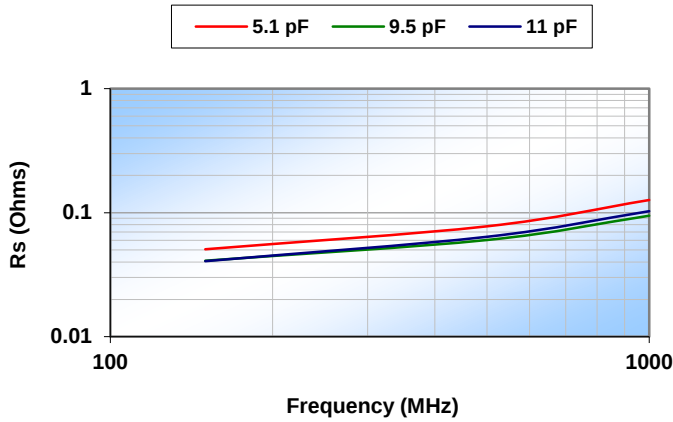
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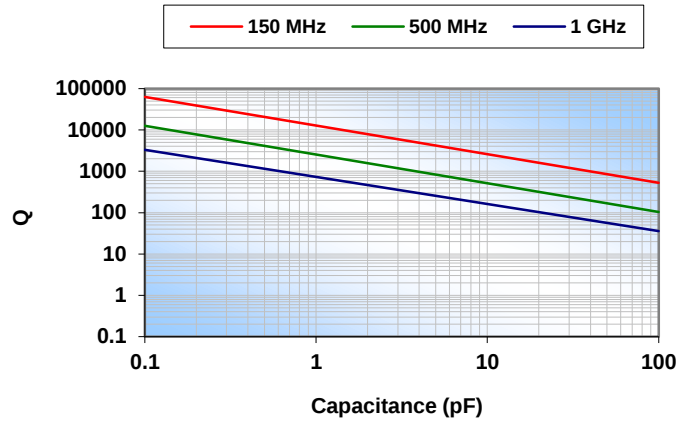
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UL Series Multilayer Capacitors

