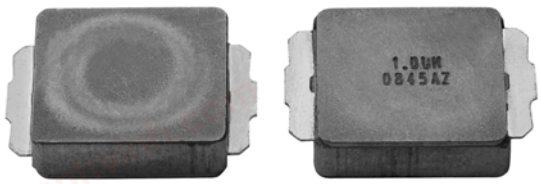
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IHLW-5050CE-01

Vishay Dale

Low Profile, High Current Inductors



Manufactured under one or more of the following:
US Patents; 6,198,375/6,204,744/6,449,829/6,460,244.
Several foreign patents, and other patents pending.

FEATURES

- Shielded construction
- Frequency range up to 5.0 MHz
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Compliant to RoHS Directive 2002/95/EC

Pb-free
RoHS COMPLIANT
GREEN (5-2008)**

APPLICATIONS

- PDA/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)

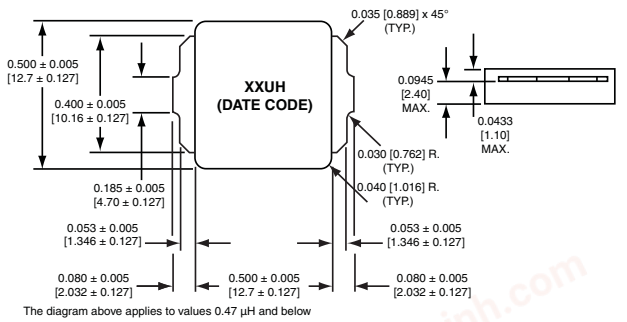
STANDARD ELECTRICAL SPECIFICATIONS

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) (3)	SATURATION CURRENT DC TYP. (A) (4)
0.10	0.8	0.96	43	84
0.15	1	1.2	41	75
0.22	1.1	1.3	38.5	65
0.33	1.3	1.5	36.5	62
0.47	1.6	2	32	55
0.68	2.3	2.5	28	49
0.82	2.6	3	25	44
1.0	3.3	3.5	24	40
1.5	5.1	5.5	19	35
1.8	6.5	7	16.5	30
2.2	7.2	8	16	29
3.3	11	12	12	27
4.7	14.3	15	10	24
5.6	18.3	19	9.5	19
6.8	19.8	22	9	18
8.2	24.8	28	8.5	16
10	30.4	34	7	14

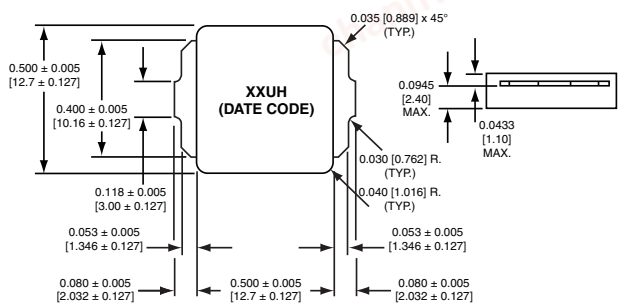
Notes

(1) All test data is referenced to 25 °C ambient
(2) Operating temperature range - 55 °C to + 125 °C
(3) DC current (A) that will cause an approximate ΔT of 40 °C
(4) DC current (A) that will cause L_0 to drop approximately 20 %
(5) 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.

DIMENSIONS in inches [millimeters]



The diagram above applies to values 0.47 µH and below



The diagram above applies to values 0.68 µH and above

DESCRIPTION

IHLW-5050CE-01	1.0 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	H	L	W	5	0	5	0	C	E	E	R	1	R	0	M	0	1
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			TOL.	SERIES	

** Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

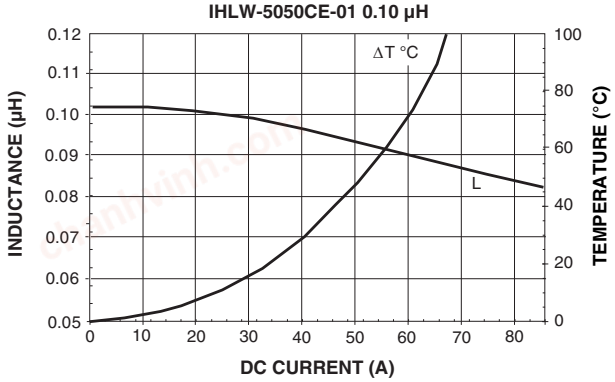
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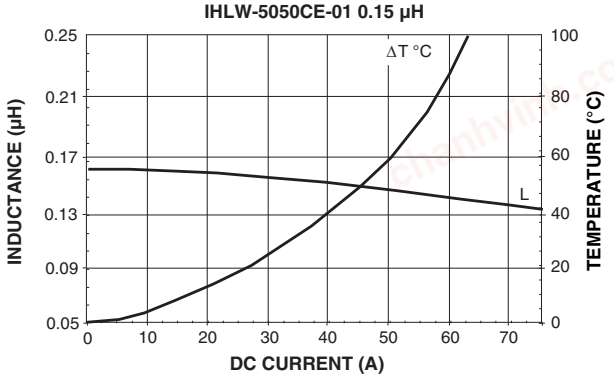
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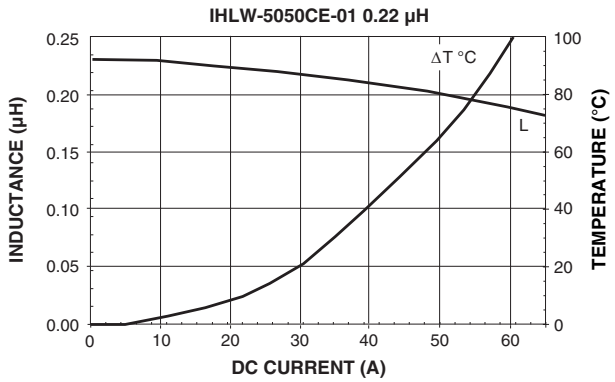
IHLW-5050CE-01 0.10 µH



