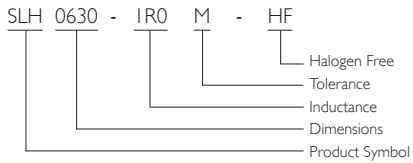


SMD Power Inductors

SLH Series



PRODUCT IDENTIFICATION



■ Tolerance: J = $\pm 5\%$, K = $\pm 10\%$, L = $\pm 15\%$, M = $\pm 20\%$,
P = $\pm 25\%$, N = $\pm 30\%$, Y = min

FEATURES

- Halogen Free products
- Shielded construction
- Lowest DCR/ μH , in this package size
- Handles high transient current spikes without saturation
- No air-gap inside but filled with magnetic powder

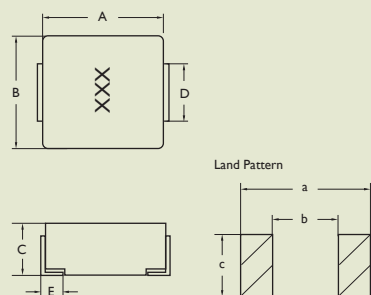
APPLICATIONS

- High current POL converters
- Low profile, high current power supply
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array (FPGA)
- Harsh environments including moisture, chemicals and salt spray

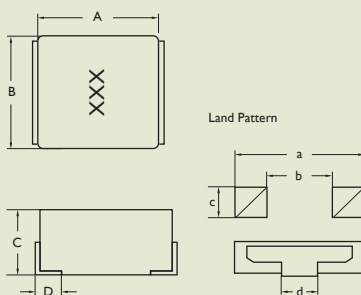
SHAPES AND DIMENSIONS

Unit: mm

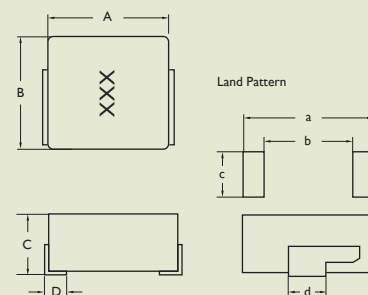
SLH 0630/0650



SLH 1040/1235



SLH 1250/1265



TYPE	A	B	C	D	E	a	b	c	d
SLH0630	6.86 ± 0.38 I	6.47 ± 0.254	3.0 ⁺⁰	3.18	1.27 ± 0.30	7.37	3.7 I	3.4	
SLH0650	6.86 ± 0.38 I	6.47 ± 0.254	5.0 ⁺⁰	3.18 ± 0.30	1.27 ± 0.30	7.37	3.7 I	3.4	
SLH1040	11.5 ⁺⁰	10.3 ⁺⁰	4.0 ⁺⁰	2.2 ± 0.30		13	6	4.0 ⁺⁰	3.0 ± 0.3
SLH1235	13.2 ± 0.38	12.9 ⁺⁰	3.5 ⁺⁰	2.3 ± 0.30		13.8	8.1	3.3	3.0 ± 0.3
SLH1250	13.2 ± 0.50	12.9 ⁺⁰	5.0 ⁺⁰	2.3 ± 0.30		13.76	7.87	5.0	4.7 ± 0.3
SLH1265	13.2 ± 0.50	12.9 ⁺⁰	6.5 ⁺⁰	2.3 ± 0.30		13.76	7.87	5.0	4.7 ± 0.3

ELECTRICAL CHARACTERISTICS SLH0630

PART NO.	INDUCTANCE (μH) ±20%	DC RESISTANCE (mΩ)		Isat (A) Max.	Irms (A) Max.
		Typical	Max.		
SLH0630-R10M	0.10	1.50	1.70	60.00	32.50
SLH0630-R15M	0.15	1.90	2.50	52.00	26.00
SLH0630-R20M	0.20	2.40	3.00	41.00	24.00
SLH0630-R22M	0.22	2.50	2.80	40.00	23.00
SLH0630-R33M	0.33	3.50	3.90	30.00	20.00
SLH0630-R47M	0.47	4.00	4.20	26.00	17.50
SLH0630-R68M	0.68	5.00	5.50	25.00	15.50
SLH0630-R82M	0.82	6.70	8.50	24.00	13.00
SLH0630-1R0M	1.00	9.00	10.00	22.00	11.00
SLH0630-1R5M	1.50	14.00	15.00	18.00	9.00
SLH0630-2R2M	2.20	18.00	20.00	14.00	8.00
SLH0630-3R3M	3.30	28.00	30.00	13.50	6.00
SLH0630-4R7M	4.70	37.00	40.00	10.00	5.50
SLH0630-6R8M	6.80	54.00	60.00	8.00	4.50
SLH0630-8R2M	8.20	64.00	68.00	7.50	4.00
SLH0630-100M	10.00	102.00	105.00	7.00	3.00

