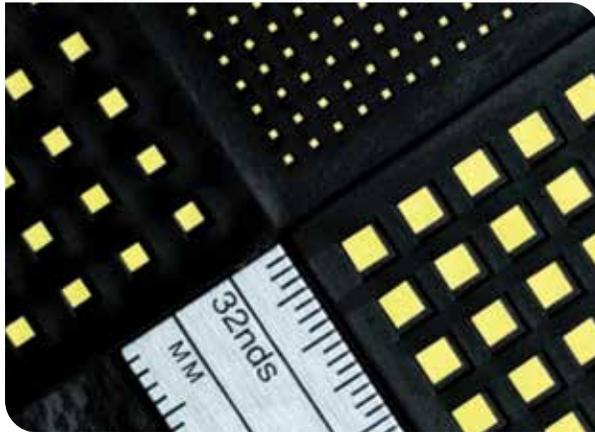




RF Capacitors  
**Single Layer (SLC)**



Made in the USA



Johanson Single Layer Capacitors (SLCs) are offered in a wide range of dielectrics for very high frequency applications.

Available in sizes from 0.25 x 0.25mm (10 x 10mil) to 2.28 x 2.28mm (90 x 90mil), these single layer capacitors are used in military infrastructure and industrial markets.

In addition to their excellent performance, reliability and consistency in volume production has been the focus.

**Border Type Selection**

Series	Type	Configurations
S0	No Border	
S1	Single Border	
S2	Dual Border	

**Features:**

- Ceramic, low profile services exhibit very high-Q / low insertion loss; SRFs to 50 GHz
- Thin film gold electrodes provide superior wire bonding & die attach performance
- Four Single Layer (SLC) Device Types to Fit Many Applications:
  - Standard Single Layer
  - Border Single Layer
  - Bar Single Layer Arrays
  - Custom Single Layer Products

**Common Applications:**

- Microwave Integrated Components
- GaAs Integrated Circuits
- RF/Microwave Components
- DC Block, Bypass, Tuning

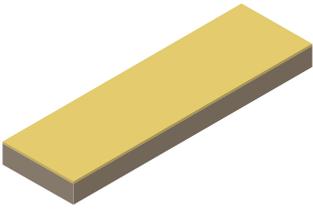
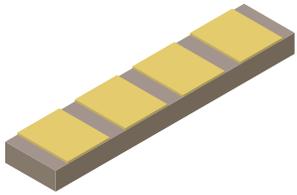
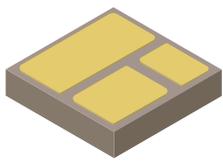
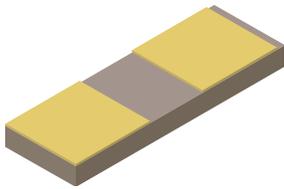
**Metallization Characteristics**

Metallization Type	TiW/Au (Titanium-Tungsten/Gold)	TiW/Ni/Au (Titanium-Tungsten/Nickel/Gold)	TiW/Pt/Au (Titanium-Tungsten/Platinum/Gold)
Termination Code	<b>S2</b>	<b>S1</b>	<b>S0</b>
Attachment Compatibility Wire / Ribbon Bonding	Wire / Ribbon Bonding Silver or Gold Conductive Epoxy Au/Ge or Au/Si Eutectic Preform Excellent High Temperature Resistance (400°C) Unsuitable for Pb/Sn or Au/Sn Soldering	Pb/Sn or Au/Sn Soldering Au/Sn Eutectic Preform Moderate High Temp. Resistance (325°C) Long term high temperature may cause Ni diffusion and wire bond problems on Au/Ge	Pb/Sn or Au/Sn Soldering Au/Sn Eutectic Preform Moderate High Temp. Resistance (325°C) Long term high temperature may cause Ni diffusion and wire bond problems on Au/Ge



RF Capacitors  
**Single Layer (SLC)**

**Options Available (SLC)**

Rectangular	
Bar Cap Arrays	
Binary	
Dual Split	
Mounting Short	

**Environmental Characteristics (SLC)**

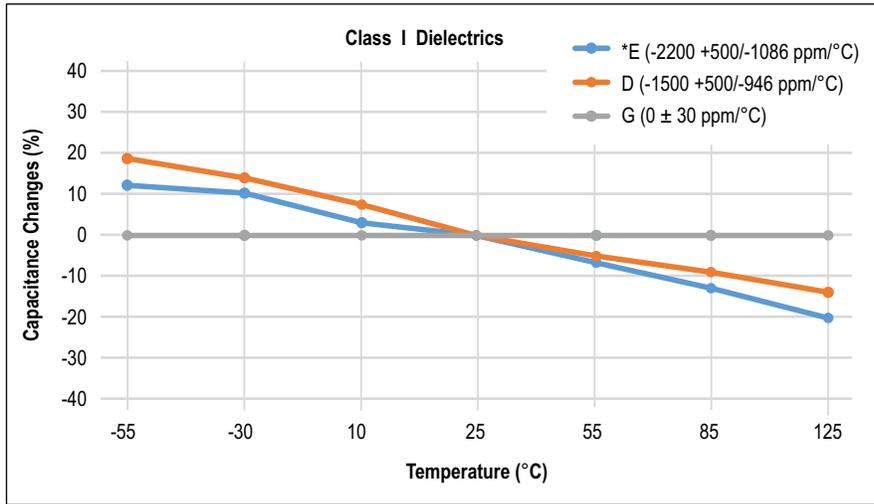
Bond Strength	Exceeds MIL-S-883, Meth. 2011
Shear Strength	Exceeds MIL-S-883, Meth. 2019
Solder Heat Resistance	MIL-S-202, Meth. 210-C, (260±5°C, 5 sec.)
Solderability	MIL-S-202, Meth. 208, (245±5°C, 5 sec.)
Shock	MIL-S-202, Meth. 213-I, (100g, 6 msec.)
Thermal Shock	MIL-S-202, Meth. 107, A, (-55 to +125°C)
Vibration	MIL-S-202, Meth. 204-G, (30g, 10-2000Hz)
Burn-In Life Test	MIL-S-202, Meth. 108, A/F
Low Voltage Humidity	Mil-C-49464, Para. 3.17
Barometric Pressure	MIL-S-202, Meth. 105, B
Immersion Salt Spray	MIL-S-202, Meth. 104, B
Moisture Resistance	MIL-S-202, Meth. 106



