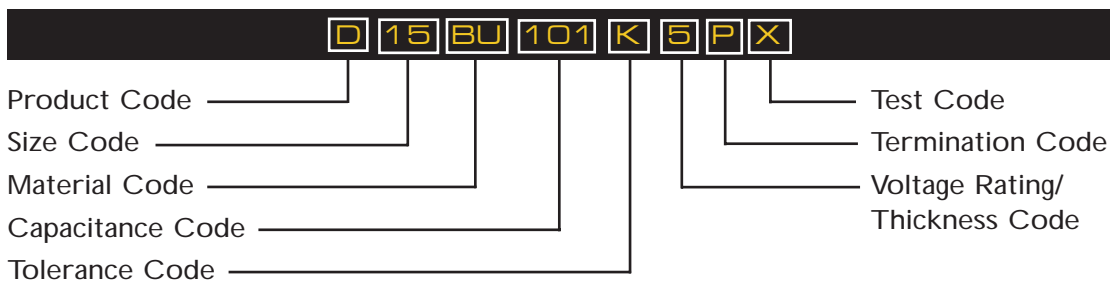


High performance single layer ceramic capacitors
for RF and Microwave and Millimeter Wave applications.



Part Number



Applications

- DC blocking
- RF bypassing
- Filtering
- Tuning
- Submounts

Benefits

- Gold metallization for wire bonding
- Rugged construction
- Custom sizes at commercial prices
- Compatible with MIC/MMIC assembly
- ESD proof
- Thin film technology



DICAP®

dielectric laboratories

Part Number

D 15 BU 101 K 5 P X

Dimensions

Style	W		L Max		T 50 Volts		T 100 Volts		Max Capacitance	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	50V	100V
D10	.010+.000 -.003	.254+.000 -.076	.010	.254	.004±.001	.102±.025	-	-	68pF	-
D12	.012+.002 -.003	.30+.000 -.076	.015	.381	.004±.001	.102±.025	-	-	100pF	-
D15	.015+.000 -.003	.381+.000 -.076	.020	.508	.004±.001	.102±.025	.006±.001	.152±.025	180pF	120pF
D20	.020+.000 -.003	.508+.000 -.076	.020	.508	.004±.001	.102±.025	.006±.001	.152±.025	220pF	150pF
D25	.025+.000 -.003	.635+.000 -.076	.030	.762	.004±.001	.102±.025	.006±.001	.152±.025	470pF	330pF
D30	.030+.000 -.003	.762+.000 -.076	.030	.762	.004±.001	.102±.025	.006±.001	.152±.025	560pF	390pF
D35	.035±.005	.889±.127	.040	1.016	.004±.001	.102±.025	.007±.002	.178±.051	1000pF	680pF
D50	.050±.010	1.270±.254	.060	1.524	-	-	.007±.002	.178±.051	-	1500pF
D70	.070±.010	1.778±.254	.080	2.032	-	-	.008±.002	.203±.051	-	2000pF
D90	.090±.010	2.286±.254	.100	2.540	-	-	.010±.004	.254±.102	-	3000pF

Dielectric Material Codes

Dielectric Class	Dielectric Code	Relative ϵ_r at 1 MHz	Max. Temp. Coefficient -55°C to +125°C	Dissipation Factor at 1 MHz	Insulation Resistance at 25°C	Dielectric with-standing Voltage
Class Ia	CF	22	0 ±15ppm/°C	.6%	>10 ⁶ MΩ	2.5 times Rated Voltage
	CG	70	0 ±30ppm/°C	.7%	>10 ⁶ MΩ	
Class Ib	NR	155	N1500± 500ppm/°C	.25%	>10 ⁶ MΩ	
	NS	300	N2400± 500ppm/°C	.7%	>10 ⁶ MΩ	
Class Ic	NU	600	N3700±1000ppm/°C	1.5%	>10 ⁵ MΩ	
	NV	900	N4700± 1000ppm/°C	1.2%	>10 ⁶ MΩ	
Class II	BF	445	±7.5%	2.5%	>10 ⁴ MΩ	
	BD	700	±10%	2.5%	>10 ⁴ MΩ	
	BG	900	±10%	2.5%	>10 ⁴ MΩ	
	BE	1250	±10%	2.5%	>10 ⁴ MΩ	
	BL	2000	±15%	2.5%	>10 ⁵ MΩ	
	BH	2400	±15%	2.5%	>10 ⁵ MΩ	
	BT	4500	+22% - 56%*	3.0%	>10 ⁵ MΩ	
	BU	7500	+22% - 75%**	3.0%	>10 ⁵ MΩ	
BV	11000	+22% - 82%**	3.0%	>10 ⁵ MΩ		

NOTES:

*Temperature Range -55 to +105°C.

**Temperature Range +10 to +85°C.

• All TC's are unbiased without voltage conditioning. TC's for Hi-Rel units are defined in MIL-C-49464, BG = ± 15%, BH = ± 25% and BU = + 22%, -82%.

• TC curves - see page 9.

• Dissipation factor applies to values of 4.7 pF or greater.

• Class 1A and 1B materials do not age. See page 9.

Specials

Selected Dielectric Materials		
ϵ_r at 1 MHz	Dielectric Designator	Temp. Coeff. ppm/°C
10	PI	P120 ± 30
13	PG	P22 ± 30
20	AH	P90 ± 20
21	NA	N30 ± 15
22	NB	N50 ± 15
30	CB	0 ± 15
40	CD	N20 ± 15
45	CE	0 ± 15
60	NH	N330 ± 90
72	DB	N50 ± 30
100	NQ	N1000 ± 375
800	NX	N3900 ± 1000

Capacitance Code

1st 2 digits = Significant figures of capacitance in pF

3rd digit = Additional number of zeroes

i.e.: 0R5 = .5pF
1R0 = 1.0pF
100 = 10pF
101 = 100pF

2777 Route 20 East • Cazenovia, New York 13035
Phone: 315.655.8710 Fax: 315.655.8179 <http://www.dilabs.com>

Part Number

D 15 BU 101 K 5 P X

Capacitance Tolerance Codes

P = ±0.01pF	C = ±0.25pF	F = ±1%	L = ±15%
A = ±0.05pF	D = ±0.5pF	G = ±2%	M = ±20%
B = ±0.1pF		J = ±5%	Z = +80%
		K = ±10%	-20%
			S = Special

Selection Guide

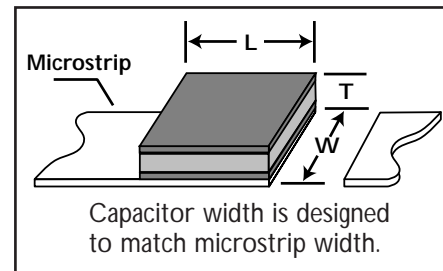
1. Consult factory for 1% and 2% tolerances
2. "P" Tol. = ≤ 1pF
3. D10 size = ≥ ±5%
4. NU, NV materials = ≥ ±5% typical
5. BG, BH materials = ± 10% typical
6. BU, BV materials = ± 20% typical

Voltage Rating Codes

50V = 5 = .004" ± .001" thickness for sizes D10 - D35
 100V = 1 = .006" ± .001" thickness for sizes D15 - D30

Full range of part numbers for 50V and 100V are listed on pages 47 through 52. The desired voltage code takes precedence over the thickness code for non standard parts.

