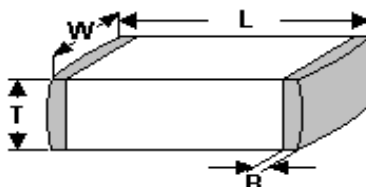


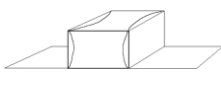
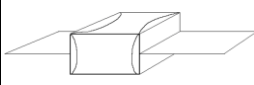
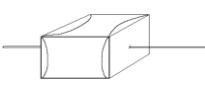
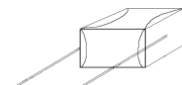
AH SERIES HIGH Q P90 ± 20 PPM/°C MULTILAYER CAPACITORS



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
AH	P90 ± 20	0.05	>10 ⁶	>10 ⁵



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)
11	TUSZEPQYMWVR	0.056 ± 0.020	0.059 ± 0.018	0.06	0.012	0.006	0.033
	T		0.064 ± 0.023			N/A	N/A
17	TUSZEPQYMWVR	0.112 ± 0.026	0.116 ± 0.028	0.12	0.032	0.006	0.054
	T	0.115 ± 0.029	0.125 ± 0.035			N/A	N/A
18	UZEWV	0.118 ± 0.032	0.125 ± 0.035	0.12	0.036	0.006	0.054
22	USZEPQYMWVR	0.252 ± 0.040	0.226 ± 0.038	0.156	0.104	N/A	N/A
40	TUSZEPQYMWVR	0.381 ± 0.049	0.384 ± 0.052	0.156	0.23	N/A	N/A
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.

Dielectric Laboratories Inc.