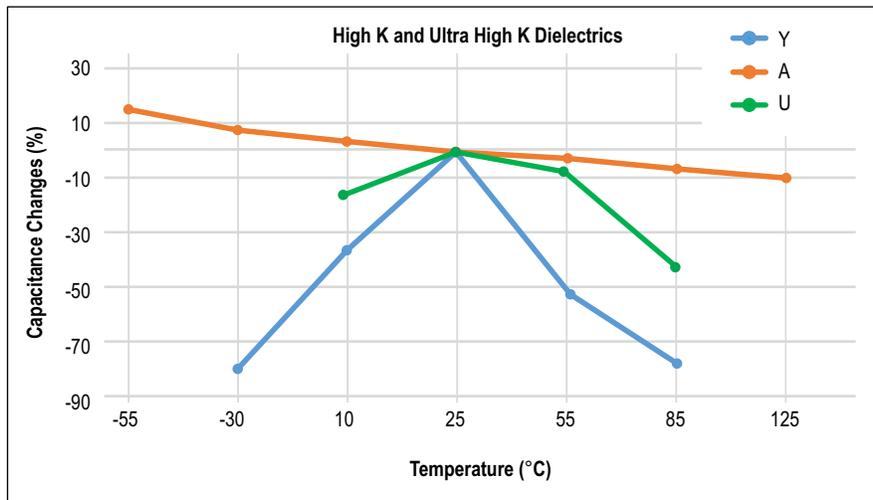
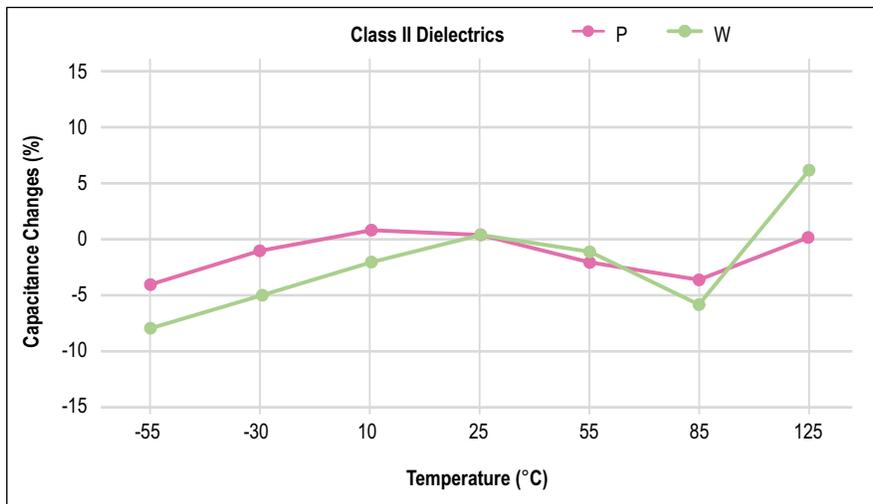
# RF Capacitors Single Layer (SLC)

Options & Environmental

Characteristics



Note: \*Capacitance change is lower than 18% at from -55 to 25°C range





RF Capacitors  
**Single Layer (SLC)**

**Dielectric Characteristics - RF Single Layer Capacitors (SLC)**

Dielectric Code	Constant (K)	Temperature Coefficient	Temperature Range	Dissipation Factor (DF)	Test Conditions	Tolerances
<b>G</b>	23 - 76	0 ± 30ppm	-55°C to +125°C	≤ 0.15% @ 1MHz	1	B, C, D (A, <2pF) (F-K, >10pF)
<b>D</b>	160	-1,500 +500ppm / -946ppm	-55°C to +125°C	≤ 0.25% @ 1MHz	1	J, K, M (B, C, D <10pF)
<b>E</b>	440	-2,200 +500ppm / -1,086ppm	-55°C to +125°C	≤ 1.5% @ 1MHz	1	J, K, M (C, D <10pF)
<b>P</b>	725 - 1,410	± 10%	-55°C to +125°C	≤ 2.50% @ 1kHz	2	J, K, M
<b>W</b>	2,300 - 4,100	± 15%	-55°C to +125°C	≤ 2.50% @ 1kHz	2	J, K, M
<b>U</b>	8,500	+22% - 56%	+10°C to +85°C	≤ 4.00% @ 1kHz	2	M, X
<b>Y</b>	15,000	+22% - 82%	-30°C to +85°C	≤ 4.00% @ 1kHz	2	M, X
<b>A</b>	15,000 - 65,000	± 15%	-55°C to +125°C	≤ 2.50% @ 1kHz	2	K, M, X

**Note:** Colors indicate a specific material.

Per MIL-PRF-49464C - 3.8 Dissipation factor. When determined as specified in 4.8.5, the dissipation factor for capacitors of 4.7 pF or greater shall not exceed: 0.15% for G – Dielectric, 2.5% for P – Dielectric. Customer Specification takes preference if referenced on the Purchase Order.

**Electrical Characteristics**

<b>Voltage Rating</b>	16; 25; 50; & 100 WVDC
<b>Dielectric Strength</b>	2.5 x WVDC min, 25°C, 50 mA max
<b>Test Conditions</b>	Class 1 1.0 ± 0.2 VRMS @ 1MHz, 25°C Class 2 For values ≤ 100pF: 1.0±0.2 VRMS @ 1MHz, 25°C; for ALL other Values: 1.0±0.2 VRMS @1KHz,25°C Class 3 1.0±0.2 VRMS @ 1KHz



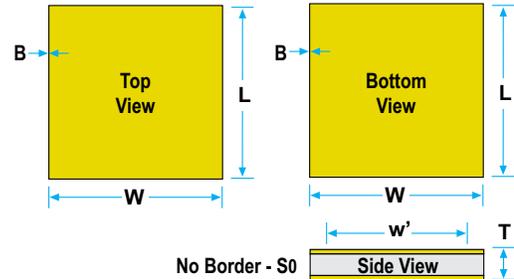
RF Capacitors

# Single Layer (SLC) - No Border

**S0**  
SERIES

GPN = Global Part Number  
S0 = No Border

## S0 Series Configuration



### S0 Series Mechanical Characteristics:

GPN Code	Size	Width (W)	Max Length (L)	Border (B)	Thickness (T)	Thickness for A-Dielectric
S0AA	inch	0.010" + 0.001"/-0.003"	0.012"	No Border	0.006" ± 0.0025" 0.153mm ± 0.064mm	0.007" ± 0.002" 0.177mm ± 0.051mm
	mm	0.254mm + 0.025mm/-0.076mm	0.305mm			
S0AG	inch	0.012" + 0.001"/-0.003"	0.015"			
	mm	0.305mm + 0.025mm/-0.076mm	0.381mm			
S0AL	inch	0.015" + 0.001"/-0.003"	0.020"			
	mm	0.381mm + 0.025mm/-0.076mm	0.508mm			
S0AP	inch	0.020" + 0.001"/-0.003"	0.025"			
	mm	0.508mm + 0.025mm/-0.076mm	0.635mm			
S0AU	inch	0.025" + 0.001"/-0.003"	0.030"			
	mm	0.635mm + 0.025mm/-0.076mm	0.762mm			
S0BC	inch	0.030" + 0.001"/-0.003"	0.035"			
	mm	0.762mm + 0.025mm/-0.076mm	0.889mm			
S0BG	inch	0.035" ± 0.005"	0.040"			
	mm	0.889mm ± 0.127mm	1.016mm			
S0BL	inch	0.040" ± 0.005"	0.045"			
	mm	1.016mm ± 0.127mm	1.143mm			
S0BQ	inch	0.050" ± 0.010"	0.060"			
	mm	1.270mm ± 0.254mm	1.524mm			
S0BR	inch	0.070" ± 0.010"	0.080"			
	mm	1.778mm ± 0.254mm	2.032mm			
S0BT	inch	0.090" ± 0.010"	0.100"			
	mm	2.286mm ± 0.254mm	2.450mm			



