

SSL-HC Series



This series is specially designed for high current, low voltage DC-DC converter applications. Its simple, rugged design provides current ratings normally available in larger packages. With tinned self-leaded construction, SSL-HC series can achieve very low DCR values and excellent solderability. In addition, they have very low resistance. Standard parts shown in catalogue and custom values are also available.

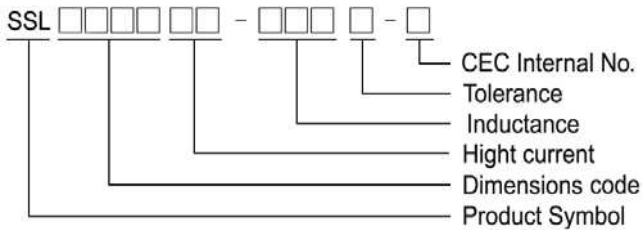
Features

- 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

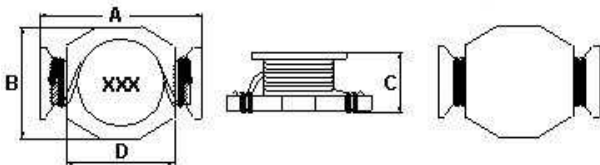
Product Identification



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

Shape and Dimension

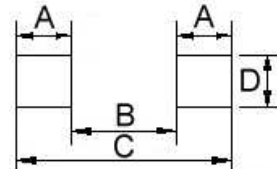
SSL0503HC



Dimension in mm

A	B	C	D
8.89 ⁺⁰	6.10 ⁺⁰	5.00 ⁺⁰	5.84

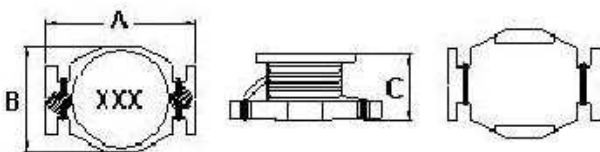
Recommended Pattern



Dimension in mm

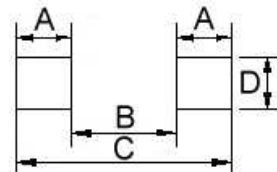
A	B	C	D
1.91	4.06	8.89	5.08

SSL0804HC



Dimension in mm

A	B	C
13.21 ⁺⁰	9.91 ⁺⁰	6.35 ⁺⁰



Dimension in mm

A	B	C	D
1.52	4.06	11.68	8.64

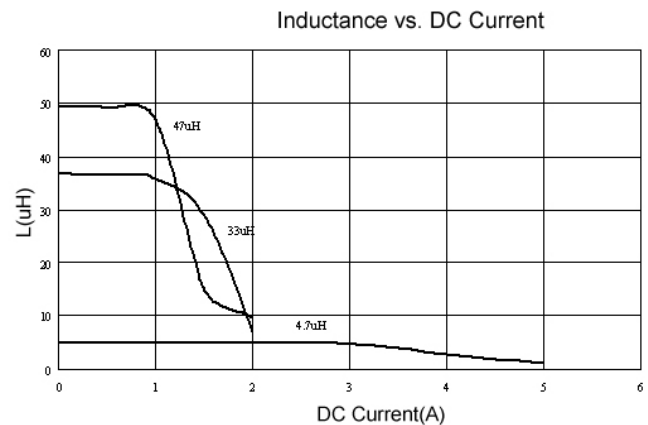
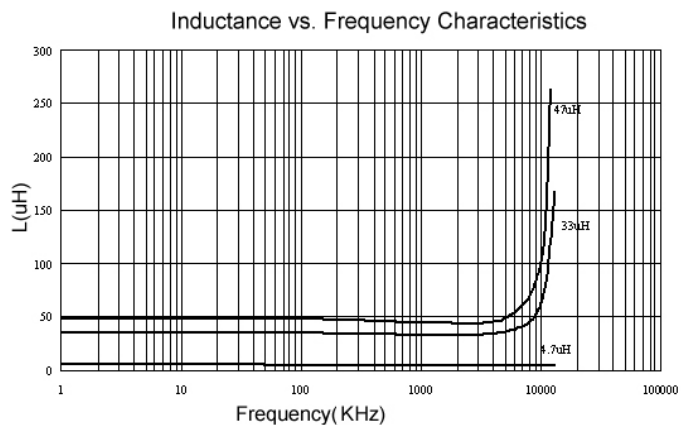
SMD Unshielded Power Inductors – SSL Series

