

## Cautions and Warnings

Please be noted that this spec is only for reference if you have projects designed with the product number listed in. If you are looking for new project design-in, please find BPSL Series specification/datasheet on Chilisin website. Or you may find our sales contact for more information on old part number at your convenience. Appreciated your attention and understanding.

**Note:** Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

## SSL Series

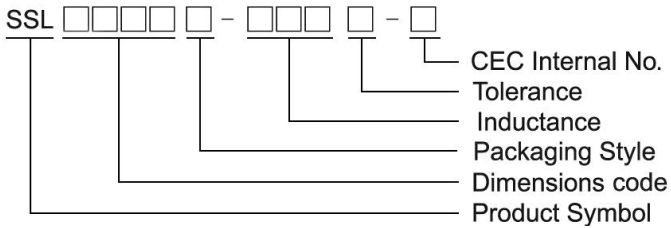
### Features

- 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

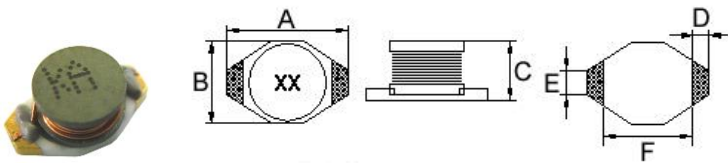
### Product Identification



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

### Shape and Dimensions

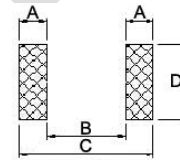
#### SSL0402



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

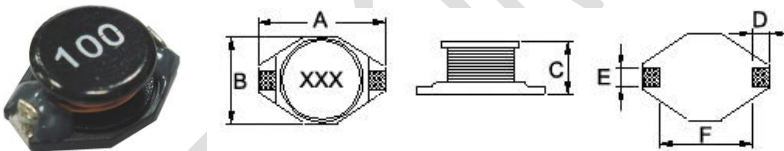
### Recommended Pattern



Dimensions in mm

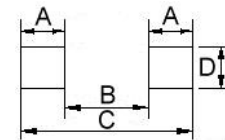
TYPE	A	B	C	D
SSL0402	1.40	4.06	6.86	3.56

#### SSL0804/ 0810



Dimensions in mm

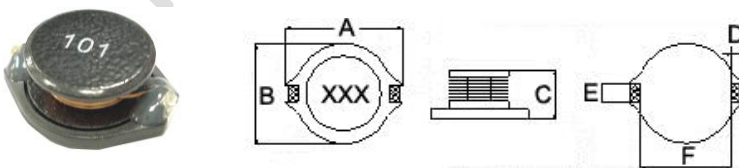
TYPE	A	B	C	D	E	F
SSL0804	12.95 <sup>+0</sup>	9.40 <sup>+0</sup>	5.21 <sup>+0</sup>	2.54	2.54	7.62
SSL0810	12.95 <sup>+0</sup>	9.40 <sup>+0</sup>	11.43 <sup>+0</sup>	2.54	2.54	7.62



Dimension in mm

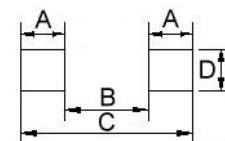
TYPE	A	B	C	D
SSL0804	2.92	7.37	13.21	2.79
SSL0810	2.92	7.37	13.21	2.79

#### 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

# SMD Unshielded Power Inductors – SSL Series

## 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-5R6M-N	5.6	20	47	0.11	1.30	1.4
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=±20%**

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current
- I rms for a 30°C temperature rise from 25°C ambient with current
- Measure Equipment :