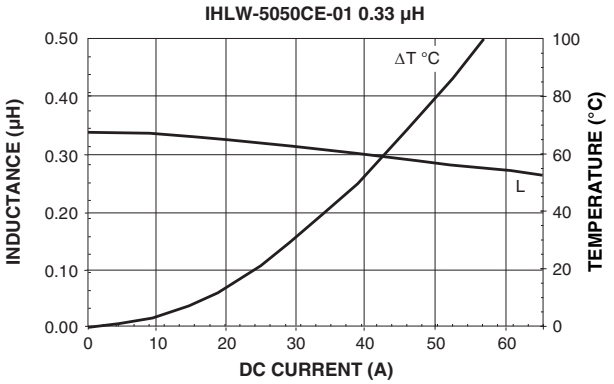
IHLW-5050CE-01 0.15 µH



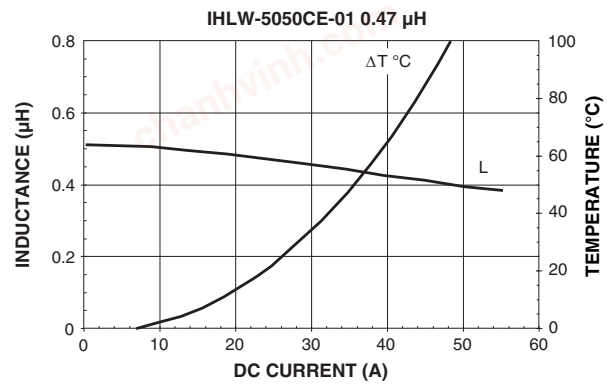
IHLW-5050CE-01 0.22 µH



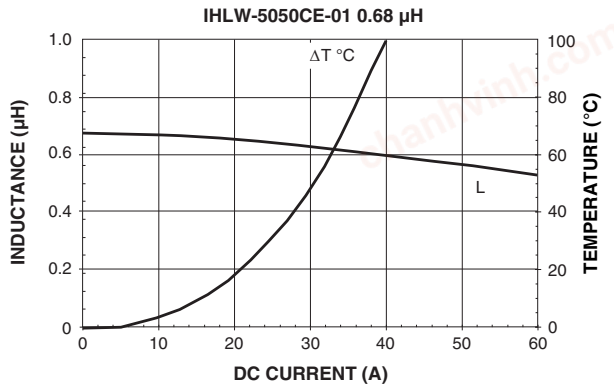
IHLW-5050CE-01 0.33 µH



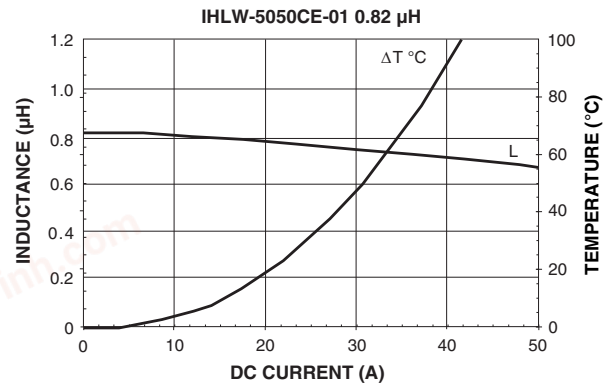
IHLW-5050CE-01 0.47 µH



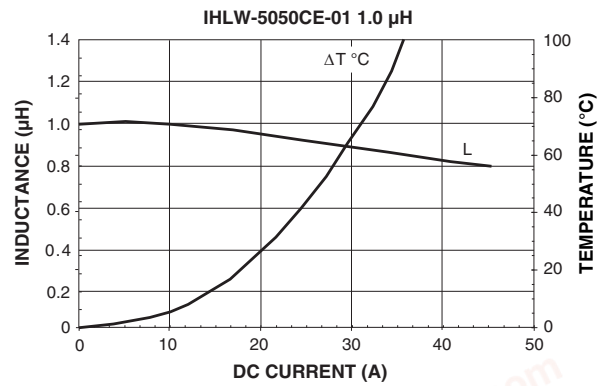
IHLW-5050CE-01 0.68 µH



IHLW-5050CE-01 0.82 µH



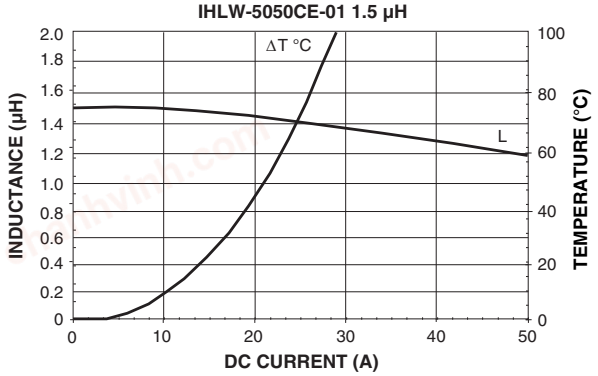
IHLW-5050CE-01 1.0 µH



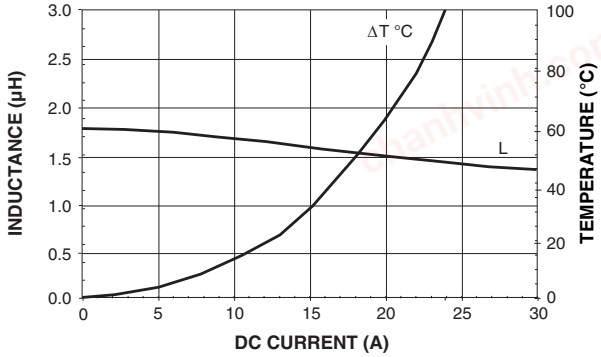
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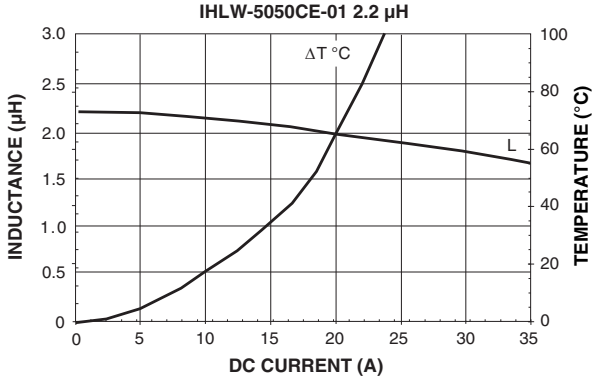
IHLW-5050CE-01 1.5 µH



