

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

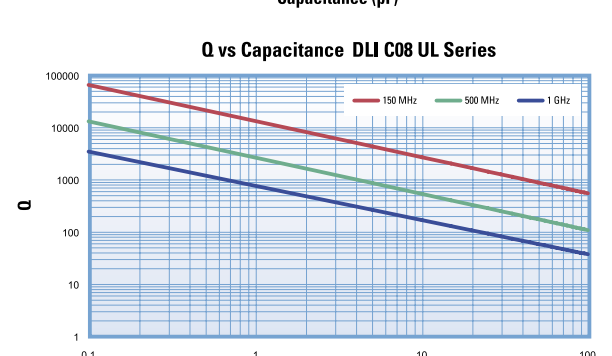
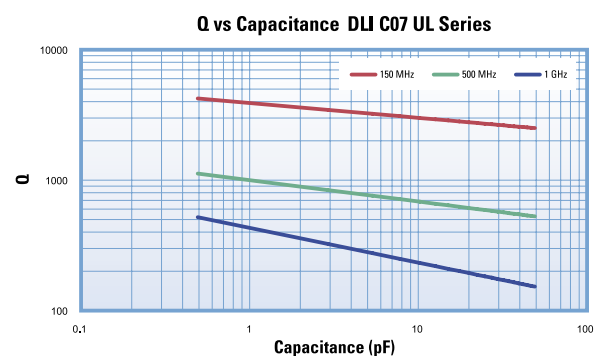
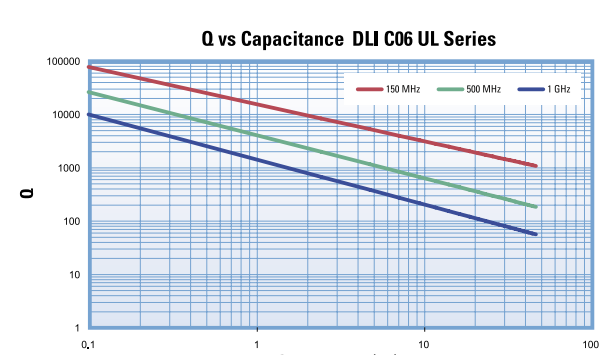
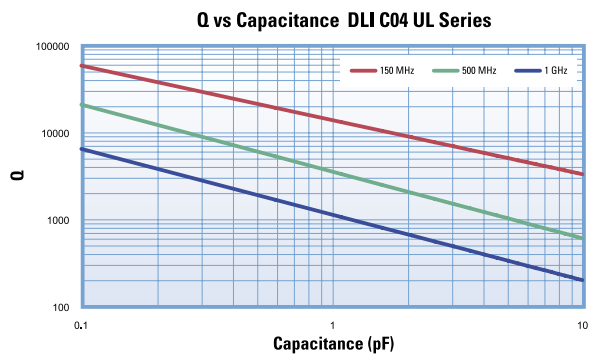
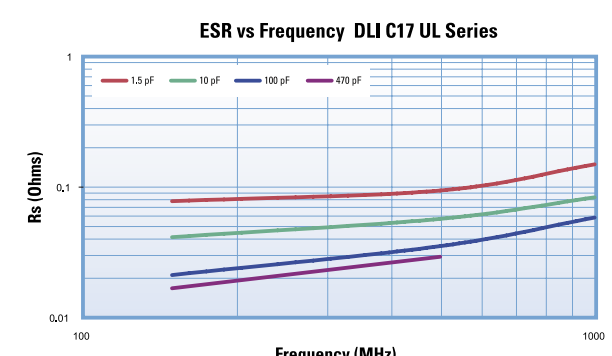
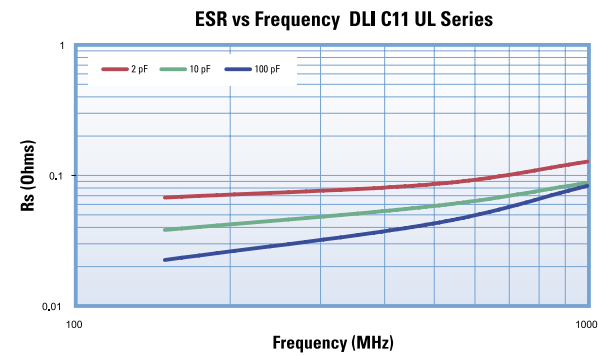
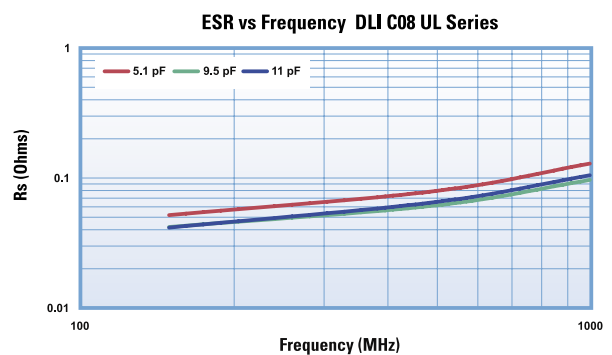
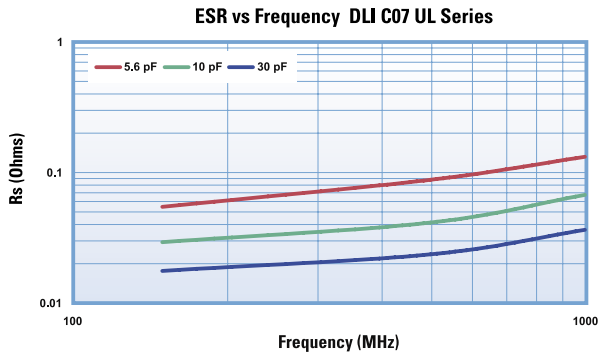
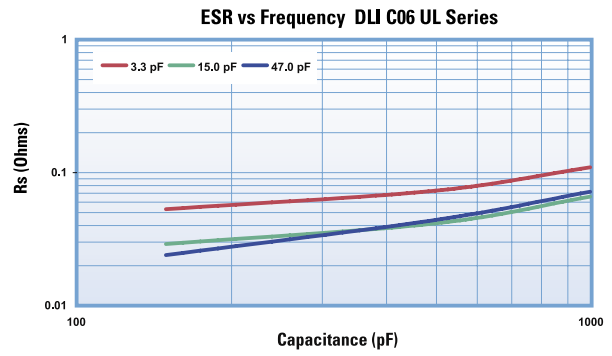
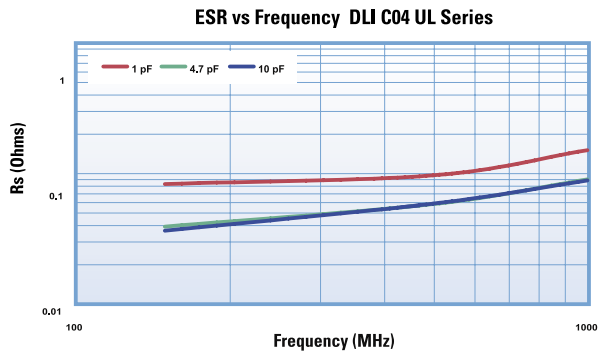
Dielectric Material Code	UL
Temperature Coefficient (ppm/°C)	0 ± 30
Dissipation Factor (% @ 1MHz Maximum)	0.05
Dielectric Voltage Rating (Volts)	Refer to table
Withstanding Voltage DWV (Volts)	250% of rated
Insulation Resistance (MΩ minimum)	
High Frequency Capacitors (C11, C17 & C18)	
@ +25°C: 10 ⁵ MΩ (0.1pF to 470pF) / 10 ⁵ MΩ (510pF to 1000pF)	
@ +125°C: 10 ⁵ MΩ (0.1pF to 470pF) / 10 ⁴ MΩ (510pF to 1000pF)	
All other Case sizes (C04, C06, C07, C08, C18, C22 & C40)	
@ +25°C: 10 ⁵ MΩ	
@ +125°C: 10 ⁴ MΩ	
Aging	None
Piezoelectric Effects	None
Dielectric Absorption	None

