



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



RoHS COMPLIANT HALOGEN FREE

LINKS TO ADDITIONAL RESOURCES



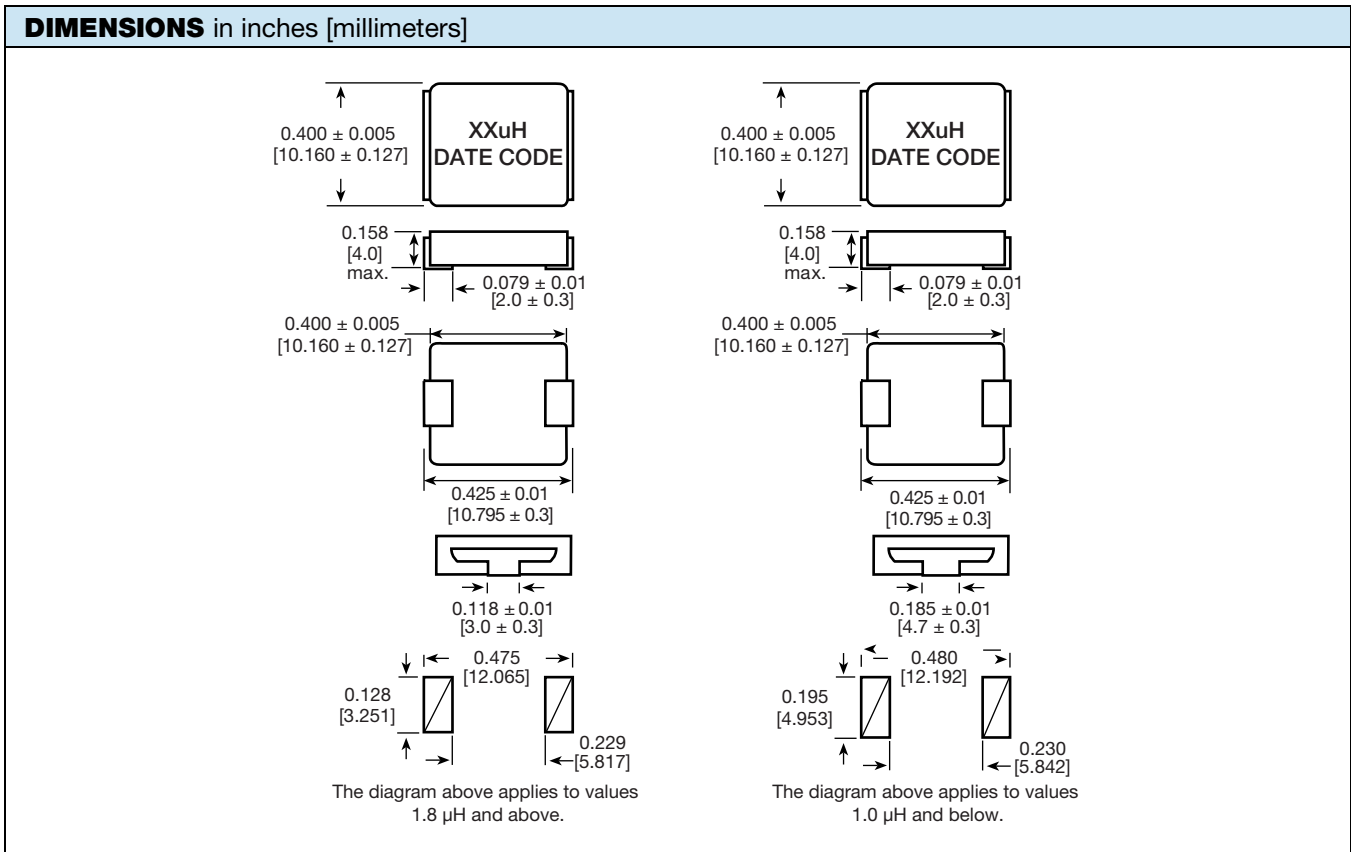
APPLICATIONS

- 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 L₀ to drop approximately 20 %