RF Capacitors

# Single Layer (SLC) - No Border

**S0**  
SERIES

## No Border (S0 Series) Capacitance Selection:

GPN Code		S0AA				S0AG				S0AL				S0AP				S0AU				
Part Size		0.010" x 0.010"				0.012" x 0.012"				0.015" x 0.015"				0.020" x 0.020"				0.025" x 0.025"				
pF	Code	16V	25V	50V	100V																	
0.1	0R1			G	G			G	G													
0.2	0R2			G	G			G	G			G	G									
0.3	0R3			G	G			G	G			G	G			G	G					
0.4	0R4			G	G			G	G			G	G			G	G			G	G	
0.5	0R5			D	D			G	G			G	G			G	G			G	G	
0.6	0R6			D	D			G	G			G	G			G	G			G	G	
0.7	0R7			D	D			D	D			G	G			G	G			G	G	
0.8	0R8			D	D			D	D			G	G			G	G			G	G	
0.9	0R9			D	D			D	D			G	G			G	G			G	G	
1.0	1R0			D	D			D	D			G	G			G	G			G	G	
1.1	1R1			E	E			D	D			D	D			G	G			G	G	
1.2	1R2			E	E			D	D			D	D			G	G			G	G	
1.3	1R3			E	E			D	D			D	D			G	G			G	G	
1.4	1R4			E	E			D	D			D	D			G	G			G	G	
1.5	1R5			E	E			D	D			D	D			G	G			G	G	
1.6	1R6			E	E			E	E			D	D			G	G			G	G	
1.7	1R7			E	E			E	E			D	D			G	G			G	G	
1.8	1R8			E	E			E	E			D	D			G	G			G	G	
1.9	1R9			E	E			E	E			D	D			D	D			G	G	
2.0	2R0			E	E			E	E			D	D			D	D			G	G	
2.1	2R1			E	E			E	E			D	D			D	D			G	G	
2.2	2R2			E	E			E	E			D	D			D	D			G	G	
2.4	2R4			P	P			E	E			D	D			D	D			G	G	
2.7	2R7			P	P			E	E			E	E			D	D			G	G	
3.0	3R0			P	P			E	E			E	E			D	D			D	D	
3.3	3R3			P	P			P	P			E	E			D	D			D	D	
3.6	3R6			P	P			P	P			E	E			D	D			D	D	
3.9	3R9			P	P			P	P			E	E			D	D			D	D	
4.3	4R3			P	P			P	P			E	E			D	D			D	D	
4.7	4R7			P	P			P	P			E	E			E	E			D	D	
5.1	5R1			P	P			P	P			P	P			E	E			D	D	
5.6	5R6			P	P			P	P			P	P			E	E			D	D	
6.2	6R2			P	P			P	P			P	P			E	E			D	D	
6.8	6R8			P	P			P	P			P	P			E	E			E	E	
7.5	7R5			W	W			P	P			P	P			E	E			E	E	
8.2	8R2			W	W			P	P			P	P			E	E			E	E	
9.1	9R1			W	W			P	P			P	P			P	P			E	E	
10	100			W	W			W	W			P	P			P	P			E	E	
12	120			W	W			W	W			P	P			P	P			E	E	
15	150			W	W			W	W			P	P			P	P			P	P	
18	180			W	W			W	W			W	W			P	P			P	P	
20	200			W	W			W	W			W	W			P	P			P	P	
22	220			U	U			W	W			W	W			P	P			P	P	
27	270			U	U			W	W			W	W			W	W			P	P	
33	330			U	U			U	U			W	W			W	W			P	P	
39	390			U	U			U	U			W	W			W	W			P	P	
47	470			Y	Y			U	U			W	W			W	W			W	W	
50	500			Y	Y			U	U			U	U			W	W			W	W	
51	510			Y	Y			U	U			U	U			W	W			W	W	
56	560	A	A	Y	Y			U	U			U	U			W	W			W	W	
68	680	A	A	Y	Y	A	A	A	Y	A	A	A	U			W	W			W	W	
75	750	A	A	Y	Y	A	A	Y	Y	A	A	A	U	A	A	A	W			W	W	
82	820	A	A			A	A	Y	Y	A	A	A	U	A	A	A	W	A	A	A	W	



RF Capacitors

# Single Layer (SLC) - No Border

S0 SERIES

## No Border (S0 Series) Capacitance Selection:

GPN Code		S0AA				S0AG				S0AL				S0AP				S0AU			
Part Size		0.010" x 0.010"				0.012" x 0.012"				0.015" x 0.015"				0.020" x 0.020"				0.025" x 0.025"			
pF	Code	16V	25V	50V	100V																
100	101	A	A			A	A	Y	Y	A	A	A	Y	A	A	A	U	A	A	A	W
120	121	A				A	A			A	A	Y	Y	A	A	A	U	A	A	A	W
150	151	A				A				A	A	Y	Y	A	A	A	U	A	A	A	U
180	181	A				A				A	A	Y		A	A	A	Y	A	A	A	U
200	201					A				A	A			A	A	A	Y	A	A	A	U
220	221					A				A	A			A	A	Y	Y	A	A	A	U
270	271									A				A	A	Y	Y	A	A	A	Y
330	331									A				A	A			A	A	Y	Y
390	391									A				A	A			A	A	Y	Y
470	471													A				A	A	Y	Y
560	561													A				A	A		
680	681													A				A			
750	751													A				A			
820	821																	A			
1,000	102																	A			
1,200	122																				
1,500	152																				
1,800	182																				
2,000	202																				
2,200	222																				
2,500	252																				
2,700	272																				
3,300	332																				
3,900	392																				
4,700	472																				
5,600	562																				
6,200	622																				
6,800	682																				
7,500	752																				
8,200	822																				
10,000	103																				

**Note:** Color breaks used to highlight changes in dielectric material, letters indicate the specific material. Contact factory for higher capacitance values.



RF Capacitors

# Single Layer (SLC) - No Border

**S0**  
SERIES

## No Border (S0 Series) Capacitance Selection:

GPN Code		S0BC				S0BG				S0BL				S0BQ				S0BR				S0BT			
Part Size		0.030" x 0.030"				0.035" x 0.035"				0.040" x 0.040"				0.050" x 0.050"				0.070" x 0.070"				0.090" x 0.090"			
pF	Code	16V	25V	50V	100V																				
0.1	0R1																								
0.2	0R2																								
0.3	0R3																								
0.4	0R4																								
0.5	0R5																								
0.6	0R6			G	G																				
0.7	0R7			G	G																				
0.8	0R8			G	G			G	G																
0.9	0R9			G	G			G	G																
1.0	1R0			G	G			G	G			G	G												
1.1	1R1			G	G			G	G			G	G												
1.2	1R2			G	G			G	G			G	G												
1.3	1R3			G	G			G	G			G	G												
1.4	1R4			G	G			G	G			G	G												
1.5	1R5			G	G			G	G			G	G												
1.6	1R6			G	G			G	G			G	G			G	G								
1.7	1R7			G	G			G	G			G	G			G	G								
1.8	1R8			G	G			G	G			G	G			G	G								
1.9	1R9			G	G			G	G			G	G			G	G								
2.0	2R0			G	G			G	G			G	G			G	G								
2.1	2R1			G	G			G	G			G	G			G	G								
2.2	2R2			G	G			G	G			G	G			G	G								
2.4	2R4			G	G			G	G			G	G			G	G								
2.7	2R7			G	G			G	G			G	G			G	G								
3.0	3R0			G	G			G	G			G	G			G	G			G	G				
3.3	3R3			G	G			G	G			G	G			G	G			G	G				
3.6	3R6			G	G			G	G			G	G			G	G			G	G				
3.9	3R9			G	G			G	G			G	G			G	G			G	G				
4.3	4R3			D	D			G	G			G	G			G	G			G	G				
4.7	4R7			D	D			G	G			G	G			G	G			G	G				
5.1	5R1			D	D			G	G			G	G			G	G			G	G		G	G	
5.6	5R6			D	D			G	D			G	G			G	G			G	G		G	G	
6.2	6R2			D	D			D	D			G	G			G	G			G	G		G	G	
6.8	6R8			D	D			D	D			G	G			G	G			G	G		G	G	
7.5	7R5			D	D			D	D			D	D			G	G			G	G		G	G	
8.2	8R2			D	D			D	D			D	D			G	G			G	G		G	G	
9.1	9R1			D	D			D	D			D	D			G	G			G	G		G	G	
10	100			E	E			D	D			D	D			G	G			G	G		G	G	
12	120			E	E			D	D			D	D			D	D			G	G		G	G	
15	150			E	E			E	E			D	D			D	D			G	G		G	G	
18	180			E	E			E	E			E	E			D	D			G	G		G	G	
20	200			E	E			E	E			E	E			D	D			G	G		G	G	
22	220			P	P			E	E			E	E			D	D			D	D		G	G	
27	270			P	P			E	E			E	E			E	E			D	D		G	G	
33	330			P	P			P	P			E	E			E	E			D	D		G	G	
39	390			P	P			P	P			P	P			E	E			D	D		D	D	
47	470			P	P			P	P			P	P			E	E			D	D		D	D	
50	500			P	P			P	P			P	P			E	E			D	D		D	D	
51	510			P	P			P	P			P	P			E	E			D	D		D	D	



