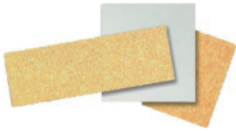
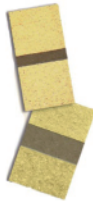
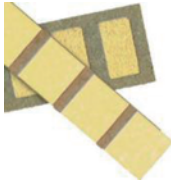


Single Layer Chip Ceramic Capacitor

General SLC	Margin SLC	Surface Mounting SLC	Array SLC	Multi-PAD SLC
SG	SM	SS	SA	SP
				
RF/Microwave and millimeter wave. Capacitance: 0.1~10000pF	RF/Microwave and millimeter wave. Capacitance: 0.1~10000pF	High precision single layer series capacitor	An array consisting of multiple single-layer capacitors, suitable for multiple coupling and bypassing	Multiple capacitance value, binary tunable single layer capacitor, suited for tuning design or microwave integrated circuit

Meet Standard: MIL-PRF-49464C

◆ Inspection Item

Group	Item	Test Method	Test Condition
A1	Burn	-	-
A1	Capacitance	-	100%
A1	Dissipation factor(D.F.)	-	100%
A1	IR	-	100%
A1	DWV	-	100%
A3	Visual	Method 2032 of MIL-STD-883	-
B1	Bond strength	Method 2011 of MIL-STD-883	Condition D, 5 grams minimum with .001" dia wire
B1	Die shear strength	Method 2019 of MIL-STD-883	Limit per MIL-STD-883, Figure 2019-4
B2	Temperature coefficient	-	-
C1	Immersion	Method 107,104 of MIL-STD-202	Immersion: B
C2	Resistance to solder heat	Method 210 of MIL-STD-202	310°C for 5 seconds
C3	Humidity, steady state, low voltage	Method 103 of MIL-STD-202	Condition A
C4	Life	Method 108 of MIL-STD-202	Applied 200% rated voltage, 2000 hours

Single Layer Chip Ceramic Capacitor

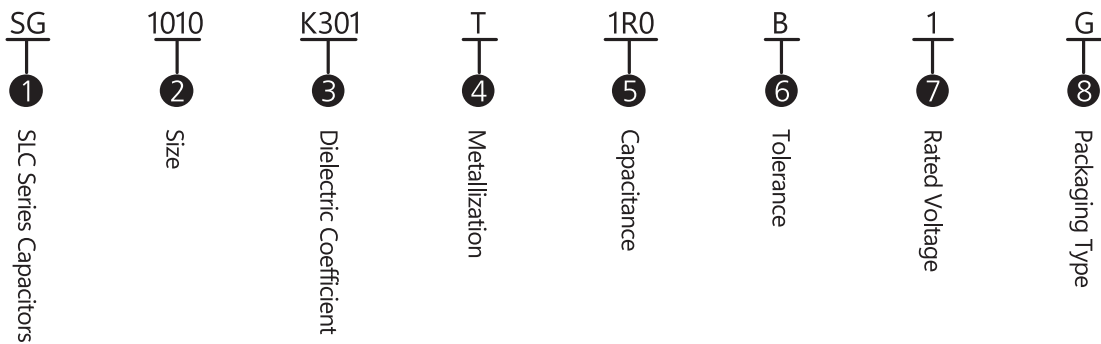
◆ Product Characteristics

Reliable performance
 Small size, down to 10mil*10mil
 Microwave and millimeter wave, frequency up to 100GHz
 Suited for conductive adhesive, AuSn eutectic soldering, gold wire bonding

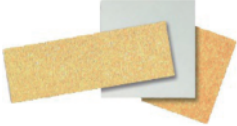
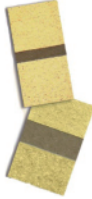
◆ Product Applications

DC blocking, RF bypass, filtering, decoupling, microwave integrated circuit

◆ Part Number



① SLC Series Capacitors

General SLC	Margin SLC	Surface Mounting SLC
SG	SM	SS
		
RF/Microwave and millimeter wave. Capacitance: 0.1~10000pF	RF/Microwave and millimeter wave. Capacitance: 0.1~10000pF	High precision single layer series capacitor

② Size

The first two digits represent length, the second two digits represent width, Unit: mil.
 for example: 1010, length is 10mil (0.254mm), width is 10mil (0.254mm).