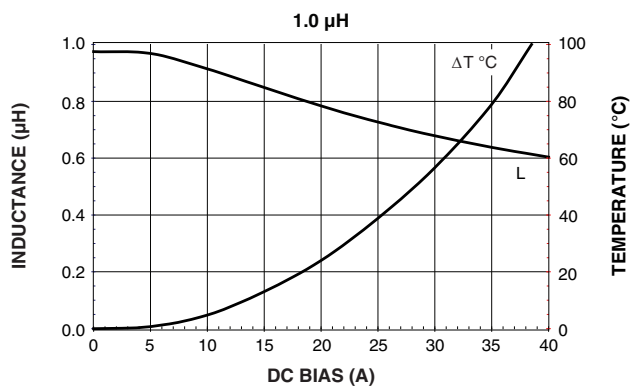
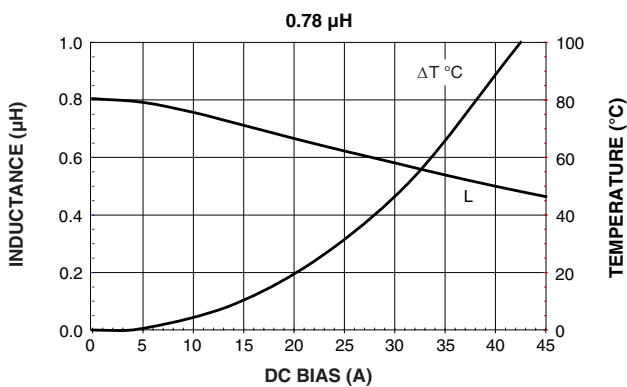
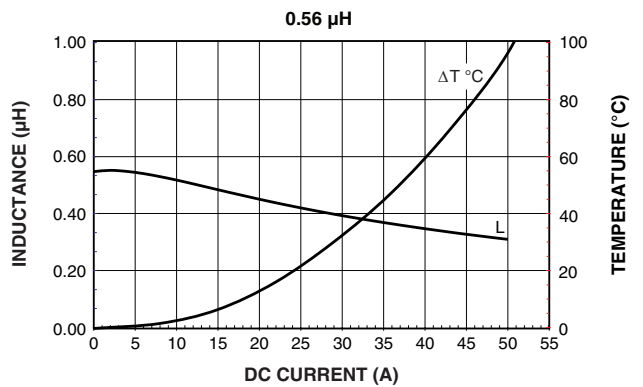
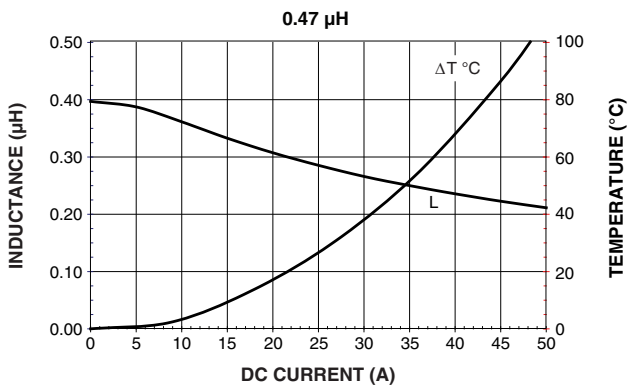
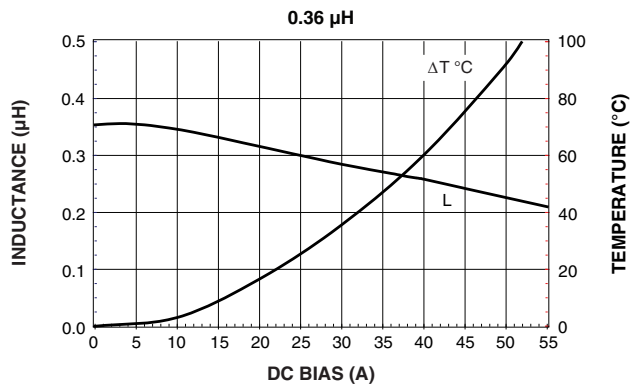
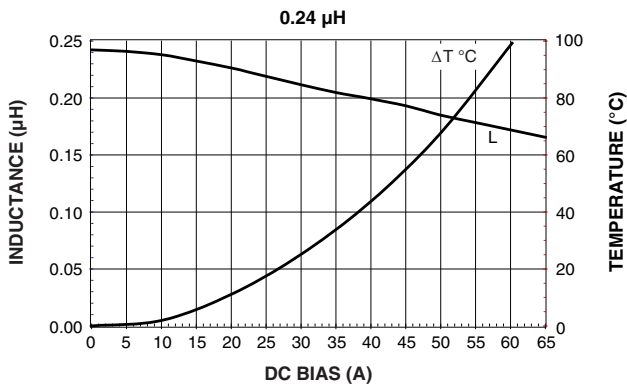
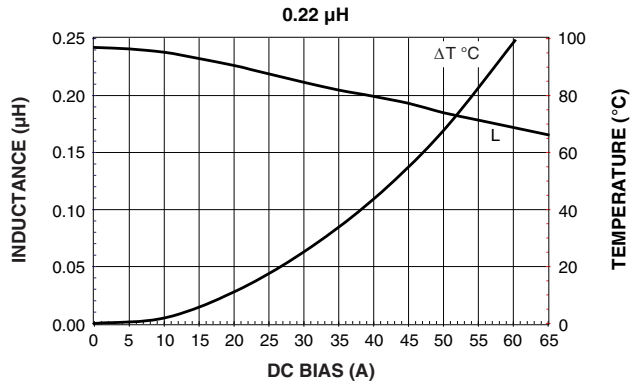
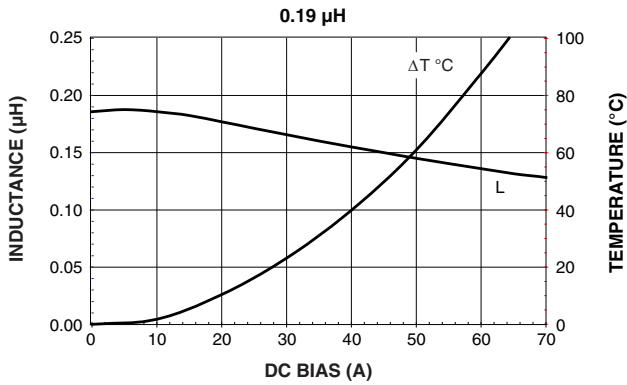