RF Capacitors

# Single Layer (SLC) - No Border

S0 SERIES

## No Border (S0 Series) Capacitance Selection:

GPN Code		S0BC				S0BG				S0BL				S0BQ				S0BR				S0BT			
Part Size		0.030" x 0.030"				0.035" x 0.035"				0.040: x 0.040"				0.050: x 0.050"				0.070" x 0.070"				0.090" x 0.090"			
pF	Code	16V	25V	50V	100V																				
56	560			W	W			P	P			P	P			E	E			E	E			D	D
68	680			W	W			P	P			P	P			P	P			E	E			D	D
75	750			W	W			P	P			P	P			P	P			E	E			D	D
82	820			W	W			W	W			P	P			P	P			E	E			D	D
100	101			W	W			W	W			P	P			P	P			E	E			E	E
120	121	A	A	A	W			W	W			W	W			P	P			P	P			E	E
150	151	A	A	A	W			W	W			W	W			P	P			P	P			E	E
180	181	A	A	A	W	A	A	A	W			W	W			W	W			P	P			P	P
200	201	A	A	A	U	A	A	A	W			W	W			W	W			P	P			P	P
220	221	A	A	A	U	A	A	A	W	A	A	A	W			W	W			P	P			P	P
270	271	A	A	A	U	A	A	A	U	A	A	A	W			W	W			P	P			P	P
330	331	A	A	A	U	A	A	A	U	A	A	A	W	A	A	A	W			W	W			P	P
390	391	A	A	A	Y	A	A	A	U	A	A	A	U	A	A	A	W			W	W			P	P
470	471	A	A	Y	Y	A	A	A	U	A	A	A	U	A	A	A	W			W	W			P	P
560	561	A	A	Y	Y	A	A	A	Y	A	A	A	U	A	A	A	U			W	W			W	W
680	681	A	A	Y	Y	A	A	Y	Y	A	A	A	Y	A	A	A	U	A	A	A	W			W	W
750	751	A	A			A	A	Y	Y	A	A	A	Y	A	A	A	U	A	A	A	W			W	W
820	821	A	A			A	A	Y	Y	A	A	Y	Y	A	A	A	U	A	A	A	W			W	W
1,000	102	A				A	A			A	A	Y	Y	A	A	A	Y	A	A	A	W			W	W
1,200	122	A				A	A			A	A	Y	Y	A	A	A	Y	A	A	A	U			W	W
1,500	152	A				A				A	A			A	A	Y	Y	A	A	A	U	A	A	A	W
1,800	182					A				A				A	A	Y	Y	A	A	A	U	A	A	A	U
2,000	202					A				A				A	A			A	A	A	Y	A	A	A	U
2,200	222					A				A				A	A			A	A	A	Y	A	A	A	U
2,500	252									A				A				A	A	Y	Y	A	A	A	U
2,700	272									A				A				A	A	Y	Y	A	A	A	U
3,300	332													A				A	A	Y	Y	A	A	A	Y
3,900	392													A				A	A			A	A	A	Y
4,700	472													A				A	A			A	A	Y	Y
5,600	562																	A				A	A	Y	Y
6,200	622																	A				A	A		
6,800	682																	A				A	A		
7,500	752																	A				A	A		
8,200	822																	A				A			
10,000	103																	A				A			

**Note:** Color breaks used to highlight changes in dielectric material, letters indicate the specific material. Contact factory for higher capacitance values.



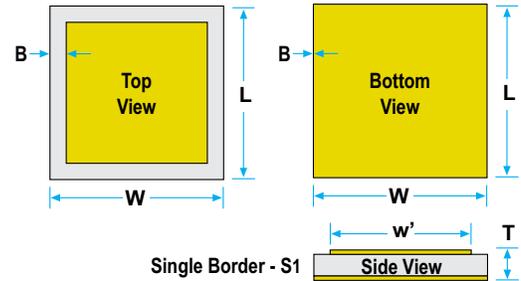
RF Capacitors

# Single Layer (SLC) - Single Border

**S1**  
SERIES

GPN = Global Part Number  
S1 = Single Border

## S1 Series Configuration



### S1 Series Mechanical Characteristics:

GPN Code	Size	Width (W) & Length (L)	Border (B)	Thickness (T)	Thickness for A-Dielectric	
S1AA	inch	0.010" ± 0.001"	0.001" (0.0005" min.)	0.006" ± 0.0025" 0.153mm ± 0.064mm	0.007" ± 0.002" 0.177mm ± 0.051mm	
	mm	0.254mm ± 0.025mm	0.025mm, (0.013mm min.)			
S1AG	inch	0.012" ± 0.001"	0.001" (0.0005" min.)			
	mm	0.305mm ± 0.025mm	0.025mm, (0.013mm min.)			
S1AL	inch	0.015" ± 0.001"	0.002" ± 0.001" 0.051mm ± 0.025mm			
	mm	0.381mm ± 0.025mm				
S1AP	inch	0.020" ± 0.001"				
	mm	0.508mm ± 0.025mm				
S1AU	inch	0.025" ± 0.001"				
	mm	0.635mm ± 0.025mm				
S1BC	inch	0.030" ± 0.001"				0.003" ± 0.001" 0.076mm ± 0.025mm
	mm	0.762mm ± 0.025mm				
S1BG	inch	0.035" ± 0.001"				
	mm	0.889mm ± 0.025mm				
S1BL	inch	0.040" ± 0.001"				
	mm	1.016mm ± 0.025mm				
S1BQ	inch	0.050" ± 0.05"				
	mm	1.270mm ± 0.127mm				
S1BR	inch	0.070" ± 0.05"				
	mm	1.778mm ± 0.127mm				
S1BT	inch	0.090" ± 0.05"				
	mm	2.286mm ± 0.127mm				



RF Capacitors

# Single Layer (SLC) - Single Border

**S1**  
SERIES

Recessed SLC electrode borders help prevent shorting from conductive epoxy squeeze-up and aid visual recognition equipment. The V-Series SLCs feature dual borders (top & bottom) while the B-Series SLCs feature a single border (top-only).