L : E4980 or HP4284A , 100kHz 0.1V

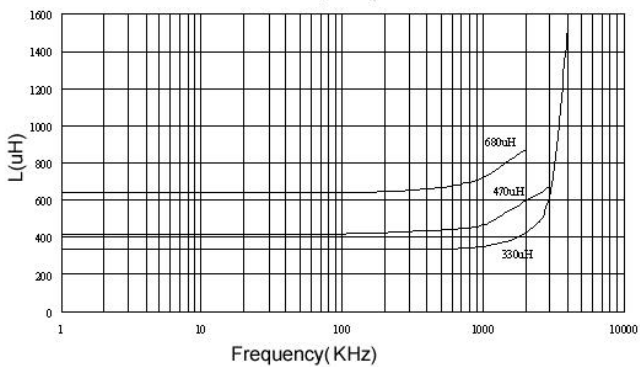
SRF : HP4291A or HP4192A

RDC : Chroma 16502

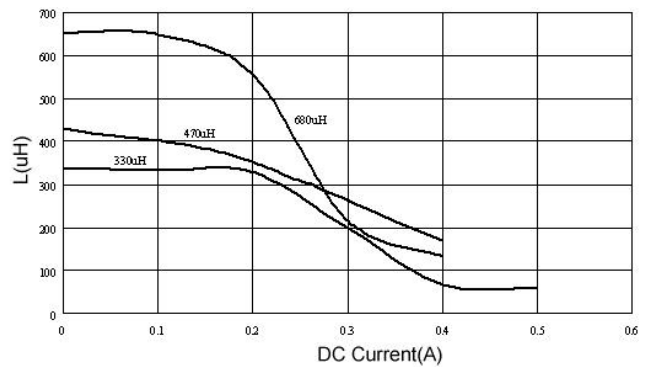
Isat : HP4284A+HP42841A or WK3260B+WK3265B

## Test Instruments :

Inductance vs. Frequency Characteristics



Inductance vs. DC Current



# SMD Unshielded Power Inductors – SSL Series

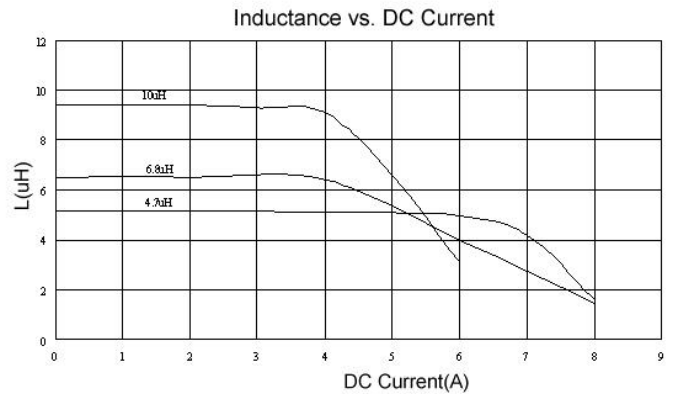
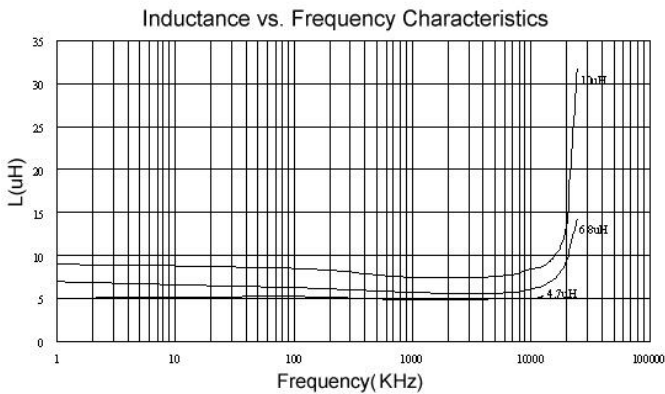
## Electrical Characteristics

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-120M-N	12	20	27	0.0432	3.5	3.6
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
SSL0804T-152M-N	1500	20	1.4	4.500	0.25	0.2

**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 without 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 : Chroma 16502  
 Isat : HP4284A+HP42841A or WK3260B+WK3265B