Note:

Inductance test frequency at 100KHz

Isat: DC current at which the inductance drops 30% from its value without current

Irms: The actual current when temperature of coil becomes ΔT = 40 °C



ELECTRICAL CHARACTERISTIC SLH0650

PART NO.	INDUCTANCE (μ H) $\pm 20\%$	DC RESISTANCE (m Ω)		Isat (A) Max.	Irms (A) Max.
		Typical	Max.		
SLH0650-R56M	0.56	3.40	3.60	12.00	20.00
SLH0650-R68M	0.68	4.20	4.50	11.50	18.00
SLH0650-R82M	0.82	4.60	4.90	13.00	16.50
SLH0650-1R0M	1.00	5.60	6.50	15.00	13.00
SLH0650-1R5M	1.50	8.60	9.00	12.00	12.00
SLH0650-2R2M	2.20	13.00	13.60	10.00	10.00
SLH0650-3R3M	3.30	19.90	20.90	8.00	8.00
SLH0650-4R7M	4.80	28.90	30.30	7.00	6.50
SLH0650-5R6M	5.60	32.70	34.40	7.00	6.00
SLH0650-6R8M	6.80	42.50	44.60	5.50	5.50
SLH0650-8R2M	8.20	43.50	45.60	5.50	5.50
SLH0650-100M	10.00	67.90	71.30	4.50	4.50

ELECTRICAL CHARACTERISTICS SLH1040

PART NO.	INDUCTANCE (μ H) $\pm 20\%$	DC RESISTANCE (m Ω)		Isat (A) Max.	Irms (A) Max.
		Typical	Max.		
SLH1040-R19M	0.19	0.88	0.95	90.00	40.00
SLH1040-R36M	0.36	1.30	1.40	60.00	31.50
SLH1040-R56M	0.56	1.70	1.80	49.00	27.50
SLH1040-1R0M	1.00	3.70	4.10	36.00	17.50
SLH1040-1R5M	1.50	5.30	5.80	27.50	15.00
SLH1040-2R2M	2.20	8.20	9.00	25.50	12.00
SLH1040-3R3M	3.30	10.80	11.80	18.60	10.00
SLH1040-4R7M	4.70	15.00	16.50	17.00	9.50
SLH1040-5R6M	5.60	17.60	19.30	16.00	8.50
SLH1040-6R8M	6.80	21.20	23.50	13.50	8.00
SLH1040-100M	10.00	33.20	36.50	12.00	6.80

Note:

Inductance test frequency at 100KHz

Isat: DC current at which the inductance drops 30% from its value without current

Irms: The actual current when temperature of coil becomes $\Delta T = 40^\circ \text{C}$

ELECTRICAL CHARACTERISTIC SLHI250

PART NO.	INDUCTANCE (μ H) $\pm 20\%$	DC RESISTANCE (m Ω)		Isat (A) Max.	Irms (A) Max.
		Typical	Max.		
SLHI250-R10M	0.10	0.53	0.60	118.00	55.00
SLHI250-R22M	0.22	0.64	0.80	110.00	51.00
SLHI250-R33M	0.33	0.85	1.10	80.00	42.00
SLHI250-R47M	0.47	1.10	1.30	65.00	38.00
SLHI250-R56M	0.56	1.30	1.50	55.00	36.00
SLHI250-R68M	0.68	1.50	1.70	54.00	34.00
SLHI250-R82M	0.82	2.00	2.30	53.00	31.00
SLHI250-1R0M	1.00	2.14	2.65	50.00	29.00
SLHI250-1R5M	1.50	3.40	4.10	48.00	23.00
SLHI250-2R2M	2.20	4.60	5.50	32.00	20.00
SLHI250-3R3M	3.30	7.70	9.20	32.00	15.00
SLHI250-4R7M	4.70	12.80	15.00	27.00	12.00
SLHI250-5R6M	5.60	14.00	16.50	22.00	11.50
SLHI250-6R8M	6.80	15.40	18.50	21.00	11.00
SLHI250-7R8M	7.80	17.20	20.50	18.00	10.00
SLHI250-8R2M	8.20	18.90	22.50	18.00	9.50
SLHI250-100M	10.00	21.40	25.50	16.00	9.00

Note:

