

BPSL Series

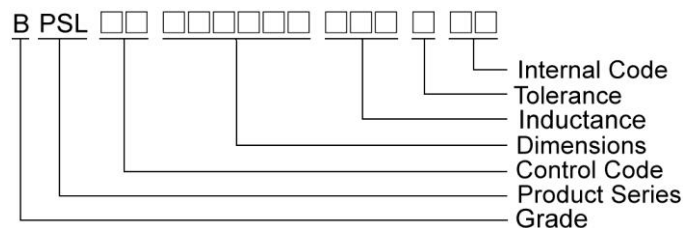
Features

- 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

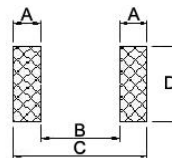
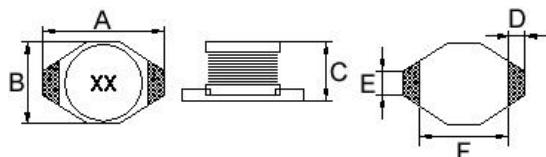
Product Identification



Shape and Dimensions

Recommended Pattern

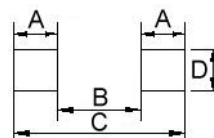
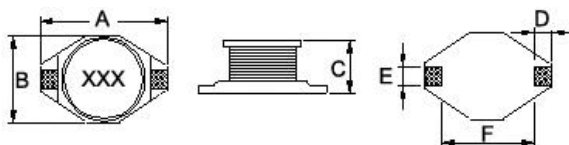
BPSL00070429



Dimensions in mm

TYPE	Shape and Dimensions						Recommended Pattern			
	A	B	C	D	E	F	A	B	C	D
BPSL00070429	6.60 ⁺⁰	4.45 ⁺⁰	2.92 ⁺⁰	1.02	1.27	4.32	1.40	4.06	6.86	3.56

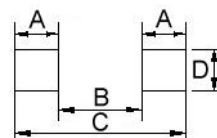
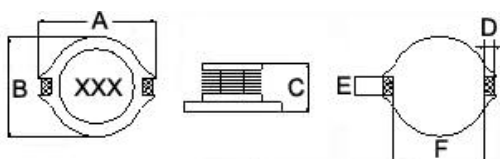
BPSL00130952/130911



Dimensions in mm

TYPE	Shape and Dimensions						Recommended Pattern			
	A	B	C	D	E	F	A	B	C	D
BPSL00130952	12.95 ⁺⁰	9.40 ⁺⁰	5.21 ⁺⁰	2.54	2.54	7.62	2.92	7.37	13.21	2.79
BPSL00130911	12.95 ⁺⁰	9.40 ⁺⁰	11.43 ⁺⁰	2.54	2.54	7.62	2.92	7.37	13.21	2.79

BPSL00191571



Dimensions in mm

TYPE	Shape and Dimensions						Recommended Pattern			
	A	B	C	D	E	F	A	B	C	D
BPSL00191571	18.54 ⁺⁰	15.24 ⁺⁰	7.11 ⁺⁰	2.54	2.54	12.7	2.92	12.45	18.29	2.79