Single Layer Chip Ceramic Capacitor

③ Dielectric Coefficient

dielectric coefficient <10, K9R6=9.6; dielectric coefficient ≥10, K301=300.

Dielectric type	Dielectric constant	Temperature Coefficient Code	Temperature Coefficient	Temperature Range	Max.D.F	Min IR (Ω) @25°C
Type I	15	COG	0±30ppm/°C	-55~+125°C	0.15%@1MHz	10 ¹²
	35	COG	0±30ppm/°C	-55~+125°C	0.15%@1MHz	10 ¹²
	85	COG	0±30ppm/°C	-55~+125°C	0.15%@1MHz	10 ¹²
	220	P3L	-1500+500ppm/°C	-55~+125°C	0.25%@1MHz	10 ¹²
	300	P3L	-1500+500ppm/°C	-55~+125°C	0.7%@1MHz	10 ¹¹
	600	S3L	-3300+1000ppm/°C	-55~+125°C	1.2%@1MHz	10 ¹¹
	900	T3L	-4700+500ppm/°C	-55~+125°C	1.2%@1MHz	10 ¹¹
Type II	1300	X7S	±22%	-55~+125°C	4%@1KHz/1 MHz	10 ¹¹
	1500	X7S	±22%	-55~+125°C	4%@1KHz/1 MHz	10 ¹¹
	2500	X7R	±15%	-55~+125°C	4%@1KHz/1 MHz	10 ¹¹
	4000	X7R	±15%	-55~+125°C	4%@1KHz/1 MHz	10 ¹¹
	9000	Y5V	-82%~+22%	-30~+85°C	4%@1KHz/1 MHz	10 ¹¹
	15000	Y5V	-82%~+22%	-30~+85°C	4%@1KHz/1 MHz	10 ¹¹
Type III	15000	X7R/X7S	±15%/±22%	-55~+125°C	2.5%@1KHz/1MHz	10 ¹⁰
	25000	X7R/X7S	±15%/±22%	-55~+125°C	2.5%@1KHz/1MHz	10 ¹⁰
	35000	X7R/X7S	±15%/±22%	-55~+125°C	2.5%@1KHz/1MHz	10 ¹⁰
	45000	X7R/X7S	±15%/±22%	-55~+125°C	2.5%@1KHz/1MHz	10 ⁹

④ Metallization

Code	Sputter Layer		Plating Layer	
	Metal	Thickness(μm)	Metal	Thickness(μm)
M	TiW/Au	0.01~0.05/0.03~0.05	Au	≥2
P	TiW/Ni/Au	0.01~0.05/0.1~0.2/0.03~0.05	Au	≥2
T	TaN/TiW/Au	0.03~0.10/0.01~0.05/0.03~0.05	Au	≥2
F	TaN/TiW/Ni/Au	0.03~0.10/0.01~0.05/0.1~0.2/0.03~0.05	Au	≥2
H	TaN/TiW/Pt/Au	0.03~0.10/0.01~0.05/0.1~0.2/0.03~0.05	Au	≥2
D	TiW/Pt/Au	0.01~0.05/0.1~0.2/0.03~0.05	Au	≥2
E	Ti/Pt/Au	0.01~0.05/0.1~0.2/0.03~0.05	Au	≥2
X	TiW/Ni/Ag	0.01~0.05/0.1~0.2/0.10~1.5	-	-
L	frontside: Ti/Pt/Au backside: Ti/Pt	0.01~0.05/0.1~0.2/0.03~0.05	Au	≥2

Note: please contact Dalicap for non-standard Au thickness and metallization system.

Single Layer Chip Ceramic Capacitor

⑤ Capacitance

Less than 10pF, 1R0=1.0pF; No less than 10pF, 101=100pF

⑥ Tolerance

Code	A	B	C	D	F	G	J	K	L	M	V	Z
Tolerance	±0.05pF	±0.1pF	±0.25pF	±0.5pF	±1%	±2%	±5%	±10%	±15%	±20%	0~+100%	-20%~+80%

⑦ Rated Voltage

Code	Rated Voltage	Code	Rated Voltage
A	10	6	63
B	16	1	100
2	25	C	120
5	50		

⑧ Packaging Type

W: Waffle Packaging; G: Stick Box; R: Film Ring.

