

MLC - UL Series: Ultra Low ESR Ceramic Capacitors



Description

- Ceramic Capacitors • SMD Compatibility • Stable TC NP0
- Low ESR, High Q • Capacitance range 0.2 - 2200 pF
- Operating Range -55° to +125°C • High Voltage
- Low Noise • EIA 0603 & 0805 Case Size

Functional Applications

- DC Blocking • Bypass • Coupling • Tuning & Feedback
- Amplifier Matching Networks • VCO Frequency Stabilization
- Filtering, Diplexers & Antenna Matching
- High RF Power Circuits • Oscillators • Timing Circuits
- Filters • Broadcast Power Amps
- RF Power Amplifiers & Delay Lines

Dielectric Characteristics

Dielectric Material Code	UL
Temperature Coefficient (ppm/°C)	0 ± 30
Dissipation Factor (% @ 1MHz Maximum)	0.05
Dielectric Withstanding Voltage	Voltage Rating (Volts) DWV (Volts)
	Refer to table 250% of rated
Insulation Resistance (MΩ Minimum)	@ +25°C @ +125°C
	** **
Aging	None
Piezoelectric Effects	None
Dielectric Absorption	None

** Refer to table and statement provided on Page 28.

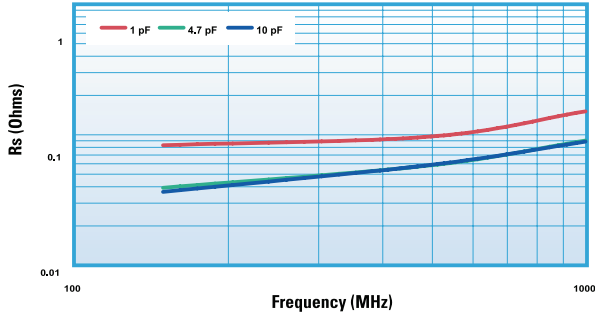
Capacitance and Voltage Table

Cap Code	Cap (PF)	Case Size					
		C04 0402	C06 0603	C07 0711	C08 0805	C11 0505	C17 1111
0R1	0.1						
0R2	0.2						
0R3	0.3						
0R4	0.4						
0R5	0.5						
0R6	0.6						
0R7	0.7						
0R8	0.8						
0R9	0.9						
1R0	1.0						
1R1	1.1						
1R3	1.3						
1R4	1.4						
1R5	1.5						
1R6	1.6						
1R7	1.7						
1R8	1.8						
1R9	1.9						
2R0	2.0						
2R1	2.1						
2R2	2.2						
2R4	2.4						
2R7	2.7						
3R0	3.0						
3R3	3.3						
3R6	3.6						
3R9	3.9						
4R3	4.3						
4R7	4.7						
5R1	5.1						
5R6	5.6						
6R2	6.2						
6R8	6.8						
7R5	7.5						
8R2	8.2						
9R1	9.1						
100	10						
110	11						
120	12						
130	13						
150	15						
160	16						
180	18						
200	20						
220	22						
240	24						
270	27						
300	30						
330	33						
360	36						
390	39						
430	43						
470	47						
510	51						
560	56						
620	62						
680	68						
750	75						
820	82						
910	91						
101	100						
111	110						
121	120						
151	150						
181	180						
221	220						
271	270						
331	330						
391	390						
471	470						
511	510						
561	560						
621	620						
681	680						
821	820						
911	910						
102	1000						
Reel QTY		5000	4000	2350	5000	3500	2350
Horizontal							

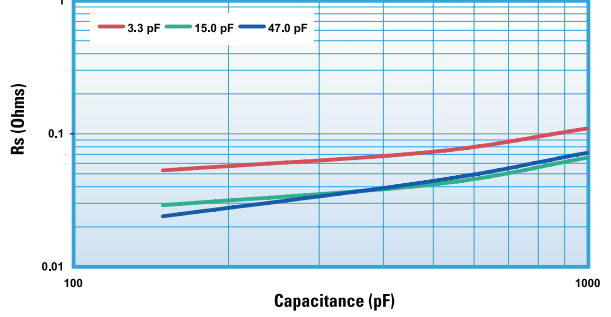
Special capacitance values available upon request.