SMD Unshielded Power Inductors – BPSL Series

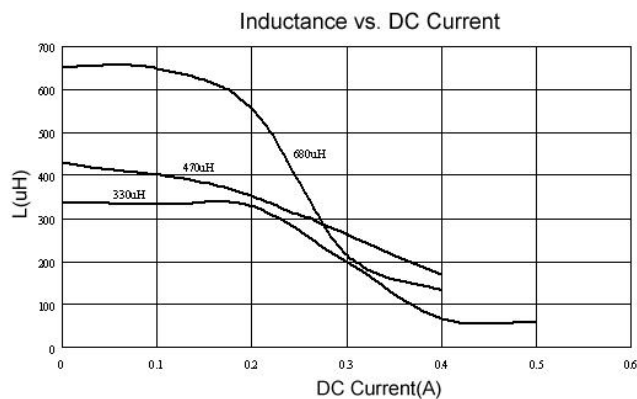
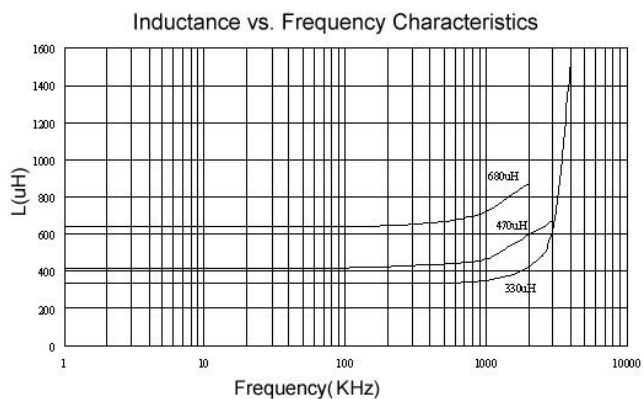
Electrical Characteristics

Part Number	Inductance (μH)	Tolerance ($\pm\%$)	SRF (MHz) Typ.	RDC (Ω) Max	Isat (A)	Irms (A)
BPSL000704291R0M00	1.0	20	130	0.05	2.90	2.9
BPSL000704291R5M00	1.5	20	115	0.05	2.60	2.8
BPSL000704292R2M00	2.2	20	90	0.07	2.30	2.4
BPSL000704293R3M00	3.3	20	70	0.08	2.00	2.0
BPSL000704294R7M00	4.7	20	50	0.09	1.50	1.5
BPSL000704295R6M00	5.6	20	47	0.11	1.30	1.4
BPSL000704296R8M00	6.8	20	45	0.13	1.20	1.4
BPSL00070429100M00	10	20	35	0.16	1.10	1.1
BPSL00070429150M00	15	20	30	0.23	0.90	1.2
BPSL00070429220M00	22	20	20	0.37	0.70	0.8
BPSL00070429330M00	33	20	15	0.51	0.58	0.6
BPSL00070429470M00	47	20	14	0.64	0.50	0.5
BPSL00070429680M00	68	20	11	0.86	0.40	0.4
BPSL00070429101M00	100	20	9	1.27	0.31	0.3
BPSL00070429151M00	150	20	6	2.00	0.27	0.25
BPSL00070429221M00	220	20	5.5	3.11	0.22	0.20
BPSL00070429331M00	330	20	5	3.80	0.18	0.16
BPSL00070429471M00	470	20	4	5.06	0.16	0.15
BPSL00070429681M00	680	20	3	9.20	0.14	0.12
BPSL00070429102M00	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 without current
- Irms 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 :



SMD Unshielded Power Inductors – BPSL Series

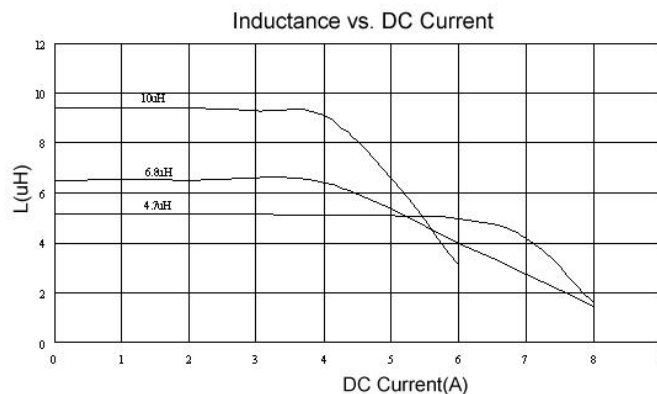
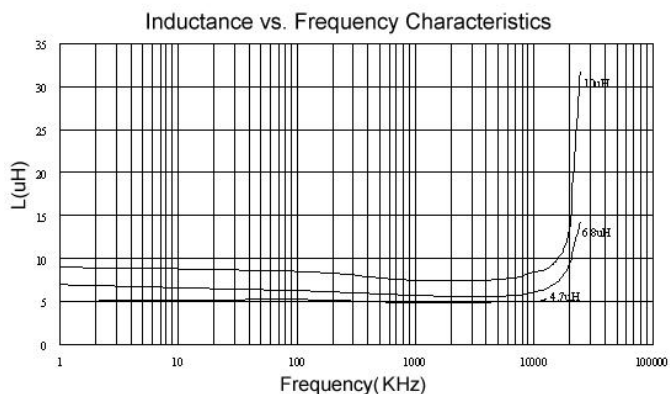
Electrical Characteristics

