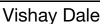
# IHLP-2525AH-01



RoHS

COMPLIANT

<u>GREEN</u> (5-2008)\*\*

# Low Profile, High Current IHLP<sup>®</sup> Inductors



Manufactured under one or more of the following: US Patents; 6,198,375/6,204,744/6,449,829/6,460,244. Several foreign patents, and other patents pending.

STANDARD ELECTRICAL SPECIFICATIONS						
L <sub>0</sub> INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A (μH)	DCR TYP. 25 °C (mΩ)	DCR MAX. 25 °C (mΩ)	HEAT RATING CURRENT DC TYP. (A) <sup>(3)</sup>	SATURATION CURRENT DC TYP. (A) <sup>(4)</sup>		
0.1	3.0	3.5	18	40		
0.15	4.7	5.2	15	38		
0.22	5.3	5.7	14	26		
0.33	6.6	7.0	12	18		
0.47	8.4	9.3	11	18		
0.68	12.7	13.9	9	17		
0.82	13.8	15.9	8	17		
1.0	17.5	18.3	7	14		
1.5	32.6	34.0	4	11.5		
2.2	40.3	46.0	3.75	13		
2.5	49.9	52.4	3.5	10.4		
3.3	56.2	60.1	3.25	10		
4.7	76.6	78.0	3	8		

### Notes

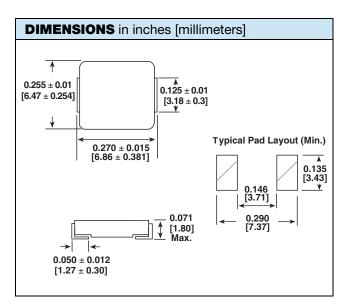
- <sup>(1)</sup> All test data is referenced to 25 °C ambient
- <sup>(2)</sup> Operating temperature range 55 °C to + 125 °C
- $^{(3)}\,$  DC current (A) that will cause an approximate  $\Delta T$  of 40  $^{\circ}C$
- $^{(4)}\,$  DC current (A) that will cause  $L_0$  to drop approximately 20 %
- <sup>(5)</sup> The part temperature (ambient + temp. rise) should not exceed 125 °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.

### FEATURES

- · Lowest height (1.8 mm) in this package footprint
- Shielded construction
- Frequency range up to 5.0 MHz
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Compliant to RoHS Directive 2002/95/EC

#### **APPLICATIONS**

- PDA/notebook/desktop/server applications
- High current POL converters
- · Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array (FPGA)



DESCRIPTION	_			
IHLP-2525AH-01	1.0 µH	.0 μH ± 20 %		e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD
GLOBAL PAR	T NUMBER			
I H L	P 2 5	2 5 A H	E R 1	R 0 M 0 1
PRODUCT FAN	nily	SIZE	PACKAGE IN CODE	IDUCTANCE TOL. SERIES

\*\* Please see document "Vishay Material Category Policy": <u>www.vishay.com/doc?99902</u>

Document Number: 34125 Revision: 25-Feb-11

DESCRIPTION

For technical questions, contact: magnetics@vishay.com

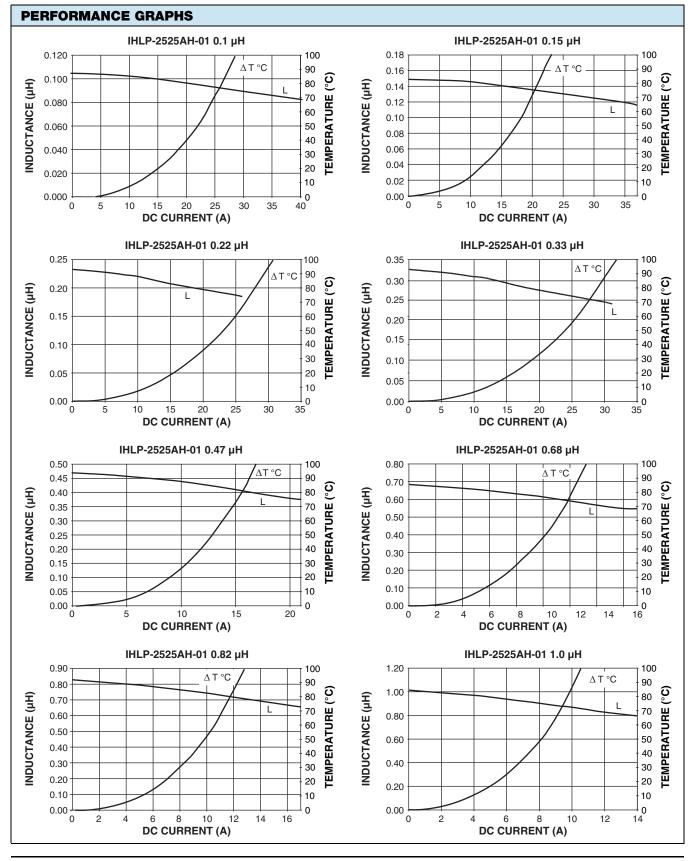
www.vishay.com



### Vishay Dale

Low Profile, High Current IHLP® Inductors



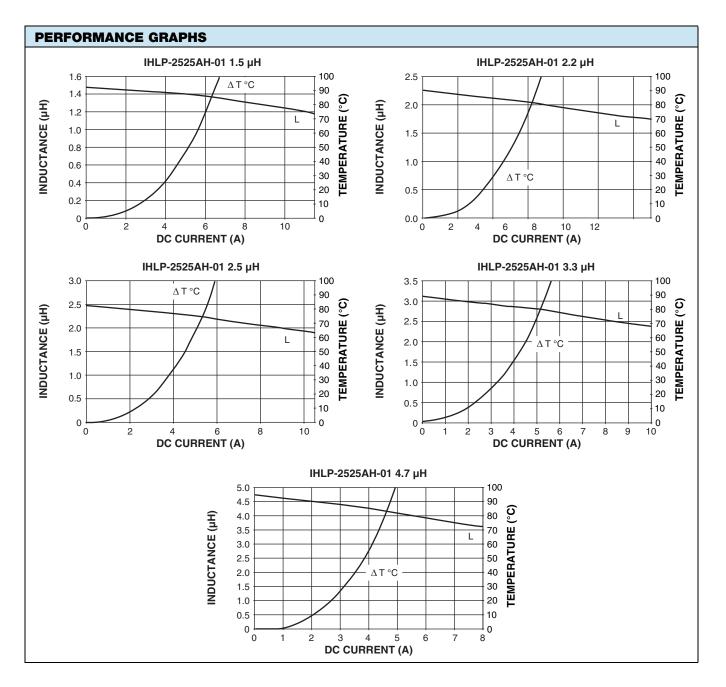


www.vishay.com 2 For technical questions, contact: magnetics@vishay.com

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