SG /SM Series SLC

◆ SG/SM Series Capacitance Table

Dimension Code		1010 (.254x.254)				1212 (.305x.305)				1515 (.381x.381)				2020 (.508x.508)			
Rated voltage		16V	25V	50V	100V	16V	25V	50V	100V	16V	25V	50V	100V	16V	25V	50V	100V
Cap (pF)	Tolerance																
0.1	A	K350	K350	K350	K350	K350	K350	K350	K350								
0.3	A	K850	K850	K850	K850	K850	K850	K850	K850	K350	K350	K350	K350				
0.8	B	K301	K301	K301	K301	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850
1.0	B	K301	K301	K301	K301	K301	K301	K301	K301	K850	K850	K850	K850	K850	K850	K850	K850
2.2	C D	K601	K601	K601	K601	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301
3.3		K132	K132	K132	K132	K601	K601	K601	K601	K601	K601	K601	K601	K301	K301	K301	K301
4.7		K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601	K301	K301	K301	K301
6.8		K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601
8.2		K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601
10		K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132	K601	K601	K601	K601
15	J K M	K402	K402	K402	K402	K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132
18		K402	K402	K402	K402	K402	K402	K402	K402	K252	K252	K252	K252	K132	K132	K132	K132
20		K402	K402	K402	K402	K402	K402	K402	K402	K252	K252	K252	K252	K132	K132	K132	K132
22		K402	K402	K402	K402	K402	K402	K402	K402	K252	K252	K252	K252	K132	K132	K132	K132
33		K902	K902	K902	K902	K902	K902	K902	K902	K402	K402	K402	K402	K252	K252	K252	K252
39		K153	K153	K153	K153	K902	K902	K902	K902	K402	K402	K402	K402	K252	K252	K252	K252
47		K153	K153	K153	K153	K902	K902	K902	K902	K402	K402	K402	K402	K402	K402	K402	K402
50		K153	K153	K153	K153	K902	K902	K902	K902	K402	K402	K402	K402	K402	K402	K402	K402
68		K153	K153	K153	K153	K153	K153	K153	K153	K902	K902	K902	K902	K402	K402	K402	K402
82		K253	K253	K253	K253	K153	K153	K153	K153	K902	K902	K902	K902	K402	K402	K402	K402
100		K253	K253	K253		K153	K153	K153	K153	K153	K153	K153	K153	K902	K902	K902	K902
120		K353	K353	K353		K153	K153	K153		K153	K153	K153	K153	K902	K902	K902	K902
150		K353	K353			K253	K253	K253		K153	K153	K153	K153	K153	K153	K153	K153
180		K453				K353	K353	K353		K253	K253	K253		K153	K153	K153	K153
200		K453				K353	K353			K253	K253	K253		K153	K153	K153	K153
220						K453				K253	K253	K253		K153	K153	K153	
270						K453				K353	K353	K353		K153	K153	K153	
330										K353	K353			K253	K253	K253	
390										K453				K253	K253	K253	
470														K353	K353		
560														K353	K353		
680														K453			
820																	
1000																	
1200																	
2200																	
10000						Type I Dielectric				Type II Dielectric				Type III Dielectric			

Note: 1) Different colours correspond to different Dielectrics, It is possible to change Dielectric constant.
 2) Special Capacitance and rated voltage, Please contact Dalicap.