## Single Border (S1 Series) Capacitance Selection:

GPN Code		S1AA				S1AG				S1AL				S1AP				S1AU				
Part Size		0.010" x 0.010"				0.012" x 0.012"				0.015" x 0.015"				0.020" x 0.020"				0.025" x 0.025"				
pF	Code	16V	25V	50V	100V																	
0.1	0R1			G	G			G	G													
0.2	0R2			G	G			G	G			G	G									
0.3	0R3			G	G			G	G			G	G			G	G					
0.4	0R4			G	D			G	G			G	G			G	G			G	G	
0.5	0R5			D	D			G	G			G	G			G	G			G	G	
0.6	0R6			D	D			D	D			G	G			G	G			G	G	
0.7	0R7			D	D			D	D			G	G			G	G			G	G	
0.8	0R8			D	D			D	D			G	G			G	G			G	G	
0.9	0R9			D	D			D	D			D	D			G	G			G	G	
1.0	1R0			E	E			D	D			D	D			G	G			G	G	
1.1	1R1			E	E			D	D			D	D			G	G			G	G	
1.2	1R2			E	E			D	D			D	D			G	G			G	G	
1.3	1R3			E	E			D	D			D	D			G	G			G	G	
1.4	1R4			E	E			E	E			D	D			G	G			G	G	
1.5	1R5			E	E			E	E			D	D			G	G			G	G	
1.6	1R6			E	E			E	E			D	D			G	G			G	G	
1.7	1R7			E	E			E	E			D	D			D	D			G	G	
1.8	1R8			E	E			E	E			D	D			D	D			G	G	
1.9	1R9			E	E			E	E			D	D			D	D			G	G	
2.0	2R0			E	E			E	E			D	D			D	D			G	G	
2.1	2R1			P	P			E	E			D	D			D	D			G	G	
2.2	2R2			P	P			E	E			E	E			D	D			G	G	
2.4	2R4			P	P			E	E			E	E			D	D			G	G	
2.7	2R7			P	P			E	E			E	E			D	D			D	D	
3.0	3R0			P	P			E	E			E	E			D	D			D	D	
3.3	3R3			P	P			P	P			E	E			D	D			D	D	
3.6	3R6			P	P			P	P			E	E			D	D			D	D	
3.9	3R9			P	P			P	P			E	E			D	D			D	D	
4.3	4R3			P	P			P	P			P	P			E	E			D	D	
4.7	4R7			P	P			P	P			P	P			E	E			D	D	
5.1	5R1			P	P			P	P			P	P			E	E			D	D	
5.6	5R6			P	P			P	P			P	P			E	E			D	D	
6.2	6R2			W	W			P	P			P	P			E	E			D	D	
6.8	6R8			W	W			P	P			P	P			E	E			E	E	
7.5	7R5			W	W			P	P			P	P			E	E			E	E	
8.2	8R2			W	W			P	P			P	P			P	P			E	E	
9.1	9R1			W	W			W	W			P	P			P	P			E	E	
10	100			W	W			W	W			P	P			P	P			E	E	
12	120			W	W			W	W			P	P			P	P			E	E	
15	150			W	W			W	W			W	W			P	P			P	P	
18	180			W	W			W	W			W	W			P	P			P	P	
20	200			U	U			W	W			W	W			P	P			P	P	
22	220			U	U			W	W			W	W			P	P			P	P	
27	270			U	U			W	W			W	W			W	W			P	P	
33	330			U	U			U	U			W	W			W	W			P	P	



RF Capacitors

# Single Layer (SLC) - Single Border

**S1**  
SERIES

## Single Border (S1 Series) Capacitance Selection:

GPN Code		S1AA				S1AG				S1AL				S1AP				S1AU			
Part Size		0.010" x 0.010"				0.012" x 0.012"				0.015" x 0.015"				0.020" x 0.020"				0.025" x 0.025"			
pF	Code	16V	25V	50V	100V																
39	390			Y	Y			U	U			W	W			W	W			W	W
47	470			Y	Y			U	U			U	U			W	W			W	W
50	500			Y	Y			U	Y			U	U			W	W			W	W
51	510			Y	Y			Y	Y			U	U			W	W			W	W
56	560	A	A	Y	Y	A	A	Y	Y	A	A	A	U	A	A	A	W			W	W
68	680	A	A			A	A	Y	Y	A	A	A	U	A	A	A	W			W	W
75	750	A	A			A	A	Y	Y	A	A	A	U	A	A	A	W			W	W
82	820	A	A			A	A	Y	Y	A	A	A	Y	A	A	A	U	A	A	A	W
100	101	A				A	A			A	A	Y	Y	A	A	A	U	A	A	A	W
120	121	A				A	A			A	A	Y	Y	A	A	A	U	A	A	A	W
150	151	A				A				A	A			A	A	A	Y	A	A	A	U
180	181					A				A	A			A	A	A	Y	A	A	A	U
200	201					A				A				A	A	Y	Y	A	A	A	U
220	221					A				A				A	A	Y	Y	A	A	A	U
270	271									A				A	A	Y	Y	A	A	A	Y
330	331									A				A	A			A	A	Y	Y
390	391													A				A	A	Y	Y
470	471													A				A	A		
560	561													A				A	A		
680	681													A				A			
750	751																	A			
820	821																	A			
1,000	102																	A			
1,200	122																				
1,500	152																				
1,800	182																				
2,000	202																				
2,200	222																				
2,500	252																				
2,700	272																				
3,300	332																				
3,900	392																				
4,700	472																				
5,600	562																				
6,200	622																				
6,800	682																				
7,500	752																				
8,200	822																				
10,000	103																				

**Note:** Color breaks used to highlight changes in dielectric material, letters indicate the specific material. Contact factory for higher capacitance values.



RF Capacitors

# Single Layer (SLC) - Single Border

**S1**  
SERIES

## Single Border (S1 Series) Capacitance Selection:

GPN Code		S1BC				S1BG				S1BL				S1BQ				S1BR				S1BT			
Part Size		0.030" x 0.030"				0.035" x 0.035"				0.040" x 0.040"				0.050" x 0.050"				0.070" x 0.070"				0.090" x 0.090"			
pF	Code	16V	25V	50V	100V																				
0.1	0R1																								
0.2	0R2																								
0.3	0R3																								
0.4	0R4																								
0.5	0R5																								
0.6	0R6			G	G																				
0.7	0R7			G	G			G	G																
0.8	0R8			G	G			G	G																
0.9	0R9			G	G			G	G																
1.0	1R0			G	G			G	G			G	G												
1.1	1R1			G	G			G	G			G	G												
1.2	1R2			G	G			G	G			G	G												
1.3	1R3			G	G			G	G			G	G												
1.4	1R4			G	G			G	G			G	G												
1.5	1R5			G	G			G	G			G	G			G	G								
1.6	1R6			G	G			G	G			G	G			G	G								
1.7	1R7			G	G			G	G			G	G			G	G								
1.8	1R8			G	G			G	G			G	G			G	G								
1.9	1R9			G	G			G	G			G	G			G	G								
2.0	2R0			G	G			G	G			G	G			G	G								
2.1	2R1			G	G			G	G			G	G			G	G								
2.2	2R2			G	G			G	G			G	G			G	G								
2.4	2R4			G	G			G	G			G	G			G	G								
2.7	2R7			G	G			G	G			G	G			G	G								
3.0	3R0			G	G			G	G			G	G			G	G			G	G				
3.3	3R3			G	G			G	G			G	G			G	G			G	G				
3.6	3R6			G	G			G	G			G	G			G	G			G	G				
3.9	3R9			D	D			G	G			G	G			G	G			G	G				
4.3	4R3			D	D			G	G			G	G			G	G			G	G				
4.7	4R7			D	D			G	G			G	G			G	G			G	G				
5.1	5R1			D	D			G	G			G	G			G	G			G	G			G	G
5.6	5R6			D	D			D	D			G	G			G	G			G	G			G	G
6.2	6R2			D	D			D	D			G	G			G	G			G	G			G	G
6.8	6R8			D	D			D	D			G	G			G	G			G	G			G	G
7.5	7R5			D	D			D	D			D	D			G	G			G	G			G	G
8.2	8R2			D	D			D	D			D	D			G	G			G	G			G	G
9.1	9R1			D	D			D	D			D	D			G	G			G	G			G	G
10	100			E	E			D	D			D	D			G	G			G	G			G	G
12	120			E	E			D	D			D	D			D	D			G	G			G	G
15	150			E	E			E	E			D	D			D	D			G	G			G	G
18	180			P	P			E	E			E	E			D	D			G	G			G	G
20	200			P	P			E	E			E	E			D	D			G	G			G	G
22	220			P	P			E	E			E	E			D	D			D	D			G	G
27	270			P	P			P	P			E	E			E	E			D	D			G	G
33	330			P	P			P	P			P	P			E	E			D	D			G	G
39	390			P	P			P	P			P	P			E	E			D	D			D	D
47	470			P	P			P	P			P	P			E	E			D	D			D	D
50	500			P	P			P	P			P	P			E	E			D	D			D	D
51	510			P	P			P	P			P	P			E	E			D	D			D	D
56	560			W	W			P	P			P	P			P	P			E	E			D	D
68	680			W	W			P	P			P	P			P	P			E	E			D	D
75	750			W	W			P	P			P	P			P	P			E	E			D	D
82	820			W	W			W	W			P	P			P	P			E	E			D	D