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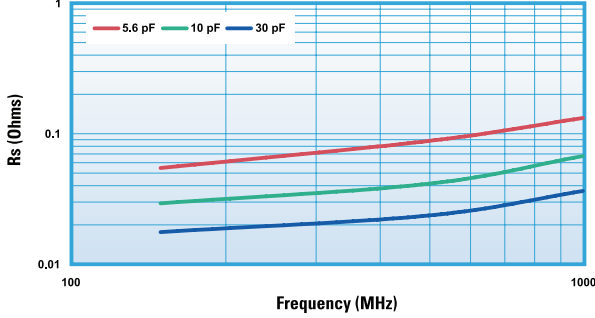
ESR vs Frequency DLI C04 UL Series



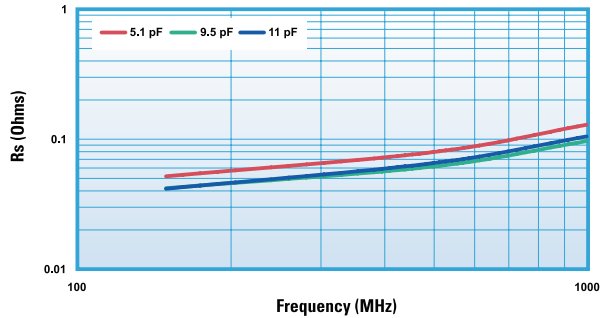
ESR vs Frequency DLI C06 UL Series



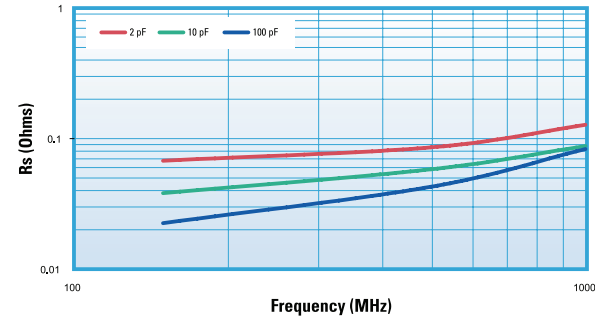
ESR vs Frequency DLI C07 UL Series



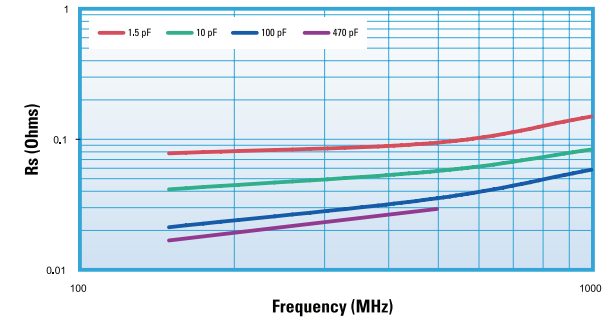
ESR vs Frequency DLI C08 UL Series



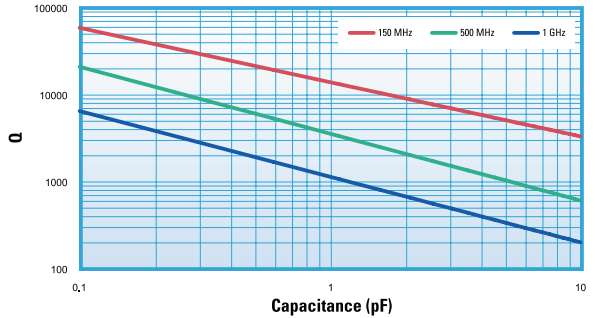
ESR vs Frequency DLI C11 UL Series



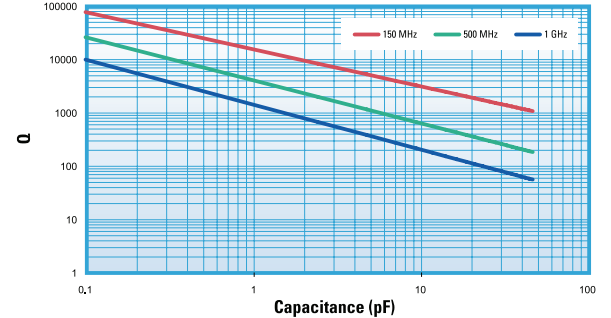
ESR vs Frequency DLI C17 UL Series



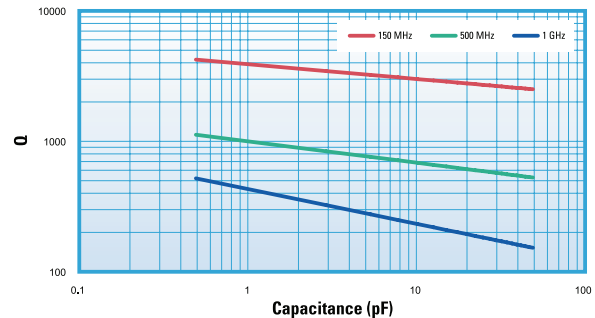
Q vs Capacitance DLI C04 UL Series