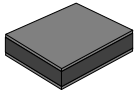

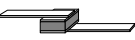


Outline Drawing



Test Level Codes

Code	Industrial Parts
X	<ul style="list-style-type: none"> • 4 side visual screening (see separate chart) • 1% AQL Level II per Mil-Std-105 for capacitance, Dissipation Factor (D.F.), Insulation Resistance (I.R.) and Dielectric Withstanding Voltage (DWV) • 100% count
Hi-Rel Devices	
A	<ul style="list-style-type: none"> • Group A testing – 100 hours Burn-in plus 100% Electrical Screening to Mil-C-49464
B	<ul style="list-style-type: none"> • Group A and B testing – includes temperature coefficient and bondability testing to Mil-C-49464
C	<ul style="list-style-type: none"> • Group A, B, and C testing – includes 2000 hours life test to Mil-C-49464
D	<p>Special agreed upon testing to customers' specification (one or more of the following examples of commonly requested tests)</p> <ul style="list-style-type: none"> • MIL-STD-883, Method 2011 – Destructive Bond Pull Test • MIL-STD-883, Method 2019 – Die Shear Test • MIL-H-38534 K • MIL-H-38534 H • Element Evaluation
E	<ul style="list-style-type: none"> • 6 side visual screening as per MIL-STD-883, Method 2032

Termination Codes

Parts	Code	Description
	P	Gold over nickel barrier, gold 100µ" minimum thickness. Applies to all single layer products.
	M	TiW 300Å/Au100µ".
	L	Single beam lead.
	A	Axial beam lead.
	S	Standing axial beam lead.

Standard Lead Material Silver (Ag) .002" thick, Gold (Au) optional.

Lead width minimum 50% of chip width.

Packaging

Waffle Pack – Max. 400 capacitors/pack.
 Gel-Pak® and custom packaging available.



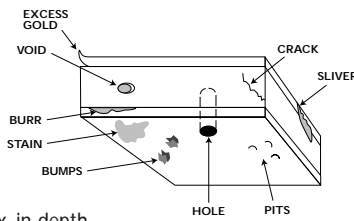
DICAP®

Part Number

D 15 BU 101 K 5 P X

Visual Screening

Applicable Areas:	
Hi-Rel	= 6 sides
Industrial	= 4 sides
Burrs	None
Bumps	None
Holes	None
Cracks	None
Rollback	.001" max. in depth
Excess Gold	Less than 1 mil of rollback and knit to ceramic is acceptable
Stains	Very slight acceptable, covering less than 5% of the area and not concentrated
Slivers	Length and width less than 50% of the thickness is acceptable
Pits	Very shallow depressions, 5 max. acceptable and not to be concentrated in one area
Corner chips	Very slight acceptable, .001" max. in depth and length
Stains	Very slight acceptable, covering less than 5% of the area and not concentrated
Voids	Very slight acceptable, .001" max. in diameter and 2 allowed only
Surface Finish	Slight/nodular appearance acceptable typical 40µ" CLA
Scratches	Shall not expose dielectric material
Magnification	20X minimum



Environmental Parameters

Parameter	MIL-STD-202	
	Method	Condition
Thermal Shock	107	A -55°C to +125°C
Immersion	104	B
Moisture Resistance	106	-
Resistance to Solder Heat	210	C 260°C ± 5°C
Burn In	108	A 100 hrs, 125°C
Barometric Pressure	105	B
Mechanical Shock	213	I 100g, 6ms
Vibration	204	G 30g, 10-2000Hz

Mechanical Parameters

Bond Strength	Exceeds MIL-STD-883, Method 2011. Pull force = 3g (min.), .001" gold wire. Typical is 8g.
Shear Strength	Exceeds MIL-STD-883, Method 2019
Breaking Strength	10 times greater than MOS capacitors
Metalization	Gold 100µ in. minimum thickness
Hermeticity	Impervious to moisture and solvents

Capacitance and Dissipation Factor Measurements

Applicable to measurements under 2000 pF	
1. Equipment	
LCR Meters HP4275A, HP4277A, HP4278A	
2. Procedures	
Test frequency	- 1MHz ± 50KHz
Test voltage	- Class I Materials: 1± .2 VRMS Class II Materials: .3 ± .1 VRMS
Temperature	- + 25± 2°C Standard - + 25± 1°C for BU, BV materials

Part Number Example (How to Order)

	D	10	BH	100	K	5	P	X
Product family code	_____	_____	_____	_____	_____	_____	_____	_____
Case size code (see pg. 6)	_____	_____	_____	_____	_____	_____	_____	_____
Dielectric material code	_____	_____	_____	_____	_____	_____	_____	_____
Capacitance code	_____	_____	_____	_____	_____	_____	_____	_____
Capacitance tolerance code	_____	_____	_____	_____	_____	_____	_____	_____
Voltage code	_____	_____	_____	_____	_____	_____	_____	_____
Termination code	_____	_____	_____	_____	_____	_____	_____	_____
Test level code	_____	_____	_____	_____	_____	_____	_____	_____

Full range of part numbers are listed on pages 11 through 14 where tolerance code has to be added. Termination code and test level code shown are standard.

Elevated Temperature

Di-caps® have been subjected to voltage conditioning at 165°, 150 Hours, 100Vdc. No further degradation in capacitance value, dissipation factor (at MHz), insulation resistance, or dielectric withstanding voltage has been observed.

Space Qualified

Di-caps® and gap-caps are "first choice" in satellite and missile programs. At Dielectric Laboratories, no failures were noted in 1500 life test samples during 71 million hours of life testing at accelerated test conditions.

