

Functional Applications:

- DC Blocking
- RF Bypass
- Filtering
- Tuning
- Submounts

Benefits:

- Gold Metallization for wire bonding
- Rugged Construction
- Custom sizes at commercial prices
- Thin Film Technology
- ESD Proof

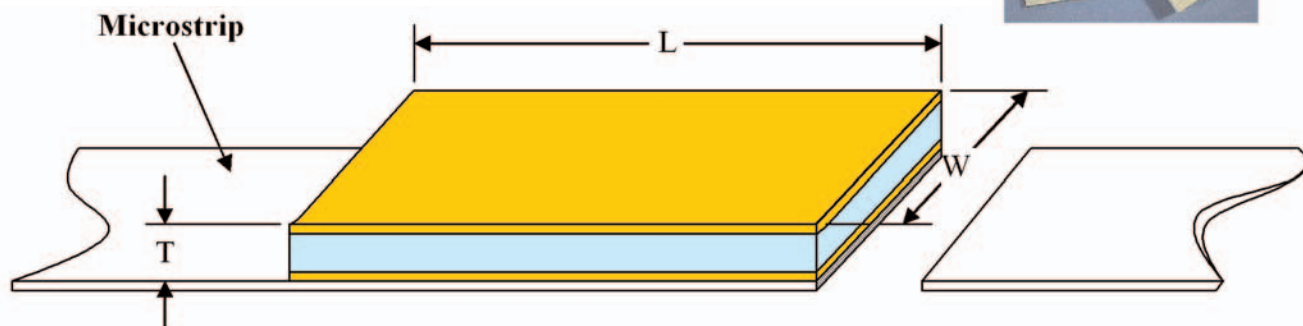


Table of Standard Values (pF)

0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.1
0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	0.55
0.6	0.65	0.7	0.75	0.8	0.85	0.9	0.95	1
1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
2	2.2	2.4	2.7	3	3.3	3.6	3.9	4.3
4.7	5.1	5.6	6.2	6.8	7.5	8.2	9.1	10
11	12	13	15	16	18	20	22	24
27	30	33	36	39	43	47	51	56
62	68	75	82	91	100	110	120	130
150	160	180	200	220	240	270	300	330
360	390	430	470	510	560	620	680	750
820	910	1000	110	1200	1300	1500	1600	1800
2000	220	2400	2700	3000	3300	3600	3900	4300
5300	6500	10,000						

DiCap[®] Dimensions

Style	W Width		L Length (Maximum)		T Thickness (50 Volts)		T Thickness (100 Volts)		Standard Capacitance Range
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	pF
D10	.010 + .000 - .003	.254 + .000 - .076	.010	.254	.004 ± .001	.102 ± .025	-	-	.02 - 100
D12	.012 + .002 - .003	.305 + .051 - .076	.015	.381	.004 ± .001	.102 ± .025	-	-	.03 - 200
D15	.015 + .000 - .003	.381 + .000 - .076	.020	.508	.004 ± .001	.102 ± .025	.006 ± .001	.152 ± .025	.04 - 350
D20	.020 + .000 - .003	.508 + .000 - .076	.020	.508	.004 ± .001	.102 ± .025	.006 ± .001	.152 ± .025	.06 - 470
D25	.025 + .000 - .003	.635 + .000 - .076	.030	.762	.004 ± .001	.102 ± .025	.006 ± .001	.152 ± .025	.10 - 800
D30	.030 + .000 - .003	.762 + .000 - .076	.030	.762	.004 ± .001	.102 ± .025	.006 ± .001	.152 ± .025	.15 - 1000
D35	.035 ± .005	.889 ± .127	.040	1.016	.004 ± .001	.102 ± .025	.007 ± .002	.178 ± .051	.20 - 1500
D50	.050 ± .010	1.270 ± .254	.060	1.524	-	-	.007 ± .002	.178 ± .051	.30 - 3700
D70	.070 ± .010	1.778 ± .254	.080	1.778	-	-	.008 ± .002	.203 ± .051	.55 - 6500
D90	.090 ± .010	2.286 ± .254	.100	2.540	-	-	.010 ± .004	.254 ± .102	.65 - 10,000

Maximum thickness does not apply for capacitance values below 0.5pF

UX thickness only available in .005", .010" and .015"

email sales@dilabs.com
or europesales@dilabs.com
or asiasesales@dilabs.com

phone 315.655.8710
fax 315.655.0445
www.dilabs.com

Dielectric Laboratories Inc.