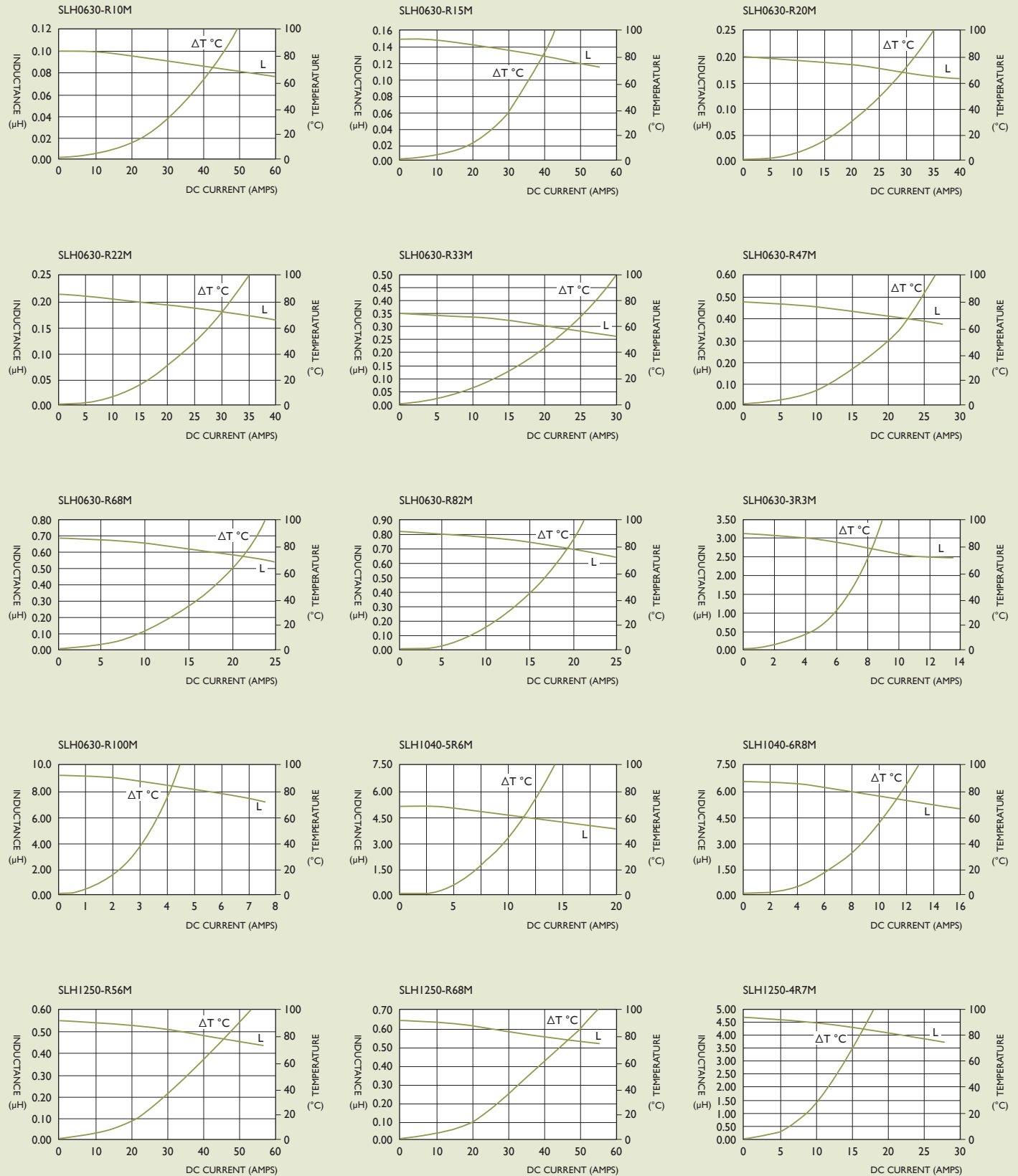
Inductance test frequency at 100KHz

Isat: DC current at which the inductance drops 30% from its value without current

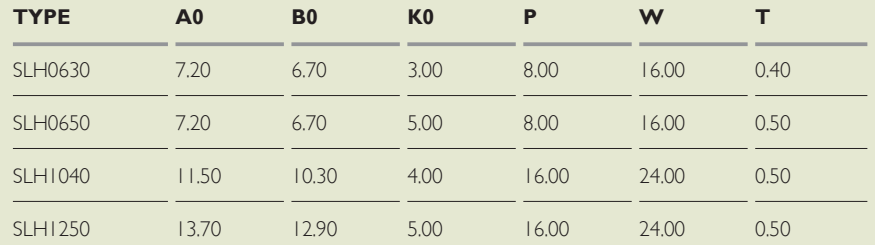
Irms: The actual current when temperature of coil becomes $\Delta T = 40^\circ\text{C}$



TYPICAL ELECTRICAL CHARACTERISTICS



Unit: mm



TYPE	BULK	QUANTITY/REEL	CASKET/REEL	CASKET	QUANTITY/BOX
SLH0630	v	1000	3	5	15000
SLH0650	v	1000	3	5	15000
SLH1040	v	800	2	5	8000
SLH1250	v	500	2	5	5000