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IHLP® Commercial Inductors, Low DCR Series



FEATURES

- 10.8 mm x 10.16 mm x 4.0 mm package
- Magnetically shielded metal construction
- Optimized for low DCR for up to 20 % reduction in dc power losses over other IHLP series
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

HALOGEN FREE

LINKS TO ADDITIONAL RESOURCES

Product Page | 3D Models | Calculators

APPLICATIONS

- DC/DC power supplies
- Smart grid and solar
- Telecommunications equipment
- Noise suppression and filtering

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)
IHLP4040DZERR19M11	0.19	0.70	0.80	40	46
IHLP4040DZERR22M11	0.22	0.85	0.95	33	44
IHLP4040DZERR24M11	0.24	0.85	0.95	33	44
IHLP4040DZERR36M11	0.36	1.05	1.15	32	30
IHLP4040DZERR47M11	0.47	1.53	1.68	30	30
IHLP4040DZERR56M11	0.56	1.61	1.80	32	22
IHLP4040DZERR78M11	0.78	1.80	1.90	27	22
IHLP4040DZER1R0M11	1.0	2.30	2.50	25	20
IHLP4040DZER1R8M11	1.8	4.50	5.00	17	16
IHLP4040DZER2R0M11	2.0	5.20	5.80	16	14
IHLP4040DZER4R7M11	4.7	12.9	14.2	9.5	7.6
IHLP4040DZER6R8M11	6.8	17.5	19.3	9.0	7.5
IHLP4040DZER100M11	10	27.8	30.5	7.5	7.1
IHLP4040DZER150M11	15	40.9	45.0	6.25	6.0
IHLP4040DZER180M11	18	46.40	51.90	5.6	4.6
IHLP4040DZER220M11	22	60.4	66.0	5.0	4.5
IHLP4040DZER330M11	33	87.5	94.5	4.4	4.0
IHLP4040DZER470M11	47	132.0	145.0	3.3	3.0
IHLP4040DZER101M11	100	249.0	270.0	2.5	2.25

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, PCB 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) = 50 V
- Moisture Sensitivity Level (MSL) = 1 floor life - unlimited
- Resistance to solder heat: 260 °C for 30 s (3 times max. through reflow)

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

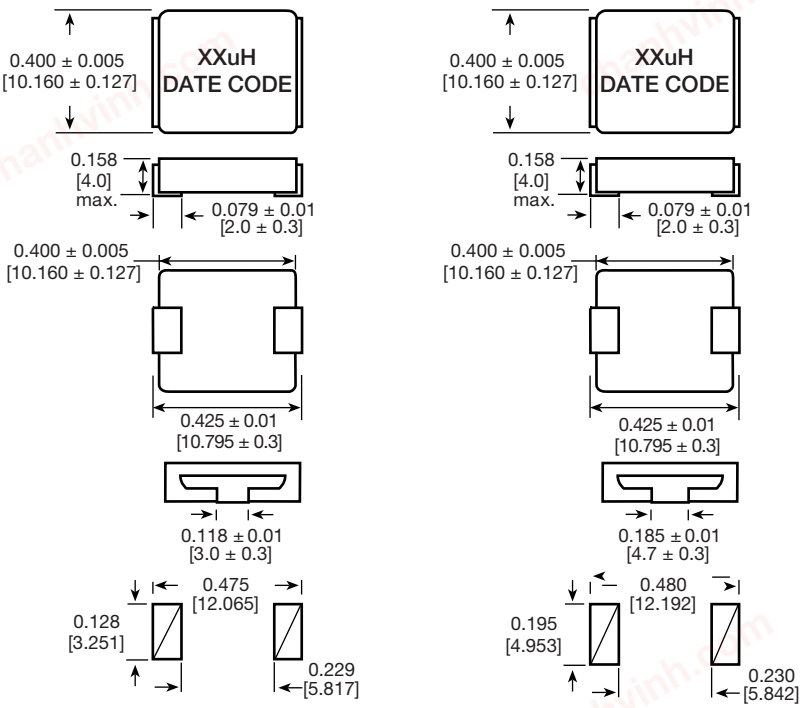
(2) DC current (A) that will cause L_0 to drop approximately 20 %

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DIMENSIONS in inches [millimeters]



The diagram above applies to values 1.8 µH and above.

