SD Recessed Metalization SLC

1 Features

- Small size, high accuracy, rugged construction, stable performance;
- Gold electrode is compatible with gold wire, gold strip etc;
- Minimize potential shorting caused by epoxy or solder attachments

2 Applications

Widely Applicable to Optical and Wireless Communication Equipment. The Functional Applications are D.C. Blocking, Bypassing, Filtering, Coupling, Tuning, Matching Etc. in High Frequency and Micro-Wave Circuits.

3 How to order

SD	B	25	2X1	2A	101M	C	C	01
Type	Series	Case size code	TCC	Rated Voltage	Capacitance& Tolerance	Termination	Packing	Desing
T able 1	Table 2	Table 3	Table 4	Table 5	Table 6、7	Table 8	Table 9	Table 10

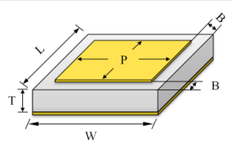
Table 1 Type	Table 2 Series	Drawing
SD: SLC	B: Single Recessed E: Double Recessed	

Table 3 Case size code (mm)

Case size code	W	L	P (Typical)	B	T
10	0.254 ± 0.076	0.254 ± 0.076	0.203	0.025 (+0.025, −0.013)	0.07 ~ 0.40
12	0.305 ± 0.076	0.305 ± 0.076	0.254		
15	0.381 ± 0.076	0.381 ± 0.076	0.279	0.051 (+0.051, −0.038)	
20	0.508 ± 0.076	0.508 ± 0.076	0.406		
25	0.635 ± 0.051	0.635 ± 0.051	0.533		
30	0.762 ± 0.051	0.762 ± 0.051	0.660		
35	0.889 ± 0.051	0.889 ± 0.051	0.787		
40	1.016 ± 0.051	1.016 ± 0.051	0.914		
50	1.270 ± 0.051	1.270 ± 0.051	1.168		

Note 1: For capacitance below 0.5pF, thickness T max. is 0.4mm or 2L/3 (whichever is thicker);
Note 2: P is the typical value for reference only

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Table 4 TCC	Operating temperature	Table 5 Rated Voltage	
AG、CG、UK VL、KL、DM	−55℃ ~ 125℃	1C	16V
2X1	−55℃ ~ 125℃	1E	25V
2F2	−55℃ ~ 85℃	1H	50V
2F4	−25℃ ~ 85℃	1J	63V
X7R、X7S	−55℃ ~ 125℃	2A	100V

Table 6 Nominal Capacitance

EIA Capacitance code in pF.1st two digit are significant figures of capacitance; 3rd digit denotes number of Zeros; R=decimal point; For examples: 103=10,000pF; 3R9=3.9pF.

Table 7 Capacitance Tolerance

Nominal Capacitance < 10pF		NominalCapacitance≥ 10pF			
Code	Tolerance (pF)	Code	Tolerance (%)	Code	Tolerance (%)
A	± 0.05	F	± 1	L	± 15
B	± 0.1	G	± 2	M	± 20
C	± 0.25	J	± 5	S	−20 ~ +50
D	± 0.50	K	± 10	Z	−20 ~ +80

Table 8 Termination	Table 9 Packing	Table 10 Design code
P: TiW/Au	C:Waffle box E:Blue film,7.87" blue film,no ring F:Blue film, 6 " ring	Design code: Blank if no special design; For special design,two digit number will be used,start from 01
T: TiW/Ni/Au		
C: NiCr/Au		
S: Special termination		

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4 Single Recessed Metalization Capacitance Value for Class 1 / Class 2 Ceramic

Case size code	Rated Voltage	Capacitance Range (pF)								
		TCC	AG	CG	UK	VL	KL	DM	2X1	2F2
10	100V	min.	0.02	0.04	0.28	0.42	0.93	1.2	2.4	20
		max.	0.10	0.61	0.79	1.7	2.7	3.3	30	74
12	100V	min.	0.03	0.05	0.37	0.57	1.2	1.6	3.2	27
		max.	0.14	0.83	1.1	2.4	3.6	4.5	41	100
15	100V	min.	0.03	0.06	0.40	0.61	1.3	1.7	3.4	29
		max.	0.20	1.2	1.5	3.4	5.2	6.5	59	140
20	100V	min.	0.06	0.11	0.77	1.2	2.6	3.3	6.7	56
		max.	0.35	2.0	2.6	5.7	8.8	11	100	240
25	100V	min.	0.10	0.18	1.3	2.0	4.3	5.4	11	93
		max.	0.50	2.9	3.7	8.1	13	16	140	350
30	100V	min.	0.13	0.24	1.7	2.6	5.6	7.1	14	120
		max.	0.71	4.1	5.3	12	18	22	200	500
35	100V	min.	0.19	0.33	2.3	3.6	7.8	9.8	20	170
		max.	0.97	5.6	7.2	16	24	31	280	680
40	100V	min.	0.25	0.43	3.1	4.7	10	13	26	220
		max.	1.3	7.3	9.4	21	32	40	360	880
50	100V	min.	0.40	0.70	4.9	7.5	17	21	42	360
		max.	2.0	11	15	32	49	62	570	1400