| DESCRIPTION | | | | | |
|----------------|------------------|----------------------|--------------|--------------------------------|--|
| IHLP-4040DZ-11 | 2.0 µH | ± 20 % | ER | e3 | |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD | |

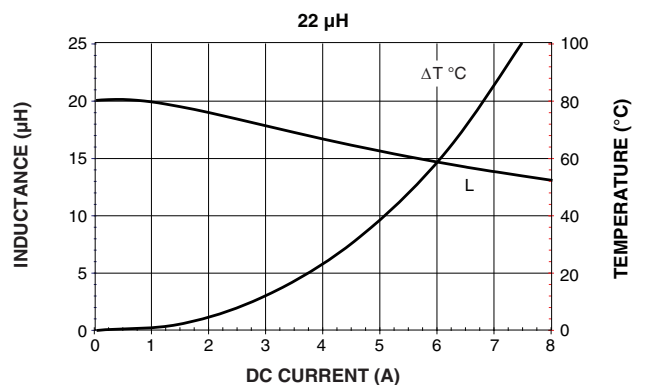
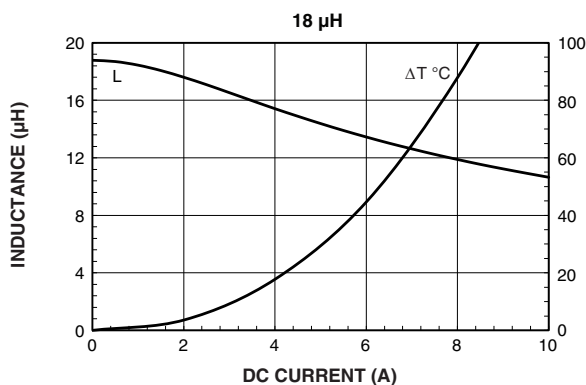
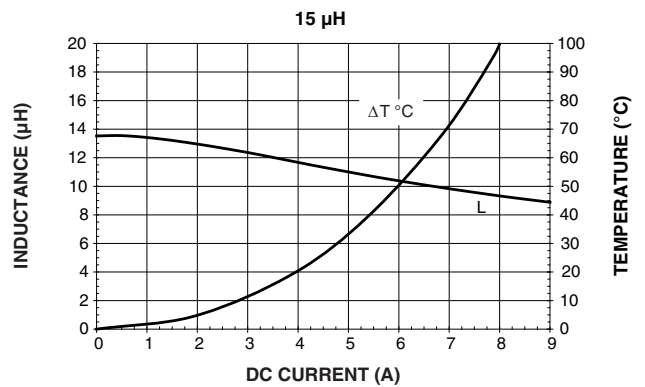
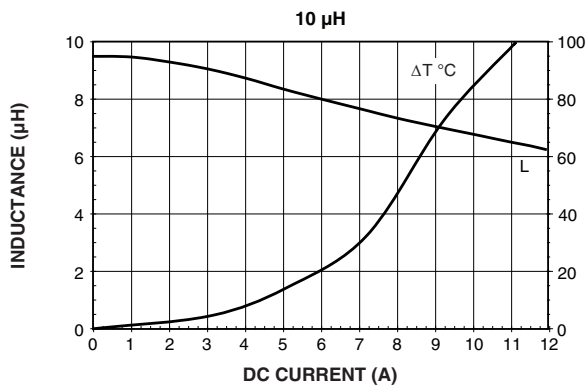
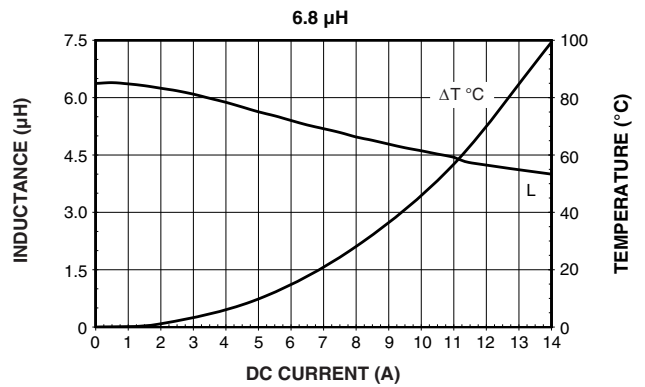
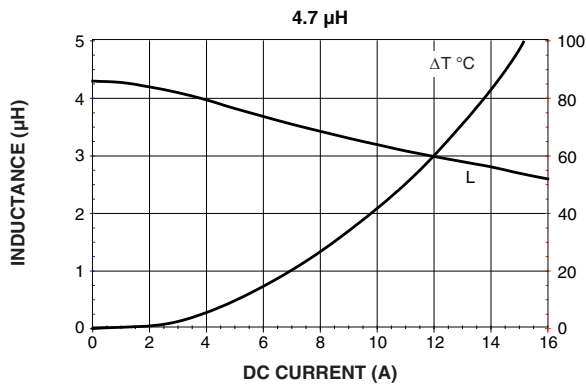
