SMD POWER CHOKES INDUCTOR
- SSL SERIES -

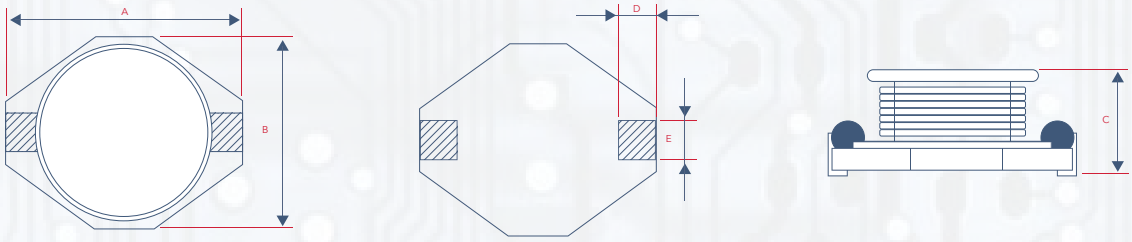
FEATURES

- These new SSL Series is designed for the smallest possible size, low cost and high performance.
- It's high energy storage and very low DC resistance offer higher saturated current which is suitable for DC to DC conversion for Notebook, Palm Top, Step up or Step down converters etc.

PART NUMBERING

SSL	0804	-	3R3	K
PRODUCT TYPE	SIZE		INDUCTANCE	TOLERANCE
	0402 0802 0804 0810 1306		1R0 - 1.0µH 100 - 10µH 101 - 100µH 102 - 1000µH	K - ±10% M - ±20%

MECHANICAL DIMENSION (in MM)



TYPE	A	B	C	D (ref.)	E (ref.)
SSL0402	6.60 max	4.45 max	2.92 max	1.27	1.02
SSL0802	12.9 ± 0.4	9.0 ± 0.4	3.0 max	2.6	1.2
SSL0804	12.9 ± 0.4	9.0 ± 0.4	5.21 max	2.6	1.2
SSL0810	12.9 ± 0.4	9.0 ± 0.4	11.43 max	2.6	1.2
SSL1306	18.5 ± 0.5	15.5 ± 0.5	7.5 max	2.6	2.54

ELECTRICAL

TYPE	INDUCTANCE	RATED CURRENT
SSL0402 - _ _ _ - _	1.0µH to 1000µH	2.9 Amps to 0.10Amps
SSL0802 - _ _ _ - _	10µH to 1000µH	2.4 Amps to 0.1Amps
SSL0804 - _ _ _ - _	1.0µH to 1000µH	9.0 Amps to 0.3Amps
SSL0810 - _ _ _ - _	10µH to 1000µH	8.0 Amps to 0.8Amps
SSL1306 - _ _ _ - _	1.0µH to 1000µH	8.6 Amps to 0.56Amps

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RoHS

SSL - 0402 - SERIES

PART NO.	INDUCTANCE (µH) ±20%	SRF (MHz)	RDC (Ω) MAX.	I SAT (A)	IRMS (A)
SSL0402-1R0M	1.0	130	0.05	2.90	2.90
SSL0402-1R5M	1.5	115	0.05	2.60	2.80
SSL0402-2R2M	2.2	90	0.07	2.30	2.4
SSL0402-3R3M	3.3	70	0.08	2.00	2.0
SSL0402-4R7M	4.7	50	0.09	1.50	1.5
SSL0402-6R8M	6.8	45	0.13	1.20	1.4
SSL0402-100M	10	35	0.16	1.10	1.1
SSL0402-150M	15	30	0.23	0.90	1.0
SSL0402-220M	22	20	0.37	0.70	0.8
SSL0402-330M	33	15	0.51	0.58	0.6
SSL0402-470M	47	14	0.64	0.50	0.5
SSL0402-680M	68	11	0.86	0.40	0.4
SSL0402-101M	100	9	1.27	0.31	0.3
SSL0402-151M	150	6	2.00	0.27	0.25
SSL0402-221M	220	5.5	2.65	0.22	0.2
SSL0402-331M	330	5	3.80	0.18	0.16
SSL0402-471M	470	4	506	0.16	0.15
SSL0402-681M	680	3	9.20	0.14	0.12
SSL0402-102M	1000	2	13.8	0.10	0.07