RF Capacitors

# Single Layer (SLC) - Single Border

S1 SERIES

## Single Border (S1 Series) Capacitance Selection:

GPN Code		S1BC				S1BG				S1BL				S1BQ				S1BR				S1BT			
Part Size		0.030" x 0.030"				0.035" x 0.035"				0.040" x 0.040"				0.050" x 0.050"				0.070" x 0.070"				0.090" x 0.090"			
pF	Code	16V	25V	50V	100V																				
100	101			W	W			W	W			P	P			P	P			E	E			E	E
120	121	A	A	A	W			W	W			W	W			P	P			P	P			E	E
150	151	A	A	A	W			W	W			W	W			P	P			P	P			E	E
180	181	A	A	A	W	A	A	A	W			W	W			W	W			P	P			P	P
200	201	A	A	A	U	A	A	A	W			W	W			W	W			P	P			P	P
220	221	A	A	A	U	A	A	A	W	A	A	A	W			W	W			P	P			P	P
270	271	A	A	A	U	A	A	A	U	A	A	A	W			W	W			P	P			P	P
330	331	A	A	A	Y	A	A	A	U	A	A	A	U	A	A	A	W			W	W			P	P
390	391	A	A	A	Y	A	A	A	U	A	A	A	U	A	A	A	W			W	W			P	P
470	471	A	A	Y	Y	A	A	A	Y	A	A	A	U	A	A	A	W			W	W			P	P
560	561	A	A	Y	Y	A	A	A	Y	A	A	A	U	A	A	A	U			W	W			W	W
680	681	A	A			A	A	Y	Y	A	A	A	Y	A	A	A	U	A	A	A	W			W	W
750	751	A	A			A	A	Y	Y	A	A	A	Y	A	A	A	U	A	A	A	W			W	W
820	821	A	A			A	A	Y	Y	A	A	Y	Y	A	A	A	U	A	A	A	W			W	W
1,000	102	A				A	A			A	A	Y	Y	A	A	A	W			A	A			W	W
1,200	122	A				A				A	A			A	A	Y	Y	A	A	A	U			W	W
1,500	152	A				A				A	A			A	A	Y	Y	A	A	A	U	A	A	A	W
1,800	182					A				A				A	A	Y	Y	A	A	A	U	A	A	A	U
2,000	202					A				A				A	A			A	A	A	Y	A	A	A	U
2,200	222					A				A				A	A			A	A	A	Y	A	A	A	U
2,500	252									A				A				A	A	Y	Y	A	A	A	U
2,700	272									A				A				A	A	Y	Y	A	A	A	U
3,300	332													A				A	A	Y	Y	A	A	A	Y
3,900	392													A				A	A			A	A	A	Y
4,700	472																	A				A	A	Y	Y
5,600	562																	A				A	A	Y	Y
6,200	622																	A				A	A		
6,800	682																	A				A	A		
7,500	752																	A				A	A		
8,200	822																	A				A			
10,000	103																					A			

**Note:** Color breaks used to highlight changes in dielectric material, letters indicate the specific material. Contact factory for higher capacitance values.



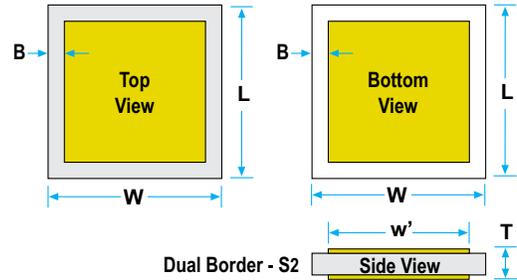
RF Capacitors

# Single Layer (SLC) - Dual Border

**S2**  
SERIES

GPN = Global Part Number  
S2 = Dual Border

## S2 Series Configuration



### S2 Series Mechanical Characteristics:

GPN Code	Size	Width (W) & Length (L)	Border (B)	Thickness (T)	Thickness for A-Dielectric	
S2AA	inch	0.010" ± 0.001"	0.001" (0.0005" min.)	0.006" ± 0.0025" 0.153mm ± 0.064mm	0.007" ± 0.002" 0.177mm ± 0.051mm	
	mm	0.254mm ± 0.025mm	0.025mm, (0.013mm min.)			
S2AG	inch	0.012" ± 0.001"	0.001" (0.0005" min.)			
	mm	0.305mm ± 0.025mm	0.025mm, (0.013mm min.)			
S2AL	inch	0.015" ± 0.001"	0.002" ± 0.001" 0.051mm ± 0.025mm			
	mm	0.381mm ± 0.025mm				
S2AP	inch	0.020" ± 0.001"				
	mm	0.508mm ± 0.025mm				
S2AU	inch	0.025" ± 0.001"				
	mm	0.635mm ± 0.025mm				
S2BC	inch	0.030" ± 0.001"				0.003" ± 0.001" 0.076mm ± 0.025mm
	mm	0.762mm ± 0.025mm				
S2BG	inch	0.035" ± 0.001"				
	mm	0.889mm ± 0.025mm				
S2BL	inch	0.040" ± 0.001"				
	mm	1.016mm ± 0.025mm				
S2BQ	inch	0.050" ± 0.05"				
	mm	1.270mm ± 0.127mm				
S2BR	inch	0.070" ± 0.05"				
	mm	1.778mm ± 0.127mm				
S2BT	inch	0.090" ± 0.05"				
	mm	2.286mm ± 0.127mm				



RF Capacitors

# Single Layer (SLC) - Dual Border

**S2**  
SERIES

Recessed SLC electrode borders help prevent shorting from conductive epoxy squeeze-up and aid visual recognition equipment. The V-Series SLCs feature dual borders (top & bottom) while the B-Series SLCs feature a single border (top-only).