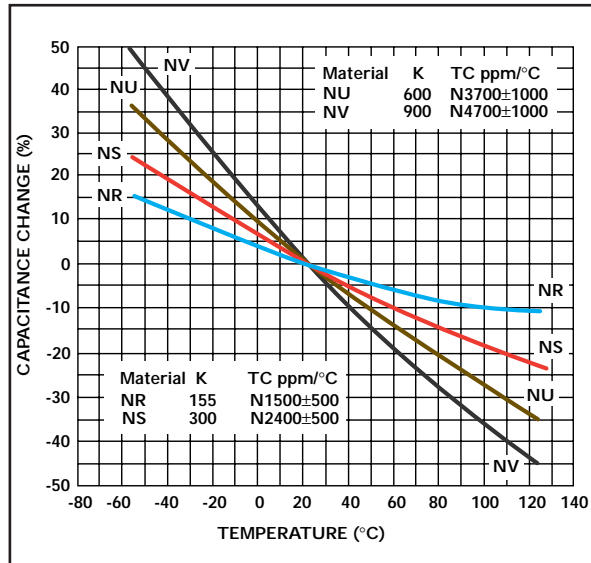
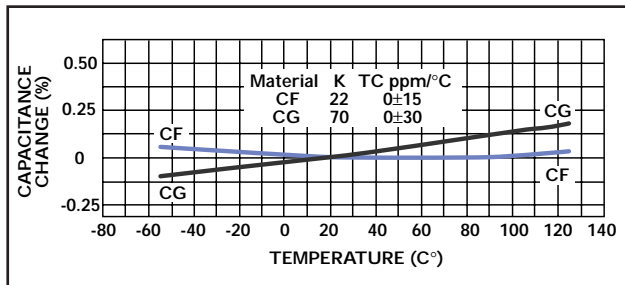


Part Number

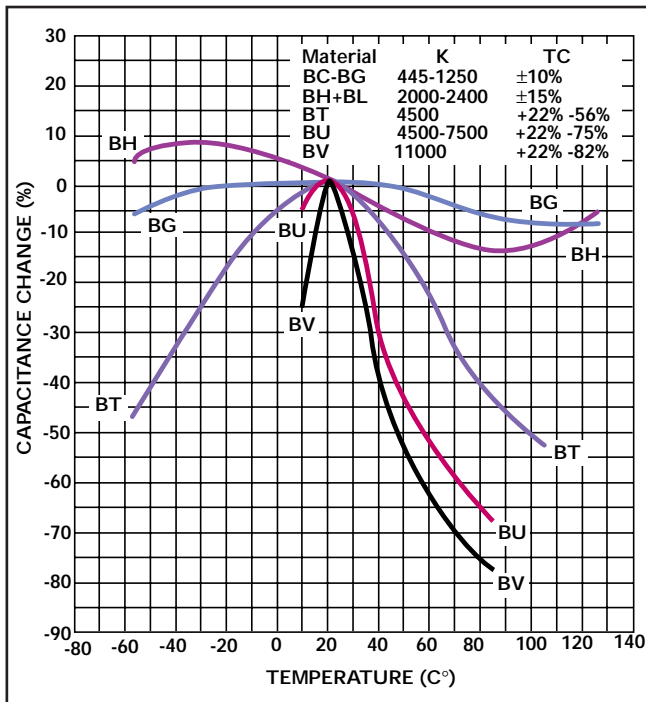
D 15 BU 101 K 5 P X

Temperature Coefficients

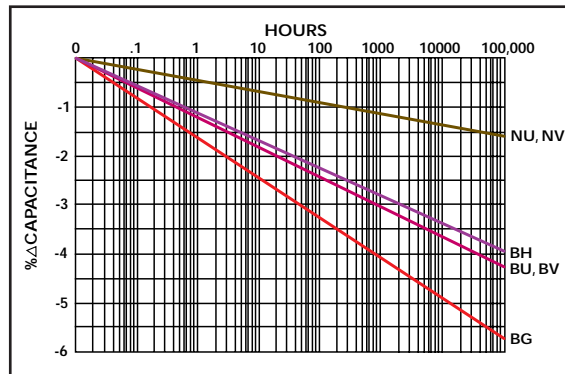
Class 1



Class 11



Typical Aging of Certain Dielectric Materials



Consult Factory For Custom Solutions.



Part Number

D 15 BU 101 K 5 P X

Nominal Capacitance (pF) vs. Dielectric Material and Case Size

50 volts

Case Size	Class I Materials							Class II Materials						
		CF	CG	NR	NS	NU	NV	BF	BG	BE	BH	BT	BU	BV
D10	Min.	0.05	0.15	0.4	0.85	1.6	3.0	1.8	2.2	4.3	6.2	15	22	36
	Max.	0.1	0.35	0.8	1.5	2.7	3.9	2.0	3.9	5.6	12	20	33	51
D12	Min.	0.05	0.25	0.7	1.6	3.0	6.2	2.2	4.7	9.1	15	24	47	75
	Max.	0.2	0.65	1.5	2.7	5.6	8.2	4.3	8.2	12	22	43	68	91
D15	Min.	0.05	0.35	1.1	2.4	4.7	10	2.7	6.8	15	20	43	68	120
	Max.	0.3	1.0	2.2	4.3	9.1	12	6.2	12	18	39	62	100	150
D20	Min.	0.1	0.55	1.5	3.6	6.2	15	3.6	9.1	20	27	56	100	180
	Max.	0.5	1.4	3.3	5.6	12	18	8.2	18	24	51	91	150	200
D25	Min.	0.2	0.85	3.0	7.5	15	24	10	18	36	51	120	180	330
	Max.	0.8	2.7	6.8	12	22	33	15	33	47	100	150	270	390
D30	Min.	0.3	1.1	3.6	9.1	18	30	12	22	47	62	120	220	360
	Max.	1.0	3.3	8.2	15	27	43	20	43	56	100	200	330	470
D35	Min.	0.4	1.9	6.2	15	27	56	20	39	82	120	220	430	680
	Max.	1.8	5.6	12	24	51	75	36	75	100	200	390	620	1000

** Values stated at 1 MHz at 25C.

** Maximum thickness limits may not apply below 0.5pF.

100 volts

Case Size	Class I Materials							Class II Materials						
		CF	CG	NR	NS	NU	NV	BF	BG	BE	BH	BT	BU	BV
D15	Min.	0.06	0.25	0.75	1.6	3.6	7.5	1.8	4.7	9.1	15	30	43	82
	Max.	0.2	0.7	1.5	3.3	6.8	10	4.3	8.2	12	27	39	75	100
D20	Min.	0.06	0.35	0.95	2.4	4.3	9.1	2.7	6.2	15	18	36	68	120
	Max.	0.3	0.9	2.2	3.9	8.2	12	5.6	12	15	33	62	100	150
D25	Min.	0.1	0.65	1.9	4.2	9.1	18	6.8	15	24	33	75	120	200
	Max.	0.6	1.8	3.9	8.2	15	22	12	22	30	68	100	180	270
D30	Min.	0.2	0.75	2.4	5.1	12	22	8.2	15	30	39	91	180	330
	Max.	0.7	2.2	4.7	10	20	27	12	27	36	82	150	270	390
D35	Min.	0.3	1.3	4.3	9.1	20	43	10	24	56	75	180	330	430
	Max.	1.2	3.9	8.2	18	39	51	22	51	68	150	270	390	560
D50	Min.	0.8	3.0	10	22	43	82	18	62	120	180	360	680	1200
	Max.	2.7	9.1	20	39	75	100	56	100	150	330	560	1000	1500
D70	Min.	1.5	4.7	18	36	62	150	39	91	200	270	560	1000	1800
	Max.	4.3	15	33	56	120	200	82	180	240	510	910	1500	2000
D90	Min.	2.7	7.5	24	56	120	220	47	150	300	430	820	1820	2400
	Max.	6.8	22	51	100	200	270	120	270	390	750	1500	2200	3000

** Values stated at 1 MHz at 25C.

Maximum thickness limits may not apply below 0.5pF.