## Test Instruments :



# SMD Unshielded Power Inductors – SSL Series

## Electrical Characteristics

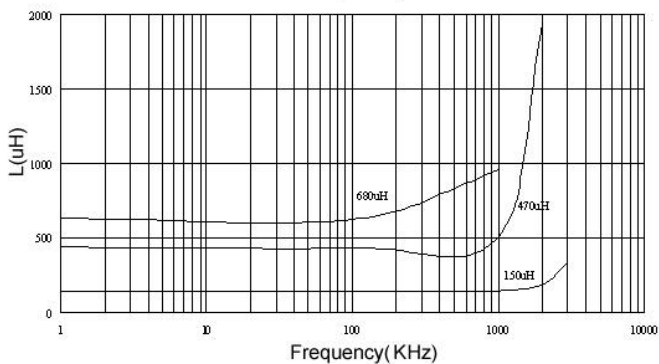
Part Number	Inductance ( $\mu\text{H}$ )	Tolerance ( $\pm\%$ )	SRF (MHz) Typ.	RDC ( $\Omega$ ) Max	Isat (A)	Irms (A)
SSL0810T-3R3M-N	3.3	20	30	0.025	10	4.0
SSL0810T-4R7M-N	4.7	20	25	0.033	8.0	3.5
SSL0810T-100M-N	10	20	22	0.033	8.0	3.5
SSL0810T-150M-N	15	20	18	0.042	7.0	3.0
SSL0810T-220M-N	22	20	11	0.054	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-271M-N	270	20	2.5	0.60	1.4	0.6
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=±20%**

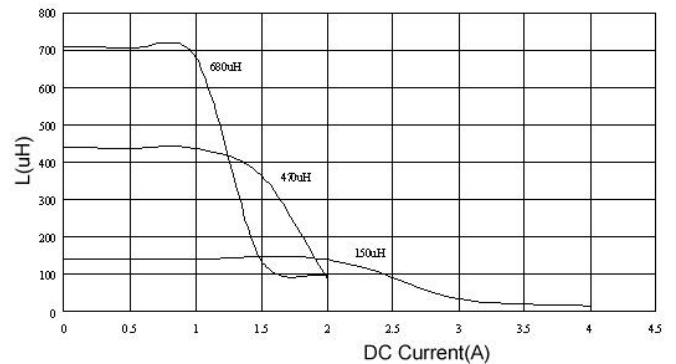
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current
- I rms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :  
 L : E4980 or HP4284A , 100kHz 0.1V  
 SRF:HP4291A or HP4192A  
 RDC : Chroma 16502  
 Isat : HP4284A+HP42841A or WK3260B+WK3265B

## Test Instruments :

Inductance vs. Frequency Characteristics



Inductance vs. DC Current



# SMD Unshielded Power Inductors – SSL Series

## Electrical Characteristics

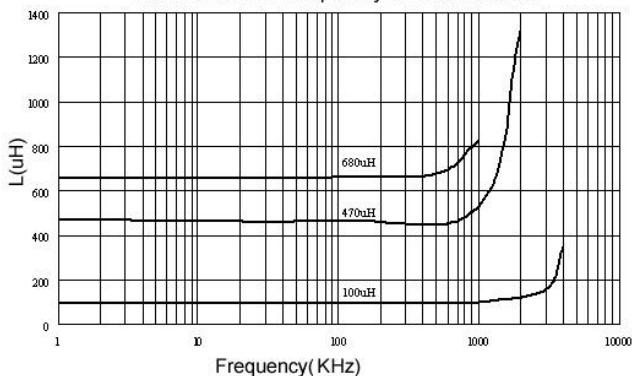
Part Number	Inductance ( $\mu\text{H}$ )	Tolerance ( $\pm\%$ )	SRF (MHz) Typ.	RDC ( $\Omega$ +15%)	Isat (A)	Irms (A)
SSL1306T-1R0M-N	1.0	20	80	0.011	20	8.6
SSL1306T-2R2M-N	2.2	20	80	0.014	16	7.1
SSL1306T-3R3M-N	3.3	20	60	0.016	14	6.2
SSL1306T-4R7M-N	4.7	20	45	0.022	13	5.5
SSL1306T-5R6M-N	5.6	20	40	0.022	12	5.3
SSL1306T-6R8M-N	6.8	20	30	0.022	10	5.0
SSL1306T-100M-N	10	20	30	0.032	10	4.3
SSL1306T-150M-N	15	20	22	0.036	8.0	4.0
SSL1306T-180M-N	18	20	20	0.039	7.5	3.7
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%**