## Dual Border (S2 Series) Capacitance Selection:

GPN Code		S2AA				S2AG				S2AL				S2AP				S2AU				
Part Size		0.010" x 0.010"				0.012" x 0.012"				0.015" x 0.015"				0.020" x 0.020"				0.025" x 0.025"				
pF	Code	16V	25V	50V	100V																	
0.1	0R1			G	G			G	G													
0.2	0R2			G	G			G	G			G	G			G	G					
0.3	0R3			G	G			G	G			G	G			G	G					
0.4	0R4			D	D			G	G			G	G			G	G			G	G	
0.5	0R5			D	D			G	G			G	G			G	G			G	G	
0.6	0R6			D	D			D	D			G	G			G	G			G	G	
0.7	0R7			D	D			D	D			G	G			G	G			G	G	
0.8	0R8			E	E			D	D			D	D			G	G			G	G	
0.9	0R9			E	E			D	D			D	D			G	G			G	G	
1.0	1R0			E	E			D	D			D	D			G	G			G	G	
1.1	1R1			E	E			D	D			D	D			G	G			G	G	
1.2	1R2			E	E			D	D			D	D			G	G			G	G	
1.3	1R3			E	E			E	E			D	D			G	G			G	G	
1.4	1R4			E	E			E	E			D	D			G	G			G	G	
1.5	1R5			E	E			E	E			D	D			D	D			G	G	
1.6	1R6			P	P			E	E			D	D			D	D			G	G	
1.7	1R7			P	P			E	E			D	D			D	D			G	G	
1.8	1R8			P	P			E	E			D	D			D	D			G	G	
1.9	1R9			P	P			E	E			E	E			D	D			G	G	
2.0	2R0			P	P			E	E			E	E			D	D			G	G	
2.1	2R1			P	P			E	E			E	E			D	D			G	G	
2.2	2R2			P	P			E	E			E	E			D	D			G	G	
2.4	2R4			P	P			P	P			E	E			D	D			G	G	
2.7	2R7			P	P			P	P			E	E			D	D			D	D	
3.0	3R0			P	P			P	P			E	E			D	D			D	D	
3.3	3R3			P	P			P	P			E	E			D	D			D	D	
3.6	3R6			P	P			P	P			P	P			E	E			D	D	
3.9	3R9			P	P			P	P			P	P			E	E			D	D	
4.3	4R3			P	P			P	P			P	P			E	E			D	D	
4.7	4R7			P	P			P	P			P	P			E	E			D	D	
5.1	5R1			W	W			P	P			P	P			E	E			D	D	
5.6	5R6			W	W			P	P			P	P			E	E			D	D	
6.2	6R2			W	W			P	P			P	P			E	E			E	E	
6.8	6R8			W	W			P	P			P	P			P	P			E	E	
7.5	7R5			W	W			W	W			P	P			P	P			E	E	
8.2	8R2			W	W			W	W			P	P			P	P			E	E	
9.1	9R1			W	W			W	W			P	P			P	P			E	E	
10	100			W	W			W	W			P	P			P	P			E	E	
12	120			W	W			W	W			W	W			P	P			P	P	
15	150			W	W			W	W			W	W			P	P			P	P	
18	180			U	U			W	W			W	W			P	P			P	P	
20	200			U	U			W	W			W	W			P	P			P	P	
22	220			U	U			W	W			W	W			W	W			P	P	
27	270			U	U			U	U			W	W			W	W			P	P	
33	330			Y	Y			U	U			W	W			W	W			P	P	
39	390			Y	Y			U	U			U	U			W	W			W	W	
47	470			Y	Y			Y	Y			U	U			W	W			W	W	



RF Capacitors

# Single Layer (SLC) - Dual Border

**S2**  
SERIES

## Dual Border (S2 Series) Capacitance Selection:

GPN Code		S2AA				S2AG				S2AL				S2AP				S2AU			
Part Size		0.010" x 0.010"				0.012" x 0.012"				0.015" x 0.015"				0.020" x 0.020"				0.025" x 0.025"			
pF	Code	16V	25V	50V	100V																
50	500			Y	Y			Y	Y			U	U			W	W			W	W
51	510			Y	Y			Y	Y			U	U			W	W			W	W
56	560	A	A			A	A	Y	Y	A	A	A	U	A	A	A	W			W	W
68	680	A	A			A	A	Y	Y	A	A	A	Y	A	A	A	W			W	W
75	750	A				A	A	Y	Y	A	A	A	Y	A	A	A	U			W	W
82	820	A				A	A	Y	Y	A	A	A	Y	A	A	A	U	A	A	A	W
100	101	A				A	A			A	A	Y	Y	A	A	A	U	A	A	A	W
120	121	A				A				A	A	Y	Y	A	A	A	U	A	A	A	U
150	151					A				A	A			A	A	A	Y	A	A	A	U
180	181					A				A				A	A	Y	Y	A	A	A	U
200	201					A				A				A	A	Y	Y	A	A	A	U
220	221									A				A	A	Y	Y	A	A	A	Y
270	271									A				A	A			A	A	Y	Y
330	331													A				A	A	Y	Y
390	391													A				A	A	Y	Y
470	471													A				A	A		
560	561													A				A			
680	681																	A			
750	751																	A			
820	821																	A			
1,000	102																	A			
1,200	122																				
1,500	152																				
1,800	182																				
2,000	202																				
2,200	222																				
2,500	252																				
2,700	272																				
3,300	332																				
3,900	392																				
4,700	472																				
5,600	562																				
6,200	622																				
6,800	682																				
7,500	752																				
8,200	822																				
10,000	103																				

**Note:** Color breaks used to highlight changes in dielectric material, letters indicate the specific material. Contact factory for higher capacitance values.



