

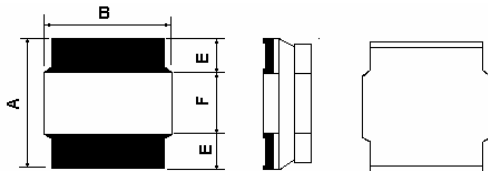
Application Field

- Personal computers.
- Disk Drives and computer peripherals.
- DC Power supply circuit.
- For Small DC-DC converter (cellular phone, HDD,DVC,DSC,PDA,LCD disply etc)

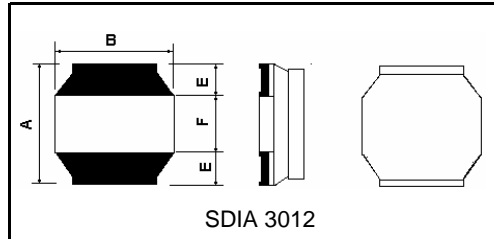
Features

- Low DC resistance, High current capacity and high impedance characteristics
- Excellent solder heat resistance, Both flow and reflow soldering methods can be employed.

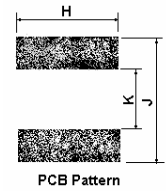
Dimensions and footprint (unit:mm)



SDIA3010, SDIA4012,SDIA4018,SDIA6012
SDIA8020, SDIA8025,SDIA8040



SDIA 3012

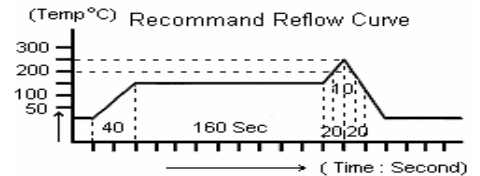


PCB Pattern

Type	A	B	C	D	E	F	H	J	K
SDIA3010	3.0± 0.2	3.0± 0.2	1.0 max		0.9	2.0	3.7	3.7	1.2
SDIA3012	3.0± 0.2	3.0± 0.2	1.2 max		0.9	2.0	3.7	3.7	1.2
SDIA4012	4.0 ± 0.2	4.0 ± 0.2	1.2 max		1	2.0	4.6	4.6	1.6
SDIA4018	4.0 ± 0.2	4.0 ± 0.2	1.8 max		1	2.0	4.6	4.6	1.6
SDIA6012	6.0 ± 0.2	6.0 ± 0.2	1.2max		0.9	4.21	6.7	6.7	3.5
SDIA8020	8.0± 0.2	8.0 ± 0.2	2.0 max		1.6	4.8	8.7	8.7	4.3
SDIA8025	8.0± 0.2	8.0 ± 0.2	2.5 max		1.6	4.8	8.7	8.7	4.3
SDIA8040	8.0± 0.2	8.0 ± 0.2	4.0 max		1.6	4.8	8.7	8.7	4.3

General Specification:

1. Storage temp: -40°C ~ +125°C
2. Operating temp: -25°C ~ +105°C
3. Resistance to solder heat : 250°C 10secs





SDIA3010- Series , SDIA3012-Series

Part No	Inductance	SDIA3010		SDIA3012	
		L(μ H)	RDC(Ω)Max	IDC(A)Min	RDC(Ω)Max
R10	0.1				
1R0	1.0	0.096	1.65	0.104	1.500
1R4	1.4				
1R5	1.5	0.120	1.30	0.183	1.360
1R8	1.8			0.197	1.200
2R0	2.0				
2R2	2.2	0.168	1.25	0.200	1.100
2R7	2.7				
3R3	3.3	0.216	0.85	0.320	0.910
3R9	3.9				
4R7	4.7	0.312	0.80	0.380	0.770
5R6	5.6				
6R8	6.8	0.540	0.65	0.640	0.670
8R2	8.2				
100	10	0.684	0.50	0.950	0.540
120	12				
150	15	1.092	0.37	1.068	0.440
180	18				
220	22	1.32	0.34	1.730	0.375
270	27				
330	33	2.52	0.25	2.570	0.310
390	39				
470	47	3.60	0.17	3.720	0.250
560	56				
680	68	5.04	0.15		
820	82				
101	100	9.60	0.14		
121	120				
151	150	13.20	0.11		
181	180				
221	220	16.80	0.10		
251	250	18.00	0.08		
271	270				
331	330				
391	390				
471	470				
561	560				
681	680				

SDIAxxxx-xxxK-E Code "-E" : Lead free process and RoHs compliant

Inductance tolerance : N \pm 30% M \pm 20% L \pm 15% K \pm 10% J \pm 5% IDC : Δ L / L (0A) \leq 10%