Phone: 315-655-8710 Fax: 315-655-8179

QUALITY SYSTEM AS9100 + ISO 9001:2000 CERTIFIED

2777 Route 20 East, Cazenovia, NY 13035

Email: sales@dilabs.com Web: <http://www.dilabs.com>

ENVIRONMENTAL SYSTEM ISO 14001:2004 CERTIFIED

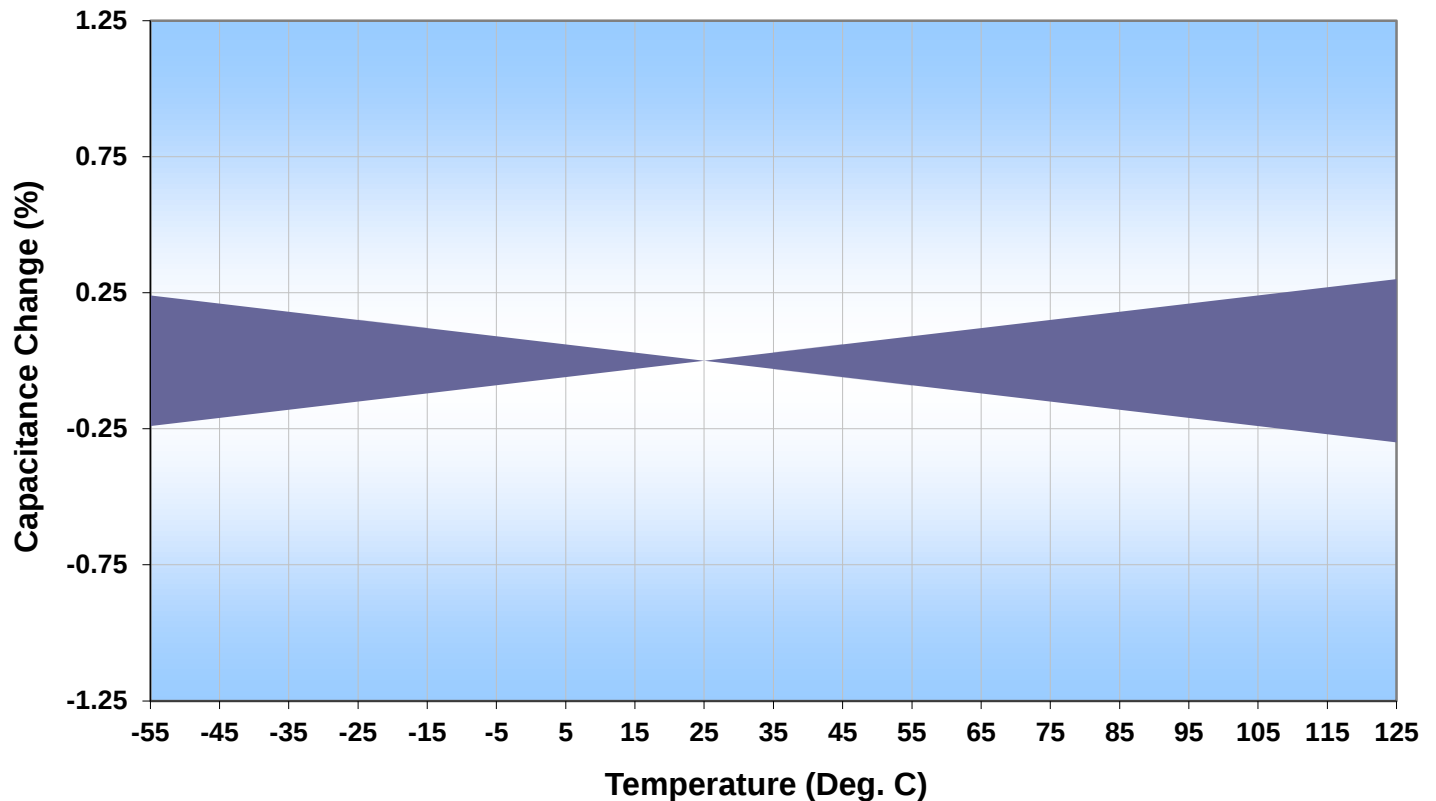
AH SERIES MULTILAYER CAPACITORS

Capacitance Range and Voltage Rating Table ⁽¹⁾						
Code	Max Rated Voltage	Case Size Code (EIA)				
		Capacitance Range in pF				
		11 (0505)	17 (1111)	18 (1111) ⁽²⁾	22 (2225)	40 (3838)
5	50 V	36 - 100	680 - 1000	Code 4 500 V	Code 9 250 V	Code 9 250 V
1	100 V		510 - 620			
8	150 V		220 - 470			
6	200 V					
9	250 V	0.1 - 33	110 - 200	Code 9 250 V	Code 8 150 V	Code 6 200 V
3	300 V					
4	500 V					
7	1000 V			Code 9 250 V		
A	1500 V					
G	2000 V					
B	2500 V					
D	3600 V					
F	5000 V					
H	7200 V					