The diagram above applies to values 1.0 µH and below.

DESCRIPTION

IHLP-4040DZ-11	2.0 µH	± 20 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

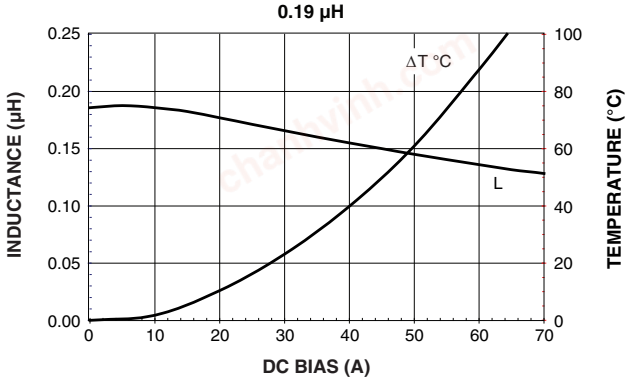
I H L P	4 0 4 0 D Z	E R	2 R 0	M	1 1
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		ER = tape and reel	**2R0** = 2.0 µH	**M** = ± 20 %	

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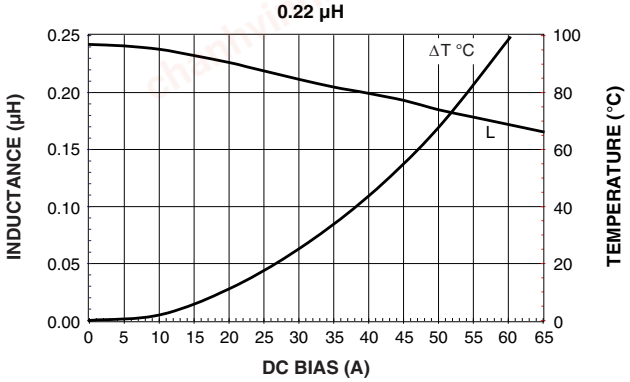
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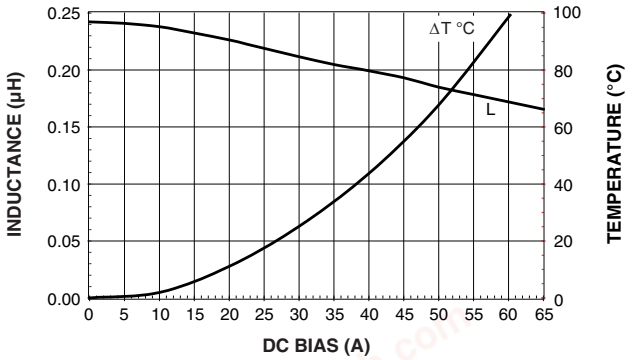
0.19 µH