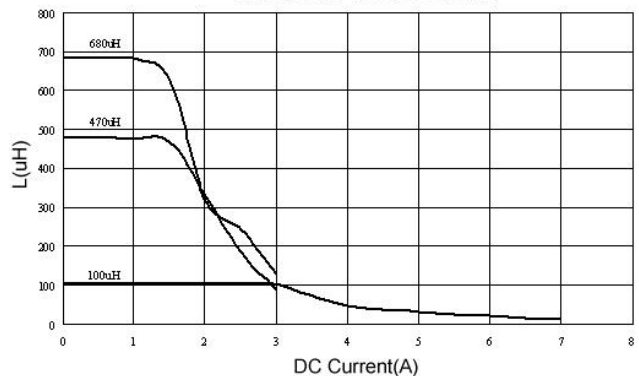
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :  
 L : E4980 or HP4284A , 100kHz 0.1V  
 SRF:HP4291A or HP4192A  
 RDC : Chroma 16502  
 Isat : HP4284A+HP42841A or WK3260B+WK3265B

## Test Instruments :

Inductance vs. Frequency Characteristics



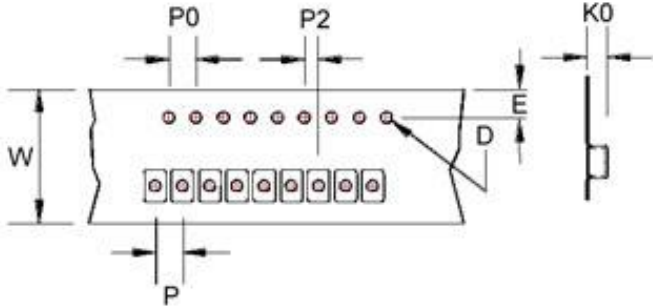
Inductance vs. DC Current



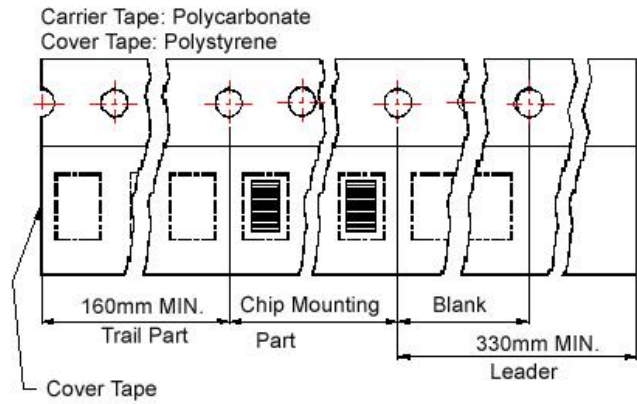
# SMD Unshielded Power Inductors - SSL Series

## Packaging Specifications

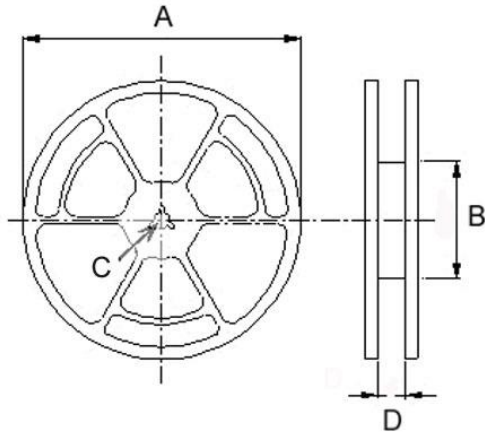
Tape Dimensions



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