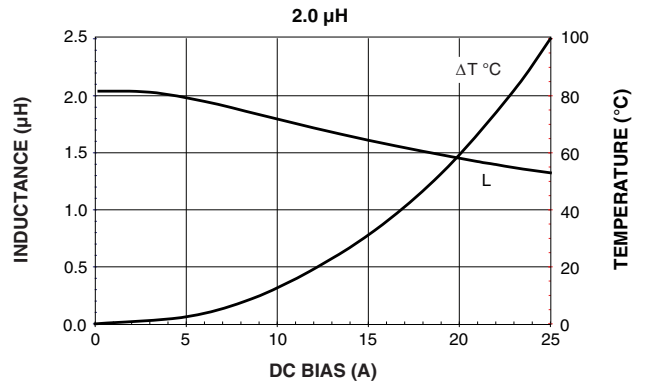
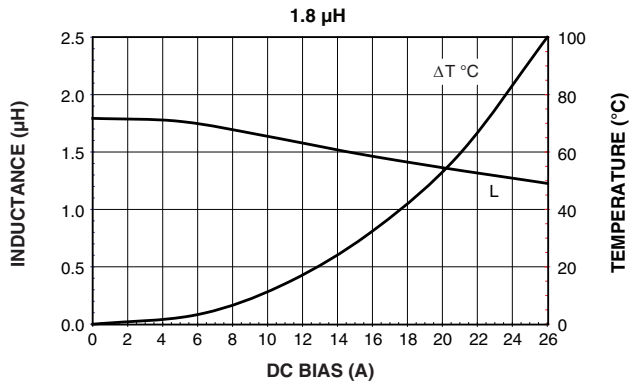
| GLOBAL PART NUMBER | | | | | |
|--------------------|-------------|--------------------|------------------|----------------------|--------|
| I H L P | 4 0 4 0 D Z | E R | 2 R 0 | M | 1 1 |
| PRODUCT FAMILY | SIZE | PACKAGE CODE | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | SERIES |
| | | ER = tape and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



