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
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

AUTOMOTIVE GRADE

Pb-free

RoHS COMPLIANT

HALOGEN FREE GREEN (5-2008)

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

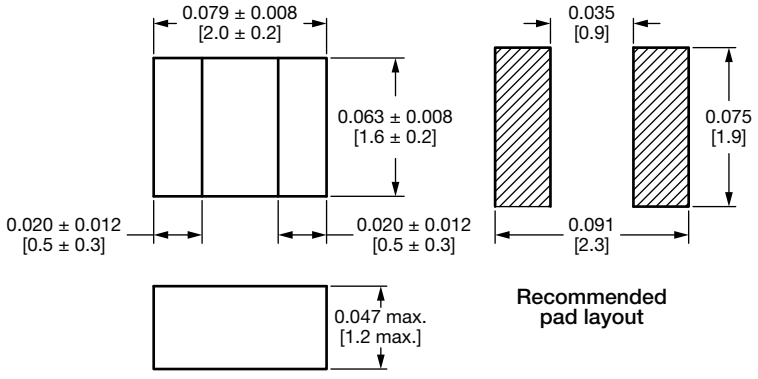
Notes

- 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 L_0 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

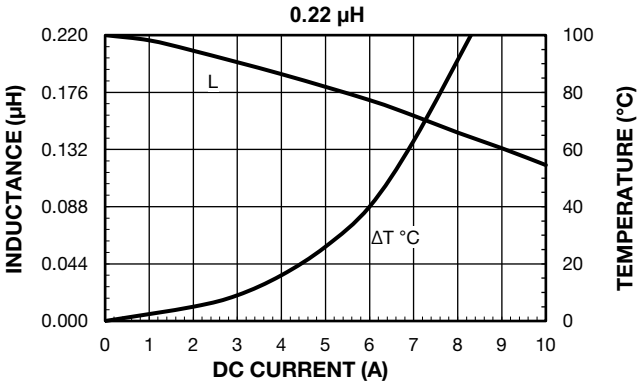
I	H	L	P	0	8	0	6	A	B	E	Z	R	2	4	M	5	A
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE	SERIES	

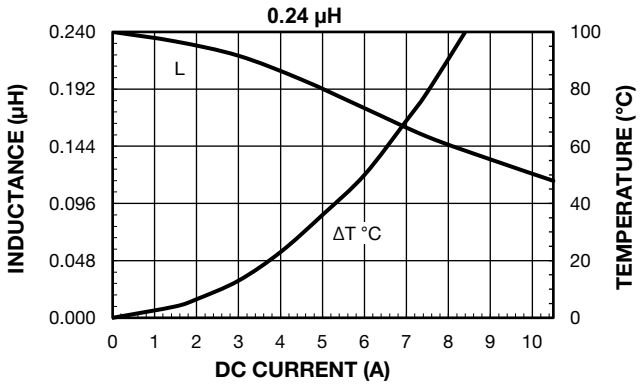
EZ = tape and reel 3000 pcs/reel

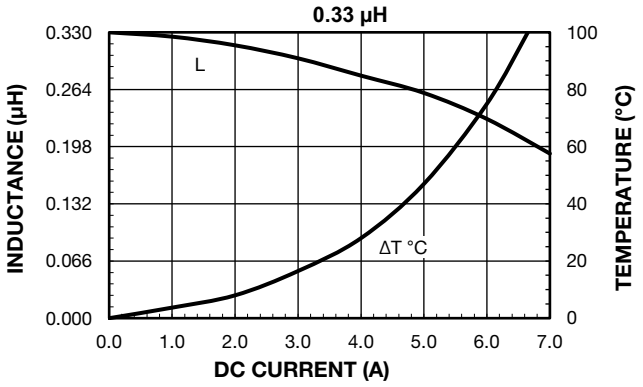
R24 = 0.24 µH

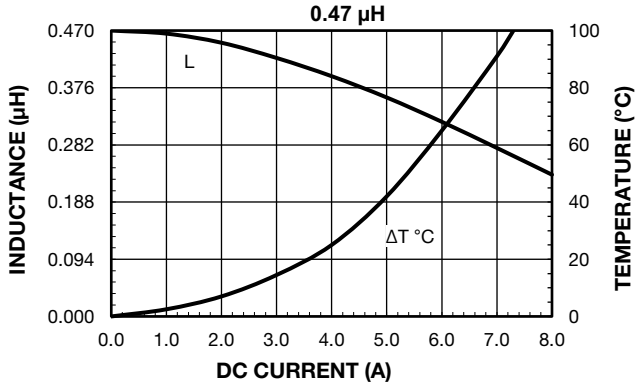
M = ± 20 %

PERFORMANCE GRAPHS









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