◆SG/SM Series Capacitance Table

Dimension Code		2525 (.635x.635)				3030 (.762x.762)				3535 (.889x.889)				4040 (1.016x1.016)				5050 (1.270x1.270)			
Rated voltage		16V	25V	50V	100V	16V	25V	50V	100V	16V	25V	50V	100V	16V	25V	50V	100V	16V	25V	50V	100V
Cap (pF)	Tolerance																				
0.1	A																				
0.3	A																				
0.8	B	K350	K350	K350	K350	K350	K350	K350	K350												
1.0	B	K850	K850	K850	K850	K350	K350	K350	K350	K350	K350	K350	K350								
2.2	C D	K850	K850	K850	K850	K850	K850	K850	K850	K350	K350	K350	K350	K350	K350	K350	K350				
3.3		K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K350	K350	K350	K350
4.7		K301	K301	K301	K301	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K350	K350	K350	K350
6.8		K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K850	K850	K850	K850	K850	K850	K850	K850
8.2		K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K850	K850	K850	K850	K850	K850	K850	K850
10		K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K850	K850	K850	K850
15	J K M	K601	K601	K601	K601	K601	K601	K601	K601	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301
18		K601	K601	K601	K601	K601	K601	K601	K601	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301
20		K132	K132	K132	K132	K601	K601	K601	K601	K601	K601	K601	K601	K301	K301	K301	K301	K301	K301	K301	K301
22		K132	K132	K132	K132	K601	K601	K601	K601	K601	K601	K601	K601	K301	K301	K301	K301	K301	K301	K301	K301
33		K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601	K601	K601	K601	K601	K301	K301	K301	K301
39		K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601	K301	K301	K301	K301
47		K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601	K601	K601	K601	K601
50		K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601
68		K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601
82		K402	K402	K402	K402	K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132
100		K402	K402	K402	K402	K402	K402	K402	K402	K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132
120		K402	K402	K402	K402	K402	K402	K402	K402	K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132
150		K902	K902	K902	K902	K402	K402	K402	K402	K402	K402	K402	K402	K252	K252	K252	K252	K132	K132	K132	K132
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390		K153	K153	K153	K153	K153	K153	K153	K153	K902	K902	K902	K902	K902	K902	K902	K902	K402	K402	K402	K402
470		K253	K253	K253		K153	K153	K153	K153	K153	K153	K153	K153	K902	K902	K902	K902	K402	K402	K402	K402
560		K253	K253	K253		K153	K153	K153	K153	K153	K153	K153	K153	K902	K902	K902	K902	K902	K902	K902	K902
680		K253	K253	K253		K253	K253	K253		K153	K153	K153		K153	K153	K153	K153	K902	K902	K902	K902
1000		K353	K353			K253	K253	K253		K253	K253	K253		K153	K153	K153		K153	K153	K153	K153
1200		K453				K353	K353			K253	K253	K253		K253	K253	K253		K153	K153	K153	
1500						K453				K353	K353			K253	K253	K253		K153	K153	K153	
1800										K353	K353			K353	K353			K153	K153	K153	
2200										K453				K353				K253	K253		
10000				Type I Dielectric				Type II Dielectric				Type III Dielectric									

Note: 1) Different colours correspond to different Dielectrics, It is possible to change Dielectric constant.
 2) Special Capacitance and rated voltage, Please contact Dalicap.