See complete part numbers on pages 11-14.

Cap Value pF	D10	D12	D15	D20	D25	D30	D35
0.05	D10CFR05_5PX	D12CFR05_5PX	D15CFR05_5PX				
0.1	D10CF0R1_5PX	D12CF0R1_5PX	D15CF0R1_5PX	D20CF0R1_5PX			
0.15	D10CGR15_5PX	D12CFR15_5PX	D15CFR15_5PX	D20CFR15_5PX			
0.2	D10CG0R2_5PX	D12CF0R2_5PX	D15CF0R2_5PX	D20CF0R2_5PX	D25CF0R2_5PX		
0.25	D10CGR25_5PX	D12CGR25_5PX	D15CFR25_5PX	D20CFR25_5PX	D25CFR25_5PX		
0.3	D10CG0R3_5PX	D12CG0R3_5PX	D15CF0R3_5PX	D20CF0R3_5PX	D25CF0R3_5PX	D30CF0R3_5PX	
0.35	D10CGR35_5PX	D12CGR35_5PX	D15CGR35_5PX	D20CFR35_5PX	D25CFR35_5PX	D30CFR35_5PX	
0.4	D10NR0R4_5PX	D12CG0R4_5PX	D15CG0R4_5PX	D20CF0R4_5PX	D25CF0R4_5PX	D30CF0R4_5PX	D35CF0R4_5PX
0.45	D10NRR45_5PX	D12CGR45_5PX	D15CGR45_5PX	D20CFR45_5PX	D25CFR45_5PX	D30CFR45_5PX	D35CFR45_5PX
0.5	D10NR0R5_5PX	D12CGR05_5PX	D15CG0R5_5PX	D20CF0R5_5PX	D25CF0R5_5PX	D30CF0R5_5PX	D35CF0R5_5PX
0.55	D10NRR55_5PX	D12CGR55_5PX	D15CGR55_5PX	D20CGR55_5PX	D25CFR55_5PX	D30CFR55_5PX	D35CFR55_5PX
0.6	D10NR0R6_5PX	D12CG0R6_5PX	D15CG0R6_5PX	D20CG0R6_5PX	D25CF0R6_5PX	D30CF0R6_5PX	D35CF0R6_5PX
0.65	D10NRR65_5PX	D12CGR65_5PX	D15CGR65_5PX	D20CGR65_5PX	D25CFR65_5PX	D30CFR65_5PX	D35CFR65_5PX
0.7	D10NR0R7_5PX	D12NR0R7_5PX	D15CG0R7_5PX	D20CG0R7_5PX	D25CF0R7_5PX	D30CF0R7_5PX	D35CF0R7_5PX
0.75	D10NRR75_5PX	D12NRR75_5PX	D15CGR75_5PX	D20CGR75_5PX	D25CFR75_5PX	D30CFR75_5PX	D35CFR75_5PX
0.8	D10NR0R8_5PX	D12NR0R8_5PX	D15CG0R8_5PX	D20CG0R8_5PX	D25CF0R8_5PX	D30CF0R8_5PX	D35CF0R8_5PX
0.85	D10NSR85_5PX	D12NRR85_5PX	D15CGR85_5PX	D20CGR85_5PX	D25CGR85_5PX	D30CFR85_5PX	D35CFR85_5PX
0.9	D10NS0R9_5PX	D12NR0R9_5PX	D15CG0R9_5PX	D20CG0R9_5PX	D25CG0R9_5PX	D30CF0R9_5PX	D35CF0R9_5PX
0.95	D10NSR95_5PX	D12NRR95_5PX	D15CGR95_5PX	D20CGR95_5PX	D25CGR95_5PX	D30CFR95_5PX	D35CFR95_5PX
1.0	D10NS1R0_5PX	D12NR1R0_5PX	D15CG1R0_5PX	D20CG1R0_5PX	D25CG1R0_5PX	D30CF1R0_5PX	D35CF1R0_5PX
1.2	D10NS1R2_5PX	D12NR1R2_5PX	D15NR1R2_5PX	D20CG1R2_5PX	D25CG1R2_5PX	D30CG1R2_5PX	D35CF1R2_5PX
1.5	D10NS1R5_5PX	D12NR1R5_5PX	D15NR1R5_5PX	D20NR1R5_5PX	D25CG1R5_5PX	D30CG1R5_5PX	D35CF1R5_5PX
1.8	D10NU1R8_5PX	D12NS1R8_5PX	D15NR1R8_5PX	D20NR1R8_5PX	D25CG1R8_5PX	D30CG1R8_5PX	D35CF1R8_5PX
2.0	D10NU2R0_5PX	D12NS2R0_5PX	D15NR2R0_5PX	D20NR2R0_5PX	D25CG2R0_5PX	D30CG2R0_5PX	D35CG2R0_5PX
2.2	D10NU2R2_5PX	D12NS2R2_5PX	D15NR2R2_5PX	D20NR2R2_5PX	D25CG2R2_5PX	D30CG2R2_5PX	D35CG2R2_5PX
2.4	D10NU2R4_5PX	D12NS2R4_5PX	D15NS2R4_5PX	D20NR2R4_5PX	D25CG2R4_5PX	D30CG2R4_5PX	D35CG2R4_5PX
2.7	D10NU2R7_5PX	D12NS2R7_5PX	D15NS2R7_5PX	D20NR2R7_5PX	D25CG2R7_5PX	D30CG2R7_5PX	D35CG2R7_5PX
3.0	D10NV3R0_5PX	D12NU3R0_5PX	D15NS3R0_5PX	D20NR3R0_5PX	D25NR3R0_5PX	D30CG3R0_5PX	D35CG3R0_5PX
3.3	D10NV3R3_5PX	D12NU3R3_5PX	D15NS3R3_5PX	D20NR3R3_5PX	D25NR3R3_5PX	D30CG3R3_5PX	D35CG3R3_5PX
3.6	D10NV3R6_5PX	D12NU3R6_5PX	D15NS3R6_5PX	D20NS3R6_5PX	D25NR3R6_5PX	D30NR3R6_5PX	D35CG3R6_5PX
3.9	D10NV3R9_5PX	D12NU3R9_5PX	D15NS3R9_5PX	D20NS3R9_5PX	D25NR3R9_5PX	D30NR3R9_5PX	D35CG3R9_5PX
4.3		D12NU4R3_5PX	D15NS4R3_5PX	D20NS4R3_5PX	D25NR4R3_5PX	D30NR4R3_5PX	D35CG4R3_5PX
4.7		D12NU4R7_5PX	D15NU4R7_5PX	D20NS4R7_5PX	D25NR4R7_5PX	D30NR4R7_5PX	D35CG4R7_5PX
5.1		D12NU5R1_5PX	D15NU5R1_5PX	D20NS5R1_5PX	D25NR5R1_5PX	D30NR5R1_5PX	D35CG5R1_5PX
5.6		D12NU5R6_5PX	D15NU5R6_5PX	D20NS5R6_5PX	D25NR5R6_5PX	D30NR5R6_5PX	D35CG5R6_5PX
6.2		D12NV6R2_5PX	D15NU6R2_5PX	D20NU6R2_5PX	D25NR6R2_5PX	D30NR6R2_5PX	D35NR6R2_5PX
6.8		D12NV6R8_5PX	D15NU6R8_5PX	D20NU6R8_5PX	D25NR6R8_5PX	D30NR6R8_5PX	D35NR6R8_5PX
7.5		D12NV7R5_5PX	D15NU7R5_5PX	D20NU7R5_5PX	D25NS7R5_5PX	D30NR7R5_5PX	D35NR7R5_5PX
8.2		D12NV8R2_5PX	D15NU8R2_5PX	D20NU8R2_5PX	D25NS8R2_5PX	D30NR8R2_5PX	D35NR8R2_5PX
9.1			D15NU9R1_5PX	D20NU9R1_5PX	D25NS9R1_5PX	D30NS9R1_5PX	D35NR9R1_5PX
10			D15NV100_5PX	D20NU100_5PX	D25NS100_5PX	D30NS100_5PX	D35NR100_5PX
12			D15NV120_5PX	D20NU120_5PX	D25NS120_5PX	D30NS120_5PX	D35NR120_5PX
15				D20NV150_5PX	D25NU150_5PX	D30NS150_5PX	D35NS150_5PX
18					D25NU180_5PX	D30NU180_5PX	D35NS180_5PX
20				D20NV180_5PX	D25NU200_5PX	D30NU200_5PX	D35NS200_5PX
22					D25NU220_5PX	D30NU220_5PX	D35NS220_5PX
24					D25NV240_5PX	D30NU240_5PX	D35NS240_5PX
27					D25NV270_5PX	D30NU270_5PX	D35NU270_5PX
30					D25NV300_5PX	D30NV300_5PX	D35NU300_5PX
33					D25NV330_5PX	D30NV330_5PX	D35NU330_5PX
36						D30NV360_5PX	D35NU360_5PX
39						D30NV390_5PX	D35NU390_5PX
43						D30NV430_5PX	D35NU430_5PX
47							D35NU470_5PX
51							D35NU510_5PX
56							D35NV560_5PX
62							D35NV620_5PX
68							D35NV680_5PX
82							
100							