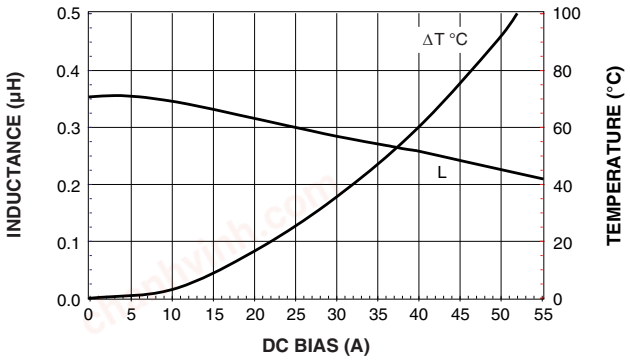
0.22 µH



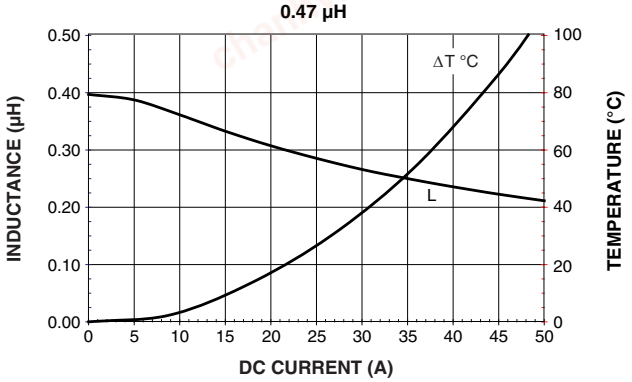
0.24 µH



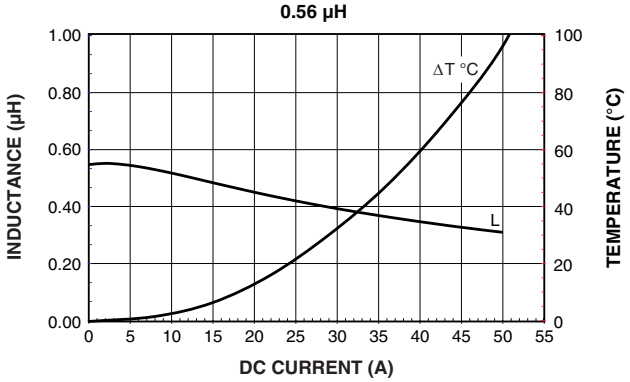
0.36 µH



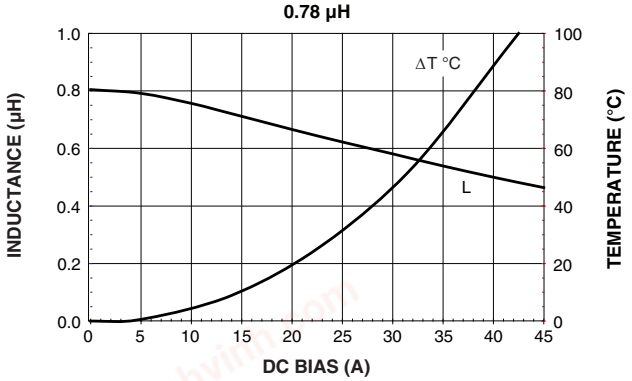
0.47 µH



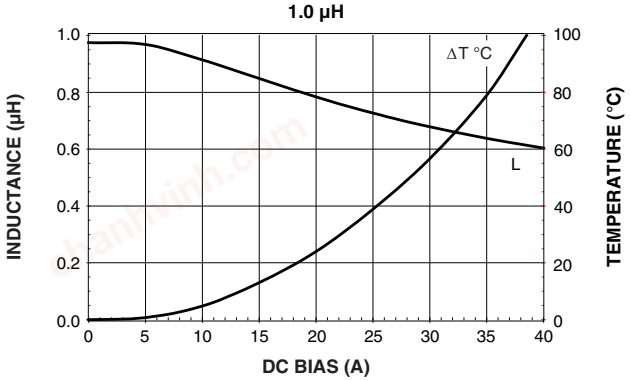
0.56 µH



0.78 µH



1.0 µH

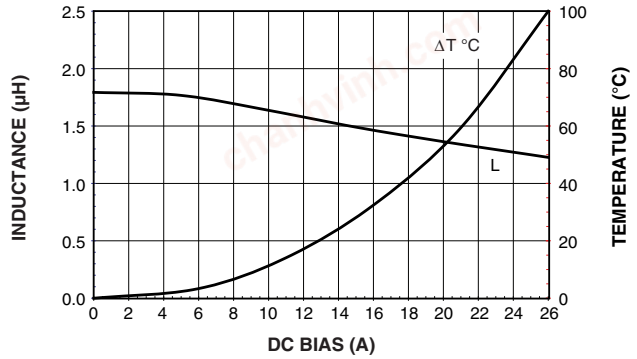


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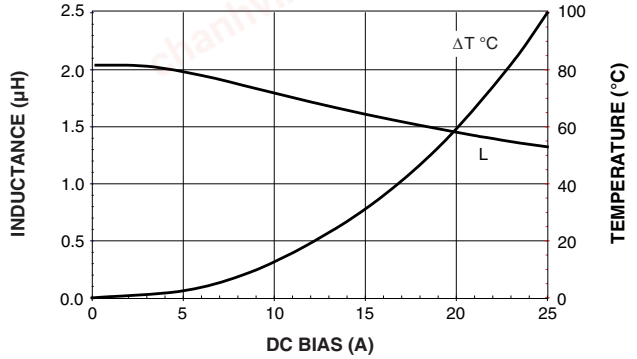
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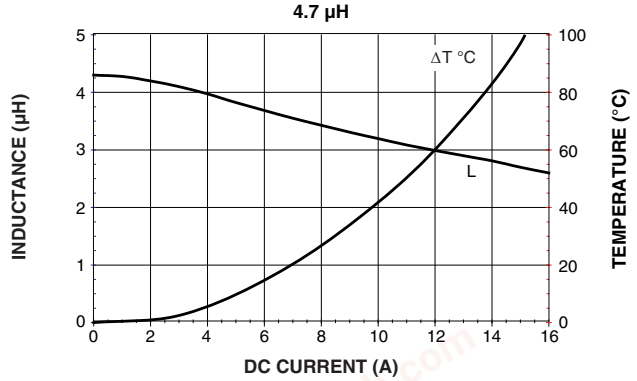
1.8 µH



