

Vishay Dale

# IHLP® Commercial Inductors, High Temperature (155 °C) Series



**DESIGN SUPPORT TOOLS** click logo to get started

3D	
Models	
Available	

Design Tools Available

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>(1)</sup>	SATURATION CURRENT DC TYP. (A) <sup>(2)</sup>	SRF TYP. (MHz)			
0.33	3.25	3.48	22.0	16.0	112			
0.47	3.87	4.14	20.0	14.0	82.4			
0.68	5.38	5.76	16.5	17.0	56.1			
0.82	6.75	7.22	13.8	16.8	68.6			
1.0	7.90	8.45	12.0	13.0	53.2			
1.5	12.3	13.2	10.6	11.6	45.9			
2.2	17.10	18.30	8.1	10.8	31.2			
3.3	26.50	28.40	6.8	8.3	28.6			
4.7	35.90	38.40	5.6	5.6	25.5			
5.6	42.60	45.60	5.3	4.8	22.8			
6.8	53.80	57.60	4.4	4.4	19.6			
10	71.90	76.90	4.0	2.9	14.0			
15	118.0	127.0	2.9	2.8	10.4			
22	163.0	174.0	2.8	2.2	8.3			

#### Notes

- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +155 °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
- Rated operating voltage (across inductor) = 75 V
- (1) DC current (A) that will cause an approximate  $\Delta T$  of 40 °C
- <sup>(2)</sup> DC current (A) that will cause  $L_0$  to drop approximately 20 %

### **FEATURES**

- High temperature, up to 155 °C
- Shielded construction
- Excellent DC/DC energy storage up to 1 MHz to 2 MHz. Filter inductor applications up the SRF COMPLIANT (see Standard Electrical Specifications table).
- RoHS

HALOGEN FREE

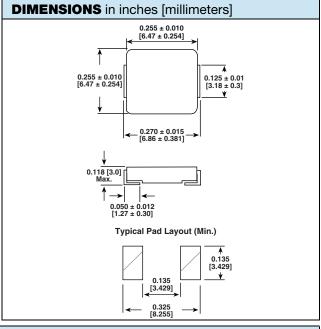
GREEN

(5-2008)

- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite 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	l						
IHLP-2525CZ-51	22 µH	± 20 %	ER	e3			
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANC	E PACKAGE CODE	JEDEC <sup>®</sup> LEAD (Pb)-FREE STANDARD			
GLOBAL PART NUMBER							
I H L	P 2 5	2 5 C Z	E R 2	2 0 N	1 5 1		
MODEL		SIZE	PACKAGE I CODE	NDUCTANCE TO VALUE	DL. SERIES		

### PATENT(S): www.vishay.com/patents This Vishay product is protected by one or more United States and international patents.