Part Number	Inductance (μH)	Tolerance ($\pm\%$)	SRF (MHz) Typ.	RDC (Ω) Max	Isat (A)	Irms (A)
BPSL001309521R0M00	1.0	20	100	0.009	9.0	6.8
BPSL001309521R5M00	1.5	20	90	0.010	8.0	6.4
BPSL001309522R2M00	2.2	20	80	0.012	7.0	6.1
BPSL001309523R3M00	3.3	20	65	0.015	6.4	5.4
BPSL001309524R7M00	4.7	20	45	0.018	5.4	4.8
BPSL001309526R8M00	6.8	20	38	0.027	4.6	4.4
BPSL00130952100M00	10	20	30	0.038	3.8	3.9
BPSL00130952120M00	12	20	27	0.0432	3.5	3.6
BPSL00130952150M00	15	20	27	0.046	3.0	3.1
BPSL00130952220M00	22	20	19	0.085	2.6	2.7
BPSL00130952330M00	33	20	15	0.100	2.0	2.1
BPSL00130952470M00	47	20	12	0.140	1.6	1.8
BPSL00130952680M00	68	20	10	0.200	1.4	1.5
BPSL00130952101M00	100	20	9	0.260	1.2	1.3
BPSL00130952151M00	150	20	6	0.400	1.0	1.0
BPSL00130952221M00	220	20	5	0.610	0.8	0.8
BPSL00130952331M00	330	20	4.5	1.020	0.6	0.6
BPSL00130952471M00	470	20	3.5	1.270	0.5	0.5
BPSL00130952681M00	680	20	2.5	2.020	0.4	0.4
BPSL00130952102M00	1000	20	2.0	3.000	0.3	0.3
BPSL00130952152M00	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
- Irms 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 – BPSL Series

Electrical Characteristics

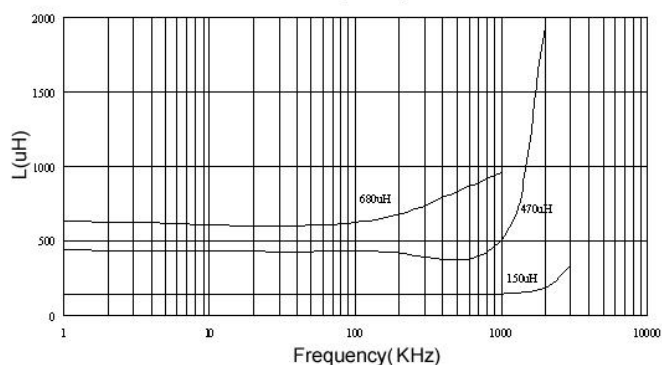
Part Number	Inductance (μH)	Tolerance ($\pm\%$)	SRF (MHz) Typ.	RDC (Ω) Max	Isat (A)	Irms (A)
BPSL001309113R3M00	3.3	20	30	0.025	10	4.0
BPSL001309114R7M00	4.7	20	25	0.033	8.0	3.5
BPSL00130911100M00	10	20	22	0.033	8.0	3.5
BPSL00130911150M00	15	20	18	0.042	7.0	3.0
BPSL00130911220M00	22	20	11	0.054	5.5	2.5
BPSL00130911330M00	33	20	9	0.08	4.0	2.0
BPSL00130911470M00	47	20	8	0.10	3.8	1.6
BPSL00130911680M00	68	20	7	0.17	3.0	1.2
BPSL00130911101M00	100	20	5	0.22	2.5	1.2
BPSL00130911151M00	150	20	4	0.34	2.0	0.9
BPSL00130911221M00	220	20	3.5	0.44	1.6	0.7
BPSL00130911271M00	270	20	2.5	0.60	1.4	0.6
BPSL00130911331M00	330	20	2.5	0.70	1.2	0.6
BPSL00130911471M00	470	20	2	0.95	1.0	0.3
BPSL00130911681M00	680	20	2	1.2	1.0	0.2
BPSL00130911102M00	1000	20	1.5	2.0	0.8	0.1