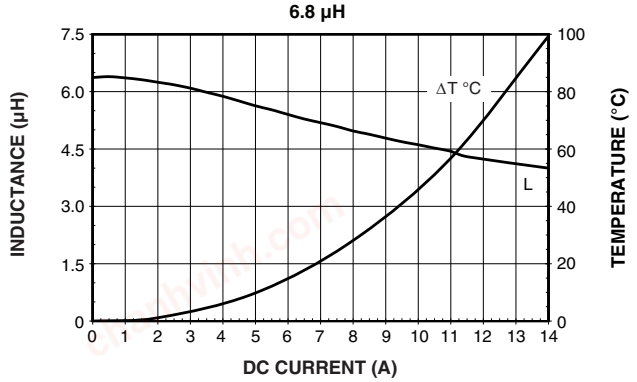
2.0 µH



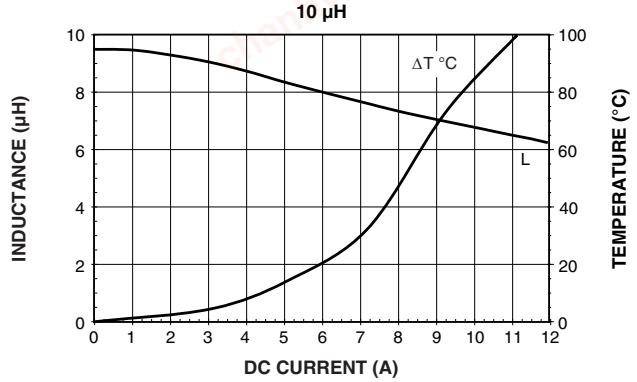
4.7 µH



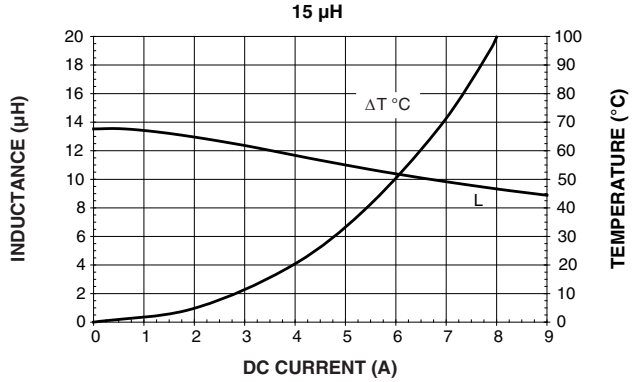
6.8 µH



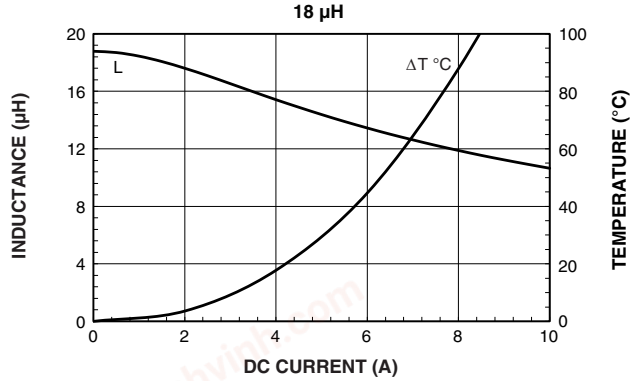
10 µH