⁽¹⁾ DWV is 2.5x the rated voltage unless otherwise stated

⁽²⁾ Enhanced C17 Case Size

Temperature Coefficient of Capacitance UL Material



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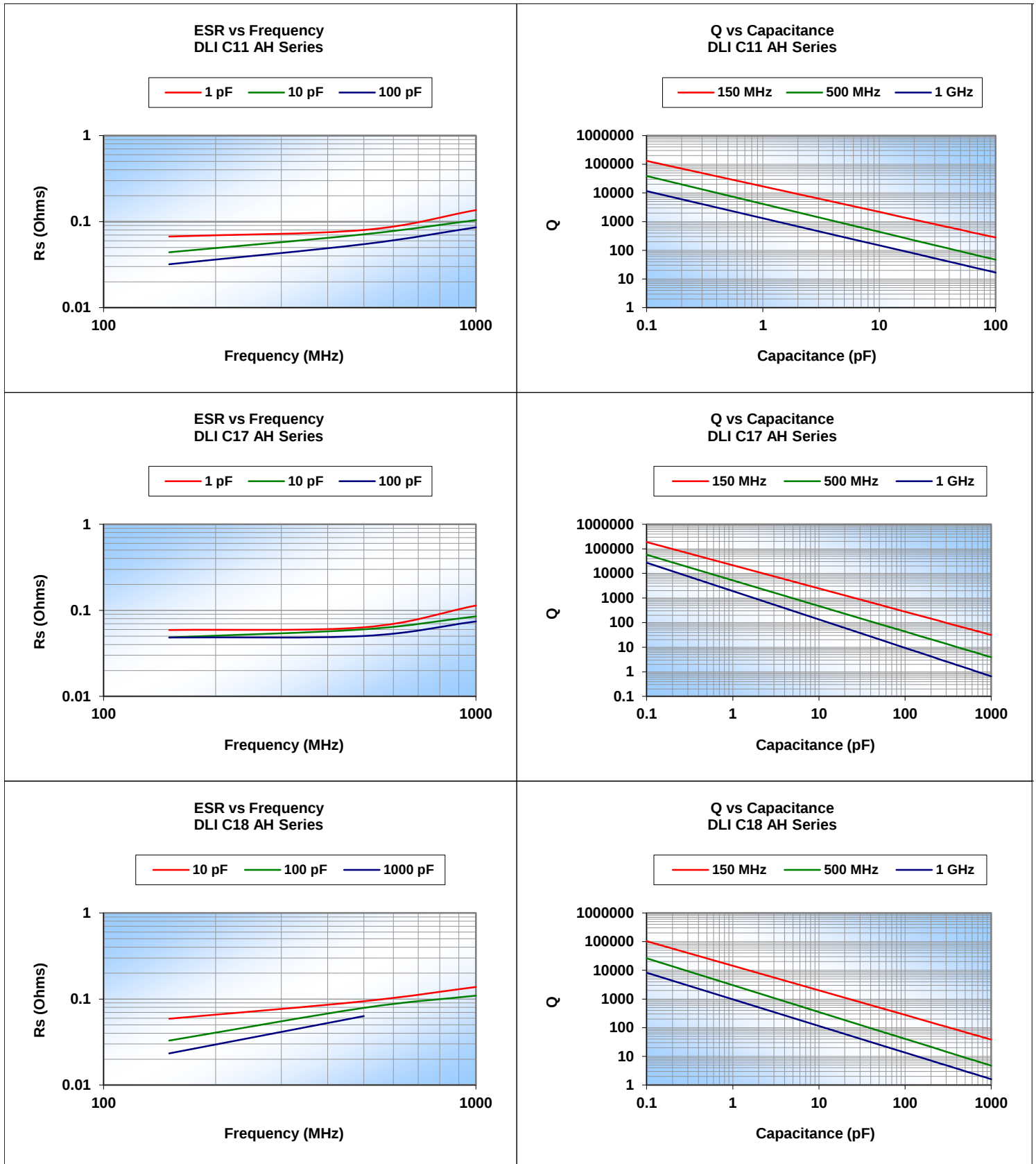
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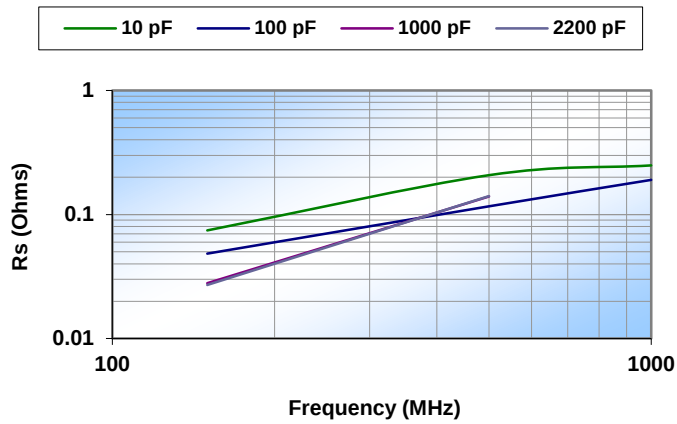
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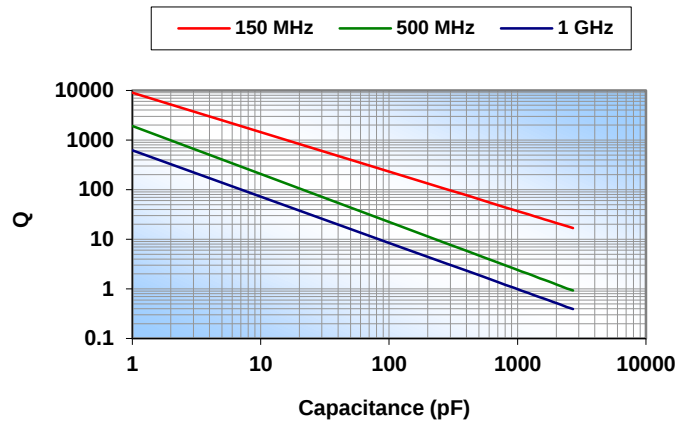
ENVIRONMENTAL SYSTEM ISO 14001:2004 CERTIFIED

