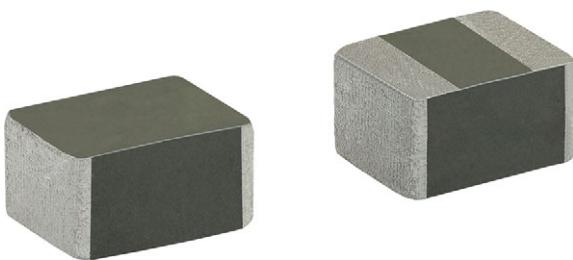


IHLP® Automotive Inductors, High Temperature (165 °C) Series



FEATURES

- 3.2 mm x 2.5 mm x 2.0 mm SMD package
- Handles high transient current spikes without saturation
- Magnetically shielded composite construction
- AEC-Q200 qualified
- Side and bottom plated terminals for improved shock and vibration performance and solder inspection
- Excellent stability of inductance versus temperature up to 165 °C
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT

HALOGEN
FREE
GREEN
(5-2008)

LINKS TO ADDITIONAL RESOURCES



Product Page

APPLICATIONS

- Energy storage for DC/DC converters in infotainment, navigation, and braking systems
- ADAS, LiDAR, sensors, and engine control
- Power line noise suppression and filtering

STANDARD ELECTRICAL SPECIFICATIONS						
PART NUMBER	L ₀ INDUCTANCE ± 20 % AT 0 A (μ H)	DCR TYP. 25 °C (m Ω)	DCR MAX. 25 °C (m Ω)	HEAT RATING CURRENT DC TYP. (A) ⁽¹⁾	SATURATION CURRENT DC TYP. (A)	
					20 % DROP ⁽²⁾	30 % DROP ⁽³⁾
IHLP1210BZEZR47M5A	0.47	9.2	11	12	8.2	10.2
IHLP1210BZEZ1R0M5A	1.0	19	23	7.2	7.0	8.4
IHLP1210BZEZ2R2M5A	2.2	35	46	5.4	5.0	6.2
IHLP1210BZEZ3R3M5A	3.3	63	70	4.2	4.0	5.2
IHLP1210BZEZ4R7M5A	4.7	98	108	3.0	3.5	4.3

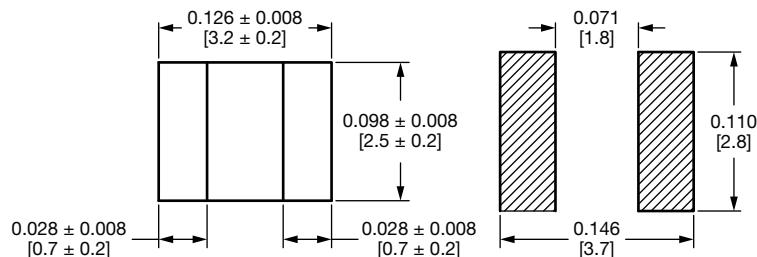
Notes

- All test data is referenced to 25 °C ambient
- Test condition: 1 MHz, 1 V
- Operating temperature range -55 °C to +165 °C
- Rated operating voltage (across inductor) = 30 V
- The part temperature (ambient + temp. rise) should not exceed the maximum rating 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 %

⁽³⁾ DC current (A) that will cause L₀ to drop approximately 30 %

DIMENSIONS in inches [millimeters]


Typical pad layout



No part marking

DESCRIPTION
IHLP1210BZEZ-5A
0.47 µH
± 20 %
ER
e3
MODEL
INDUCTANCE VALUE
INDUCTANCE TOLERANCE
PACKAGE CODE
JEDEC® LEAD (Pb)-FREE STANDARD
GLOBAL PART NUMBER