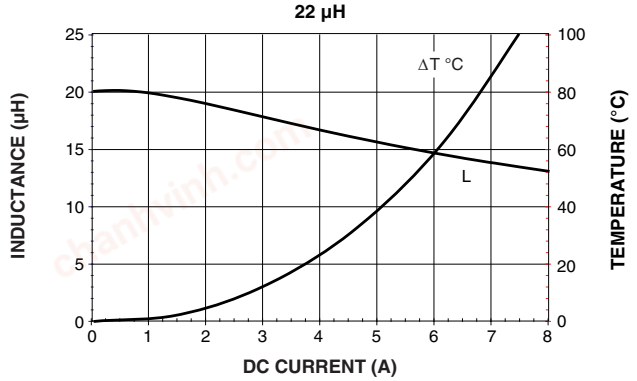
15 µH



18 µH



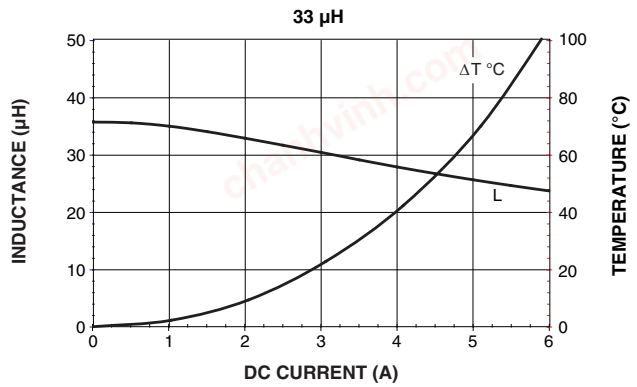
22 µH

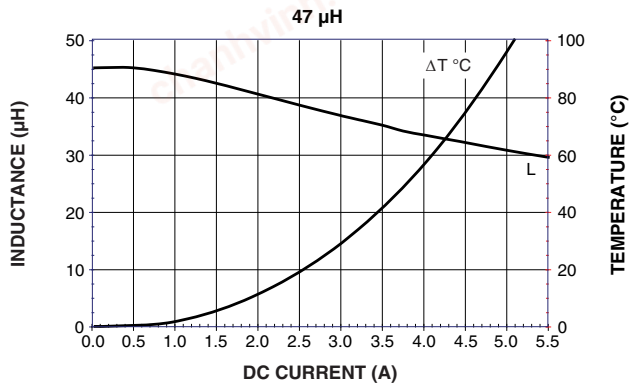


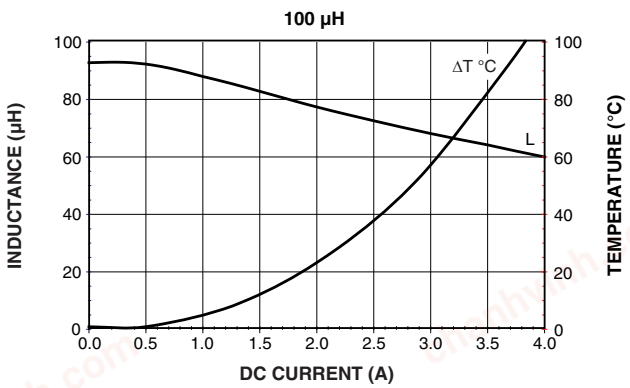
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