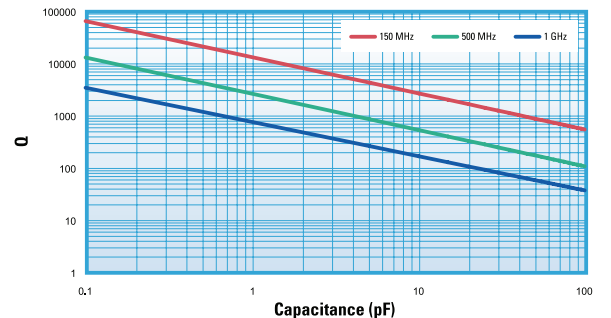
Q vs Capacitance DLI C06 UL Series



Q vs Capacitance DLI C07 UL Series

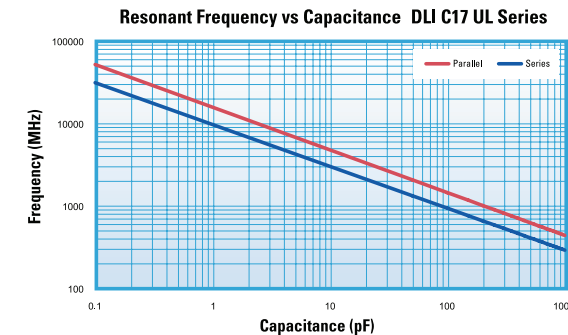
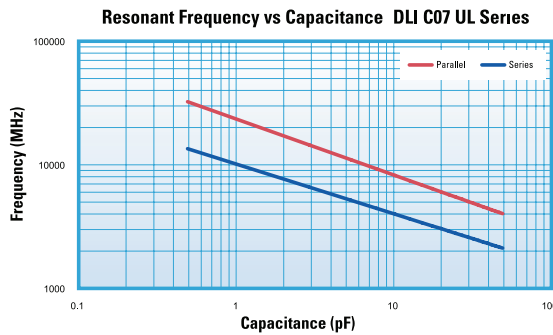
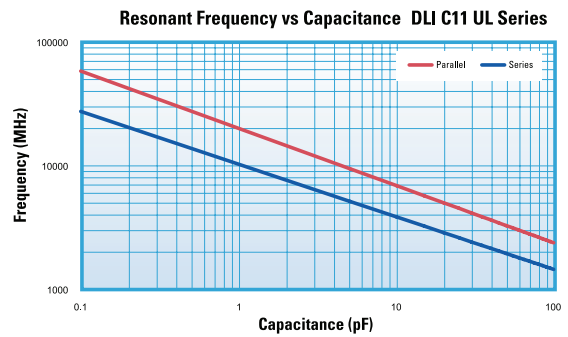
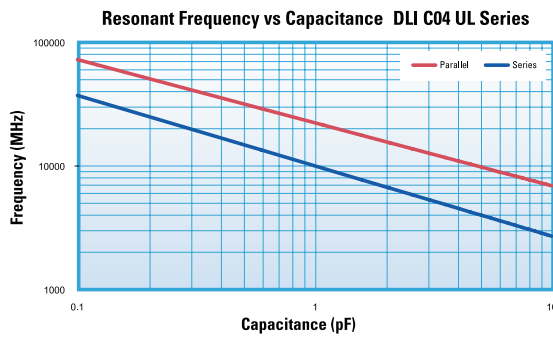
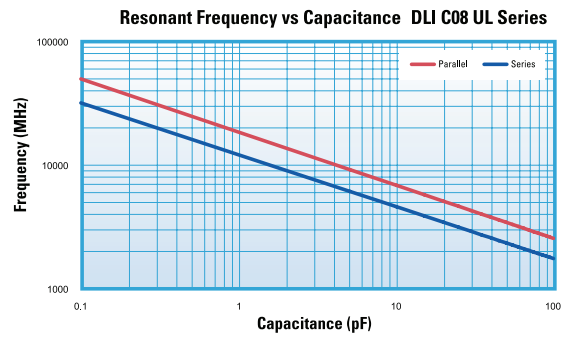
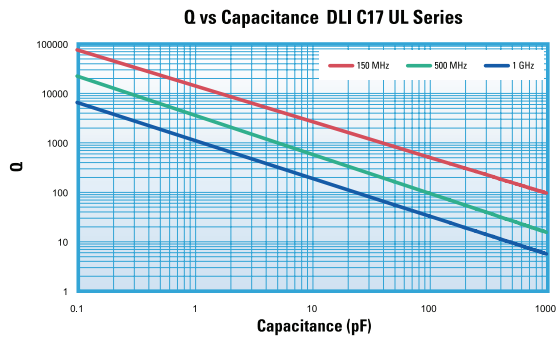
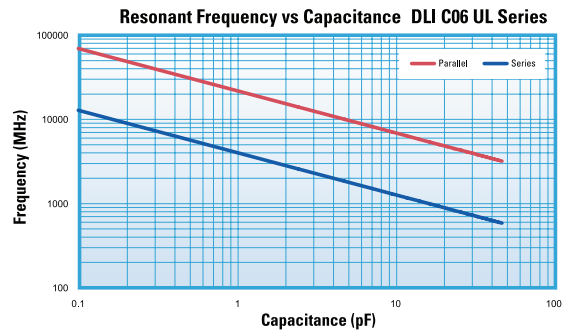
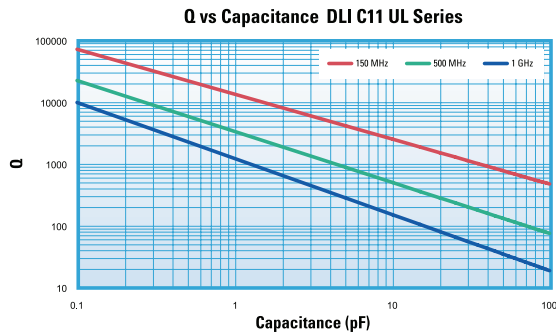


Q vs Capacitance DLI C08 UL Series



The information above represents typical device performance.

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Part Number See Page 28 for complete part number system.

C	17	UL	620	J-	7	U	N-	X	0	T
MLC Capacitor	Case Size	Material System	Capacitance Code	Tolerance Level	Voltage Code	Termination Code	Leading Code	Test Level	Marking Code	Packaging

Terminations		Lead Types		Test Level - All Case Sizes		Laser Marking		Packaging	
C04	S	C04/6/7/8	N	X	Standard	C04	0	C04/6	T, W, B, P, S
C06	U, S, Z,	C11	A, B, D	Y	Reduced Visual	C06	0, 1, 2	C07	W, B, P, S
C07	S, Z,	C17	A, B, C, D, E, F	A	MIL-PRF-55681 Group A	C07	0, 1	C08/11/17	T, V, W, B, P, S
C08/11/17	U, S, Z,	*Special leading requirements available.		C	MIL-PRF-55681 Group C	C08/11/17	0, 1, 2		
				D	Customer Specified				