I H L P

1 2 1 0 B Z

E Z

R 4 7

M

5 A

PRODUCT FAMILY

SIZE

PACKAGE
CODE

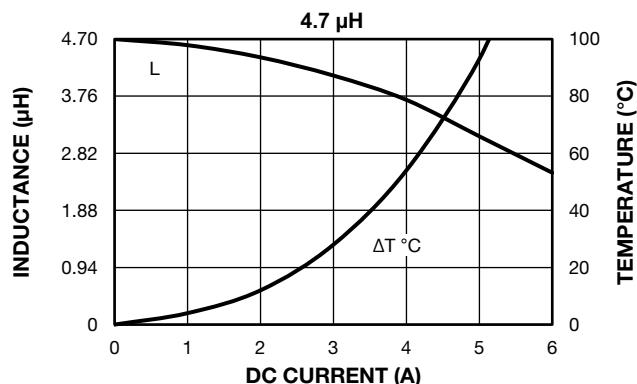
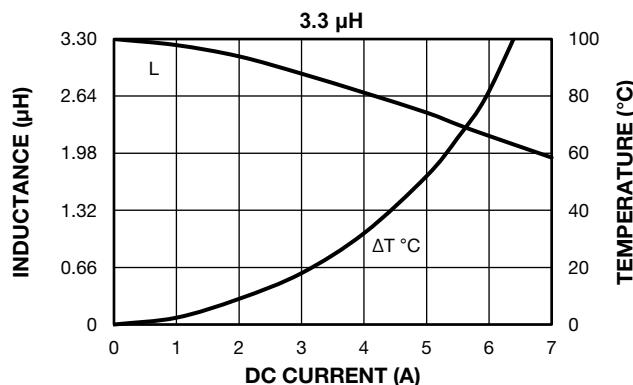
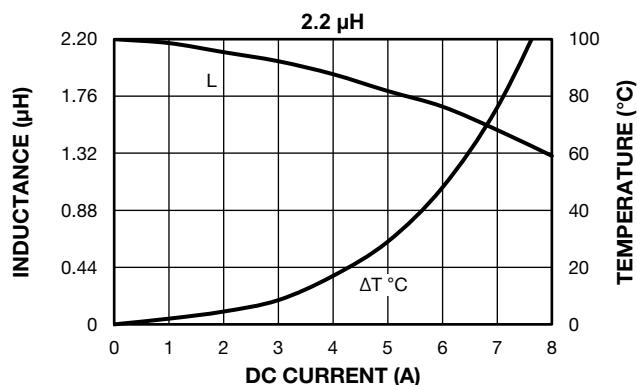
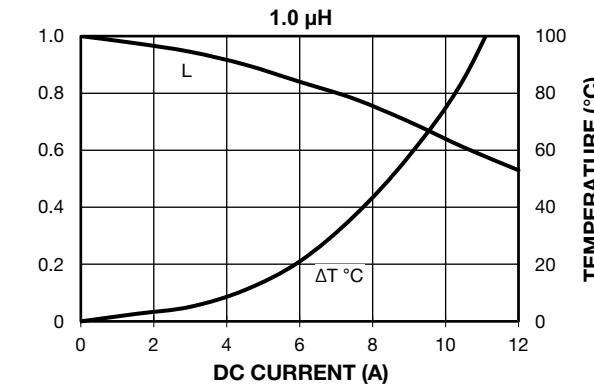
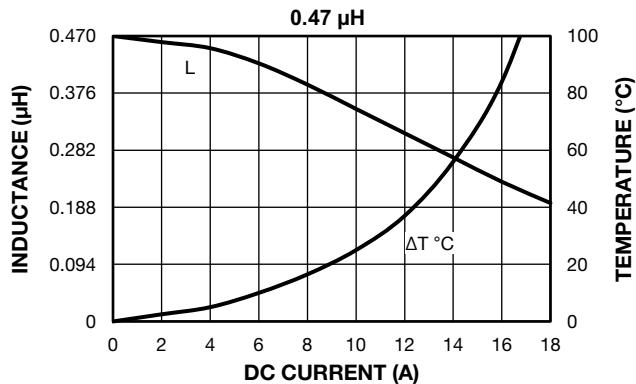
INDUCTANCE
VALUE

INDUCTANCE
TOLERANCE

SERIES

EZ = tape and reel **R47** = 0.47 µH

M = ± 20 %

PERFORMANCE GRAPHS


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