Electrical Characteristics

Part Number	Inductance (μH)	Tolerance ($\pm\%$)	DC Resistance (Ω) Max	SRF (MHz) Typ.	Isat (A)	Irms (A)
SSL0503HC-R56M-N	0.56	20	0.010	200	7.7	6.0
SSL0503HC-1R2M-N	1.2	20	0.017	140	5.3	4.4
SSL0503HC-2R2M-N	2.2	20	0.035	100	3.5	3.1
SSL0503HC-4R7M-N	4.7	20	0.054	50	2.6	2.2
SSL0503HC-100M-N	10	20	0.111	40	1.9	1.5
SSL0503HC-150M-N	15	20	0.17	30	1.5	1.2
SSL0503HC-220M-N	22	20	0.25	25	1.2	1.0
SSL0503HC-330M-N	33	20	0.37	20	0.99	0.82
SSL0503HC-470M-N	47	20	0.47	15	0.87	0.72

- Inductance tested at 100 KHz, 0.25 Vrms.
- SRF measured using HP8753D network analyzer
- Inductance drop = 30% typ. at Isat.
- $\Delta T = 40^\circ$ typ. at I rms.
- Tolerance: M = $\pm 20\%$
- Operating temperature range – $40^\circ\text{C} \sim 125^\circ\text{C}$ (Including self - temperature rise)
- Electrical specifications at 25°C

Test Instruments :

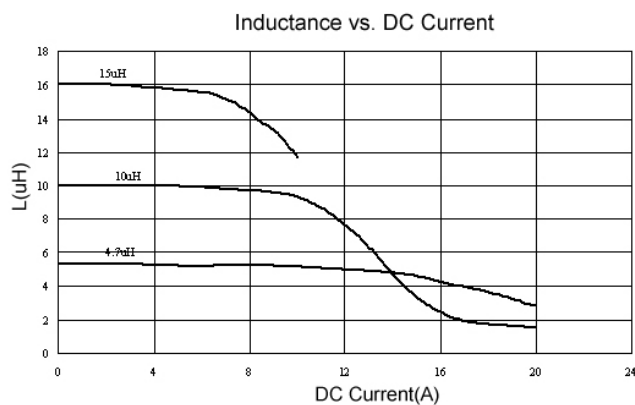
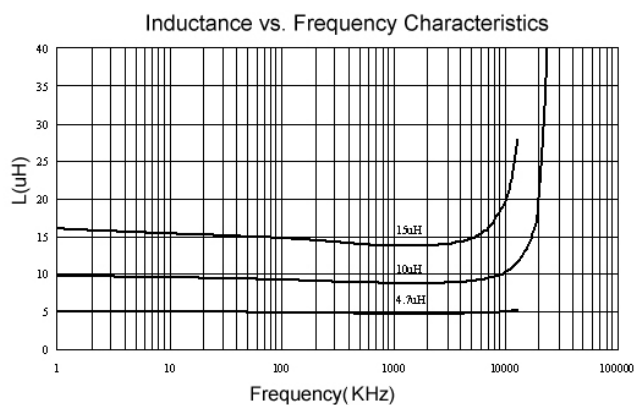