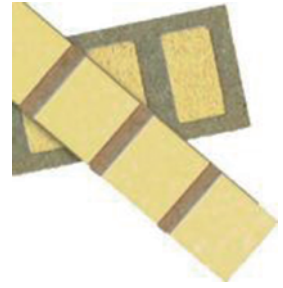
SS Series SLC

◆ SS Series Capacitance Table

Dimension Code		2010 (.508x.254)				4020 (1.016x.508)				6030 (1.524x.762)				8040 (2.032x.1.016)			
Rated voltage		16V	25V	50V	100V	16V	25V	50V	100V	16V	25V	50V	100V	16V	25V	50V	100V
Cap (pF)	Tolerance																
0.1	A	K850	K850	K850	K850	K350	K350	K350	K350								
0.3	A	K301	K301	K301	K301	K350	K350	K350	K350	K350	K350	K350	K350				
0.8	B	K601	K601	K601	K601	K850	K850	K850	K850	K350	K350	K350	K350	K350	K350	K350	K350
1.0	B	K601	K601	K601	K601	K301	K301	K301	K301	K850	K850	K850	K850	K350	K350	K350	K350
2.2	C D	K132	K132	K132	K132	K301	K301	K301	K301	K850	K850	K850	K850	K850	K850	K850	K850
3.3		K252	K252	K252	K252	K601	K601	K601	K601	K301	K301	K301	K301	K850	K850	K850	K850
4.7		K402	K402	K402	K402	K601	K601	K601	K601	K301	K301	K301	K301	K301	K301	K301	K301
6.8		K402	K402	K402	K402	K132	K132	K132	K132	K601	K601	K601	K601	K301	K301	K301	K301
8.2		K402	K402	K402	K402	K132	K132	K132	K132	K601	K601	K601	K601	K301	K301	K301	K301
10		K402	K402	K402	K402	K132	K132	K132	K132	K601	K601	K601	K601	K301	K301	K301	K301
15	J K M	K902	K902	K902	K902	K252	K252	K252	K252	K132	K132	K132	K132	K601	K601	K601	K601
18		K902	K902	K902	K902	K252	K252	K252	K252	K132	K132	K132	K132	K601	K601	K601	K601
20		K153	K153	K153	K153	K252	K252	K252	K252	K132	K132	K132	K132	K601	K601	K601	K601
22		K153	K153	K153	K153	K402	K402	K402	K402	K132	K132	K132	K132	K132	K132	K132	K132
33		K253	K253	K253		K402	K402	K402	K402	K252	K252	K252	K252	K132	K132	K132	K132
39		K253	K253	K253		K402	K402	K402	K402	K252	K252	K252	K252	K132	K132	K132	K132
47		K353	K353			K902	K902	K902	K902	K402	K402	K402	K402	K252	K252	K252	K252
50		K353	K353			K902	K902	K902	K902	K402	K402	K402	K402	K252	K252	K252	K252
68		K453				K902	K902	K902	K902	K402	K402	K402	K402	K252	K252	K252	K252
82						K153	K153	K153	K153	K402	K402	K402	K402	K402	K402	K402	K402
100						K153	K153	K153	K153	K402	K402	K402	K402	K252	K252	K252	K252
120						K153	K153	K153	K153	K902	K902	K902	K902	K402	K402	K402	K402
150						K253	K253	K253	K253	K902	K902	K902	K902	K402	K402	K402	K402
180						K253	K253	K253	K253	K153	K153	K153	K153	K902	K902	K902	K902
200						K353	K353	K353		K153	K153	K153	K153	K902	K902	K902	K902
220						K353	K353	K353		K153	K153	K153	K153	K902	K902	K902	K902
270						K453	K453			K153	K153	K153	K153	K153	K153	K153	K153
330						K453				K253	K253	K253	K253	K153	K153	K153	K153
390										K253	K253	K253		K153	K153	K153	K153
470										K353	K353	K353		K153	K153	K153	K153
560										K353	K353			K253	K253	K253	K253
680										K453				K253	K253	K253	
820														K353	K353	K353	
1000														K353	K353		
1200														K453			
10000				Type I Dielectric				Type II Dielectric				Type III Dielectric					

Note: 1) Different colours correspond to different Dielectrics , It is possible to change Dielectric constant.
2) Special Capacitance and rated voltage, Please contact Dalicap.

SA Series Array SLC



◆ Product Characteristics

Integrated design for saving space and simplified assembling
The theoretical minimum total size is 20mils * 10mils

◆ Product Applications

DC blocking, RF bypass, filtering, decoupling, microwave integrated circuit

◆ Part Number

SA	1010	K301	T	1R0	B	1	G	6
①	②	③	④	⑤	⑥	⑦	⑧	⑨
SLC Series Capacitors	Size	Dielectric Coefficient	Metallization	Capacitance	Tolerance	Rated Voltage	Packaging Type	Capacitor Quantity

① SLC Series Capacitors

SA Series Array SLC

② Size

The first two digits represent length, the second two digits represent width, Unit: mil;
for example: 1010 length is 10mil (0.254mm), width is 10mil (0.254mm)

SA Series Array SLC

③ Dielectric Coefficient

dielectric coefficient <10, K9R6=9.6; dielectric coefficient ≥10, K301=300.