AH SERIES MULTILAYER CAPACITORS

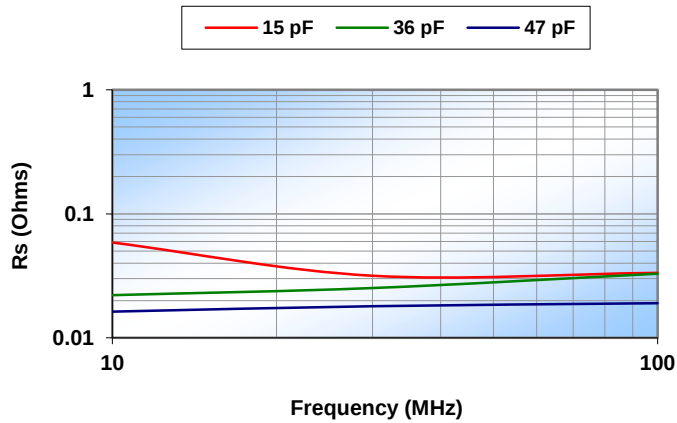
ESR vs Frequency
DLI C22 AH Series



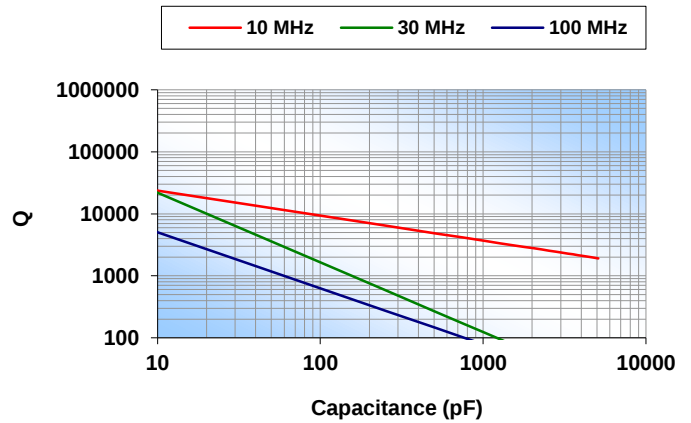
Q vs Capacitance
DLI C22 AH Series



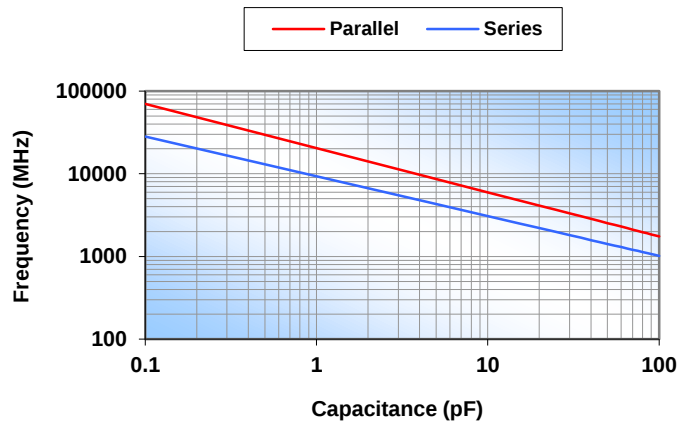
ESR vs Frequency
DLI C40 AH Series



Q vs Capacitance
DLI C40 AH Series



Resonant Frequency vs Capacitance
DLI C11 AH Series





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
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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.

