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Vishay Dale

IHLP[®] Commercial Inductors, High Saturation Series



DESIGN SUPPORT TOOLS click logo to get started

3D	**		
Models	Design Tools		
Available	Available		

STANDARD ELECTRICAL SPECIFICATIONS					
L ₀ 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) ⁽¹⁾	SATURATION CURRENT DC TYP. (A) ⁽²⁾	
0.1	1.5	1.7	30	50	
0.22	2.9	3.2	21	34	
0.33	3.7	4.1	18	22	
0.47	6.0	6.5	13.5	21	
0.68	8.7	9.4	11	18	
0.82	10.6	11.8	10	17	
1.0	13.1	14.2	9.0	16	
1.5	18.5	21.2	7.5	15	
2.2	28.0	34.0	6.5	14	
3.3	36.5	51.6	5.0	13	
4.7	45.2	63.0	4.5	10	
6.8	72.5	95.0	3.5	9	
8.2	84.2	106	3.0	8	
10	115.6	129	2.5	7	

Notes

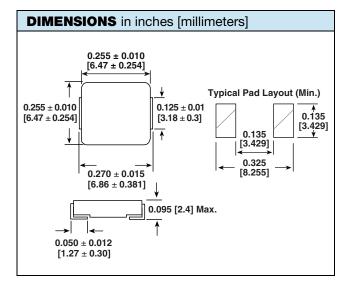
- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +125 °C
- The part temperature (ambient + temp. rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Rated operating voltage (across inductor) = 75 V
- ⁽¹⁾ DC current (A) that will cause an approximate ΔT of 40 °C
- DC current (A) that will cause L₀ to drop approximately 20 % (2)

FEATURES

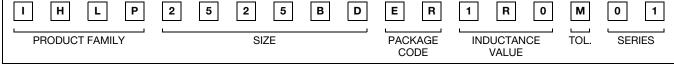
- · Lowest height (2.4 mm) in this package footprint
- Shielded construction
- Frequency range up to 5.0 MHz
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without saturation
- GREEN Ultra low buzz noise, due to composite (5-2008) construction
- IHLP design. PATENT(S): <u>www.vishay.com/patents</u>
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

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 1.0 µH IHLP-2525BD-01 ± 20 % ER e3 PACKAGE CODE JEDEC® LEAD (Pb)-FREE STANDARD MODEL INDUCTANCE VALUE INDUCTANCE TOLERANCE **GLOBAL PART NUMBER**



PATENT(S): www.vishay.com/patents

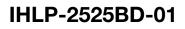
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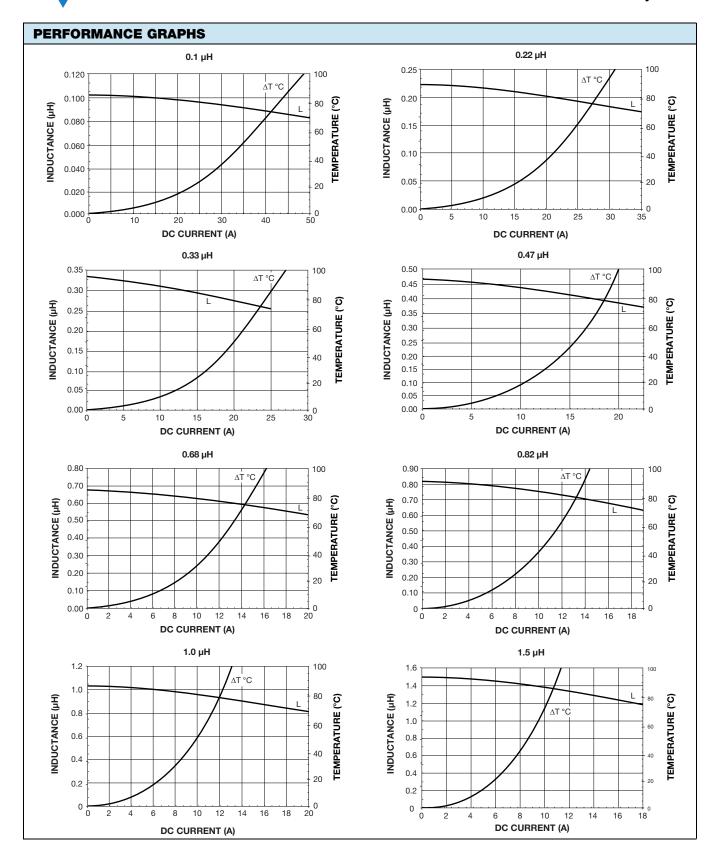
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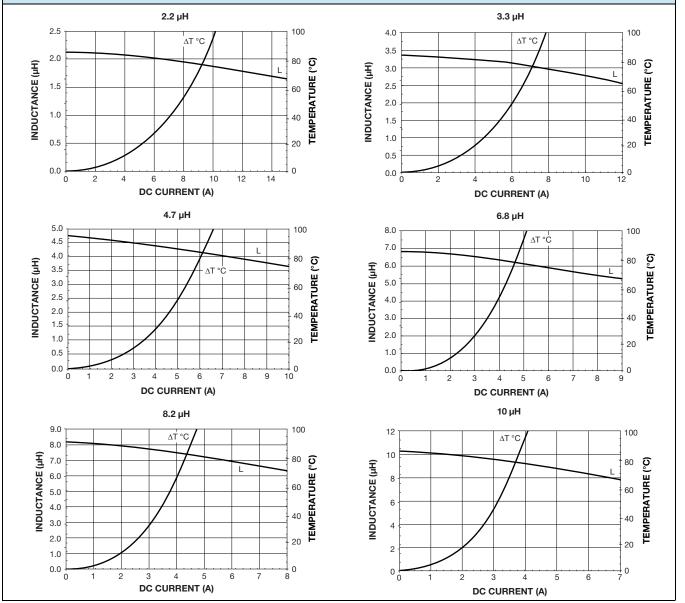
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IHLP-2525BD-01

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PERFORMANCE GRAPHS



3

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