5 Single Recessed Metalization Capacitance Value for class 3 ceramic

Case size code	Rated Voltage	Capacitance Range (pF)				
		TCC	X7R、X7S	Rated Voltage	TCC	X7R、X7S
10	16V、25V、50V	min.	38	63V	min.	38
		max.	170		max.	160
12	16V、25V、50V	min.	51	63V	min.	51
		max.	240		max.	210
15	16V、25V、50V	min.	55	63V	min.	55
		max.	340		max.	310
20	16V、25V、50V	min.	120	63V	min.	120
		max.	570		max.	520
25	16V、25V、50V	min.	210	63V	min.	210
		max.	820		max.	740
30	16V、25V、50V	min.	320	63V	min.	320
		max.	1200		max.	1100
35	16V、25V、50V	min.	440	63V	min.	440
		max.	1600		max.	1400
40	16V、25V、50V	min.	580	63V	min.	580
		max.	2100		max.	1900
50	16V、25V、50V	min.	930	63V	min.	930
		max.	3200		max.	2900

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6 Double Recessed Metalization Capacitance Value for Class 1 / Class 2 Ceramic

Case size code	Rated Voltage	Capacitance Range (pF)								
		TCC	AG	CG	UK	VL	KL	DM	2X1	2F2
10	100V	min.	0.02	0.03	0.25	0.38	0.83	1.0	2.1	18
		max.	0.1	0.57	0.75	1.6	2.5	3.2	29	70
12	100V	min.	0.03	0.05	0.34	0.53	1.2	1.5	3.0	25
		max.	0.14	0.79	1.0	2.3	3.5	4.4	40	96
15	100V	min.	0.03	0.05	0.33	0.51	1.1	1.4	2.9	24
		max.	0.19	1.1	1.5	3.2	4.9	6.1	55	130
20	100V	min.	0.06	0.1	0.69	1.1	2.3	2.9	5.9	50
		max.	0.33	1.9	2.5	5.5	8.4	11	95	230
25	100V	min.	0.09	0.17	1.2	1.8	4.0	5.0	10	86
		max.	0.47	2.7	3.6	7.9	12	15	140	330
30	100V	min.	0.13	0.22	1.6	2.4	5.3	6.7	14	110
		max.	0.68	3.9	5.1	11	17	22	200	480
35	100V	min.	0.18	0.31	2.2	3.4	7.4	9.3	19	160
		max.	0.94	5.4	7.0	15	24	30	270	660
40	100V	min.	0.24	0.42	2.9	4.5	9.9	12	25	210
		max.	1.2	7.1	9.2	20	31	39	350	860
50	100V	min.	0.38	0.67	4.7	7.3	16	20	41	350
		max.	1.9	11	14	31	48	61	560	1400

7 Double Recessed Metalization Capacitance Value for class 3 ceramic

Case sizecode	Rated Voltage	Capacitance Range (pF)				
		TCC	X7R、X7S	Rated Voltage	TCC	X7R、X7S
10	16V、25V、50V	min.	34	63V	min.	34
		max.	170		max.	150
12	16V、25V、50V	min.	47	63V	min.	47
		max.	230		max.	210
15	16V、25V、50V	min.	46	63V	min.	46
		max.	320		max.	290
20	16V、25V、50V	min.	100	63V	min.	100
		max.	550		max.	500
25	16V、25V、50V	min.	190	63V	min.	190
		max.	790		max.	720
30	16V、25V、50V	min.	290	63V	min.	290
		max.	1100		max.	1000
35	16V、25V、50V	min.	410	63V	min.	410
		max.	1600		max.	1400
40	16V、25V、50V	min.	550	63V	min.	550
		max.	2000		max.	1800
50	16V、25V、50V	min.	900	63V	min.	900
		max.	3200		max.	2800