See page 7 for Capacitance Tolerances and Guidelines.



50 Volt DiCap Class 1I Materials

Cap Value pF	D10	D12	D15	D20	D25	D30	D35
1.8	D10BF1R8_5PX						
2	D10BF2R0_5PX						
2.2	D10BG2R2_5PX	D12BF2R2_5PX					
2.4	D10BG2R4_5PX	D12BF2R4_5PX					
2.7	D10BG2R7_5PX	D12BF2R7_5PX	D15BF2R7_5PX				
3	D10BG3R0_5PX	D12BF3R0_5PX	D15BF3R0_5PX				
3.3	D10BG3R3_5PX	D12BF3R3_5PX	D15BF3R3_5PX				
3.6	D10BG3R6_5PX	D12BF3R6_5PX	D15BF3R6_5PX	D20BF3R6_5PX			
3.9	D10BG3R9_5PX	D12BF3R9_5PX	D15BF3R9_5PX	D20BF3R9_5PX			
4.3	D10BE4R3_5PX	D12BF4R3_5PX	D15BF4R3_5PX	D20BF4R3_5PX			
4.7	D10BE4R7_5PX	D12BG4R7_5PX	D15BF4R7_5PX	D20BF4R7_5PX			
5.1	D10BE5R1_5PX	D12BG5R1_5PX	D15BF5R1_5PX	D20BF5R1_5PX			
5.6	D10BE5R6_5PX	D12BG5R6_5PX	D15BF5R6_5PX	D20BF5R6_5PX			
6.2	D10BH6R2_5PX	D12BG6R2_5PX	D15BF6R2_5PX	D20BF6R2_5PX			
6.8	D10BH6R8_5PX	D12BG6R8_5PX	D15BG6R8_5PX	D20BF6R8_5PX			
7.5	D10BH7R5_5PX	D12BG7R5_5PX	D15BG7R5_5PX	D20BF7R5_5PX			
8.2	D10BH8R2_5PX	D12BG8R2_5PX	D15BG8R2_5PX	D20BF8R2_5PX			
9.1	D10BH9R1_5PX	D12BE9R1_5PX	D15BG9R1_5PX	D20BG9R1_5PX			
10	D10BH100_5PX	D12BE100_5PX	D15BG100_5PX	D20BG100_5PX	D25BF100_5PX		
12	D10BH120_5PX	D12BE120_5PX	D15BG120_5PX	D20BG120_5PX	D25BF120_5PX	D30BF120_5PX	
15	D10BT150_5PX	D12BH150_5PX	D15BE150_5PX	D20BG150_5PX	D25BF150_5PX	D30BF150_5PX	
18	D10BT180_5PX	D12BH180_5PX	D15BE180_5PX	D20BG180_5PX	D25BG180_5PX	D30BF180_5PX	
20	D10BT200_5PX	D12BH200_5PX	D15BH200_5PX	D20BE200_5PX	D25BG200_5PX	D30BF200_5PX	D35BF200_5PX
22	D10BU220_5PX	D12BH220_5PX	D15BH220_5PX	D20BE220_5PX	D25BG220_5PX	D30BG220_5PX	D35BF220_5PX
24	D10BU240_5PX	D12BT240_5PX	D15BH240_5PX	D20BE240_5PX	D25BG240_5PX	D30BG240_5PX	D35BF240_5PX
27	D10BU270_5PX	D12BT270_5PX	D15BH270_5PX	D20BH270_5PX	D25BG270_5PX	D30BG270_5PX	D35BF270_5PX
30	D10BU300_5PX	D12BT300_5PX	D15BH300_5PX	D20BH300_5PX	D25BG300_5PX	D30BG300_5PX	D35BF300_5PX
33	D10BU330_5PX	D12BT330_5PX	D15BH330_5PX	D20BH330_5PX	D25BG330_5PX	D30BG330_5PX	D35BF330_5PX
36	D10BV360_5PX	D12BT360_5PX	D15BH360_5PX	D20BH360_5PX	D25BE360_5PX	D30BG360_5PX	D35BF360_5PX
39	D10BV390_5PX	D12BT390_5PX	D15BH390_5PX	D20BH390_5PX	D25BE390_5PX	D30BG390_5PX	D35BG390_5PX
43	D10BV430_5PX	D12BT430_5PX	D15BT430_5PX	D20BH430_5PX	D25BE430_5PX	D30BG430_5PX	D35BG430_5PX
47	D10BV470_5PX	D12BU470_5PX	D15BT470_5PX	D20BH470_5PX	D25BE470_5PX	D30BE470_5PX	D35BG470_5PX
51	D10BV510_5PX	D12BU510_5PX	D15BT510_5PX	D20BH510_5PX	D25BH510_5PX	D30BE510_5PX	D35BG510_5PX
56		D12BU560_5PX	D15BT560_5PX	D20BT560_5PX	D25BH560_5PX	D30BE560_5PX	D35BG560_5PX
62		D12BU620_5PX	D15BT620_5PX	D20BT620_5PX	D25BH620_5PX	D30BH620_5PX	D35BG620_5PX
68		D12BU680_5PX	D15BU680_5PX	D20BT680_5PX	D25BH680_5PX	D30BH680_5PX	D35BG680_5PX
82		D12BV820_5PX	D15BU820_5PX	D20BT820_5PX	D25BH820_5PX	D30BH820_5PX	D35BE820_5PX
100			D15BU101_5PX	D20BU101_5PX	D25BH101_5PX	D30BH101_5PX	D35BE101_5PX
120			D15BV121_5PX	D20BU121_5PX	D25BT121_5PX	D30BT121_5PX	D35BH121_5PX
150			D15BV151_5PX	D20BU151_5PX	D25BT151_5PX	D30BT151_5PX	D35BH151_5PX
180				D20BV181_5PX	D25BU181_5PX	D30BT181_5PX	D35BH181_5PX
200				D20BV201_5PX	D25BU201_5PX	D30BT201_5PX	D35BH201_5PX
220					D25BU221_5PX	D30BU221_5PX	D35BT221_5PX
270					D25BU271_5PX	D30BU271_5PX	D35BT271_5PX
330					D25BV331_5PX	D30BU331_5PX	D35BT331_5PX
390					D25BV391_5PX	D30BV391_5PX	D35BT391_5PX
470						D30BV471_5PX	D35BU471_5PX
560							D35BU561_5PX
680							D35BV681_5PX
820							D35BV821_5PX
1000							D35BV102_5PX