2777 Route 20 East
Cazenovia, New York, USA
13035-9433

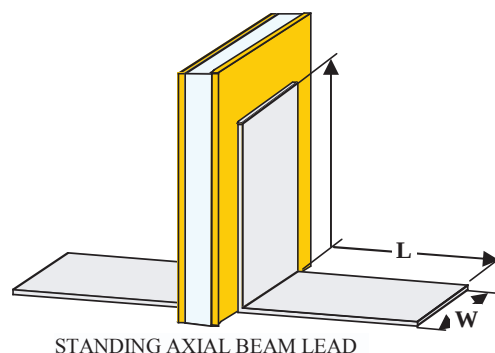
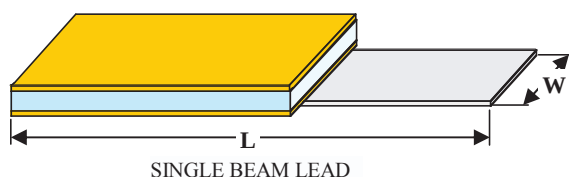
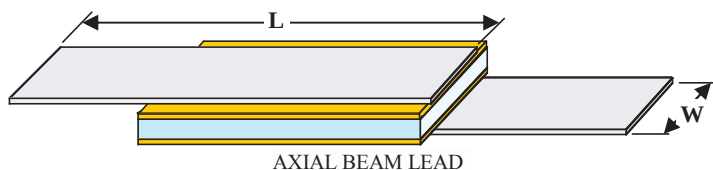


RF, Microwave, and Millimeter-Wave Applications

Leaded DiCap® Dimensions

Style	W Lead Width (Minimum)		W Lead Width (Maximum)		L Lead Length (Minimum)	
	Inches	mm	Inches	mm	Inches	mm
D10	.0035	.0889	.007	.1778	.250	6.350
D12	.0045	.1143	.009	.2286	.250	6.350
D15	.0065	.1651	.013	.3302	.250	6.350
D20	.0085	.2159	.017	.2159	.250	6.350
D25	.011	.2794	.022	.5588	.250	6.350
D30	.0135	.3429	.027	.6858	.250	6.350
D35	.015	.381	.030	.762	.250	6.350
D50	.020	.508	.040	1.016	.250	6.350
D70	.030	.762	.060	1.524	.250	6.350
D90	.040	1.016	.080	2.032	.250	6.350

- See DiCap® Termination Code Table for available lead configurations.
- Lead material is 0.002" pure silver, (Ag), 0.002" ± .0005" thick.
- Leads are attached with Au Sn, 80%/20% eutectic alloy. Re flow temperature is 280 °C minimum.
- Pure Gold, (Au) leads are available. Consult factory for details.
- Chip dimensions per DiCap® Dimensions table.
- Custom Lead dimensions are available. Consult factory for details.



DiCap® Designer Kits

160 Capacitors, 10 Each of 16 Values

Part Number	Capacitor Width	10 Capacitors of each value								
		Dielectric	pF	Tol.	pF	Tol.	pF	Tol.	pF	Tol.
D10XXKITA5PX	.010"	Class I, see codes on pg. 5	.1	B	.6	C	1.5	C	2.7	D
			.4	B	1.0	C	2.2	D	3.3	D
		Class II, see codes on pg. 5	3.9	D	5.6	M	8.2	M	20	M
			4.7	D	6.2	M	10	M	33	M
D15XXKITA5PX D20XXKITA5PX	.015" .020"	Class I, see codes on pg. 5	.1	B	.6	C	1.5	C	3.3	D
			.4	B	1.0	C	2.2	C	5.6	D
		Class II, see codes on pg. 5	6.8	K	10	K	20	M	50	M
			8.2	K	15	K	33	M	100	M
D25XXKITA5PX D30XXKITA5PX	.025" .030"	Class I, see codes on pg. 5	.4	B	1.5	C	3.3	D	8.2	K
			.6	C	2.2	C	4.7	D	10	K
			1.0	C	2.7	C	5.6	D	20	K
		Class II, see codes on pg. 5	33	M	50	M	100	M	180	M

DLI reserves the right to substitute values as required.

Customer may request specific cap value and material for sample kit.