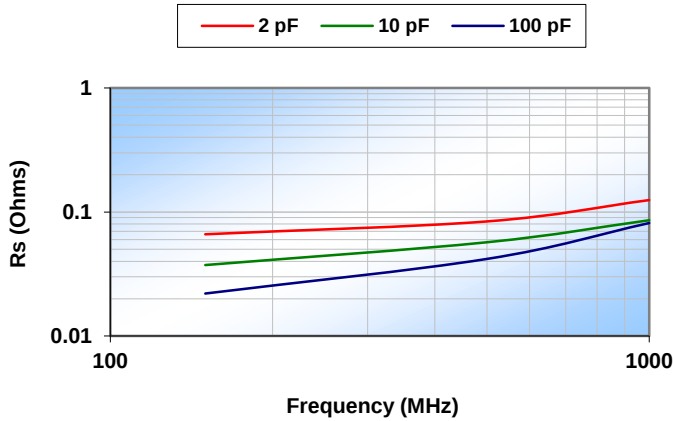
ESR vs Frequency
DLI C08 UL Series



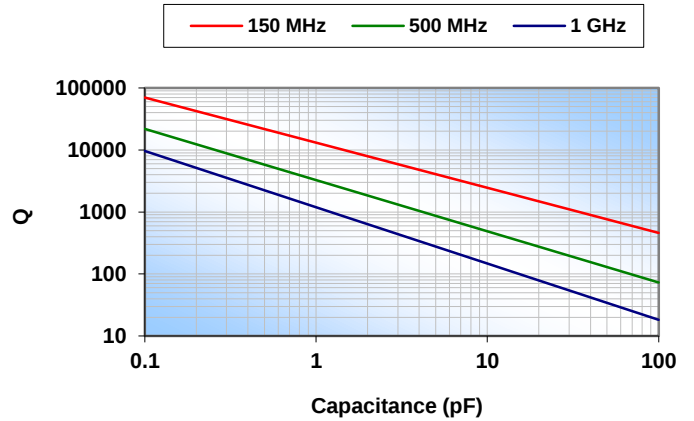
Q vs Capacitance
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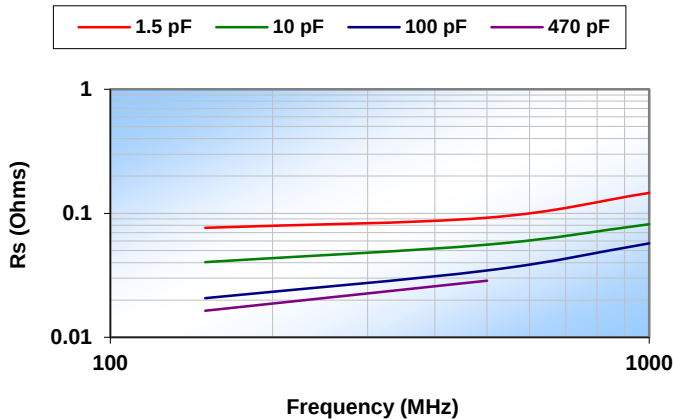
ESR vs Frequency
DLI C11 UL Series



