IHLL Power Inductor, Low DCR

FEATURES

- 3.2 mm x 2.5 mm x 1.2 mm SMD package
- Handles high transient current spikes without saturation
- Magnetically shielded composite construction
- Bottom plated terminals
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

HALOGEN FREE GREEN (5-2008)

APPLICATIONS

- SSD modules
- DC/DC converter for CPU
- Noise suppression and filtering
- Data networking and storage systems

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)		SRF TYP. (MHz)
					20 % DROP (2)	30 % DROP (3)	
IHLL1210ABEZR22M1Z	0.22	6.6	10.0	9.2	TBD	11.5	TBD
IHLL1210ABEZR47M1Z	0.47	14.0	19.0	7.5	TBD	8.6	TBD
IHLL1210ABEZ1R0M1Z	1	26.0	30.0	5.3	TBD	6.6	TBD
IHLL1210ABEZ2R2M1Z	2.2	42.0	50.0	3.8	TBD	5.0	TBD
IHLL1210ABEZ3R3M1Z	3.3	75.0	95.0	2.9	TBD	3.7	TBD
IHLL1210ABEZ4R7M1Z	4.7	115.0	135.0	2.3	TBD	2.9	TBD

Notes

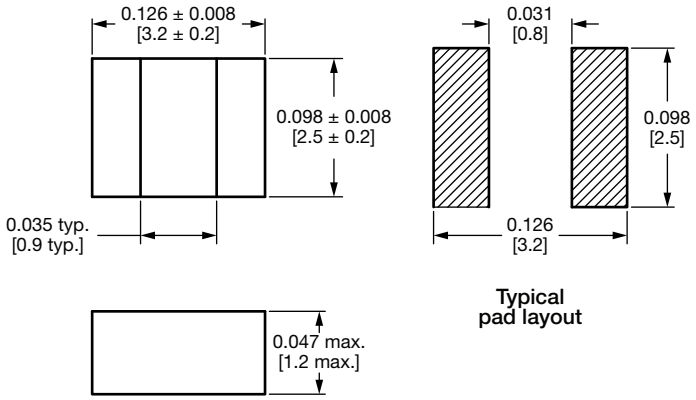
- All test data is referenced to 25 °C ambient
- Test condition: 1 MHz, 1 V
- Operating temperature range -55 °C to +125 °C
- The part temperature (ambient + temp. rise) should not exceed 155 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, 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 %

(3) DC current (A) that will cause L_0 to drop approximately 30 %

DIMENSIONS in inches [millimeters]



DESCRIPTION

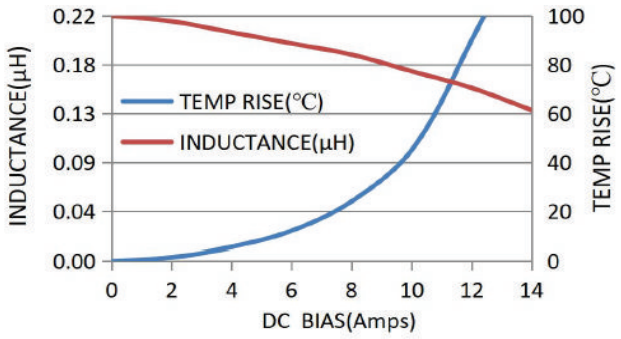
IHLL-1210AB-1Z	**0.47 µH**	**± 20 %**	**ER**	**e3**
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

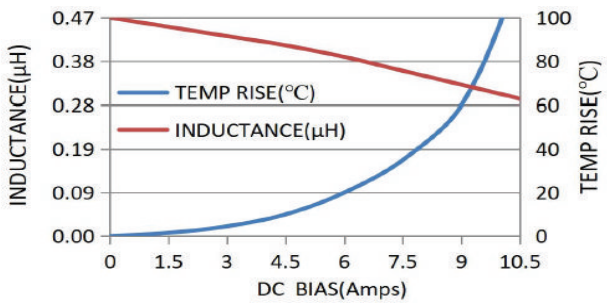
I H L L	**1 2 1 0 A B**	**E Z**	**3 R 3**	**M**	**1 Z**
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	SERIES
		EZ = tape and reel	**3R3** = 3.3 µH	**M** = ± 20 %	

PERFORMANCE GRAPHS

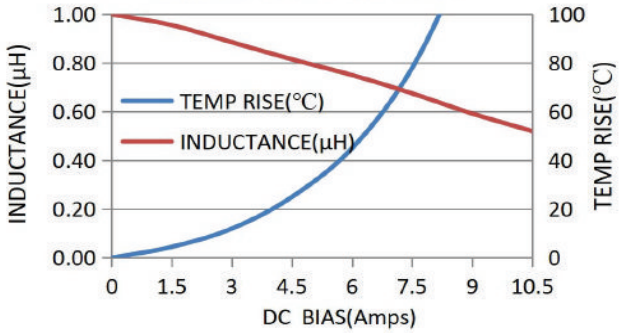
0.22 µH



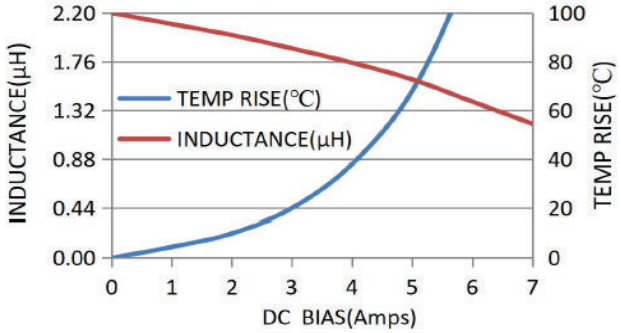
0.47 µH



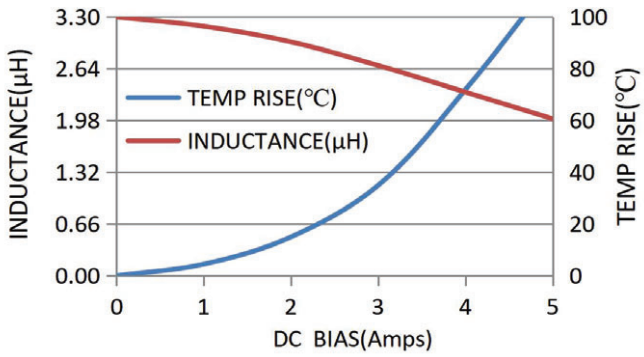
1 µH



2.2 µH



3.3 µH



4.7 µH