

## SSL Series

### Features

- RoHS, Halogen Free and REACH Compliance
- Unshielded power inductor
- Various package size and wide inductance range. SSL-HC family is designed for low resistance and high current purpose

### Applications

- DC/DC converters

### Product Identification



- Packaging: T : Tape and Reel , B : Bulk

### Shape and Dimensions

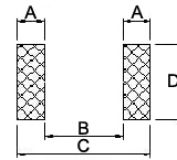
#### SSL0402



Dimensions in mm

A	B	C	D	E	F
6.60 <sup>+0</sup>	4.45 <sup>+0</sup>	2.92 <sup>+0</sup>	1.02	1.27	4.32

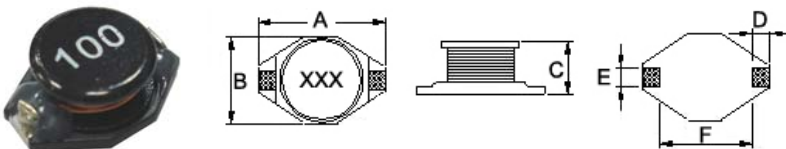
### Recommended Pattern



Dimensions in mm

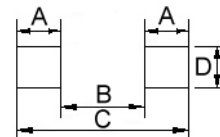
TYPE	A	B	C	D
SSL0402	1.40	4.06	6.86	3.56

#### SSL0804/ 0810



Dimensions in mm

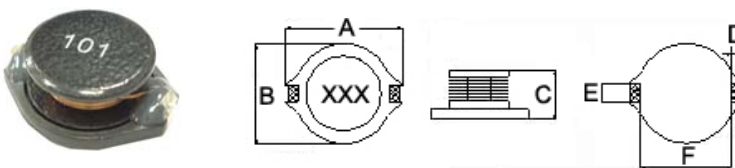
TYPE	A	B	C	D	E	F
SSL0804	12.95 <sup>+0</sup>	9.40 <sup>+0</sup>	5.21 <sup>+0</sup>	2.54	2.54	7.62
SSL0810	12.95 <sup>+0</sup>	9.40 <sup>+0</sup>	11.43 <sup>+0</sup>	2.54	2.54	7.62



Dimension in mm

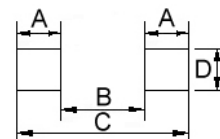
TYPE	A	B	C	D
SSL0804	2.92	7.37	13.21	2.79
SSL0810	2.92	7.37	13.21	2.79

#### SSL1306



Dimensions in mm

A	B	C	D	E	F
18.54 <sup>+0</sup>	15.24 <sup>+0</sup>	7.11 <sup>+0</sup>	2.54	2.54	12.7



Dimension in mm

TYPE	A	B	C	D
SSL1306	2.92	12.45	18.29	2.79

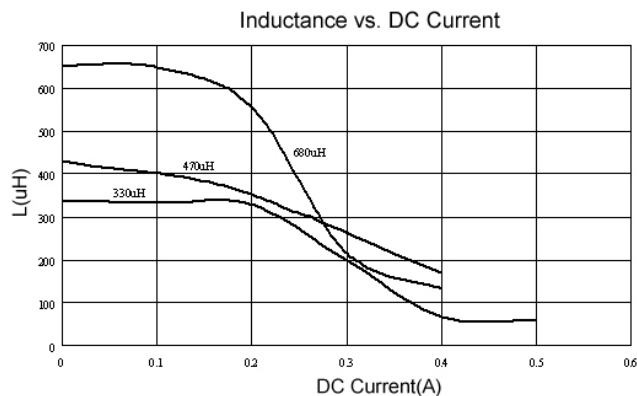
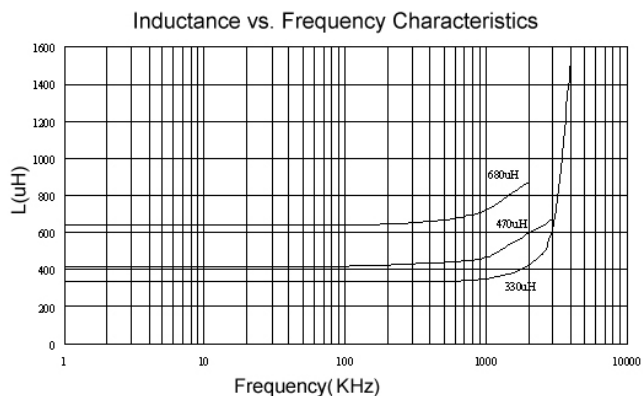
## Electrical Characteristics