M = ± 20%, K = ± 10% , J = ± 5%

SSL - 0802 - SERIES

PART NO.	INDUCTANCE AT 100kHz 0.1VRMS (µH ± 20%)	DC RESISTANCE (Ω ± 15%)	I SAT^2 (AMPS) INDUCTANCE DROP - 10%
SSL0802-100M	10	0.09	2.4
SSL0802-150M	15	0.12	2.0
SSL0802-220M	22	0.19	1.6
SSL0802-330M	33	0.25	1.4
SSL0802-470M	47	0.32	1.0
SSL0802-680M	68	0.55	0.9
SSL0802-101M	100	0.70	0.7
SSL0802-151M	150	1.0	0.6
SSL0802-221M	220	1.6	0.5
SSL0802-331M	330	2.2	0.4
SSL0802-471M	470	3.3	0.3
SSL0802-681M	680	4.4	0.2
SSL0802-102M	1000	7.0	0.1

M = ± 20%, K = ± 10% , J = ± 5%

Tested at 100 KHz, 0.1 Vrms
Inductance drop = 10% Typical at rated Isat
ΔT = 30°C Typical at Irms
Operating Temperature range -40°C to +85°C

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SSL - 0804 - SERIES

PART NO.	INDUCTANCE AT 100kHz 0.1VRMS (µH ± 20%)	DC RESISTANCE (Ω ± 15%)	I SAT^2 (AMPS) INDUCTANCE DROP - 10%
SSL0804-1R0M	1.0	0.008	9.0
SSL0804-1R5M	1.5	0.009	8.0
SSL0804-2R2M	2.2	0.010	7.0
SSL0804-3R3M	3.3	0.013	6.4
SSL0804-4R7M	4.7	0.016	5.4
SSL0804-6R8M	6.8	0.019	4.6
SSL0804-100M	10	0.025	3.8
SSL0804-150M	15	0.040	3.0
SSL0804-220M	22	0.050	2.6
SSL0804-330M	33	0.088	2.0
SSL0804-470M	47	0.12	1.6
SSL0804-680M	68	0.16	1.4
SSL0804-101M	100	0.23	1.2
SSL0804-151M	150	0.33	1.0
SSL0804-221M	220	0.53	0.8
SSL0804-331M	330	0.81	0.6
SSL0804-471M	470	1.10	0.5
SSL0804-681M	680	1.60	0.4
SSL0804-102M	1000	2.15	0.3

M = ± 20%, K = ± 10% , J = ± 5%

SSL - 0810 - SERIES

PART NO.	INDUCTANCE (µH ± 20%)	DC RESISTANCE (Ω MAX)	I SAT^2 (AMPS)
SSL0810-100M	10	0.033	8.0
SSL0810-150M	15	0.042	7.0
SSL0810-220M	22	0.054	5.5
SSL0810-330M	33	0.080	4.0
SSL0810-470M	47	0.10	3.8
SSL0810-680M	68	0.17	3.0
SSL0810-101M	100	0.22	2.5
SSL0810-151M	150	0.34	2.0
SSL0810-221M	220	0.44	1.6
SSL0810-331M	330	0.70	1.2
SSL0810-471M	470	0.95	1.0
SSL0810-681M	680	1.20	1.0
SSL0810-102M	1000	2.00	0.8

M = ± 20%, K = ± 10% , J = ± 5%

Tested at 100 KHz, 0.1 Vrms
Inductance drop = 10% Typical at rated Isat
ΔT = 30°C Typical at Irms
Operating Temperature range -40°C to +85°C

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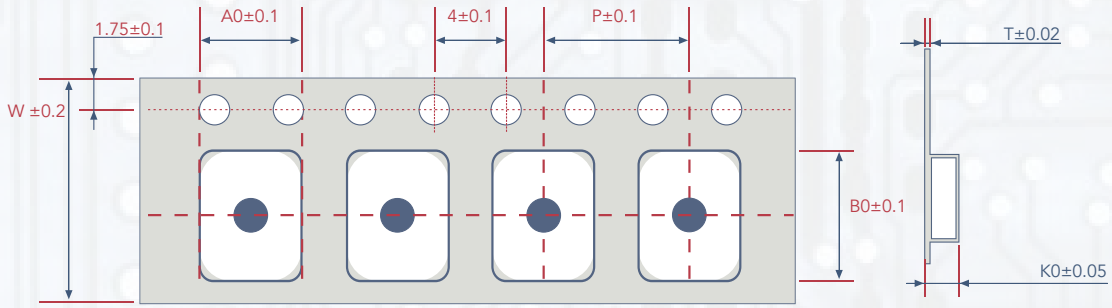
SSL - 1306 - SERIES