Dielectric type	Dielectric constant	Temperature Coefficient Code	Temperature Coefficient	Temperature Range	Max.D.F	Min IR(Ω) @25°C
Type I	15	COG	0±30ppm/°C	-55~+125°C	0.15%@1MHz	10 ¹²
	35	COG	0±30ppm/°C	-55~+125°C	0.15%@1MHz	10 ¹²
	85	COG	0±30ppm/°C	-55~+125°C	0.15%@1MHz	10 ¹²
	220	P3L	-1500+500ppm/°C	-55~+125°C	0.25%@1MHz	10 ¹²
	300	P3L	-1500+500ppm/°C	-55~+125°C	0.7%@1MHz	10 ¹¹
	600	S3L	-3300+1000ppm/°C	-55~+125°C	1.2%@1MHz	10 ¹¹
	900	T3L	-4700+500ppm/°C	-55~+125°C	1.2%@1MHz	10 ¹¹
Type II	1300	X7S	±22%	-55~+125°C	4%@1KHz/1 MHz	10 ¹¹
	1500	X7S	±22%	-55~+125°C	4%@1KHz/1 MHz	10 ¹¹
	2500	X7R	±15%	-55~+125°C	4%@1KHz/1 MHz	10 ¹¹
	4000	X7R	±15%	-55~+125°C	4%@1KHz/1 MHz	10 ¹¹
	9000	Y5V	-82%~+22%	-30~+85°C	4%@1KHz/1 MHz	10 ¹¹
	15000	Y5V	-82%~+22%	-30~+85°C	4%@1KHz/1 MHz	10 ¹¹
Type III	15000	X7R/X7S	±15%/±22%	-55~+125°C	2.5%@1KHz/1MHz	10 ¹⁰
	25000	X7R/X7S	±15%/±22%	-55~+125°C	2.5%@1KHz/1MHz	10 ¹⁰
	35000	X7R/X7S	±15%/±22%	-55~+125°C	2.5%@1KHz/1MHz	10 ¹⁰
	45000	X7R/X7S	±15%/±22%	-55~+125°C	2.5%@1KHz/1MHz	10 ⁹

④ Metallization

Code	Sputter Layer		Plating Layer	
	Metal	Thickness(μm)	Metal	Thickness(μm)
M	TiW/Au	0.01~0.05/0.03~0.05	Au	≥2
P	TiW/Ni/Au	0.01~0.05/0.1~0.2/0.03~0.05	Au	≥2
T	TaN/TiW/Au	0.03~0.10/0.01~0.05/0.03~0.05	Au	≥2
F	TaN/TiW/Ni/Au	0.03~0.10/0.01~0.05/0.1~0.2/0.03~0.05	Au	≥2
H	TaN/TiW/Pt/Au	0.03~0.10/0.01~0.05/0.1~0.2/0.03~0.05	Au	≥2
D	TiW/Pt/Au	0.01~0.05/0.1~0.2/0.03~0.05	Au	≥2
E	Ti/Pt/Au	0.01~0.05/0.1~0.2/0.03~0.05	Au	≥2
X	TiW/Ni/Ag	0.01~0.05/0.1~0.2/0.10~1.5	-	-
L	frontside: Ti/Pt/Au backside: Ti/Pt	0.01~0.05/0.1~0.2/0.03~0.05	Au	≥2

Note: please contact Dalicap for non-standard Au thickness and metallization system.

SA Series Array SLC

⑤ Capacitance

Less than 10pF, 1R0=1.0pF; No less than 10pF, 101=100pF

⑥ Tolerance

Code	A	B	C	D	F	G	J	K	L	M	O	Z	V
Tolerance	±0.05pF	±0.1pF	±0.25pF	±0.5pF	±1%	±2%	±5%	±10%	±15%	±20%	±40%	-20%~+80%	0~+100%

⑦ Rated Voltage

Code	Rated Voltage	Code	Rated Voltage
A	10	6	63
B	16	1	100
2	25	C	120
5	50		

⑧ Packaging Type

W: Waffle Packaging; G: Stick Box; R: Film Ring.

⑨ Capacitor Quantity

Capacitor parallel array quantity.