Part Number	Inductance ( $\mu\text{H}$ )	Tolerance ( $\pm\%$ )	SRF (MHz) Typ.	RDC ( $\Omega$ ) Max	Isat (A)	Irms (A)
SSL0402T-1R0M-N	1.0	20	130	0.05	2.90	2.9
SSL0402T-1R5M-N	1.5	20	115	0.05	2.60	2.8
SSL0402T-2R2M-N	2.2	20	90	0.07	2.30	2.4
SSL0402T-3R3M-N	3.3	20	70	0.08	2.00	2.0
SSL0402T-4R7M-N	4.7	20	50	0.09	1.50	1.5
SSL0402T-6R8M-N	6.8	20	45	0.13	1.20	1.4
SSL0402T-100M-N	10	20	35	0.16	1.10	1.1
SSL0402T-150M-N	15	20	30	0.23	0.90	1.2
SSL0402T-220M-N	22	20	20	0.37	0.70	0.8
SSL0402T-330M-N	33	20	15	0.51	0.58	0.6
SSL0402T-470M-N	47	20	14	0.64	0.50	0.5
SSL0402T-680M-N	68	20	11	0.86	0.40	0.4
SSL0402T-101M-N	100	20	9	1.27	0.31	0.3
SSL0402T-151M-N	150	20	6	2.00	0.27	0.25
SSL0402T-221M-N	220	20	5.5	3.11	0.22	0.20
SSL0402T-331M-N	330	20	5	3.80	0.18	0.16
SSL0402T-471M-N	470	20	4	5.06	0.16	0.15
SSL0402T-681M-N	680	20	3	9.20	0.14	0.12
SSL0402T-102M-N	1000	20	2	13.8	0.10	0.07

**Note: When ordering, please specify tolerance code. Tolerance: M= $\pm 20\%$**

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value with current
- I rms for a 30°C temperature rise from 25°C ambient with current
- Measure Equipment :  
 L : E4980 or HP4284A , 100kHz 0.1V  
 SRF : HP4291A or HP4192A  
 RDC : CHEN HWA 502  
 Isat : HP4284A+HP42841A or WK3260B+WK3265B

## Test Instruments :



## Electrical Characteristics

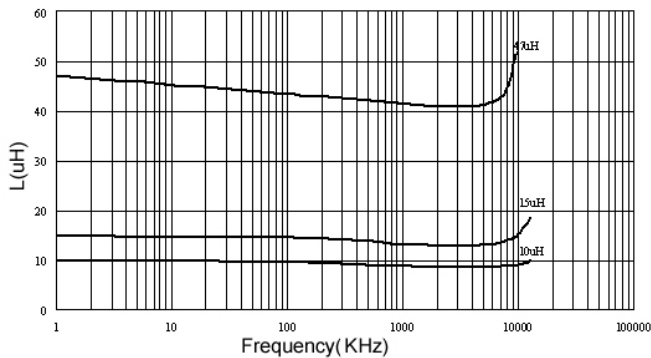
Part Number	Inductance ( $\mu\text{H}$ )	Tolerance ( $\pm\%$ )	SRF (MHz) Typ.	RDC ( $\Omega$ ) Max	Isat (A)	Irms (A)
SSL0802T-100M-N	10	20	35	0.09	2.4	2.0
SSL0802T-150M-N	15	20	33	0.12	2.0	1.5
SSL0802T-220M-N	22	20	25	0.19	1.6	1.3
SSL0802T-330M-N	33	20	19	0.25	1.4	1.1
SSL0802T-470M-N	47	20	14	0.32	1.0	0.8
SSL0802T-680M-N	68	20	12	0.55	0.9	0.7
SSL0802T-101M-N	100	20	10	0.70	0.7	0.6
SSL0802T-151M-N	150	20	8	1.00	0.6	0.5
SSL0802T-221M-N	220	20	6	1.60	0.5	0.4
SSL0802T-331M-N	330	20	5	2.20	0.4	0.3
SSL0802T-471M-N	470	20	4	3.30	0.3	0.2
SSL0802T-681M-N	680	20	3	4.40	0.2	0.1
SSL0802T-102M-N	1000	20	2.5	7.00	0.1	0.05