50 Volt SLC

Capacitance Range vs. Case size by Dielectric Material

Style		Class I Dielectric materials														
		LA	PI	PG	AH	CF	NA	CD	NG	CG	DB	NP	NR	NS	NU	NV
D10	Min	0.02	0.03	0.04	0.06	0.07	0.06	0.10	0.15	0.20	0.20	0.25	0.45	0.80	1.6	2.4
	Max	0.02	0.05	0.06	0.10	0.10	0.10	0.15	0.20	0.35	0.35	0.40	0.80	1.5	3.0	4.3
D12	Min	0.03	0.04	0.06	0.08	0.10	0.09	0.15	0.20	0.30	0.30	0.35	0.65	1.2	2.4	3.6
	Max	0.06	0.10	0.10	0.20	0.25	0.20	0.35	0.45	0.75	0.75	0.90	1.7	3.0	6.2	9.1
D15	Min	0.04	0.06	0.08	0.15	0.15	0.15	0.25	0.25	0.45	0.45	0.50	1.0	1.8	3.6	5.6
	Max	0.08	0.15	0.20	0.30	0.35	0.30	0.55	0.65	1.1	1.1	1.3	2.4	4.7	9.1	13
D20	Min	0.06	0.09	0.15	0.20	0.20	0.20	0.35	0.40	0.65	0.65	0.75	1.5	2.7	5.6	8.2
	Max	0.10	0.20	0.25	0.40	0.50	0.45	0.75	0.90	1.4	1.5	1.8	3.3	6.2	12	18
D25	Min	0.10	0.20	0.25	0.35	0.45	0.40	0.65	0.75	1.2	1.3	1.5	2.7	5.1	11	16
	Max	0.20	0.40	0.50	0.80	0.95	0.90	1.5	1.7	2.7	2.7	3.3	6.2	12	24	36
D30	Min	0.15	0.25	0.30	0.45	0.55	0.50	0.85	0.95	1.6	1.6	1.9	3.6	6.8	15	20
	Max	0.25	0.45	0.60	0.95	1.1	1.0	1.8	2.0	3.3	3.3	3.9	7.5	13	27	43
D35	Min	0.20	0.35	0.50	0.70	0.85	0.80	1.3	1.5	2.7	2.7	3.0	5.6	11	22	33
	Max	0.50	0.85	1.1	1.8	2.0	1.9	3.3	3.6	6.2	6.2	7.5	13	27	51	75

Style		Class II Materials											
		BF	BD	BG	BC	BE	BL	BJ	BN	BT	BU	BV	UX*
D10	Min	1.2	1.8	2.4	3.6	3.3	5.6	9.1	12	12	22	36	
	Max	2.2	3.6	4.3	6.2	6.2	10	16	22	22	43	68	100
D12	Min	1.8	3.0	3.6	5.1	5.1	8.2	13	18	18	36	56	
	Max	4.7	7.5	9.1	13	13	20	33	47	47	91	130	200
D15	Min	2.7	4.3	5.6	7.5	7.5	12	20	27	27	51	82	
	Max	6.8	11	13	20	18	30	51	68	68	130	200	350
D20	Min	4.3	6.2	8.2	12	12	18	30	43	43	75	120	200
	Max	9.1	13	18	27	24	39	68	91	91	180	270	470
D25	Min	8	12	16	22	22	36	56	82	82	150	240	270
	Max	18	27	36	51	51	82	130	180	180	330	510	800
D30	Min	10	16	20	30	30	47	75	100	100	200	300	360
	Max	22	33	43	62	62	91	160	220	220	390	620	1000
D35	Min	16	27	33	47	47	75	120	160	160	300	510	560
	Max	39	62	75	110	110	180	270	390	390	750	1200	1500

* UX capacitors are 16 volt rated

Part Number Identification

D	10	CF	0R1	B	5	P	X
Product D = Single Layer Capacitor (DiCap®)	Case Size 10 12 15 20 25 30 35 50 70 90	Material See Material Tables on page 5 in the General Section.	Capacitance(pF) R02 = 0.02 pF 0R5 = 0.5 pF 1R0 = 1.0 pF 5R1 = 5.1 pF 100 = 10 pF 101 = 100 pF 432 = 4300 pF See Capacitance tables for available values. Consult Factory for custom solutions.	Tolerance A = ± 0.05pF B = ± 0.10pF C = ± 0.25pF D = ± 0.5pF F = ± 1% G = ± 2% J = ± 5% K = ± 10% L = ± 15% M = ± 20% Z = + 80% -20%	Voltage C = 16V 5 = 50V 1 = 100V	Termination P = Ni / Au T = Ni / AuSn M = Au L = Single Beam Lead A = Axial Beam Lead S = Standing Axial Beam Lead	Test Level Y, X, A, B, C, D and E. See Test Level Codes on page 7 in General section.

