IHLP® Tin / Lead Inductors, High Saturation Series

FEATURES

- Shielded construction
- Handles high transient current spikes without saturation
- Tin / lead 60Sn / 40Pb **plated** (not dipped) terminals
- IHLP design; PATENT(S): www.vishay.com/patents

APPLICATIONS

- Notebook / desktop / server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for field programmable gate array (FPGA)

LINKS TO ADDITIONAL RESOURCES

Calculators

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L_0 INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (µH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) (1)	SATURATION CURRENT DC TYP. (A) (2)
IHLP5050EZRZR10ML1	0.10	0.52	0.60	55	118
IHLP5050EZRZR22ML1	0.22	0.64	0.80	51	110
IHLP5050EZRZR33ML1	0.33	0.85	1.1	42	80
IHLP5050EZRZR47ML1	0.47	1.1	1.3	38	65
IHLP5050EZRZR56ML1	0.56	1.3	1.5	36	55
IHLP5050EZRZR82ML1	0.82	2.0	2.3	31	53
IHLP5050EZRZ1R0ML1	1.0	2.1	2.5	29	50
IHLP5050EZRZ1R5ML1	1.5	3.4	4.1	23	48
IHLP5050EZRZ2R2ML1	2.2	4.6	5.5	20	32
IHLP5050EZRZ3R3ML1	3.3	7.7	9.2	15	32
IHLP5050EZRZ4R7ML1	4.7	12.8	15.0	12	27
IHLP5050EZRZ5R6ML1	5.6	14.0	16.5	11.5	22
IHLP5050EZRZ6R8ML1	6.8	15.4	18.5	11	21
IHLP5050EZRZ7R8ML1	7.8	17.2	20.5	10	18
IHLP5050EZRZ8R2ML1	8.2	18.9	22.5	9.5	18
IHLP5050EZRZ100ML1	10	21.4	25.5	9.0	16

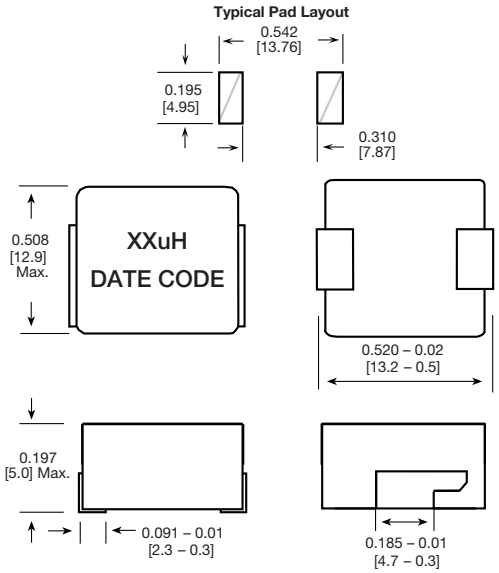
Notes

- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +125 °C
- The part temperature (ambient + temp. rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application
- Rated operating voltage (across inductor) = 75 V

(1) DC current (A) that will cause an approximate ΔT of 40 °C

(2) DC current (A) that will cause L_0 to drop approximately 20 %

DIMENSIONS in inches [millimeters]



DESCRIPTION

IHLP-5050EZ-L1	1.0 µH	± 20 %	RZ
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE

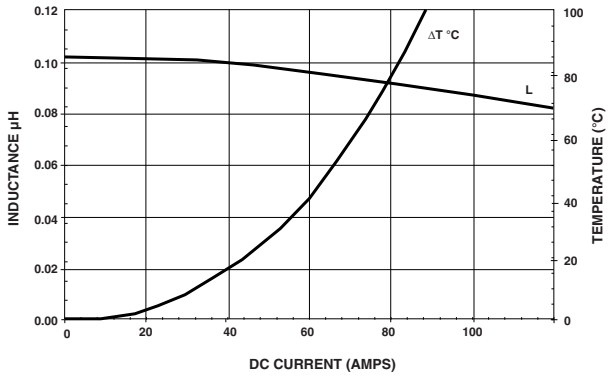
GLOBAL PART NUMBER

I	H	L	P	5	0	5	0	E	Z	R	Z	1	R	7	M	L	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