**Note: When ordering, please specify tolerance code. Tolerance: M= $\pm 20\%$**

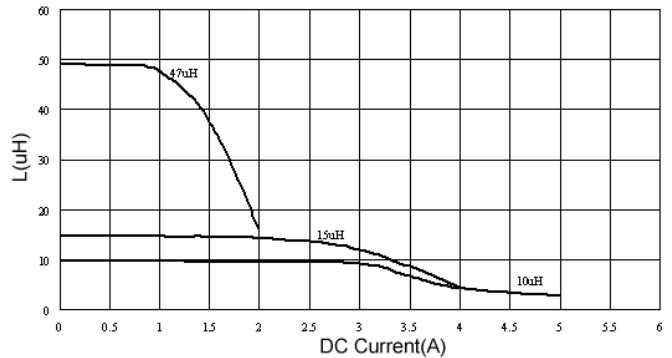
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value with current
- I rms for a 30°C temperature rise from 25°C ambient with current
- Measure Equipment :  
 L : E4980 or HP4284A , 100kHz 0.1V  
 SRF : HP4291A or HP4192A  
 RDC : CHEN HWA 502  
 Isat : HP4284A+HP42841A or WK3260B+WK3265B

## Test Instruments :

Inductance vs. Frequency Characteristics



Inductance vs. DC Current



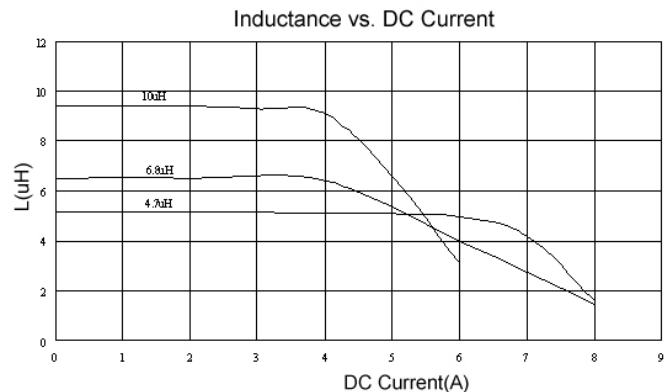
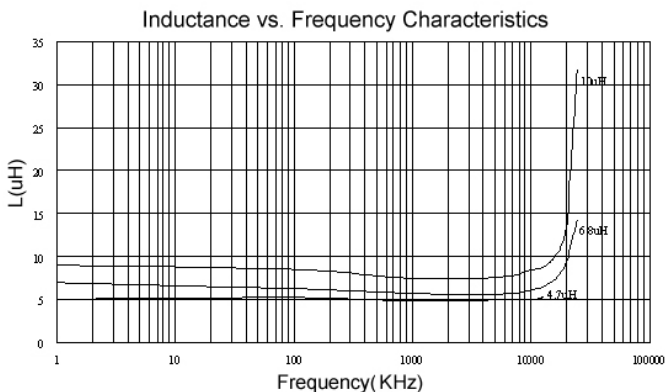
## Electrical Characteristics