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

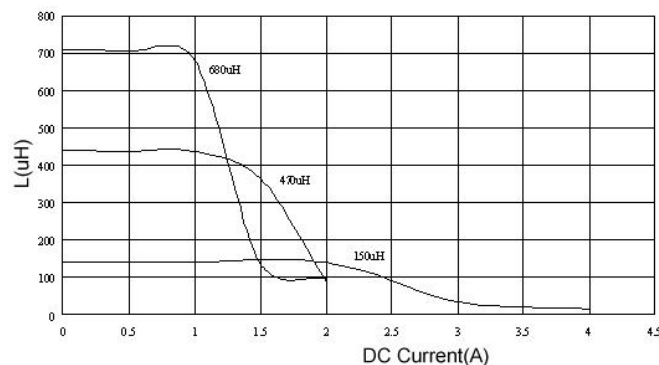
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
 L : E4980 or HP4284A , 100kHz 0.1V
 SRF:HP4291A or HP4192A
 RDC : Chroma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

Test Instruments :

Inductance vs. Frequency Characteristics



Inductance vs. DC Current



SMD Unshielded Power Inductors – BPSL Series

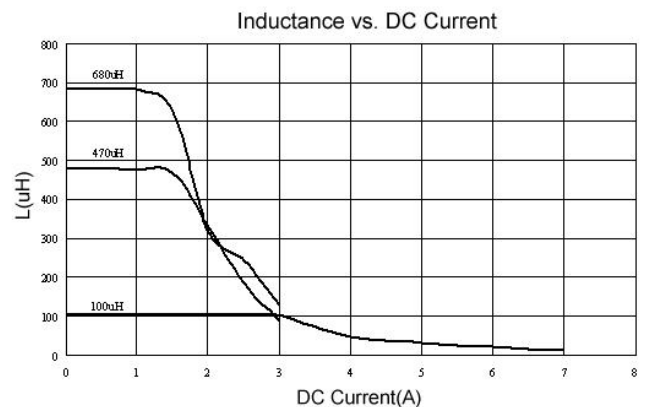
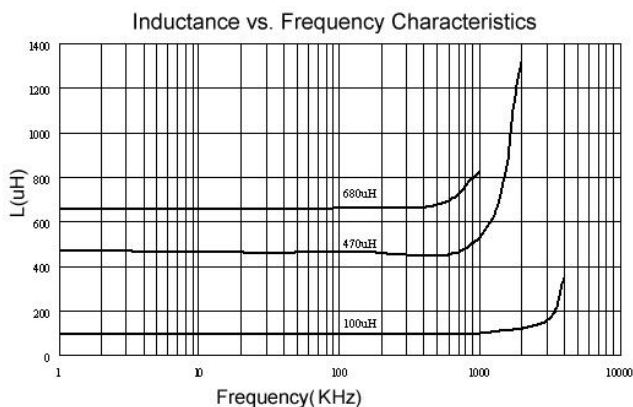
Electrical Characteristics