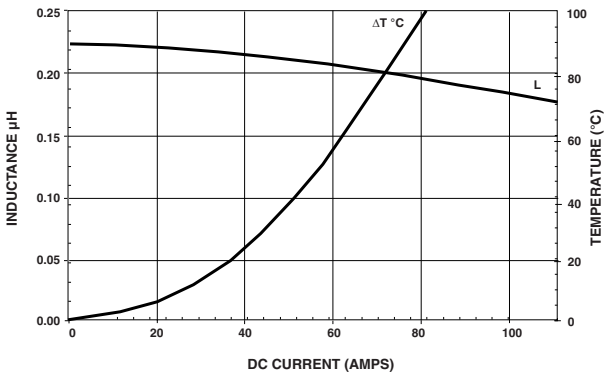
RZ = tape and reel + SnPb
SL = tape and reel + SnPb + single lot date code

PERFORMANCE GRAPHS

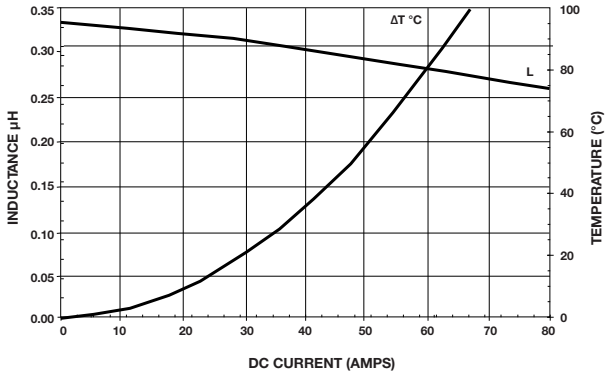
0.10 µH



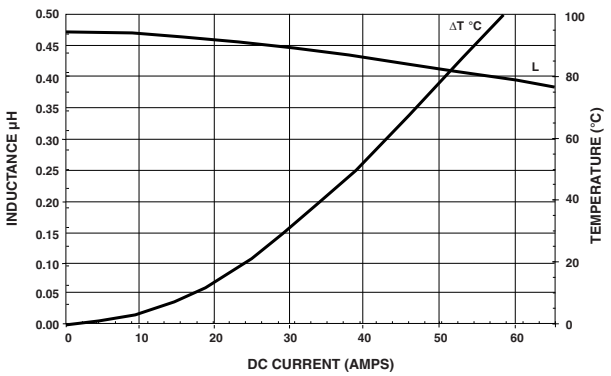
0.22 µH



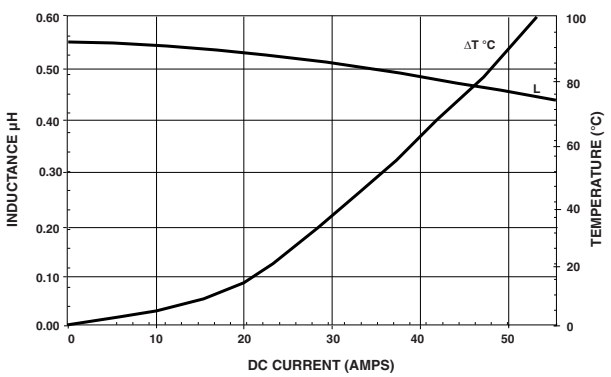
0.33 µH



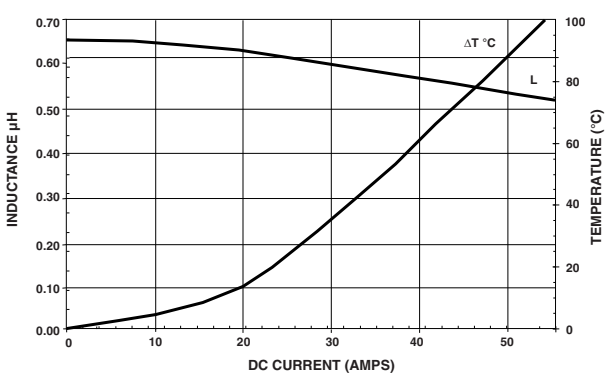
0.47 µH