See page 7 for Capacitance Tolerances and Guidelines.

100 Volt DiCap Class 1 Materials

Cap Value pF	D15	D20	D25	D30	D35	D50	D70	D90
0.1	D15CF0R1_1PX	D20CF0R1_1PX	D25CF0R1_1PX					
0.15	D15CFR15_1PX	D20CFR15_1PX	D25CFR15_1PX					
0.2	D15CF0R2_1PX	D20CF0R2_1PX	D25CF0R2_1PX	D30CF0R2_1PX				
0.25	D15CGR25_1PX	D20CGR25_1PX	D25CGR25_1PX	D30CGR25_1PX				
0.3	D15CG0R3_1PX	D20CF0R3_1PX	D25CF0R3_1PX	D30CF0R3_1PX	D35CF0R3_1PX			
0.35	D15CGR35_1PX	D20CGR35_1PX	D25CGR35_1PX	D30CGR35_1PX	D35CGR35_1PX			
0.4	D15CG0R4_1PX	D20CG0R4_1PX	D25CF0R4_1PX	D30CF0R4_1PX	D35CF0R4_1PX			
0.45	D15CGR45_1PX	D20CGR45_1PX	D25CFR45_1PX	D30CFR45_1PX	D35CFR45_1PX			
0.5	D15CG0R5_1PX	D20CG0R5_1PX	D25CF0R5_1PX	D30CF0R5_1PX	D35CF0R5_1PX			
0.55	D15CGR55_1PX	D20CGR55_1PX	D25CFR55_1PX	D30CFR55_1PX	D35CFR55_1PX			
0.6	D15CG0R6_1PX	D20CG0R6_1PX	D25CF0R6_1PX	D30CF0R6_1PX	D35CF0R6_1PX			
0.65	D15CGR65_1PX	D20CGR65_1PX	D25CGR65_1PX	D30CGR65_1PX	D35CGR65_1PX			
0.7	D15CG0R7_1PX	D20CG0R7_1PX	D25CG0R7_1PX	D30CF0R7_1PX	D35CF0R7_1PX			
0.75	D15NRR75_1PX	D20CGR75_1PX	D25CGR75_1PX	D30CGR75_1PX	D35CFR75_1PX			
0.8	D15NR0R8_1PX	D20CG0R8_1PX	D25CG0R8_1PX	D30CG0R8_1PX	D35CF0R8_1PX	D50CF0R8_1PX		
0.85	D15NRR85_1PX	D20CGR85_1PX	D25CGR85_1PX	D30CGR85_1PX	D35CFR85_1PX	D50CFR85_1PX		
0.9	D15NR0R9_1PX	D20CG0R9_1PX	D25CG0R9_1PX	D30CG0R9_1PX	D35CF0R9_1PX	D50CF0R9_1PX		
0.95	D15NRR95_1PX	D20NRR95_1PX	D25CGR95_1PX	D30CGR95_1PX	D35CFR95_1PX	D50CFR95_1PX		
1	D15NR1R0_1PX	D20NR1R0_1PX	D25CG1R0_1PX	D30CG1R0_1PX	D35CF1R0_1PX	D50CF1R0_1PX		
1.2	D15NR1R2_1PX	D20NR1R2_1PX	D25CG1R2_1PX	D30CG1R2_1PX	D35CF1R2_1PX	D50CF1R2_1PX		
1.5	D15NR1R5_1PX	D20NR1R5_1PX	D25CG1R5_1PX	D30CG1R5_1PX	D35CG1R5_1PX	D50CF1R5_1PX	D70CF1R5_1PX	
1.8	D15NS1R8_1PX	D20NR1R8_1PX	D25CG1R8_1PX	D30CG1R8_1PX	D35CG1R8_1PX	D50CF1R8_1PX	D70CF1R8_1PX	
2	D15NS2R0_1PX	D20NR2R0_1PX	D25NR2R0_1PX	D30CG2R0_1PX	D35CG2R0_1PX	D50CF2R0_1PX	D70CF2R0_1PX	
2.2	D15NS2R2_1PX	D20NS2R2_1PX	D25NR2R2_1PX	D30CG2R2_1PX	D35CG2R2_1PX	D50CF2R2_1PX	D70CF2R2_1PX	
2.4	D15NS2R4_1PX	D20NS2R4_1PX	D25NR2R4_1PX	D30NR2R4_1PX	D35CG2R4_1PX	D50CF2R4_1PX	D70CF2R4_1PX	
2.7	D15NS2R7_1PX	D20NS2R7_1PX	D25NR2R7_1PX	D30NR2R7_1PX	D25CG2R7_1PX	D50CF2R7_1PX	D70CF2R7_1PX	D90CF2R7_1PX
3	D15NS3R0_1PX	D20NS3R0_1PX	D25NR3R0_1PX	D30NR3R0_1PX	D25CG3R0_1PX	D50CG3R0_1PX	D70CF3R0_1PX	D90CF3R0_1PX
3.3	D15NS3R3_1PX	D20NS3R3_1PX	D25NR3R3_1PX	D30NR3R3_1PX	D35CG3R3_1PX	D50CG3R3_1PX	D70CF3R3_1PX	D90CF3R3_1PX
3.6	D15NU3R6_1PX	D20NS3R6_1PX	D25NR3R6_1PX	D30NR3R6_1PX	D35CG3R6_1PX	D50CG3R6_1PX	D70CF3R6_1PX	D90CF3R6_1PX
3.9	D15NU3R9_1PX	D20NS3R9_1PX	D25NR3R9_1PX	D30NR3R9_1PX	D35CG3R9_1PX	D50CG3R9_1PX	D70CF3R9_1PX	D90CF3R9_1PX