Part Number	Inductance (μH)	Tolerance ($\pm\%$)	SRF (MHz) Typ.	RDC ($\Omega+15\%$)	Isat (A)	Irms (A)
BPSL001915711R0M00	1.0	20	80	0.011	20	8.6
BPSL001915712R2M00	2.2	20	80	0.014	16	7.1
BPSL001915713R3M00	3.3	20	60	0.016	14	6.2
BPSL001915714R7M00	4.7	20	45	0.022	13	5.5
BPSL001915715R6M00	5.6	20	40	0.022	12	5.3
BPSL001915716R8M00	6.8	20	30	0.022	10	5.0
BPSL00191571100M00	10	20	30	0.032	10	4.3
BPSL00191571150M00	15	20	22	0.036	8.0	4.0
BPSL00191571180M00	18	20	20	0.039	7.5	3.7
BPSL00191571220M00	22	20	20	0.047	7.0	3.5
BPSL00191571330M00	33	20	15	0.066	5.5	3.0
BPSL00191571470M00	47	20	9	0.087	4.5	2.6
BPSL00191571680M00	68	20	8	0.13	3.5	2.3
BPSL00191571101M00	100	20	7	0.19	3.0	1.8
BPSL00191571151M00	150	20	6	0.25	2.6	1.5
BPSL00191571221M00	220	20	5	0.38	2.4	1.2
BPSL00191571331M00	330	20	4	0.56	1.9	1.0
BPSL00191571471M00	470	20	3	0.85	1.4	0.82
BPSL00191571681M00	680	20	2.5	1.2	1.2	0.72
BPSL00191571102M00	1000	20	2	1.8	1.0	0.56

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

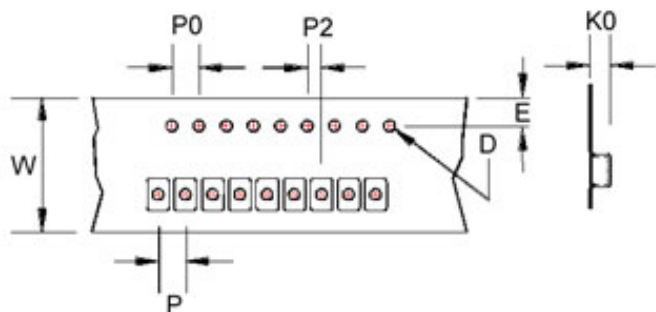
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
 L : E4980 or HP4284A , 100kHz 0.1V
 SRF:HP4291A or HP4192A
 RDC : Chroma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

Test Instruments :

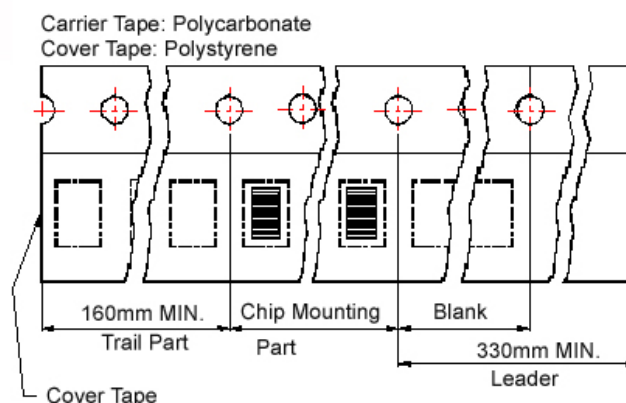


Packaging Specifications

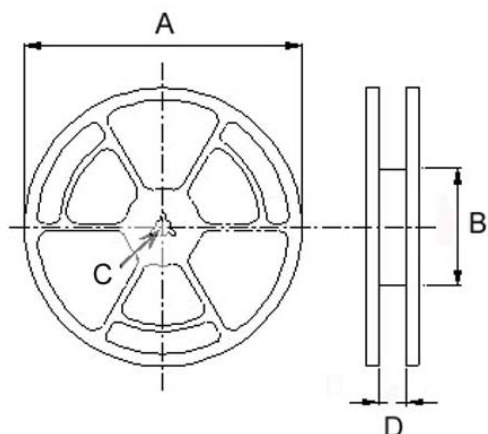
Tape Dimensions



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
BPSL00070429	3.2	1.55	1.75	12	8	4	2	330	100	13	13.4	-	2500
								178	60		13.2	750	-
BPSL00130952	5.4	1.55	1.75	24	16	4	2	330	100	13	24.4	-	750
BPSL00130911	11.5	1.55	1.75	24	20	4	2	330	100	13	24.4	-	225
BPSL00191571	7.5	1.55	1.75	32	20	4	2	330	100	13	33.4	-	350