RF Capacitors

# Single Layer (SLC) - Dual Border

**S2**  
SERIES

## Dual Border (S2 Series) Capacitance Selection:

GPN Code		S2BC				S2BG				S2BL				S2BQ				S2BR				S2BT			
Part Size		0.030" x 0.030"				0.035" x 0.035"				0.040" x 0.040"				0.050" x 0.050"				0.050" x 0.050"				0.090" x 0.090"			
pF	Code	16V	25V	50V	100V																				
0.1	0R1																								
0.2	0R2																								
0.3	0R3																								
0.4	0R4																								
0.5	0R5			G	G																				
0.6	0R6			G	G																				
0.7	0R7			G	G			G	G																
0.8	0R8			G	G			G	G																
0.9	0R9			G	G			G	G			G	G												
1.0	1R0			G	G			G	G			G	G												
1.1	1R1			G	G			G	G			G	G												
1.2	1R2			G	G			G	G			G	G												
1.3	1R3			G	G			G	G			G	G												
1.4	1R4			G	G			G	G			G	G			G	G								
1.5	1R5			G	G			G	G			G	G			G	G								
1.6	1R6			G	G			G	G			G	G			G	G								
1.7	1R7			G	G			G	G			G	G			G	G								
1.8	1R8			G	G			G	G			G	G			G	G								
1.9	1R9			G	G			G	G			G	G			G	G								
2.0	2R0			G	G			G	G			G	G			G	G								
2.1	2R1			G	G			G	G			G	G			G	G								
2.2	2R2			G	G			G	G			G	G			G	G								
2.4	2R4			G	G			G	G			G	G			G	G								
2.7	2R7			G	G			G	G			G	G			G	G								
3.0	3R0			G	G			G	G			G	G			G	G			G	G				
3.3	3R3			G	G			G	G			G	G			G	G			G	G				
3.6	3R6			G	D			G	G			G	G			G	G			G	G				
3.9	3R9			D	D			G	G			G	G			G	G			G	G				
4.3	4R3			D	D			G	G			G	G			G	G			G	G				
4.7	4R7			D	D			G	G			G	G			G	G			G	G			G	G
5.1	5R1			D	D			D	D			G	G			G	G			G	G			G	G
5.6	5R6			D	D			D	D			G	G			G	G			G	G			G	G
6.2	6R2			D	D			D	D			G	G			G	G			G	G			G	G
6.8	6R8			D	D			D	D			D	D			G	G			G	G			G	G
7.5	7R5			D	D			D	D			D	D			G	G			G	G			G	G
8.2	8R2			D	D			D	D			D	D			G	G			G	G			G	G
9.1	9R1			E	E			D	D			D	D			G	G			G	G			G	G
10	100			E	E			D	D			D	D			G	G			G	G			G	G
12	120			E	E			D	D			D	D			D	D			G	G			G	G
15	150			E	E			E	E			D	D			D	D			G	G			G	G
18	180			E	E			E	E			E	E			D	D			G	G			G	G
20	200			P	P			E	E			E	E			D	D			G	G			G	G
22	220			P	P			E	E			E	E			D	D			D	D			G	G
27	270			P	P			P	P			E	E			E	E			D	D			G	G
33	330			P	P			P	P			P	P			E	E			D	D			G	G
39	390			P	P			P	P			P	P			E	E			D	D			D	D
47	470			P	P			P	P			P	P			E	E			D	D			D	D
50	500			P	P			P	P			P	P			E	E			D	D			D	D
51	510			P	P			P	P			P	P			P	P			E	E			D	D
56	560			W	W			P	P			P	P			P	P			E	E			D	D
68	680			W	W			P	P			P	P			P	P			E	E			D	D



RF Capacitors

# Single Layer (SLC) - Dual Border

**S2**  
SERIES

## Dual Border (S2 Series) Capacitance Selection:

GPN Code		S2BC				S2BG				S2BL				S2BQ				S2BR				S2BT			
Part Size		0.030" x 0.030"				0.035" x 0.035"				0.040" x 0.040"				0.050" x 0.050"				0.050" x 0.050"				0.090" x 0.090"			
pF	Code	16V	25V	50V	100V																				
75	750			W	W			W	W			P	P			P	P			E	E			D	D
82	820			W	W			W	W			P	P			P	P			E	E			D	D
100	101			W	W			W	W			W	W			P	P			P	P			E	E
120	121	A	A	A	W			W	W			W	W			P	P			P	P			E	E
150	151	A	A	A	W			W	W			W	W			W	W			P	P			E	E
180	181	A	A	A	U	A	A	A	W			W	W			W	W			P	P			P	P
200	201	A	A	A	U	A	A	A	W			W	W			W	W			P	P			P	P
220	221	A	A	A	U	A	A	A	W	A	A	A	W			W	W			P	P			P	P
270	271	A	A	A	U	A	A	A	U	A	A	A	W			W	W			P	P			P	P
330	331	A	A	A	Y	A	A	A	U	A	A	A	U	A	A	A	W			W	W			P	P
390	391	A	A	A	Y	A	A	A	U	A	A	A	U	A	A	A	W			W	W			P	P
470	471	A	A	Y	Y	A	A	A	Y	A	A	A	U	A	A	A	W			W	W			P	P
560	561	A	A	Y	Y	A	A	Y	Y	A	A	A	U	A	A	A	U			W	W			W	W
680	681	A	A			A	A	Y	Y	A	A	A	Y	A	A	A	U	A	A	A	W			W	W
750	751	A	A			A	A	Y	Y	A	A	Y	Y	A	A	A	U	A	A	A	W			W	W
820	821	A				A	A	Y	Y	A	A	Y	Y	A	A	A	U	A	A	A	W			W	W
1,000	102	A				A	A			A	A	Y	Y	A	A	A	Y	A	A	A	U			W	W
1,200	122	A				A				A	A			A	A	Y	Y	A	A	A	U			W	W
1,500	152	A				A				A				A	A	Y	Y	A	A	A	U	A	A	A	W
1,800	182					A				A				A	A			A	A	A	Y	A	A	A	U
2,000	202					A				A				A	A			A	A	A	Y	A	A	A	U
2,200	222									A				A				A	A	A	Y	A	A	A	U
2,500	252									A				A				A	A	Y	Y	A	A	A	U
2,700	272									A				A				A	A	Y	Y	A	A	A	U
3,300	332													A				A	A	Y	Y	A	A	A	Y
3,900	392													A				A	A			A	A	Y	Y
4,700	472																	A				A	A	Y	Y
5,600	562																	A				A	A	Y	Y
6,200	622																	A				A	A		
6,800	682																	A				A	A		
7,500	752																	A				A	A		
8,200	822																	A				A			
10,000	103																					A			

**Note:** Color breaks used to highlight changes in dielectric material, letters indicate the specific material. Contact factory for higher capacitance values.



RF Capacitors  
**Single Layer (SLC)**

**HOW TO ORDER**

S0	AA	500	B	3R9	C	1	S1	001	W
Subfamily	Size	Voltage	DTC	Capacitance	Tolerance	Mark	Termination	Special Code	Pack
<b>S0</b> = No Border <b>S1</b> = Single Border <b>S2</b> = Dual Border	<b>AA</b> = .010" x .010" <b>AG</b> = .012" x .012" <b>AJ</b> = .012" x .015" <b>AL</b> = .015" x .015" <b>AP</b> = .020" x .020" <b>AU</b> = .025" x .025" <b>BC</b> = .030" x .030" <b>BG</b> = .035" x .035" <b>BL</b> = .040" x .040" <b>BQ</b> = .050" x .050" <b>BR</b> = .070" x .070" <b>BT</b> = .090" x .090"	<b>160</b> = 16V <b>250</b> = 25V <b>500</b> = 50V <b>101</b> = 100V	<b>A</b> = GBL <b>D</b> = P3L <b>E</b> = R3L <b>G</b> = NP0 <b>P</b> = X7P <b>W</b> = X7R <b>U</b> = Z5U <b>Y</b> = 75V High-K X7R	1st two digits are significant; 3rd digit denotes number of zeros.  <b>0R5</b> = 0.5pF <b>100</b> = 10pF <b>102</b> = 1000 pF	<b>A</b> = $\pm 0.05\text{pF}$ <b>B</b> = $\pm 0.1\text{pF}$ <b>C</b> = $\pm 0.25\text{pF}$ <b>D</b> = $\pm 0.5\text{pF}$ <b>F</b> = $\pm 1\%$ <b>G</b> = $\pm 2\%$ <b>J</b> = $\pm 5\%$ <b>K</b> = $\pm 10\%$ <b>M</b> = $\pm 20\%$ <b>X</b> = $+80\%/-20\%$	<b>1</b> = No mark	<b>S0</b> = TiW/Pt/Au <b>S1</b> = TiW/Ni/Au <b>S2</b> = TiW/Au <b>ZZ</b> = Special Code	<b>001</b> = Default catalog item <b>003</b> = 1st special code	<b>B</b> = Bulk <b>W</b> = Waffle Pack <b>D</b> = Gel Pack <b>S</b> = Ring Frame

Example: **S0AA500B3R9C1S1001W** Capacitors Single Layer - No Bord, 010" x .010", 50V, ?, ?,  $\pm 0.25\text{pF}$ , No mark, TiW/Ni/Au, & Waffle Pack