4.3	D15NU4R3_1PX	D20NU4R3_1PX	D25NS4R3_1PX	D30NR4R3_1PX	D35NR4R3_1PX	D50CG4R3_1PX	D70CF4R3_1PX	D90CF4R3_1PX
4.7	D15NU4R7_1PX	D20NU4R7_1PX	D25NS4R7_1PX	D30NR4R7_1PX	D35NR4R7_1PX	D50CG4R7_1PX	D70CF4R7_1PX	D90CF4R7_1PX
5.1	D15NU5R1_1PX	D20NU5R1_1PX	D25NS5R1_1PX	D30NS5R1_1PX	D35NR5R1_1PX	D50CG5R1_1PX	D70CG5R1_1PX	D90CF5R1_1PX
5.6	D15NU5R6_1PX	D20NU5R6_1PX	D25NS5R6_1PX	D30NS5R6_1PX	D35NR5R6_1PX	D50CG5R6_1PX	D70CG5R6_1PX	D90CF5R6_1PX
6.2	D15NU6R2_1PX	D20NU6R2_1PX	D25NS6R2_1PX	D30NS6R2_1PX	D35NR6R2_1PX	D50CG6R2_1PX	D70CG6R2_5PX	D90CF6R2_1PX
6.8	D15NU6R8_1PX	D20NU6R8_1PX	D25NS6R8_1PX	D30NS6R8_1PX	D35NR6R8_1PX	D50CG6R8_5PX	D70CG6R8_5PX	D90CF6R8_1PX
7.5	D15NV7R5_1PX	D20NU7R5_1PX	D25NS7R5_1PX	D30NS7R5_1PX	D35NR7R5_1PX	D50CG7R5_1PX	D70CG7R5_1PX	D90CG7R5_1PX
8.2	D15NV8R2_1PX	D20NU8R2_1PX	D25NS8R2_1PX	D30NS8R2_1PX	D35NR8R2_1PX	D50CG8R2_1PX	D70CG8R2_1PX	D90CG8R2_1PX
9.1	D15NV9R1_1PX	D20NV9R1_1PX	D25NU9R1_1PX	D30NS9R1_1PX	D35NS9R1_1PX	D50CG9R1_1PX	D70CG9R1_1PX	D90CG9R1_1PX
10	D15NV100_1PX	D20NV100_1PX	D25NU100_1PX	D30NS100_1PX	D35NS100_1PX	D50NR100_1PX	D70CG100_1PX	D90CG100_1PX
12		D20NV120_1PX	D25NU120_1PX	D30NU120_1PX	D35NS120_1PX	D50NR120_1PX	D70CG120_1PX	D90CG120_1PX
15			D25NU150_1PX	D30NU150_1PX	D35NS150_1PX	D50NR150_1PX	D70CG150_1PX	D90CG150_1PX
18			D25NV180_1PX	D30NU180_1PX	D35NS180_1PX	D50NR180_1PX	D70NR180_1PX	D90CG180_1PX
20			D25NV200_1PX	D30NU200_1PX	D35NU200_1PX	D50NR200_1PX	D70NR200_1PX	D90CG200_1PX
22			D25NV220_1PX	D30NV220_1PX	D35NU220_1PX	D50NR220_1PX	D70NR220_1PX	D90CG220_1PX
24				D30NV240_1PX	D35NU240_1PX	D50NS240_1PX	D70NR240_1PX	D90NR240_1PX
27				D30NV270_1PX	D35NU270_1PX	D50NS270_1PX	D70NR270_1PX	D90NR270_1PX
30					D35NU300_1PX	D50NS300_1PX	D70NR300_1PX	D90NR300_1PX
33					D35NU330_1PX	D50NS330_1PX	D70NR330_1PX	D90NR330_1PX
36					D35NU360_1PX	D50NS360_1PX	D70NS360_1PX	D90NR360_1PX
39					D35NU390_1PX	D50NS390_1PX	D70NS390_1PX	D90NR390_1PX
43					D35NV430_1PX	D50NU430_1PX	D70NS430_1PX	D90NR430_1PX
47					D35NV470_1PX	D50NU470_1PX	D70NS470_1PX	D90NR470_1PX
51					D35NV510_1PX	D50NU510_1PX	D70NS510_1PX	D90NR510_1PX
56						D50NU560_1PX	D70NS560_1PX	D90NS560_1PX
62						D50NU620_1PX	D70NU620_1PX	D90NS620_1PX
68						D50NU680_1PX	D70NU680_1PX	D90NS680_1PX
82						D50NV820_1PX	D70NU820_1PX	D90NS820_1PX
100						D50NV101_1PX	D70NU101_1PX	D90NS101_1PX
120							D70NU121_1PX	D90NU121_1PX
150							D70NV151_1PX	D90NU151_1PX
180							D70NV181_1PX	D90NU181_1PX
200							D70NV201_1PX	D90NU201_1PX
220								D90NV221_1PX
270								D90NV271_1PX
300								

See page 7 for Capacitance Tolerances and Guidelines.