Frequency : 1.0 μ H ~ 8.2 μ H @ 100KHz / 0.25V, 10 μ H ~ 680 μ H / 1KHz / 0.25V



SDIA4012- Series , SDIA4018-Series

Part No	Inductance L(μH)	SDIA4012		SDIA4018	
		RDC(Ω)Max	IDC(A)Min	RDC(Ω)Max	IDC(A)Min
R10	0.1				
1R0	1.0	0.067	1.95	0.057	3.550
1R4	1.4				
1R5	1.5	0.085	1.49		
1R8	1.8				
2R0	2.0				
2R2	2.2	0.140	1.40	0.084	2.500
2R7	2.7				
3R3	3.3	0.210	1.15	0.110	2.150
3R5	3.5			0.120	1.900
3R9	3.9				
4R7	4.7	1.290	0.91	0.170	1.580
5R6	5.6				
6R6	6.6			0.230	1.400
6R8	6.8	0.440	0.77	0.240	1.410
8R2	8.2				
100	10	0.620	0.66	0.320	1.100
120	12				
150	15	0.930	0.54	0.480	0.940
180	18				
220	22	1.25	0.46	0.700	0.750
270	27				
330	33	1.84	0.36	1.150	0.610
390	39				
470	47	2.66	0.31	1.680	0.530
560	56				
680	68	3.70	0.24	2.430	0.460
820	82				
101	100			3.950	0.340
121	120				
151	150			6.700	0.280
181	180				
221	220	12.35	0.16	11.800	0.230
251	250				
331	330				
391	390				
471	470				
561	560				
681	680				
821	820	60.000	0.050		

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Inductance tolerance : N±30% M±20% L±15% K±10% J±5% IDC : $\Delta L / L (0A) \leq 10\%$

Frequency : 0.1μH ~ 8.2μH @ 100KHz / 0.25V, 10μH ~ 820μH / 1KHz / 0.25V



SDIA6012- Series , SDIA46020-Series

Part No	Inductance	SDIA6012		SDIA6020	
		RDC(Ω)Max	IDC(A)Min	RDC(Ω)Max	IDC(A)Min
1R0	1.0				
1R5	1.5			0.031	4.000
1R8	1.8				
2R2	2.2			0.041	3.200
2R7	2.7				
3R0	3.0	0.110	1.19		
3R3	3.3	0.120	1.17	0.048	2.800
3R5	3.5				
3R9	3.9				
4R7	4.7	0.140	0.95	0.070	2.400
5R3	5.3	0.150	0.90		
5R6	5.6	0.160	0.83		
6R8	6.8	0.198	0.80	0.102	2.000
8R2	8.2				
100	10	0.288	0.75	0.150	1.700
120	12	0.360	0.60		
150	15	0.396	0.58		
180	18				
220	22	0.66	0.48		
270	27				
330	33	0.95	0.39		
390	39				
470	47	1.356	0.32		
560	56				
680	68	1.62	0.22		
820	82				
101	100	2.626	0.19		
121	120				
151	150				
181	180				
221	220				
331	330				
391	390				
471	470				
561	560				

SDIAxxxx-xxxK-E Code "-E" : Lead free process and RoHs compliant

Inductance tolerance : N±30% M±20% L±15% K±10% J±5% IDC : $\Delta L / L (0A) \leq 10\%$

Frequency : 0.1μH ~ 8.2μH @ 100KHz / 0.25V, 10μH ~ 820μH / 1KHz / 0.25V



SDIA8020-Series , SDIA8025-Series-SDIA8040-Series

Part No	Inductance L(μ H)	SDIA8020		SDIA8025		SDIA8040	
		RDC(Ω)Max	IDC(A)Min	RDC(Ω)Max	IDC(A)Min	RDC(Ω)Max	IDC(A)Min
1R0	1.0			0.016	8.16		
1R5	1.5			0.024	6.80		
1R8	1.8						
2R2	2.2	0.05	4.50	0.032	5.85	0.017	7.330
2R7	2.7						
3R0	3.0			0.040	4.90		
3R3	3.3	0.06	4.10			0.220	5.930
3R5	3.5						
3R9	3.9			0.049	4.31		
4R7	4.7	0.085	3.60	0.058	3.85	0.023	4.700
5R3	5.3						
5R6	5.6						
6R8	6.8	0.12	2.94	0.071	3.40	0.033	4.000
8R2	8.2			0.086	3.04		
100	10	0.22	2.50	0.11	2.60	0.044	3.400
120	12	0.23	2.20	0.13	2.40	0.055	3.050
150	15	0.25	2.00	0.14	2.26	0.065	2.700
180	18			0.18	1.97		
220	22	0.37	1.60	0.23	1.80	0.086	2.200
270	27			0.28	1.64		
330	33	0.55	1.30	0.34	1.49	0.130	1.900
390	39			0.41	1.37		
470	47	0.820	1.15	0.49	1.24	0.200	1.500
560	56			0.56	1.14		
680	68	1.11	0.94	0.66	1.02	0.300	1.200
820	82			0.83	0.94		
101	100	1.90	0.70	1.06	0.85	0.380	1.000
121	120			1.19	0.78		
151	150			1.51	0.70		
181	180			1.81	0.63		
221	220			2.01	0.58		
271	270			2.61	0.54		
331	330			2.97	0.49		
391	390			3.73	0.43		
471	470			4.21	0.39		
561	560			5.28	0.35		
681	680			6.73	0.33		
821	820			8.02	0.30		
102	1000			10.19	0.27		

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