



IHLP® High Temperature (165 °C), Automotive Power Inductors



FEATURES

- 2.0 mm x 1.6 mm x 1.2 mm SMD package
- Handles high transient current spikes without saturation
- Magnetically shielded construction
- AEC-Q200 qualified
- Side and bottom plated terminals for improved shock and vibration performance and solder inspection
- IHLP design;
PATENT(S): www.vishay.com/patents
- Packaging information: [SMD packaging](http://www.vishay.com/doc?99912)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

- Automotive point of load modules (ADAS)
- Battery powered devices
- Data networking and storage systems
- DDR5 SDRAM

STANDARD ELECTRICAL SPECIFICATIONS

| PART NUMBER | L ₀ INDUCTANCE ± 20 % AT 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⁾ | |
|--------------------|--|---------------------------|---------------------------|--|---|-----------|
| | | | | | 20 % DROP | 30 % DROP |
| IHLP0806ABEZR22M5A | 0.22 | 15.0 | 18.0 | 5.8 | 5.1 | 7.5 |
| IHLP0806ABEZR24M5A | 0.24 | 17.0 | 20.0 | 5.1 | 5.0 | 6.5 |
| IHLP0806ABEZR33M5A | 0.33 | 19.0 | 23.0 | 4.7 | 4.8 | 5.9 |
| IHLP0806ABEZR47M5A | 0.47 | 21.0 | 25.0 | 4.6 | 4.5 | 5.4 |

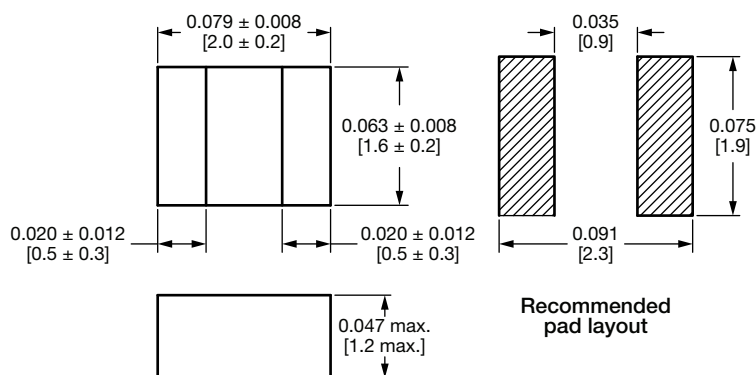
Notes

- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +165 °C
- Test condition: 1 MHz, 1 V
- The part temperature (ambient + temp. rise) should not exceed 155 °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

⁽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 % and 30 %

DIMENSIONS in inches [millimeters]



PATENT(S): www.vishay.com/patents

This Vishay product is protected by one or more United States and international patents.



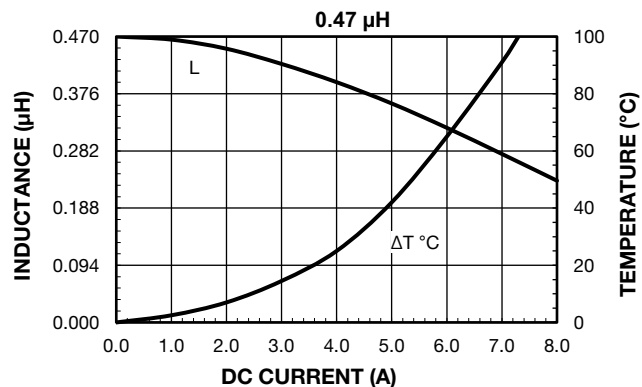
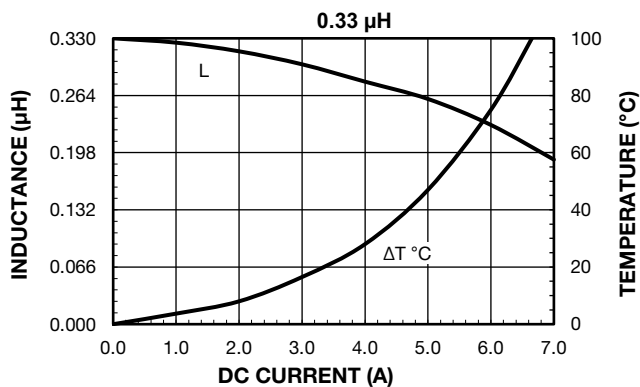
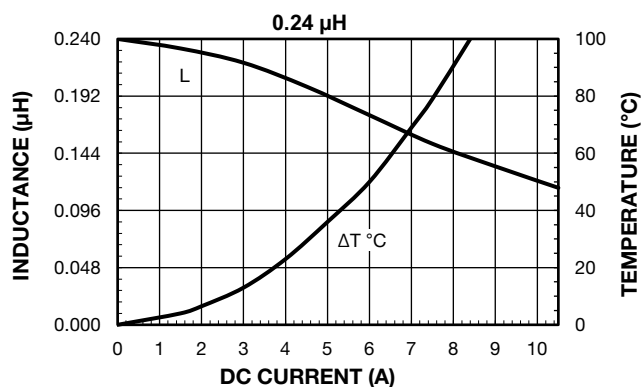
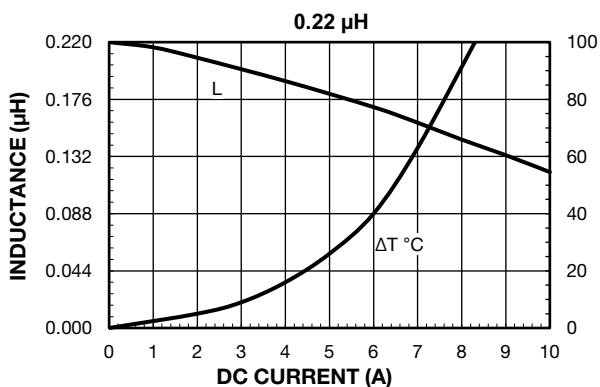
DESCRIPTION

| | | | | |
|-----------------------|-------------------------------|------------------------------|--------------|--------------------------------|
| IHLP-0806AB-5A | 0.24 μH | ± 20 % | EZ | e3 |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC® LEAD (Pb)-FREE STANDARD |

GLOBAL PART NUMBER

| | | | | | |
|--|--------------------|--------------|------------------|----------------------|------------|
| I H L P | 0 8 0 6 A B | E Z | R 2 4 | M | 5 A |
| PRODUCT FAMILY | SIZE | PACKAGE CODE | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | SERIES |
| EZ = tape and reel 3000 pcs/reel R24 = 0.24 μ H M = ± 20 % | | | | | |

PERFORMANCE GRAPHS





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