PART NO.	INDUCTANCE (µH ± 20%)	DC RESISTANCE (Ω ± 15%)	I SAT[2] (AMPS)	I RMS[3] (AMPS)
SSL1306-1R0M	1.0	0.011	20	8.6
SSL1306-2R2M	2.2	0.014	16	7.1
SSL1306-3R3M	3.3	0.016	14	6.2
SSL1306-5R6M	5.6	0.022	12	5.3
SSL1306-100M	10	0.032	10	4.3
SSL1306-150M	15	0.036	8.0	4.0
SSL1306-220M	22	0.047	7.0	3.5
SSL1306-330M	33	0.066	5.5	3.0
SSL1306-470M	47	0.089	4.5	2.6
SSL1306-680M	68	0.130	3.5	2.3
SSL1306-101M	100	0.190	3.0	1.8
SSL1306-151M	150	0.250	2.6	1.5
SSL1306-221M	220	0.380	2.4	1.2
SSL1306-331M	330	0.560	1.9	1.0
SSL1306-471M	470	0.850	1.4	0.82
SSL1306-681M	680	1.200	1.2	0.72
SSL1306-102M	1000	1.800	1.0	0.56

M = ± 20%, K = ± 10% , J = ± 5%

Tested at 100 KHz, 0.1 Vrms
Inductance drop = 10% Typical at rated Isat
ΔT = 30°C Typical at Irms
Operating Temperature range -40°C to +85°C

DIMENSIONS OF TAPING



SERIES	W	P	A0	B0	K0	T	QUANTITY	
							7" REEL	13" REEL
SSL0402	12	8	4.8	6.9	3.0	0.25	750	2000
SSL0802	24	12	9.7	13.25	3.3	0.3		1000
SSL0804	24	12	9.7	13.25	5.4	0.3		500
SSL0810	24	12	9.7	13.25	11.7	0.3		225
SSL1306	32	20	15.4	18.8	8	0.4		250

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RELIABILITY TEST (ENVIRONMENTAL PERFORMANCES):

NO.	ITEM	SPECIFICATION	TEST CONDITION
1	Temperature Cycle	Appearance No damage Impedance within ±20% Of the initial value	One Cycle STEP TEMPERATURE TIME (MIN) 1 -55°C 30 2 25°C 3 3 125°C 30 4 25°C 3 Total 100 Cycles Measured after exposure in room condition = 24hrs
2	Humidity Resistance		Temperature: +40°C ± 2°C Humidity: 90% to 95% Time 1000 ± 12 Hours Measured after exposure in room condition = 24hrs
3	High Temperature Resistance		Temperature = 125°C ± 3°C Relative Humidity = 0% Applied Current = Rated Current as stateTime = 1000 hrs ± 12 hrs Measure after exposure in room Condition = 24hrs
4	Temperature Shock		10 cycles (air to Air) (1 cycles shall consist of) 30 minutes exposure to -55°C 30 minutes exposure to 125°C 15 seconds maximum transition between temperatures Measure after exposure in room Condition = 24hrs

RELIABILITY TEST (MECHANICAL PERFORMANCES):

NO.	ITEM	SPECIFICATION	TEST CONDITION
1	Solderability	More than 90% of the terminal Electrode shall be coved with fresh solder	Pre-Heat - 150°C Pre-Heat Time - 1 minute Solder - Sn/Ag 3.0/Cu0.5 (Pb-Free) Solder Temperature - 245°C ± 5°C Immersion Time - 4 - 1 sec
2	Resistance to Soldering Heat	The chips shall not crack. More than 75% for the terminal Electrode Shall be cover with solder.	Pre-Heat - 150°C Pre-Heat Time - 1 minute Solder - Sn/Ag 3.0/Cu0.5 (Pb-Free) Solder Temperature - 260°C ± 5°C Immersion Time - 10 - 1 sec
3	Vibration		Test Device shall be soldered on the substrate Oscillation Freq. - 10 to 55 to 10Hz for 1 min Amplitude - 1.5mm Time - 2hrs for each axis (X, Y & Z) total 6 hrs