0.56 µH

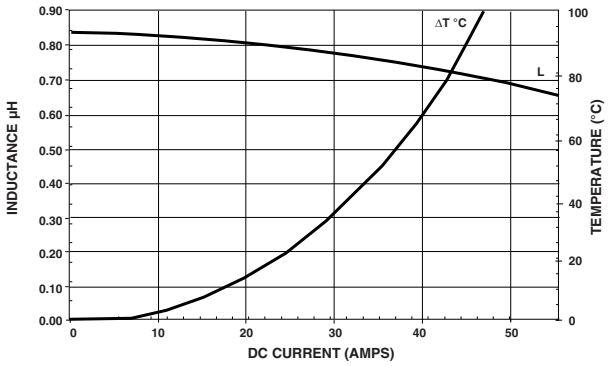


0.68 µH

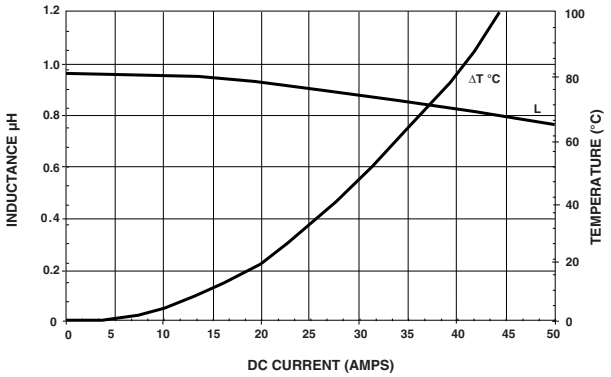


PERFORMANCE GRAPHS

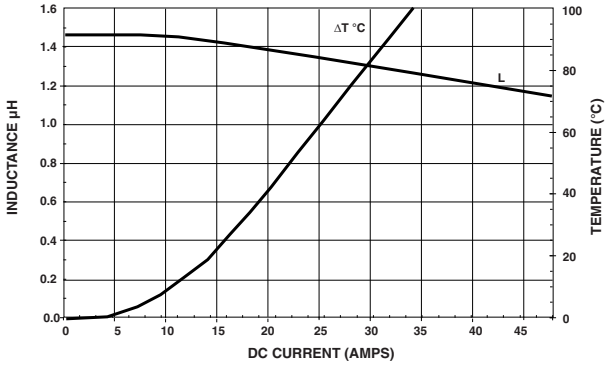
0.82 µH



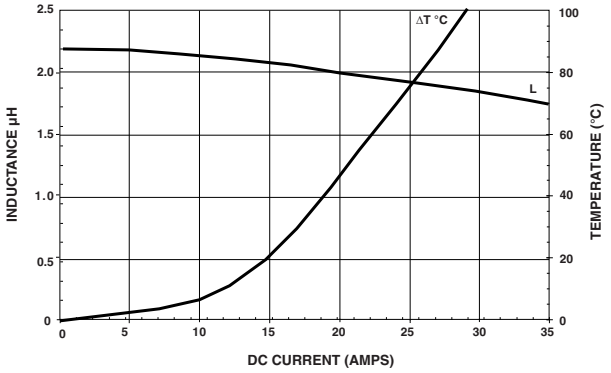
1.0 µH



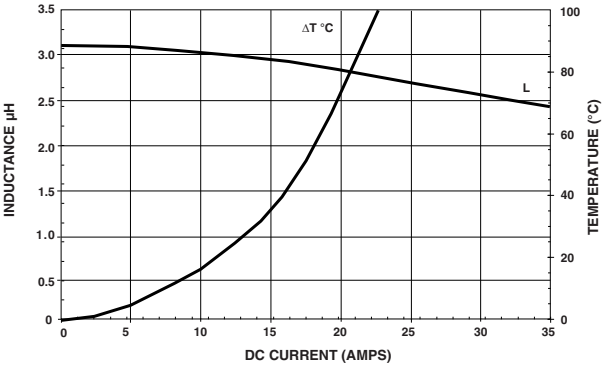
1.5 µH



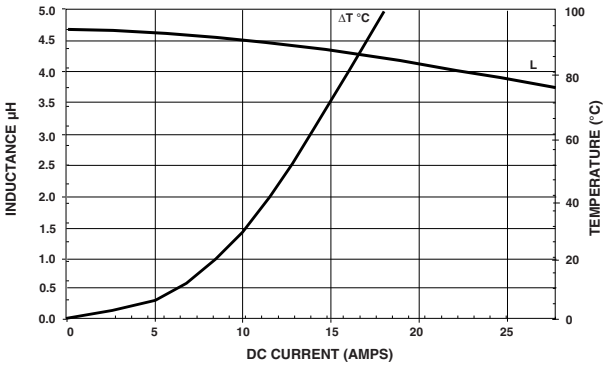
2.2 µH



3.3 µH