email sales@dilabs.com
or europesales@dilabs.com
or asiasesales@dilabs.com

phone 315.655.8710
fax 315.655.0445
www.dilabs.com

RF, Microwave, and Millimeter-Wave Applications

100 Volt SLC

Capacitance Range vs. Case Size By Dielectric Material																
Style		Class I Dielectric Materials														
		LA	PI	PG	AH	CF	NA	CD	NG	CG	DB	NP	NR	NS	NU	NV
D15	Min	0.03	0.04	0.06	0.08	0.1	0.09	0.15	0.20	0.30	0.30	0.35	0.65	1.2	2.4	3.6
	Max	0.05	0.10	0.10	0.20	0.25	0.20	0.35	0.45	0.70	0.75	0.85	1.6	3.0	6.2	9.1
D20	Min	0.04	0.06	0.08	0.15	0.15	0.15	0.25	0.30	0.45	0.45	0.55	1.0	1.9	3.9	5.6
	Max	0.08	0.10	0.15	0.25	0.30	0.30	0.50	0.60	0.95	1.0	1.2	2.2	3.9	8.2	12
D25	Min	0.07	0.15	0.20	0.25	0.30	0.30	0.45	0.50	0.85	0.85	1.0	1.9	3.6	7.5	11
	Max	0.15	0.25	0.35	0.50	0.65	0.60	1.0	1.1	1.9	1.9	2.2	4.3	8.2	16	24
D30	Min	0.09	0.15	0.20	0.35	0.40	0.35	0.60	0.65	1.1	1.1	1.3	2.7	4.7	9.1	15
	Max	0.15	0.30	0.40	0.65	0.75	0.70	1.2	1.4	2.2	2.2	2.7	5.1	9.1	18	27
D35	Min	0.15	0.20	0.25	0.40	0.45	0.45	0.70	0.80	1.3	1.4	1.6	3.0	5.6	12	18
	Max	0.30	0.55	0.75	1.2	1.4	1.3	2.2	2.4	3.9	4.3	5.1	9.1	18	36	51
D50	Min	0.30	0.50	0.60	0.95	1.1	1.1	1.7	2.0	3.3	3.3	3.9	7.5	15	30	43
	Max	0.75	1.3	1.7	2.7	3.0	3.0	4.7	5.6	9.1	9.1	11	20	39	82	120
D70	Min	0.55	0.95	1.2	1.9	2.4	2.2	3.6	4.3	6.8	6.8	8	15	30	56	91
	Max	1.10	2.0	2.7	3.9	4.7	4.3	7.5	8.2	13	15	16	33	62	120	180
D90	Min	0.65	1.2	1.5	2.4	3.0	2.7	4.3	5.1	8.2	8.2	10	20	36	68	110
	Max	1.80	3.0	3.9	6.2	7.5	6.8	12	13	22	22	27	51	91	180	270

Style		Class II Materials											
		BF	BD	BG	BC	BE	BL	BJ	BN	BT	BU	BV	UX*
D15	Min	1.8	3.0	3.6	5.6	5.1	8.2	13	18	18	36	56	
	Max	4.3	6.8	9.1	13	13	20	33	47	47	82	130	350
D20	Min	2.7	4.3	5.6	8	8	13	20	30	30	56	82	200
	Max	6.2	9	12	18	16	27	47	62	62	120	180	470
D25	Min	5.6	8	11	16	15	24	39	56	56	100	160	270
	Max	12	18	24	33	33	51	82	120	120	220	360	800
D30	Min	6.8	11	15	20	20	33	51	68	68	130	220	360
	Max	13	22	27	43	39	62	100	130	130	270	430	1000
D35	Min	9.1	13	18	24	24	39	62	91	91	160	270	560
	Max	24	39	51	75	75	120	180	270	270	510	750	1500
D50	Min	22	33	43	62	62	100	160	220	220	390	620	1200
	Max	56	91	120	160	160	270	430	560	560	1100	1800	3700
D70	Min	43	68	91	120	120	200	330	430	430	820	1300	2200
	Max	91	130	180	270	240	390	680	910	910	1600	2700	6500
D90	Min	51	82	110	150	150	240	390	510	510	1000	1600	3500
	Max	130	220	270	390	390	620	1000	1300	1300	2700	4300	10,000

* UX capacitors are 16 volt rated