SA Series Array SLC

◆SA Series Array SLC

Dimension Code		1010 (.254x.254)				1212 (.305x.305)				1515 (.381x.381)				2020 (.508x.508)				2525 (.635x.635)			
Rated voltage		16V	25V	50V	100V	16V	25V	50V	100V	16V	25V	50V	100V	16V	25V	50V	100V	16V	25V	50V	100V
Cap (pF)	Tolerance																				
0.1	A	K350	K350	K350	K350	K350	K350	K350	K350												
0.3	A	K850	K850	K850	K850	K850	K850	K850	K850	K350	K350	K350	K350								
0.8	B	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K350	K350	K350	K350
1.0	B	K301	K301	K301	K301	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850
2.2	C D	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K850	K850	K850	K850
3.3		K601	K601	K601	K601	K601	K601	K601	K601	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301
4.7		K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K301	K301	K301	K301	K301	K301	K301	K301
6.8		K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601
8.2		K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601	K601	K601	K601	K601
10		K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601	K601	K601	K601	K601
15		K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132
18	J K M	K252	K252	K252	K252	K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132
20		K402	K402	K402	K402	K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132
22		K402	K402	K402	K402	K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132
33		K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K252	K252	K252	K252	K252	K252	K252	K252
39		K902	K902	K902	K902	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K252	K252	K252	K252
47		K902	K902	K902	K902	K902	K902	K902	K902	K402	K402	K402	K402	K402	K402	K402	K402	K252	K252	K252	K252
50		K902	K902	K902	K902	K902	K902	K902	K902	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402
68		K153	K153	K153	K153	K902	K902	K902	K902	K902	K902	K902	K902	K402	K402	K402	K402	K402	K402	K402	K402
82		K153	K153	K153	K153	K153	K153	K153	K153	K902	K902	K902	K902	K902	K902	K902	K902	K402	K402	K402	K402
100		K153	K153	K153		K153	K153	K153	K153	K153	K153	K153	K153	K902	K902	K902	K902	K902	K902	K902	K902
120		K153	K153	K153		K153	K153	K153	K153	K153	K153	K153	K153	K902	K902	K902	K902	K902	K902	K902	K902
150		K253	K253	K253		K253	K253	K253		K153	K153	K153	K153	K153	K153	K153	K153	K902	K902	K902	K902
180		K253	K253	K253		K253	K253	K253		K153	K153	K153		K153	K153	K153	K153	K153	K153	K153	K153
200		K353	K353			K253	K253	K253		K253	K253	K253		K153	K153	K153	K153	K153	K153	K153	K153
220		K353	K353			K353	K353			K253	K253	K253		K153	K153	K153		K153	K153	K153	K153
270		K453				K353	K353			K253	K253	K253		K253	K253	K253		K153	K153	K153	
330						K453				K353	K353			K253	K253	K253		K253	K253	K253	
390										K453				K353	K353	K353		K253	K253	K253	
470										K453				K353	K353			K253	K253	K253	
560														K453				K353	K353		
680																		K453			
1000																					
1200																					
1500																					
1800																					
2200																					
10000				Type I Dielectric				Type II Dielectric				Type III Dielectric									

Note:1) Different colours correspond to different Dielectrics, It is possible to change Dielectric constant.

2) Special Capacitance and rated voltage, Please contact Dalicap.

SA Series Array SLC

◆ SA Series Array SLC

Dimension Code		3030 (.762x.762)				3535 (.889x.889)				4040 (1.016x1.016)				5050 (1.27x1.27)				7070 (1.78x1.78)			
Rated voltage		16V	25V	50V	100V	16V	25V	50V	100V	16V	25V	50V	100V	16V	25V	50V	100V	16V	25V	50V	100V
Cap (pF)	Tolerance																				
0.1	A																				
0.3	A																				
0.8	B	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350				
1.0	B	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350	K350
2.2	C D	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K850	K350	K350	K350	K350
3.3		K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K850	K850	K850	K850	K850	K850	K850	K850
4.7		K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K850	K850	K850	K850
6.8		K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301
8.2		K601	K601	K601	K601	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301
10	J K M	K601	K601	K601	K601	K601	K601	K601	K601	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301	K301
15		K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K301	K301	K301	K301
18		K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601	K601	K601	K601	K601	K301	K301	K301	K301
20		K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601	K601
22		K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K601	K601	K601	K601	K601	K601	K601	K601
33		K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132
39		K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132	K132
47		K252	K252	K252	K252	K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132
50		K252	K252	K252	K252	K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132	K132	K132	K132	K132
68		K402	K402	K402	K402	K402	K402	K402	K402	K252	K252	K252	K252	K252	K252	K252	K252	K132	K132	K132	K132
82		K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K252	K252	K252	K252	K252	K252	K252	K252
100		K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K252	K252	K252	K252
120		K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K252	K252	K252	K252
150		K902	K902	K902	K902	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402	K402
180		K902	K902	K902	K902	K902	K902	K902	K902	K902	K902	K902	K902	K402	K402	K402	K402	K402	K402	K402	K402
200		K902	K902	K902	K902	K902	K902	K902	K902	K902	K902	K902	K902	K402	K402	K402	K402	K402	K402	K402	K402
220		K153	K153	K153	K153	K902	K902	K902	K902	K902	K902	K902	K902	K902	K902	K902	K902	K402	K402	K402	K402
270		K153	K153	K153		K153	K153	K153	K153	K902	K902	K902	K902	K902	K902	K902	K902	K402	K402	K402	K402
330		K153	K153	K153		K153	K153	K153		K153	K153	K153	K153	K902	K902	K902	K902	K902	K902	K902	K902
390		K253	K253	K253		K153	K153	K153		K153	K153	K153		K153	K153	K153	K153	K902	K902	K902	K902
470		K253	K253	K253		K253	K253	K253		K153	K153	K153		K153	K153	K153		K153	K153	K153	K153
560		K253	K253	K253		K253	K253	K253		K253	K253	K253		K153	K153	K153		K153	K153	K153	
680		K353	K353			K353	K353			K253	K253	K253		K253	K253	K253		K153	K153	K153	
1000		K453				K453				K353	K353			K353	K353	K353		K253	K253	K253	
1200										K453				K353	K353			K253	K253	K253	
1500														K453				K353	K353		
1800																		K453			
2200																					
10000				Type I Dielectric				Type II Dielectric				Type III Dielectric									