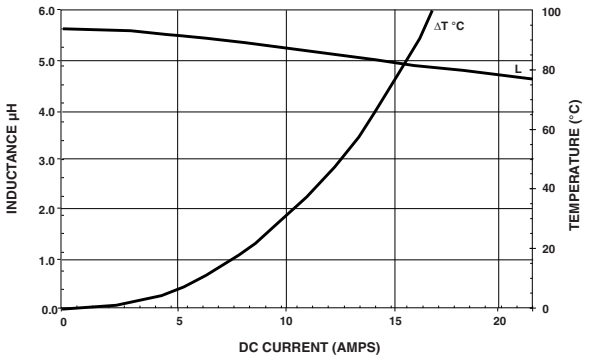


4.7 µH

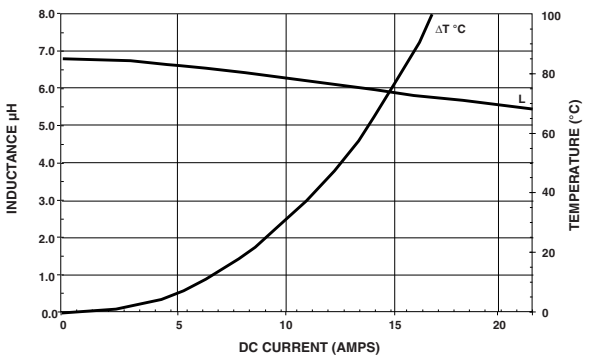


PERFORMANCE GRAPHS

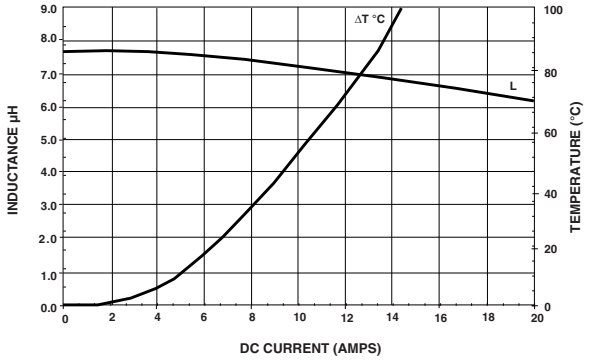
5.6 µH



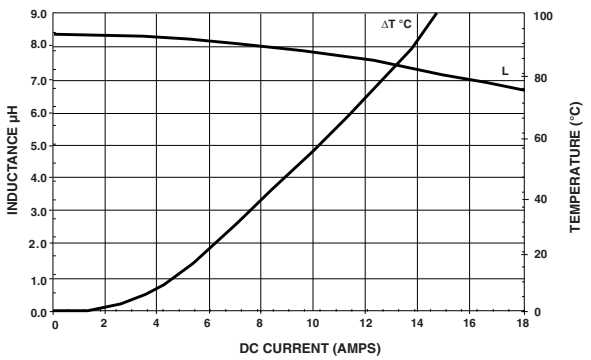
6.8 µH



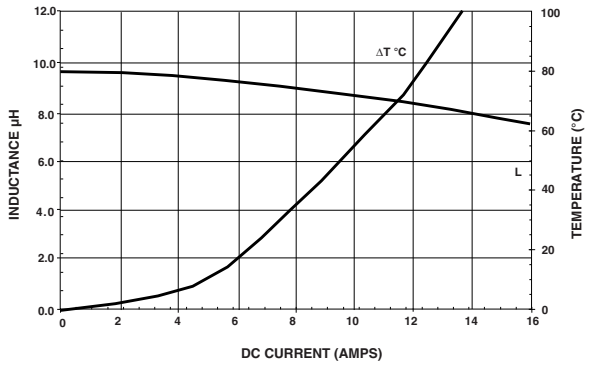
7.8 µH



8.2 µH



10 µH



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