Electrical Characteristics

Part Number	Inductance (μH)	Tolerance ($\pm\%$)	DC Resistance (Ω) Max	SRF (MHz) Typ.	Isat (A)	Irms (A)
SSL0804HC-R33M-N	0.33	20	0.002	300	20.0	16.0
SSL0804HC-R68M-N	0.68	20	0.005	200	13.0	12.0
SSL0804HC-1R0M-N	1.0	20	0.006	100	11.0	10.0
SSL0804HC-1R5M-N	1.5	20	0.008	90	9.0	9.0
SSL0804HC-2R2M-N	2.2	20	0.011	90	7.8	7.4
SSL0804HC-2R7M-N	2.7	20	0.012	65	7.0	6.6
SSL0804HC-3R3M-N	3.3	20	0.014	65	6.4	5.9
SSL0804HC-4R7M-N	4.7	20	0.018	45	5.4	4.8
SSL0804HC-6R8M-N	6.8	20	0.035	35	3.6	5.0
SSL0804HC-100M-N	10	20	0.04	26	3.3	4.3
SSL0804HC-150M-N	15	20	0.06	21	2.4	3.5
SSL0804HC-220M-N	22	20	0.08	17	2.0	2.8
SSL0804HC-330M-N	33	20	0.15	14	1.7	2.1
SSL0804HC-470M-N	47	20	0.28	12	1.4	1.7
SSL0804HC-680M-N	68	20	0.3	9	1.2	1.5
SSL0804HC-101M-N	100	20	0.4	7	0.95	1.2

- Inductance tested at 100 KHz, 0.1 Vrms.
- SRF measured using HP8753D network analyzer
- Inductance drop = 10% typ. at Isat.
- $\Delta T = 40^\circ\text{C}$ typ. at I_{rms}.
- Tolerance: M = $\pm 20\%$
- Operating temperature range $-40^\circ\text{C} \sim 125^\circ\text{C}$ (Including self - temperature rise)
- Electrical specifications at 25°C

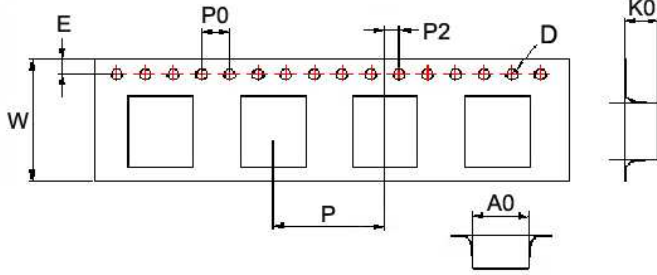
Test Instruments :



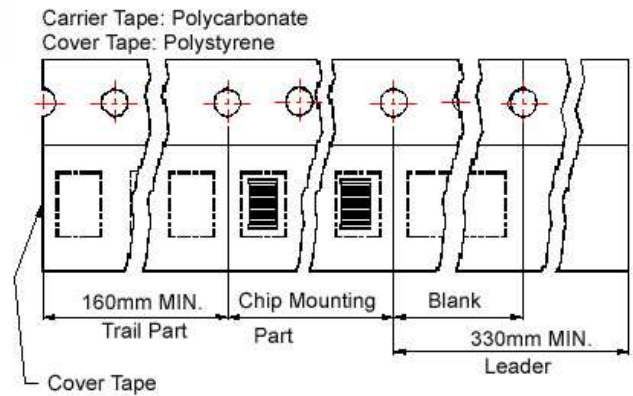
SMD Unshielded Power Inductors – SSL-HC Series

Packaging Specifications

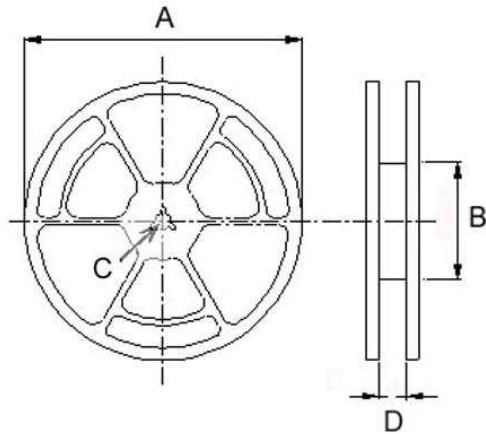
Tape Dimensions



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	
SSL 0503HC	5.3	1.55	1.75	16	12	4	2	330	100	13	17.4	1000
SSL 0804HC	6.1	1.55	1.75	24	16	4	2	330	100	13	24.2	700