

## SMD Power Inductors

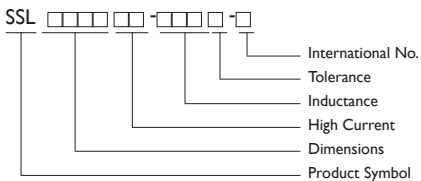
## SSL0804HC Series



## FEATURES

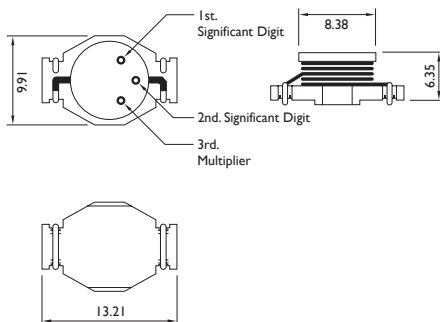
For high current, low voltage DC-DC converter applications.

## PRODUCT IDENTIFICATION



- Packaging: T: Tape and Reel, B: Bulk
- Tolerance: M:  $\pm 20\%$
- Note: YAGEO will start to release SSL\_HC Series inductors with lead-free terminals which meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to 'N' as identification. Ex. SSL0503HC-R56M-N

## SHAPES AND DIMENSIONS



Dimensions : mm

These series have been specially designed for high current, low voltage DC-DC converter applications.

This simple, rugged design provides current ratings normally available only in much larger packages - up to 16Arms for a .33 $\mu$ H part. With its tinned self-leaded construction, the SSL0804HC achieves very low DCR values and excellent solderability. In addition to the standard parts shown, custom values are also available.

These inductors are less than .2" (5mm) high. They have very low resistance and a rugged self-leaded construction.

## APPLICATIONS

Notebook computers, Sep-up and step-down converters, memory programmers. etc...

## ELECTRICAL CHARACTERISTICS

PART NO.	INDUCTANCE SRF ** ( $\mu$ H $\pm 20\%$ ) * (MHz)	DC RESISTANCE ( $\Omega$ ) Max.	Isat *** (A)	Irms **** (A)
SSL0804HC-R33M-S	0.33 300	0.002	20	16
SSL0804HC-R68M-S	0.68 200	0.005	13	12
SSL0804HC-1R0M-S	1.0 100	0.006	11	10
SSL0804HC-1R5M-S	1.5 90	0.008	9.0	9
SSL0804HC-2R2M-S	2.2 90	0.011	7.8	7.4
SSL0804HC-2R7M-S	2.7 65	0.012	7.0	6.6
SSL0804HC-3R3M-S	3.3 65	0.014	6.4	5.9
SSL0804HC-4R7M-S	4.7 45	0.018	5.4	4.8
SSL0804HC-6R8M-S	6.8 35	0.035	3.6	5.0
SSL0804HC-100M-S	10 26	0.04	3.3	4.3
SSL0804HC-150M-S	15 21	0.06	2.4	3.5
SSL0804HC-220M-S	22 17	0.08	2.0	2.8
SSL0804HC-330M-S	33 14	0.15	1.7	2.1
SSL0804HC-470M-S	47 12	0.28	1.4	1.7
SSL0804HC-680M-S	68 9	0.3	1.2	1.5
SSL0804HC-101M-S	100 7	0.4	0.95	1.2

\* Inductance Tested at 0.1 Vrms, 100 KHz

\*\* SRF measured using HP8753D network analyzer.

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

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

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

Electrical Specifications at  $25^\circ\text{C}$



## ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	INDUCTANCE (nH)	TOLERANCE (±%)	R <sub>dc</sub> (Ω)	I <sub>sat</sub> (A)	I <sub>rms</sub> (A)	SRF (KHz)Typ.
SSL0804HC-R33 □ -N	0.33	20	0.002+0	20	16	300
SSL0804HC-R68 □ -N	0.68	20	0.005+0	13	12	200
SSL0804HC-1R0 □ -N	1	20	0.006+0	11	10	100
SSL0804HC-1R5 □ -N	1.5	20	0.008+0	9	9	90
SSL0804HC-2R2 □ -N	2.2	20	0.011+0	7.8	7.4	90
SSL0804HC-2R7 □ -N	2.7	20	0.012+0	7	6.6	65
SSL0804HC-3R3 □ -N	3.3	20	0.014+0	6.4	5.9	65
SSL0804HC-4R7 □ -N	4.7	20	0.018+0	5.4	4.8	45
SSL0804HC-6R8 □ -N	6.8	20	0.035+0	3.6	5	35
SSL0804HC-100 □ -N	10	20	0.040+0	3.3	4.3	26
SSL0804HC-150 □ -N	15	20	0.060+0	2.4	3.5	21
SSL0804HC-220 □ -N	22	20	0.080+0	2	2.8	17
SSL0804HC-330 □ -N	33	20	0.150+0	1.7	2.1	14
SSL0804HC-470 □ -N	47	20	0.280+0	1.4	1.7	12
SSL0804HC-680 □ -N	68	20	0.300+0	1.2	1.5	9
SSL0804HC-101 □ -N	100	20	0.400+0	0.95	1.2	7

NOTE : □ -tolerance M=±20% / T=±30%

1. Operating temperature range -40°C~85°C

2. Inductance drop 10% typ. at last

4. ΔT=40°C rise typ. at I<sub>rms</sub>.

"-N" FOR COMPLETELY LEAD FREE TYPE (INCLUDING FERRITE BODY & SOLDER)

## RECOMMEND SOLDERING CONDITIONS

for: CL/ CLH/ SQV/ SMD power inductors/ SMD Chip Beads/ SMD Filters, Transformers, Current Sensors