100 Volt DiCap Class 11 Materials

Cap Value pF	D15	D20	D25	D30	D35	D50	D70	D90	
1.8	D15BF1R8_1PX								
2	D15BF2R0_1PX								
2.2	D15BF2R2_1PX								
2.7	D15BF2R7_1PX	D20BF2R7_1PX							
3	D15BF3R0_1PX	D20BF3R0_1PX							
3.3	D15BF3R3_1PX	D20BF3R3_1PX							
3.6	D15BF3R6_1PX	D20BF3R6_1PX							
3.9	D15BF3R9_1PX	D20BF3R9_1PX							
4.3	D15BF4R3_1PX	D20BF4R3_1PX							
4.7	D15BG4R7_1PX	D20BF4R7_1PX							
5.1	D15BG5R1_1PX	D20BF5R1_1PX							
5.6	D15BG5R6_1PX	D20BF5R6_1PX							
6.2	D15BG6R2_1PX	D20BG6R2_1PX							
6.8	D15BG6R8_1PX	D20BG6R8_1PX	D25BF6R8_1PX						
7.5	D15BG7R5_1PX	D20BG7R5_1PX	D25BF7R5_1PX						
8.2	D15BG8R2_1PX	D20BG8R2_1PX	D25BF8R2_1PX	D30BF8R2_1PX					
9.1	D15BE9R1_1PX	D20BG9R1_1PX	D25BF9R1_1PX	D30BF9R1_1PX					
10	D15BG100_1PX	D20BG100_1PX	D25BF100_1PX	D30BF100_1PX	D35BF100_1PX				
12	D15BE120_1PX	D20BG120_1PX	D25BF120_1PX	D30BF120_1PX	D35BF120_1PX				
15	D15BH150_1PX	D20BE150_1PX	D25BG150_1PX	D30BG150_1PX	D35BF150_1PX				
18	D15BH180_1PX	D20BH180_1PX	D25BG180_1PX	D30BG180_1PX	D35BF180_1PX	D50BF180_1PX			
20	D15BH200_1PX	D20BH200_1PX	D25BG200_1PX	D30BG200_1PX	D35BF200_1PX	D50BF200_1PX			
22	D15BH220_1PX	D20BH220_1PX	D25BG220_1PX	D30BG220_1PX	D35BF220_1PX	D50BF220_1PX			
24	D15BH240_1PX	D20BH240_1PX	D25BE240_1PX	D30BG240_1PX	D35BG240_1PX	D50BF240_1PX			
27	D15BH270_1PX	D20BH270_1PX	D25BE270_1PX	D30BE270_1PX	D35BG270_1PX	D50BF270_1PX			
30	D15BT300_1PX	D20BH300_1PX	D25BE300_1PX	D30BE300_1PX	D35BG300_1PX	D50BF300_1PX			
33	D15BT330_1PX	D20BH330_1PX	D25BH330_1PX	D30BE330_1PX	D35BG330_1PX	D50BF330_1PX			
36	D15BT360_1PX	D20BT360_1PX	D25BH360_1PX	D30BE360_1PX	D35BG360_1PX	D50BF360_1PX			
39	D15BT390_1PX	D20BT390_1PX	D25BH390_1PX	D30BH390_1PX	D35BG390_1PX	D50BF390_1PX	D70BF390_1PX		
43	D15BU430_1PX	D20BT430_1PX	D25BH430_1PX	D30BH430_1PX	D35BG430_1PX	D50BF430_1PX	D70BF430_1PX		
47	D15BU470_1PX	D20BT470_1PX	D25BH470_1PX	D30BH470_1PX	D35BG470_1PX	D50BF470_1PX	D70BF470_1PX	D90BF470_1PX	
51	D15BU510_1PX	D20BT510_1PX	D25BH510_1PX	D30BH510_1PX	D35BG510_1PX	D50BF510_1PX	D70BF510_1PX	D90BF510_1PX	
56	D15BU560_1PX	D20BT560_1PX	D25BH560_1PX	D30BH560_1PX	D35BE560_1PX	D50BF560_1PX	D70BF560_1PX	D90BF560_1PX	
62	D15BU620_1PX	D20BT620_1PX	D25BH620_1PX	D30BH620_1PX	D35BE620_1PX	D50BG620_1PX	D70BF620_1PX	D90BF620_1PX	
68	D15BU680_1PX	D20BU680_1PX	D25BH680_1PX	D30BH680_1PX	D35BE680_1PX	D50BG680_1PX	D70BF680_1PX	D90BF680_1PX	
82	D15BV820_1PX	D20BU820_1PX	D25BT820_1PX	D30BH820_1PX	D35BH820_1PX	D50BG820_1PX	D70BF820_1PX	D90BF820_1PX	
100	D15BV101_1PX	D20BU101_1PX	D25BT101_1PX	D30BT101_1PX	D35BH101_1PX	D50BG101_1PX	D70BG101_1PX	D90BF101_1PX	
120		D20BV121_1PX	D25BU121_1PX	D30BT121_1PX	D35BH121_1PX	D50BE121_1PX	D70BG121_1PX	D90BF121_1PX	
150		D20BV151_1PX	D25BU151_1PX	D30BT151_1PX	D35BH151_1PX	D50BE151_1PX	D70BG151_1PX	D90BG151_1PX	
180			D25BU181_1PX	D30BU181_1PX	D35BT181_1PX	D50BH181_1PX	D70BG181_1PX	D90BG181_1PX	
200			D25BV201_1PX	D30BU201_1PX	D35BT201_1PX	D50BH201_1PX	D70BE201_1PX	D90BG201_1PX	
220			D25BV221_1PX	D30BU221_1PX	D35BT221_1PX	D50BH221_1PX	D70BE221_1PX	D90BG221_1PX	
270			D25BV271_1PX	D30BU271_1PX	D35BT271_1PX	D50BH271_1PX	D70BH271_1PX	D90BG271_1PX	
330				D30BV331_1PX	D35BU331_1PX	D50BH331_1PX	D70BH331_1PX	D90BE331_1PX	
390				D30BV391_1PX	D35BU391_1PX	D50BT391_1PX	D70BH391_1PX	D90BE391_1PX	
470					D35BV471_1PX	D50BT471_1PX	D70BH471_1PX	D90BH471_1PX	
560					D35BV561_1PX	D50BT561_1PX	D70BH561_1PX	D90BH561_1PX	
680						D35BV681_1PX	D50BU681_1PX	D70BT681_1PX	D90BH681_1PX
820							D50BU821_1PX	D70BT821_1PX	D90BT821_1PX
1000							D50BU102_1PX	D70BU102_1PX	D90BT102_1PX
1200						D50BV122_1PX	D70BU122_1PX	D90BT122_1PX	
1800							D70BV182_1PX	D90BU182_1PX	
2200								D90BU222_1PX	
3000								D90BV302_1PX	

See page 7 for Capacitance Tolerances and Guidelines.