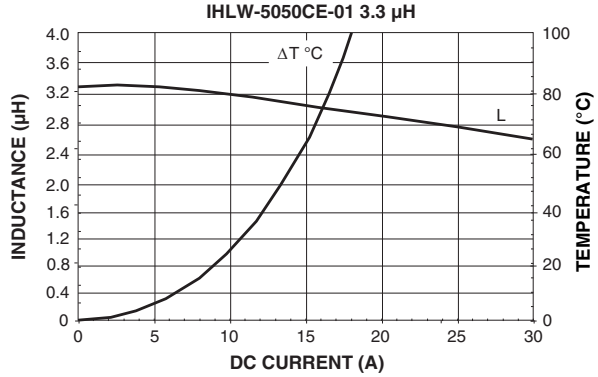
IHLW-5050CE-01 1.8 µH



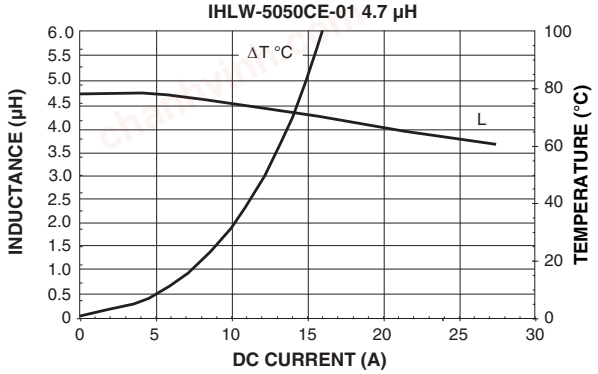
IHLW-5050CE-01 2.2 µH



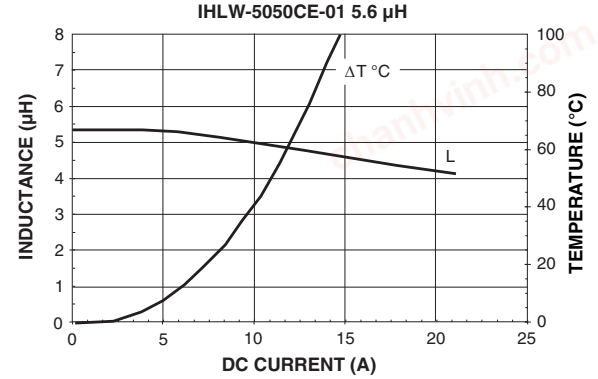
IHLW-5050CE-01 3.3 µH



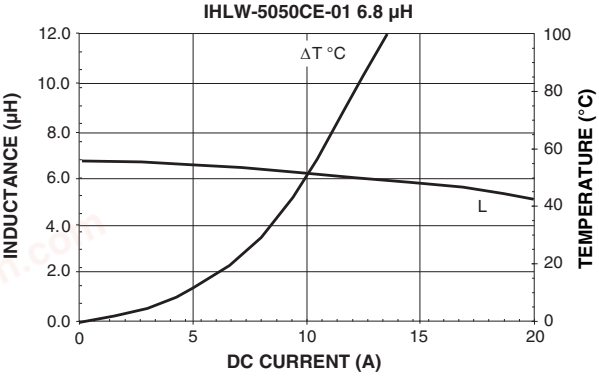
IHLW-5050CE-01 4.7 µH



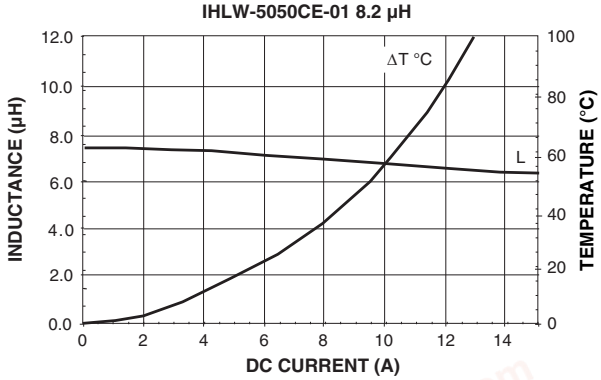
IHLW-5050CE-01 5.6 µH



IHLW-5050CE-01 6.8 µH



IHLW-5050CE-01 8.2 µH



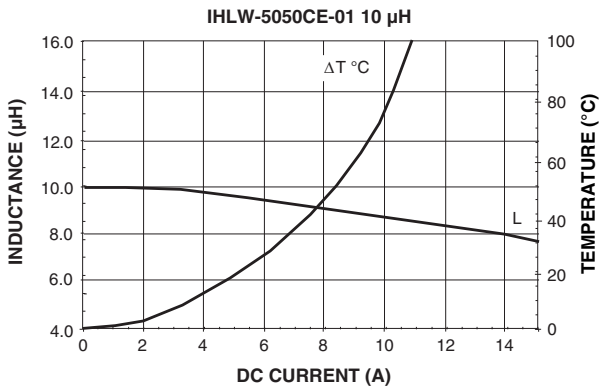
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For technical questions, contact: magnetics@vishay.com

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