Capacitance and Voltage Table

Cap Code	Cap (PF)	C04 0402	C06 0603	Case Size 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 Horizontal		5000	4000	2350	5000	3500	2350

Special capacitance values available upon request.

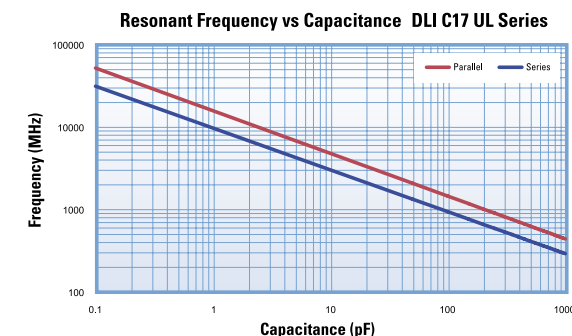
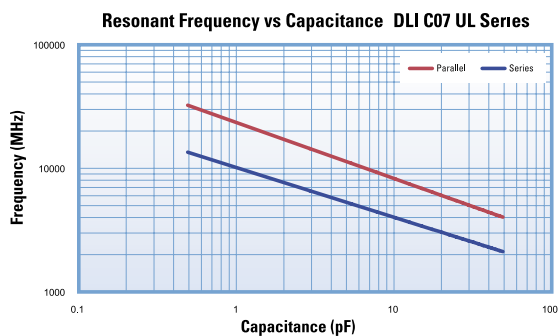
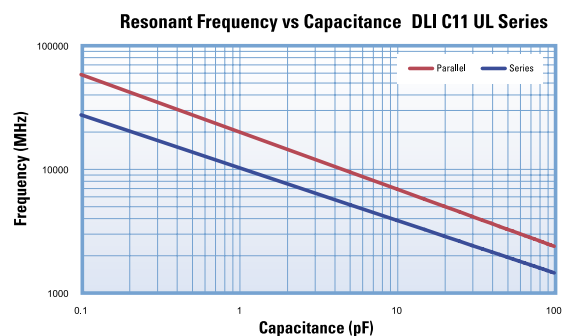
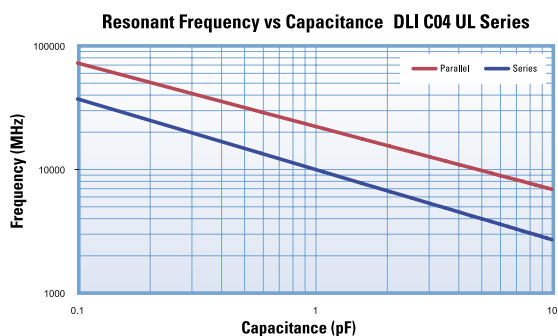
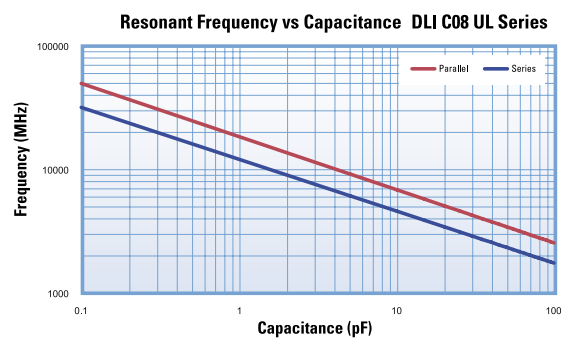
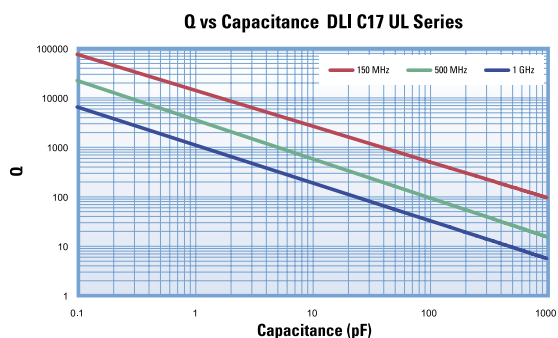
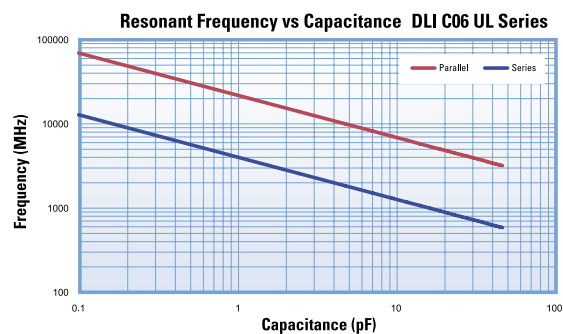
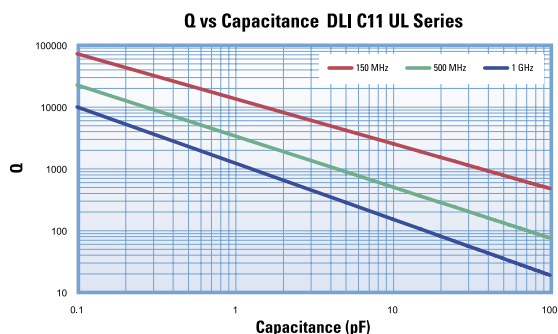
UL Series: Ultra Low ESR Ceramic Capacitors



The information above represents typical device performance.
www.knowlescapacitors.com

Should be ordered as DLI parts.

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The information above represents typical device performance.

Part Number

C	17	CF	620	J	-	7	U	N	-	X	0	T
MLC Capacitor	Case Size	Dielectric	Capacitance Codes	Capacitance Tolerance		Rated voltage	Termination	Lead Type		Test Level	Marking	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				

Should be ordered as DLI parts.

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Mouser Electronics

Authorized Distributor

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Knowles:

<u>C04UL0R3B-6ZN-X0T</u>	<u>C04UL0R3C-6ZN-X0T</u>	<u>C04UL0R3D-6ZN-X0T</u>	<u>C04UL0R4B-6ZN-X0T</u>	<u>C04UL0R4C-6ZN-X0T</u>
<u>C04UL0R4D-6ZN-X0T</u>	<u>C04UL0R5B-6ZN-X0T</u>	<u>C04UL0R5C-6ZN-X0T</u>	<u>C04UL0R5D-6ZN-X0T</u>	<u>C04UL0R6B-6ZN-X0T</u>
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