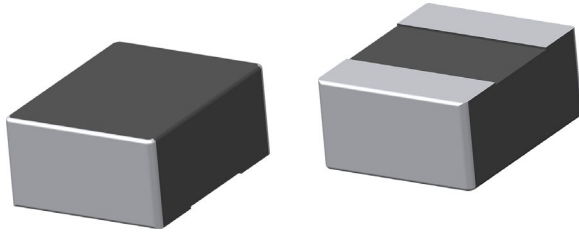




# IHLP® Automotive Inductors, High Temperature (165 °C) Series



## FEATURES

- 2.5 mm x 2.0 mm x 1.2 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
- Packaging information: [SMD packaging](#)
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

AUTOMOTIVE GRADE



RoHS COMPLIANT

HALOGEN FREE

GREEN (5-2008)

## LINKS TO ADDITIONAL RESOURCES



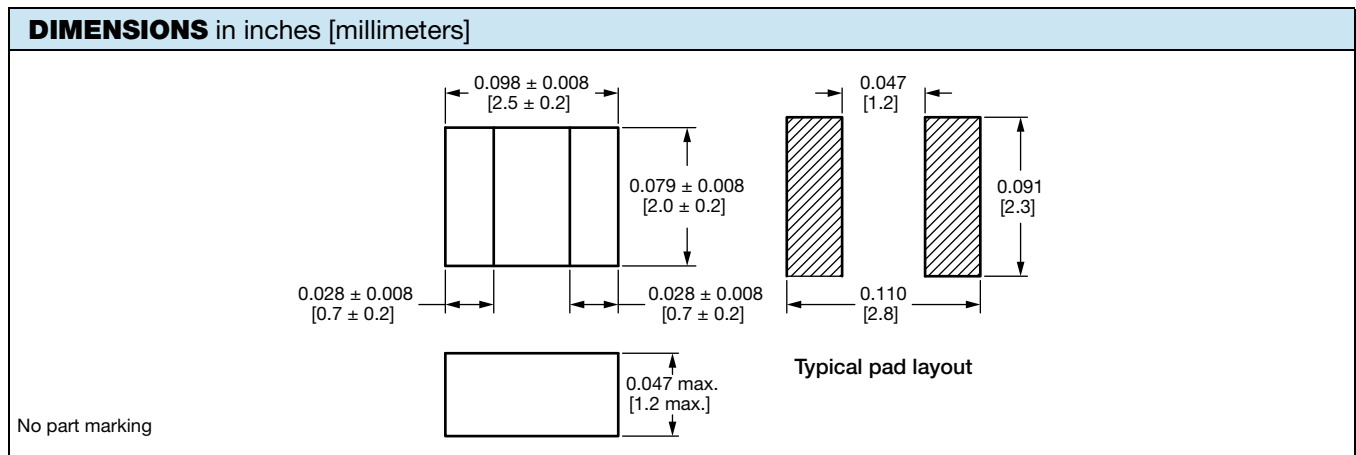
## APPLICATIONS

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

PART NUMBER	L <sub>0</sub> INDUCTANCE ± 20 % AT 0 A (µH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) <sup>(1)</sup>	SATURATION CURRENT DC TYP. (A)	
					20 % DROP <sup>(2)</sup>	30 % DROP <sup>(3)</sup>
IHLP1008ABEZR15M5A	0.15	12.0	15.0	6.5	8.5	10.2
IHLP1008ABEZR47M5A	0.47	21.0	26.0	4.7	5.3	6.5
IHLP1008ABEZ1R0M5A	1.0	35.0	42.0	3.8	3.9	4.8
IHLP1008ABEZ2R2M5A	2.2	70.0	84.0	2.6	2.8	3.5
IHLP1008ABEZ3R3M5A	3.3	115.0	140.0	2.0	2.2	2.7
IHLP1008ABEZ4R7M5A	4.7	165.0	200.0	1.7	1.9	2.2