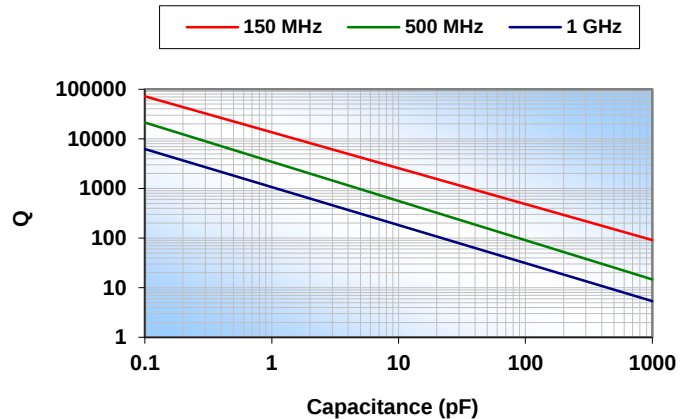
Q vs Capacitance
DLI C11 UL Series



ESR vs Frequency
DLI C17 UL Series

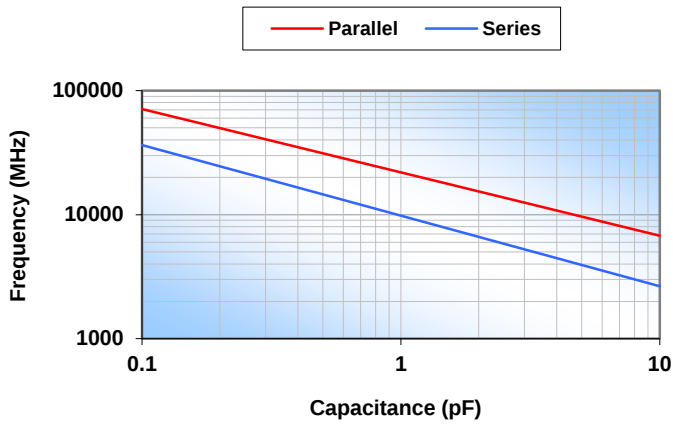


Q vs Capacitance
DLI C17 UL Series

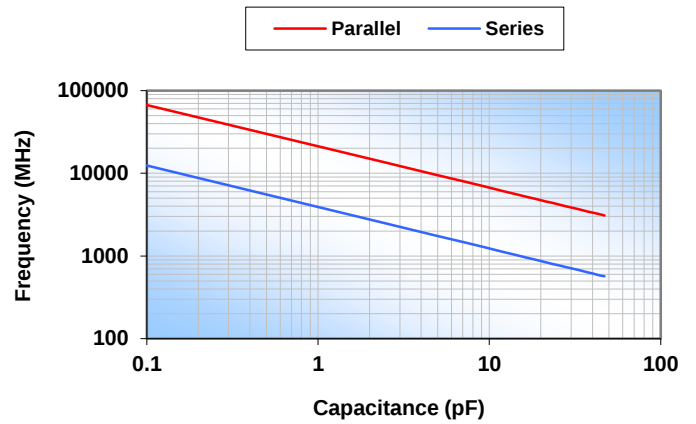


UL Series Multilayer Capacitors

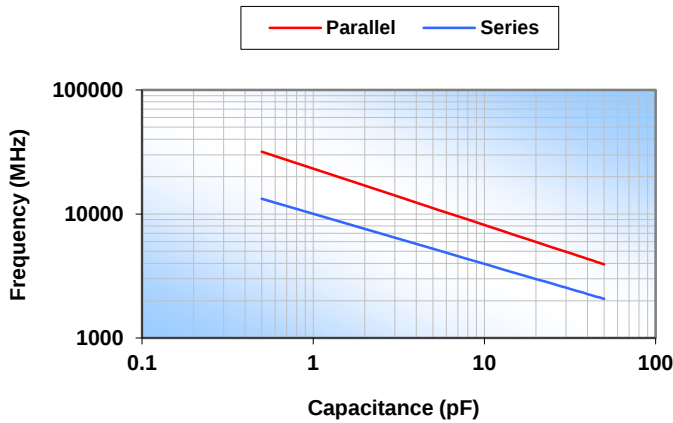
Resonant Frequency vs Capacitance
DLI C04 UL Series



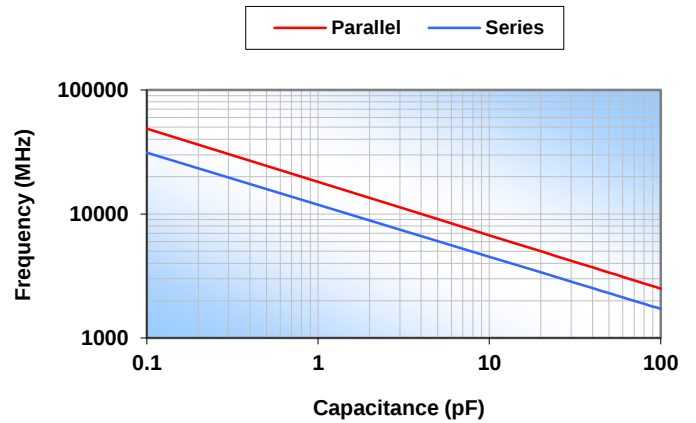
Resonant Frequency vs Capacitance
DLI C06 UL Series



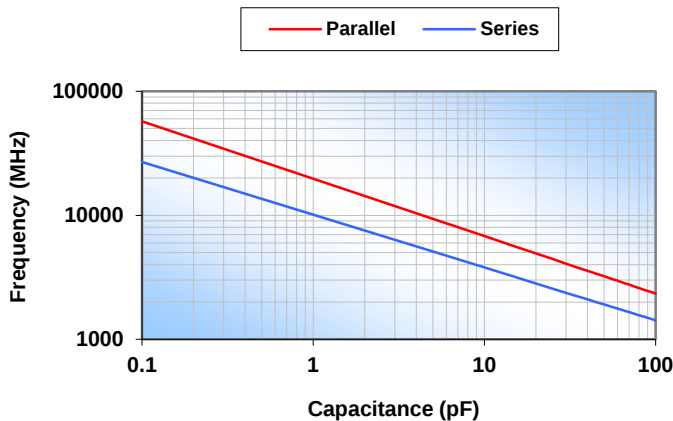
Resonant Frequency vs Capacitance
DLI C07 UL series



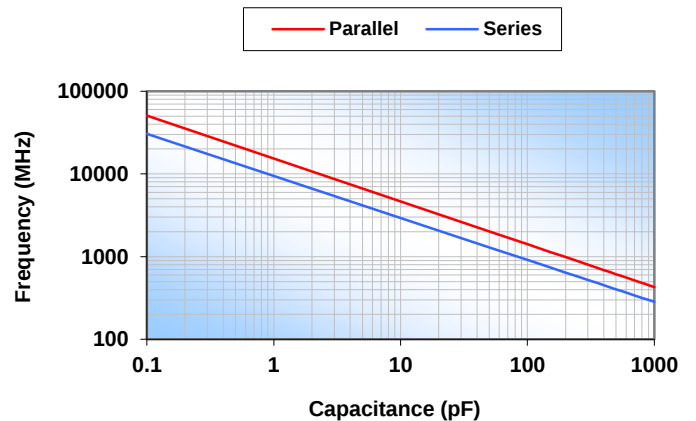
Resonant Frequency vs Capacitance
DLI C08 UL Series