Part Number	Inductance ( $\mu\text{H}$ )	Tolerance ( $\pm\%$ )	SRF (MHz) Typ.	RDC ( $\Omega$ ) Max	Isat (A)	Irms (A)
SSL0804T-1R0M-N	1.0	20	100	0.009	9.0	6.8
SSL0804T-1R5M-N	1.5	20	90	0.010	8.0	6.4
SSL0804T-2R2M-N	2.2	20	80	0.012	7.0	6.1
SSL0804T-3R3M-N	3.3	20	65	0.015	6.4	5.4
SSL0804T-4R7M-N	4.7	20	45	0.018	5.4	4.8
SSL0804T-6R8M-N	6.8	20	38	0.027	4.6	4.4
SSL0804T-100M-N	10	20	30	0.038	3.8	3.9
SSL0804T-150M-N	15	20	27	0.046	3.0	3.1
SSL0804T-220M-N	22	20	19	0.085	2.6	2.7
SSL0804T-330M-N	33	20	15	0.100	2.0	2.1
SSL0804T-470M-N	47	20	12	0.140	1.6	1.8
SSL0804T-680M-N	68	20	10	0.200	1.4	1.5
SSL0804T-101M-N	100	20	9	0.260	1.2	1.3
SSL0804T-151M-N	150	20	6	0.400	1.0	1.0
SSL0804T-221M-N	220	20	5	0.610	0.8	0.8
SSL0804T-331M-N	330	20	4.5	1.020	0.6	0.6
SSL0804T-471M-N	470	20	3.5	1.270	0.5	0.5
SSL0804T-681M-N	680	20	2.5	2.020	0.4	0.4
SSL0804T-102M-N	1000	20	2.0	3.000	0.3	0.3

**Note: When ordering, please specify tolerance code. Tolerance: M= $\pm 20\%$**

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value with current
- I rms for a 15°C temperature rise from 25°C ambient with current
- Measure Equipment :  
 L : E4980 or HP4284A , 100kHz 0.1V  
 SRF:HP4291A or HP4192A  
 RDC : CHEN HWA 502  
 Isat : HP4284A+HP42841A or WK3260B+WK3265B

## Test Instruments :



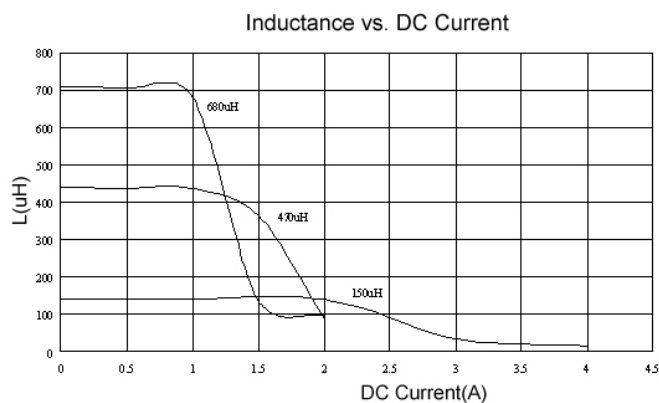
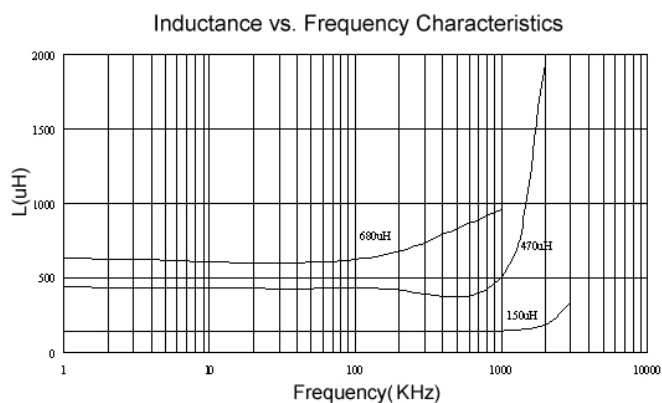
## Electrical Characteristics

