

SSL0804HC Series

SMD Power Inductors

APPLICATIONS

Notebook Computers, Step-up and Step-down Converters

Memory Programmers, etc.

OUTLINE

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 its tinned self-leaded construction, SSL-HC series can achieve very low DCR values and excellent solderability. In addition, they have very low resistance and a rugged self-leaded construction. Standard parts shown in catalogue and custom values are also available.

FEATURES

For high current, low voltage DC-DC converter applications.

ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE * (μ H)	TOLERANCE ($\pm\%$)	SRF ** (MHz) Typ.	DC RESISTANCE (Ω) Max.	Isat *** (A)	Irms **** (A)
SSL0804HC-R33M-N	0.33	20	300	0.002	20.0	16.0
SSL0804HC-R68M-N	0.68	20	200	0.005	13.0	12.0
SSL0804HC-1R0M-N	1.00	20	100	0.006	11.0	10.0
SSL0804HC-1R5M-N	1.50	20	90	0.008	9.00	9.00
SSL0804HC-2R2M-N	2.20	20	90	0.011	7.80	7.40
SSL0804HC-2R7M-N	2.70	20	65	0.012	7.00	6.60
SSL0804HC-3R3M-N	3.30	20	65	0.014	6.40	5.90
SSL0804HC-4R7M-N	4.70	20	45	0.018	5.40	4.80
SSL0804HC-6R8M-N	6.80	20	35	0.035	3.60	5.00
SSL0804HC-100M-N	10	20	26	0.04	3.30	4.30
SSL0804HC-150M-N	15	20	21	0.06	2.40	3.50
SSL0804HC-220M-N	22	20	17	0.08	2.00	2.80
SSL0804HC-330M-N	33	20	14	0.15	1.70	2.10
SSL0804HC-470M-N	47	20	12	0.28	1.40	1.70
SSL0804HC-680M-N	68	20	9	0.30	1.20	1.50
SSL0804HC-101M-N	100	20	7	0.40	0.95	1.20

Note:

*Inductance Tested at 100 KHz, 0.1 Vrms.

***Inductance Drop = 10% Typ. at Isat.

Operating Temperature Range: -40 °C to +85 °C

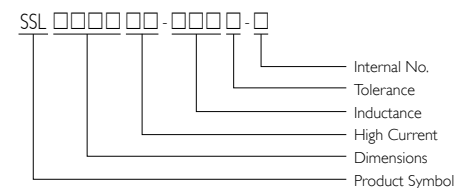
**SRF measured using HP8753D network analyzer.

**** $\Delta T = 40$ °C Rise Typ at I_{rms}.

Electrical specifications at 25 °C



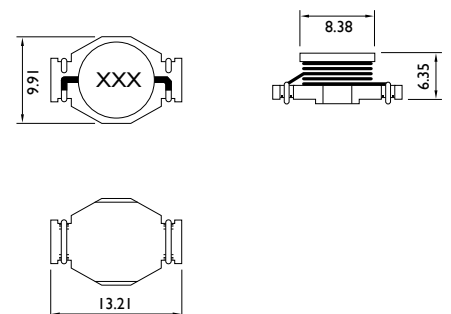
PRODUCT IDENTIFICATION



■ Packaging: T = Tape and Reel, B = Bulk

■ Internal No.: N = Lead-Free

SHAPES AND DIMENSIONS



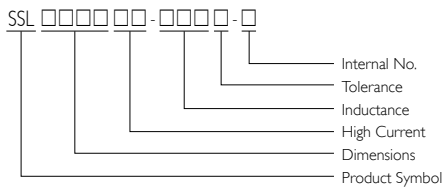
Dimensions: mm

SMD Power Inductors

SSL I 306HC Series

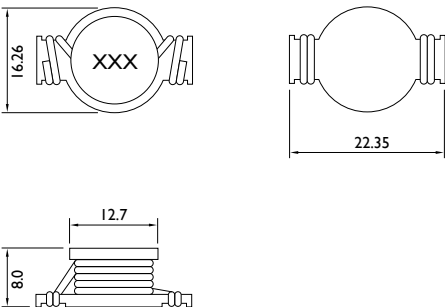


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ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE * (μ H)	TOLERANCE ($\pm\%$)	SRF (MHz) Typ.	DC RESISTANCE (Ω) Max.	Isat ** (A)	Irms *** (A)
SSL I 306HC-R78M-N	0.78	20	156	2.6	30	15
SSL I 306HC-1R5M-N	1.50	20	100	4.0	25	15
SSL I 306HC-2R2M-N	2.20	20	75	6.1	20	12
SSL I 306HC-3R3M-N	3.30	20	60	8.6	17	10
SSL I 306HC-3R9M-N	3.90	20	55	10	15	9.0
SSL I 306HC-4R7M-N	4.70	20	40	14	13	8.4
SSL I 306HC-6R0M-N	6.00	20	35	17	12	7.5
SSL I 306HC-7R8M-N	7.80	20	35	18	11	7.5
SSL I 306HC-100M-N	10	20	28	26	10	6.0
SSL I 306HC-150M-N	15	20	20	32	8.0	4.4

Note:

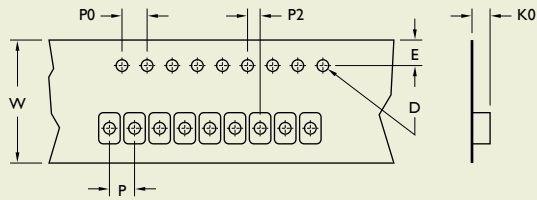
*Inductance Tested at 100 KHz, 0.25 Vrms.

*** $\Delta T = 40^\circ\text{C}$ Rise Typ at I_{rms}.

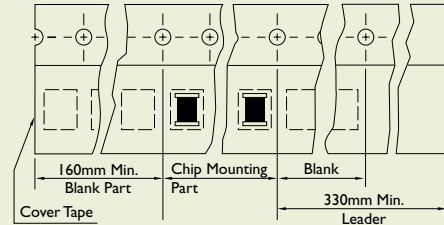
**Inductance Drop = 30% Typ. at Isat.

Operating Temperature Range: -40°C to $+85^\circ\text{C}$

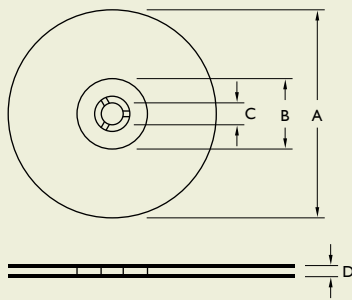
TAPE DIMENSIONS



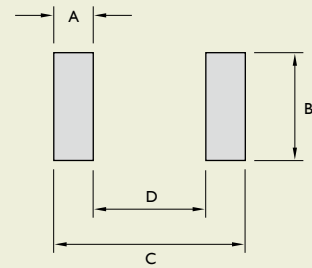
TAPE MATERIAL



REEL DIMENSIONS



RECOMMENDED PATTERN



Dimensions: mm

TYPE	TAPE DIMENSIONS							RECOMMENDED PATTERN				REEL DIMENSIONS				QUANTITY/ REEL
	K0	D	E	W	P	P0	P2	A	B	C	D	A	B	C	D	
SSL0503HC	5.30	1.55	1.75	16	12	4	2	1.91	4.06	8.89	5.08	330	100	13	17.4	1,000
SSL0804HC	6.10	1.55	1.75	24	16	4	2	1.52	4.06	11.68	8.64	330	100	13	24.2	700
SSL1306HC	7.20	1.55	1.75	44	24	4	2	3.18	8.64	20.71	14.35	330	100	13	45.4	250