Note:1) Different colours correspond to different Dielectrics, It is possible to change Dielectric constant.

2) Special Capacitance and rated voltage, Please contact Dalicap.

SP Series Multi-PAD SLC



◆ Product Characteristics

Small geometric size is suitable for microwave circuit and is good for circuit design and adjustment;
SP Array SLC is mainly customized according to customer drawings and requirements;
Maximum overall size: 10 * 10mm;
Minimum overall size: 0.3 * 0.3mm;
Minimum machining gap: 50μm;
Thickness: 0.15~0.25mm.

◆ Product Applications

Matching networks, parallel resonance circuits, dielectric resonator tuning & coupling.

◆ Part Number

SP	1010	K301	T	1R0	B	1	G	6
①	②	③	④	⑤	⑥	⑦	⑧	⑨
Multi PAD SLC	Size	Dielectric Coefficient	Metallization	Capacitance	Tolerance	Rated Voltage	Packaging	Capacitor Quantity

Instructions

◆ Package and storage

1. Single layer capacitors are packaged in waffle pack, adhesive box or blue film.
2. The temperature of storage is $5 \sim 35^{\circ}\text{C}$, and the relative humidity is not more than 80%.
3. The storage surrounding environment is free of acidic, alkaline or other harmful gases.
4. Single layer capacitors should be used within 12 months after reception, but should satisfy the storage conditions.

◆ Circuit Design

1. Check the use and installation environment, which should comply with the rated value and performances of the capacitor. Exceeding the specification will cause performance degradation, short circuit, open circuit;
2. Capacitors should be used within the allowable operating temperature, exceeding the maximum value, the insulation resistance will decrease, performance will decrease, and it will cause a short circuit. This phenomenon is particularly prominent in high-frequency circuits. If the capacitor is in a "self-heating" circuit, please make sure that the temperature of the capacitor surface is within the maximum allowed;
3. The capacitor should be used below the rated voltage. Under AC voltage or pulse voltage, make sure that the peak voltage does not exceed the rated voltage.

◆ Pick and place

It is recommended to use vacuum nozzle or ceramic tweezers to pick up single layer capacitors to avoid scratching the electrode surface and damaging the ceramic.

◆ Installation

1. For single layer capacitor bottom electrode installation, it is recommended to use eutectic welding or conductive adhesive, the maximum welding temperature does not exceed 400°C .
 - Eutectic welding: AuSn (80%/20%) or similar type of solder for eutectic welding, the solder is usually $25\mu\text{m}$ thick, 1/2 the area of the capacitor.
 - Conductive adhesive: Use an appropriate amount of conductive adhesive to ensure no solder voids.
2. For single layer capacitor top electrode installation, it is recommended to use the bonding process, recommended to use $18\sim 38\mu\text{m}$ gold wire bonding. The bonding points must all be on the surface of the electrode.