Part Number	Inductance ( $\mu\text{H}$ )	Tolerance ( $\pm\%$ )	SRF (MHz) Typ.	RDC ( $\Omega$ ) Max	Isat (A)	Irms (A)
SSL0810T-100M-N	10	20	22	0.033	8.0	3.5
SSL0810T-150M-N	15	20	18	0.042	7.0	3.0
SSL0810T-220M-N	22	20	11	0.054	5.5	2.5
SSL0810T-330M-N	33	20	9	0.08	4.0	2.0
SSL0810T-470M-N	47	20	8	0.10	3.8	1.6
SSL0810T-680M-N	68	20	7	0.17	3.0	1.2
SSL0810T-101M-N	100	20	5	0.22	2.5	1.2
SSL0810T-151M-N	150	20	4	0.34	2.0	0.9
SSL0810T-221M-N	220	20	3.5	0.44	1.6	0.7
SSL0810T-331M-N	330	20	2.5	0.70	1.2	0.6
SSL0810T-471M-N	470	20	2	0.95	1.0	0.3
SSL0810T-681M-N	680	20	2	1.2	1.0	0.2
SSL0810T-102M-N	1000	20	1.5	2.0	0.8	0.1

**Note: When ordering, please specify tolerance code. Tolerance: M= $\pm 20\%$**

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value with current
- I rms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :  
 L : E4980 or HP4284A , 100kHz 0.1V  
 SRF:HP4291A or HP4192A  
 RDC : CHEN HWA 502  
 Isat : HP4284A+HP42841A or WK3260B+WK3265B

## Test Instruments :



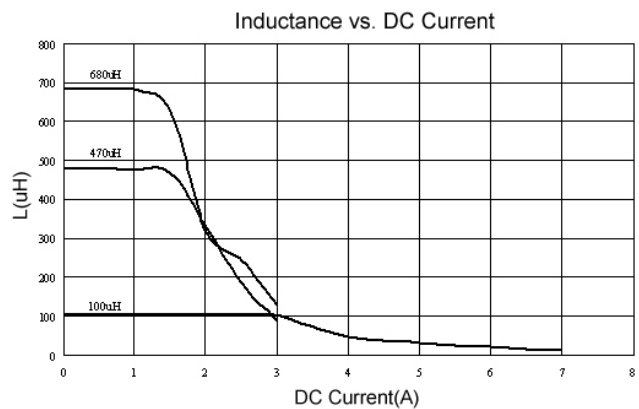
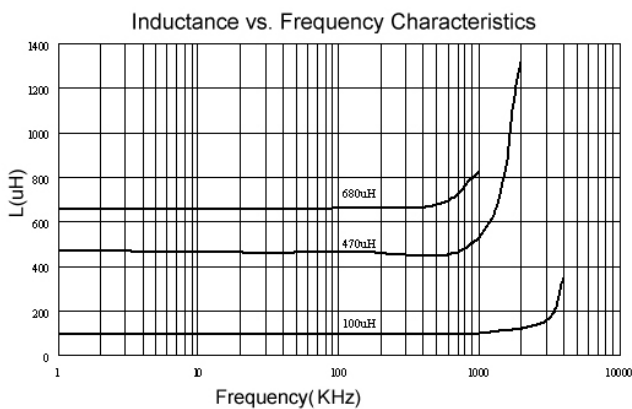
## Electrical Characteristics

Part Number	Inductance ( $\mu\text{H}$ )	Tolerance ( $\pm\%$ )	SRF (MHz) Typ.	RDC ( $\Omega+15\%$ )	Isat (A)	Irms (A)
SSL1306T-1R0M-N	1.0	20	80	0.011	20	8.6
SSL1306T-2R2M-N	2.2	20	80	0.014	16	7.1
SSL1306T-3R3M-N	3.3	20	60	0.016	14	6.2
SSL1306T-5R6M-N	5.6	20	40	0.022	12	5.3
SSL1306T-100M-N	10	20	30	0.032	10	4.3
SSL1306T-150M-N	15	20	22	0.036	8.0	4.0
SSL1306T-220M-N	22	20	20	0.047	7.0	3.5
SSL1306T-330M-N	33	20	15	0.066	5.5	3.0
SSL1306T-470M-N	47	20	9	0.087	4.5	2.6
SSL1306T-680M-N	68	20	8	0.13	3.5	2.3
SSL1306T-101M-N	100	20	7	0.19	3.0	1.8
SSL1306T-151M-N	150	20	6	0.25	2.6	1.5
SSL1306T-221M-N	220	20	5	0.38	2.4	1.2
SSL1306T-331M-N	330	20	4	0.56	1.9	1.0
SSL1306T-471M-N	470	20	3	0.85	1.4	0.82
SSL1306T-681M-N	680	20	2.5	1.2	1.2	0.72
SSL1306T-102M-N	1000	20	2	1.8	1.0	0.56