PERFORMANCE GRAPHS

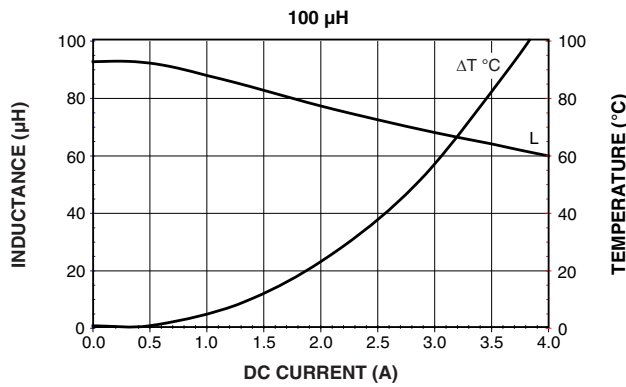
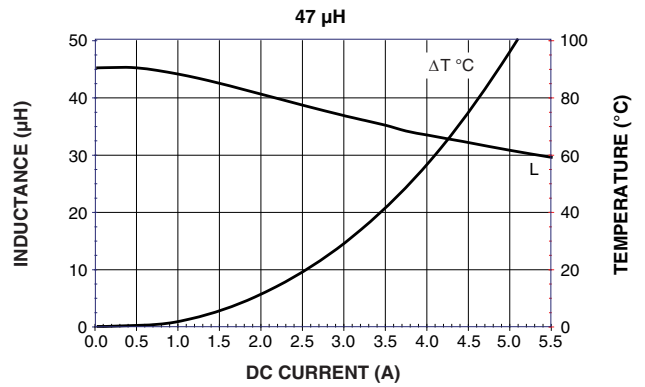
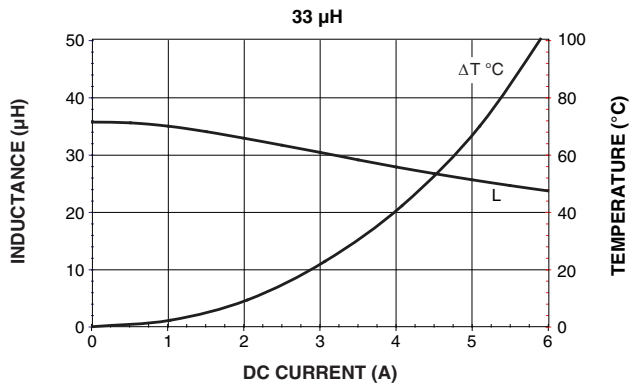


PERFORMANCE GRAPHS





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