Resonant Frequency vs Capacitance
DLI C11 UL Series



Resonant Frequency vs Capacitance
DLI C17 UL Series



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Multi-Layer – Standard P/N System

C	17	CF	620	J	-	7	U	N	-	X	0	T
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Multi-Layer Capacitor	Case size	Material System	Capacitance Value	Tolerance	Voltage Code	Termination Code	Leading Code	Test Level Code	Laser Marking Code	Packaging
-----------------------	-----------	-----------------	-------------------	-----------	--------------	------------------	--------------	-----------------	--------------------	-----------

CASE SIZE	
Case	Dimensions
04	0.040" x 0.020"
06	0.060" x 0.030"
08	0.080" x 0.050"
11	0.055" x 0.055"
17	0.110" x 0.110"
18	0.110" x 0.110"
22	0.220" x 0.245"
40	0.380" x 0.380"

MATERIAL	
Material	Characteristics
AH	P90
CF	NPO High-Q
MS	NPO High-Q
UL	Ultra Low ESR
BL	DC Blocking

VOLTAGE	
Code	Voltage
5	50V
1	100V
8	150V
6	200V
9	250V
3	300V
4	500V
7	1000V
A	1500V
G	2000V
B	2500V
D	3600V
F	5000V
H	7200V
S	SPECIAL

TOLERANCE	
Code	Value
A	+/- 0.05pF
B	+/- 0.1pF
C	+/- 0.25pF
D	+/- 0.5pF
F	+/- 1%
G	+/- 2%
J	+/- 5%
K	+/- 10%
M	+/- 20%
X	GMV
S	SPECIAL

TERMINATION	
Code	Termination System
T	Ag Termination, Ni Barrier Layer, Heavy SnPb Plated Solder
U	Ag Termination, Ni Barrier Layer, SnPb Plated Solder
S	Ag Termination, Ni Barrier Layer, Gold Flash
Z	Ag Termination, Ni Barrier Layer, Sn Plated Solder
E	Ag Termination, Enhanced Ni Barrier Layer, Sn Plated Solder
P	AgPd Termination
M	Polymer Termination, Cu Barrier Layer, Sn Plated Solder
W	Ag Termination, Cu Barrier Layer, Sn Plated Solder
V	Ag Termination, Cu Barrier Layer, SnPb Plated Solder
R	Ag Termination, Cu Barrier Layer, Heavy SnPb Plated Solder

CAPACITANCE	
1 st two digits	Significant figures in capacitance
3 rd digit	Additional number of zeros
R	Represents a decimal point
Examples: 620 = 62pF 152 = 1500pF	

LEADING	
Code	Lead Type
A	Axial Ribbon
B	Radial Ribbon
C	Center Ribbon
D	Specialty Customer Defined
E	Axial Wire
F	Radial Wire
N	NONE
NOTE: Consult factory for RoHS compliant leaded devices	

TEST LEVEL	
Code	Testing
X	Standard
Y	Reduced Visual
A	MIL-PRF-55681 Group A
C	MIL-PRF-55681 Group C
D	Customer Specified

LASER MARK	
Code	Laser Marking
0	No Marking
1	Single-side marked
2	Double-side marked
3	Large single-side mark
4	Large double-side mark
5	Vertical Edge marked
9	Customer Specified

PACKAGING	
Code	Packaging
T	Tape & Reel – Horizontal
V	Tape & Reel – Vertical
W	Waffle Pack
B	Bulk
P	Plastic Box
R	Tube (Rail)
S	Customer Specified

Note: All fields are required. Any specials, please consult factory.

Mouser Electronics

Authorized Distributor

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<u>C06UL0R8B-9ZN-X1T</u>	<u>C06UL300J-9ZN-X1T</u>	<u>C06UL330J-9ZN-X1T</u>	<u>C06UL2R7B-9ZN-X1T</u>	<u>C06UL5R6B-9ZN-X1T</u>
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