**Note: When ordering, please specify tolerance code. Tolerance: M= $\pm 20\%$**

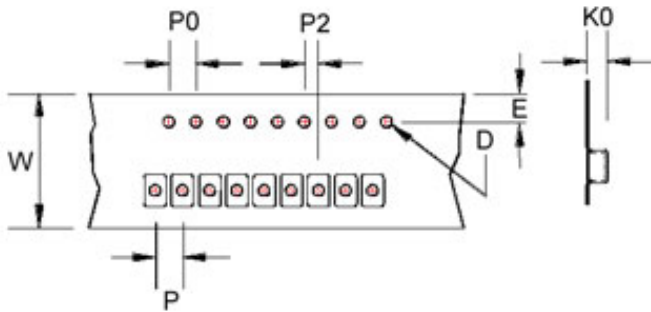
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value with current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :  
 L : E4980 or HP4284A , 100kHz 0.1V  
 SRF:HP4291A or HP4192A  
 RDC : CHEN HWA 502  
 Isat : HP4284A+HP42841A or WK3260B+WK3265B

## Test Instruments :

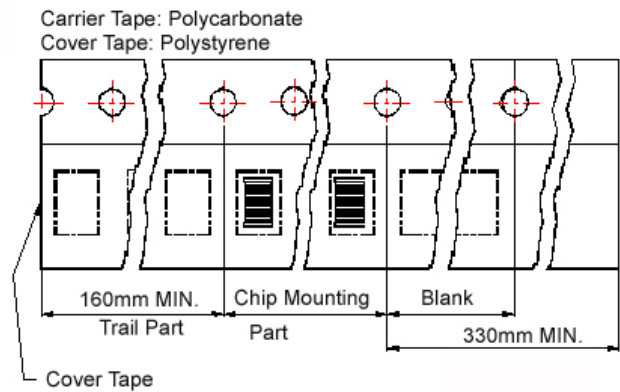


Packaging Specifications

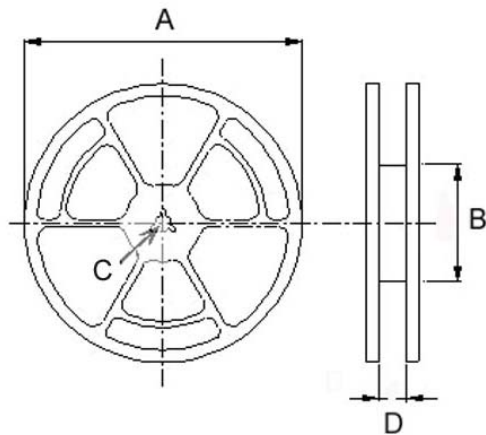
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity (PCS / REEL)	
	K0	D	E	W	P	P0	P2	A	B	C	D	178mm	330mm
SSL0402	3.2	1.55	1.75	12	8	4	2	330	100	13	13.4	-	2500
								178	60		13.2	750	-
SSL 0804	5.4	1.55	1.75	24	16	4	2	330	100	13	24.4	-	750
SSL 0810	11.5	1.55	1.75	24	20	4	2	330	100	13	24.4	-	225
SSL 1306	7.5	1.55	1.75	32	20	4	2	330	100	13	33.4	-	350