## Notes

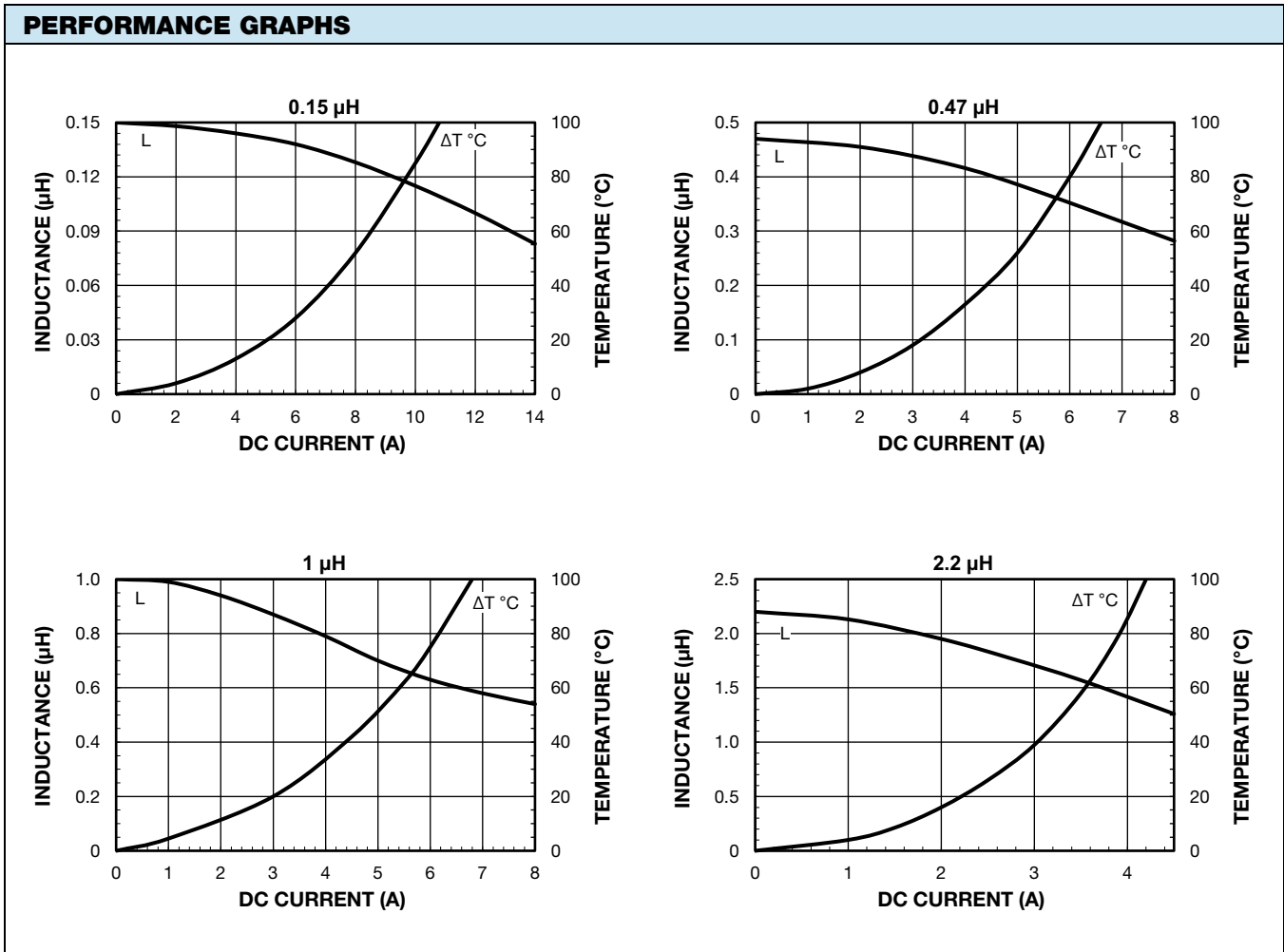
- All test data is referenced to 25 °C ambient
  - Operating temperature range -55 °C to +165 °C
  - Rated operating voltage (across inductor) = 30 V
  - Test condition: 1 MHz, 1 V
  - The part temperature (ambient + temp. rise) should not exceed the maximum rating under worst case operating conditions. 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 L<sub>0</sub> to drop approximately 20 %  
(3) DC current (A) that will cause L<sub>0</sub> to drop approximately 30 %





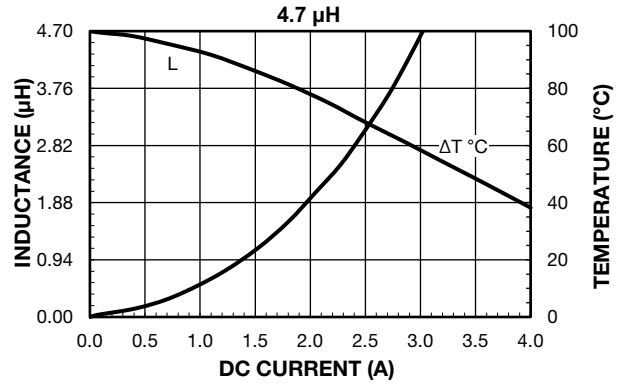
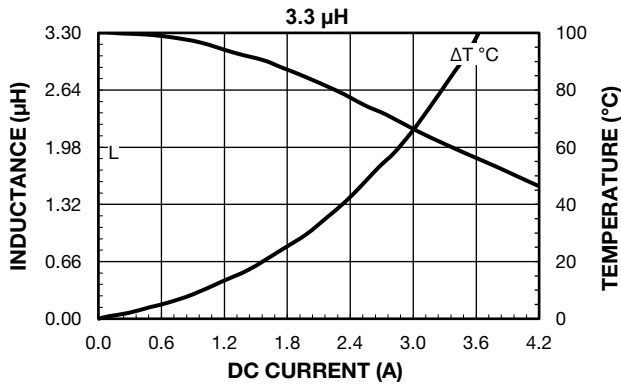
DESCRIPTION					
IHLP-1008ABEZ-5A	2.2 $\mu$ H	$\pm 20\%$	EZ	e3	
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD	

GLOBAL PART NUMBER					
I H L P	1 0 0 8 A B	E Z	2 R 2	M	5 A
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		EZ = tape and reel	2R2 = 2.2 $\mu$ H	M = $\pm 20\%$	





PERFORMANCE GRAPHS





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