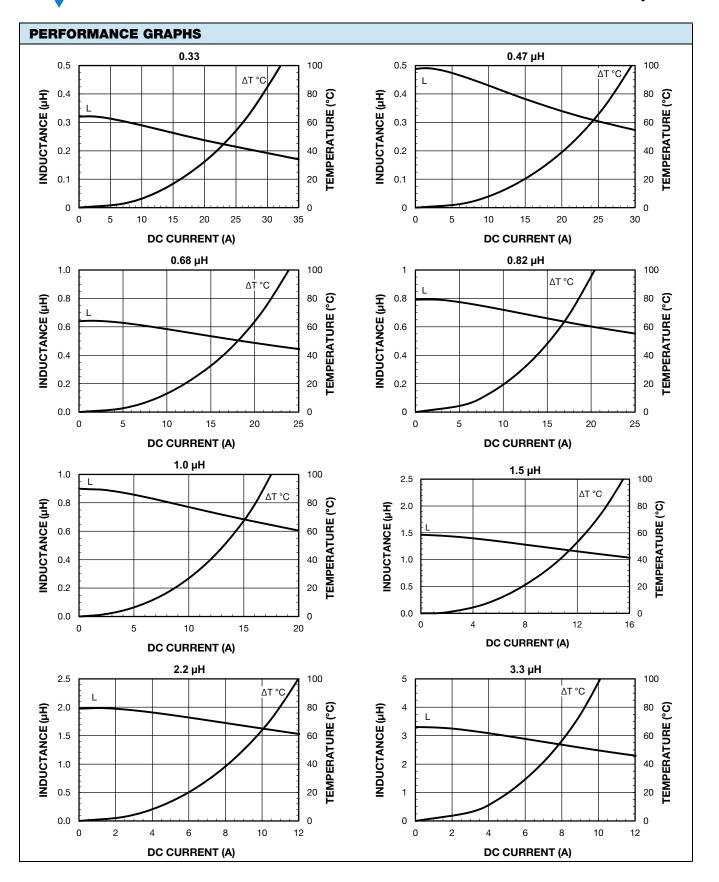
Revision: 19-Dec-2018

1 For technical questions, contact: magnetics@vishay.com Document Number: 34344

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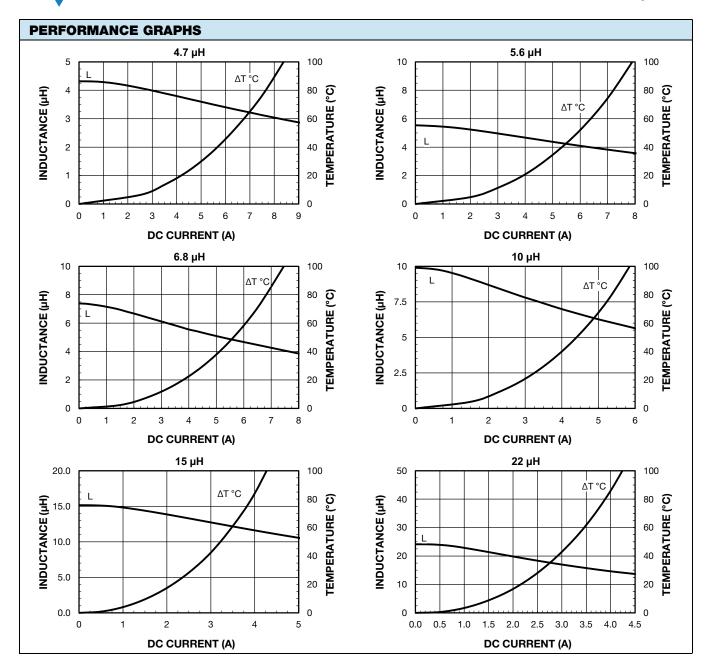


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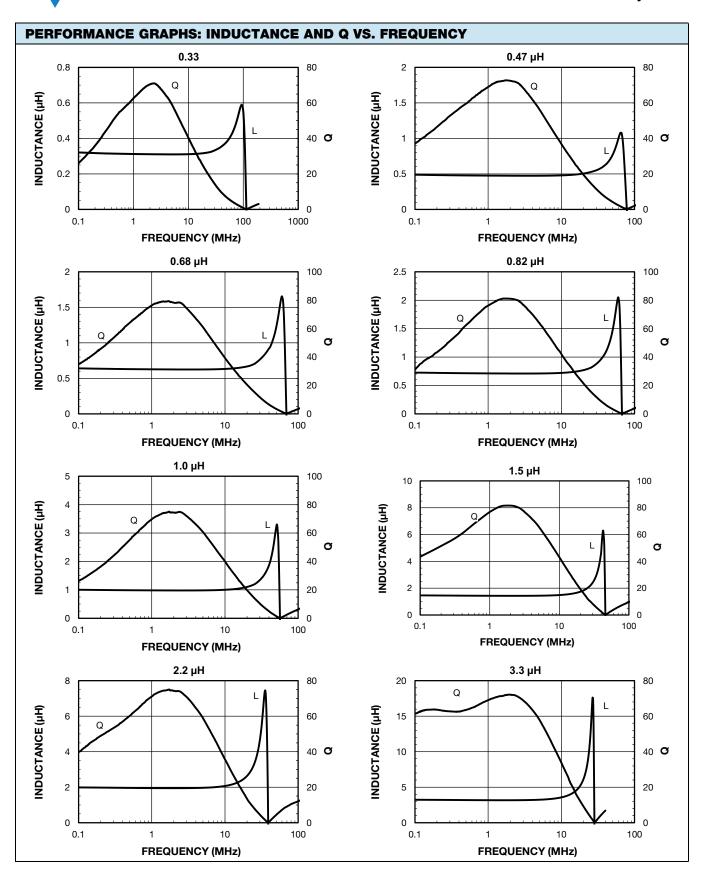
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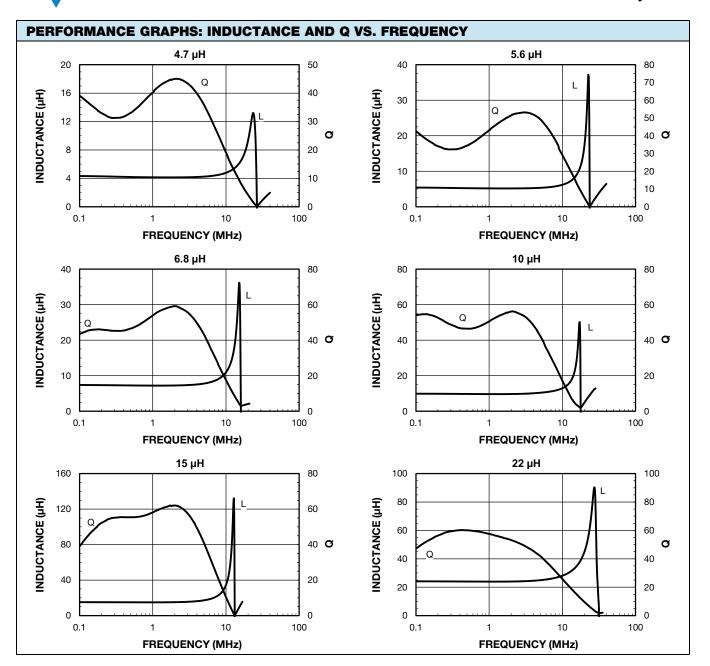
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