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Vishay Dale

# IHLP<sup>®</sup> Commercial Inductors, High Temperature (155 °C) Series



### LINKS TO ADDITIONAL RESOURCES



#### **STANDARD ELECTRICAL SPECIFICATIONS**

L <sub>0</sub> INDUCTANCE ± 20 % AT 100 kHz,	DCR TYP.	DCR MAX.		SATURATION CURRENT DC TYP.		SRF
0.25 V, 0 A (μH)	25 °C (mΩ)	25 °C (mΩ)	DC TYP. (A) <sup>(1)</sup>	(A) <sup>(2)</sup>	(A) <sup>(3)</sup>	TYP. (MHz)
0.56	1.02	1.09	61	70	101	50.0
1.0	1.25	1.34	55	56	81	31.5
1.5	1.51	1.62	48	44	63	23.0
3.3	3.12	3.34	36	28	41	12.3
8.2	7.23	7.74	20.7	23.1	33	8.7
10	9.31	9.96	18.7	21.6	31.1	8.4
33	25.2	27.0	10.2	9.9	14.3	4.4

#### Notes

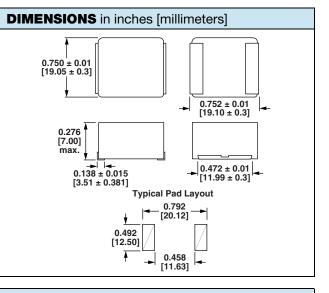
- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +155 °C
- The part temperature (ambient + temp. rise) should not exceed 155 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application
- <sup>(1)</sup> DC current (A) that will cause an approximate  $\Delta T$  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 %

#### **FEATURES**

- High temperature rating, up to 155 °C
- Shielded construction
- Excellent DC/DC energy storage up to 1 MHz to 2 MHz. Filter inductor applications up the SRF (see Standard Electrical Specifications table).
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without (5-2008) saturation
- Ultra low buzz noise, due to composite construction
- IHLP design; PATENT(S): www.vishay.com/patents
- · Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

#### **APPLICATIONS**

- 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-7575GZ-51	1.0 µH	± 20 %	ER	e3				
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC <sup>®</sup> LEAD (Pb)-FREE STANDARD				
GLOBAL PART NUMBER								
IHL	P 7 5	7 5 G Z	E R 1	R 0 M 5	1			
PRODUCT FAM	IILY	SIZE	PACKAGE IN CODE	DUCTANCE TOL. SE VALUE	RIES			
PATENT(S): <u>www.v</u>	vishay.com/patents							

This Vishay product is protected by one or more United States and international patents.

Revision: 15-Aug-2022

1 For technical questions, contact: magnetics@vishay.com Document Number: 34572

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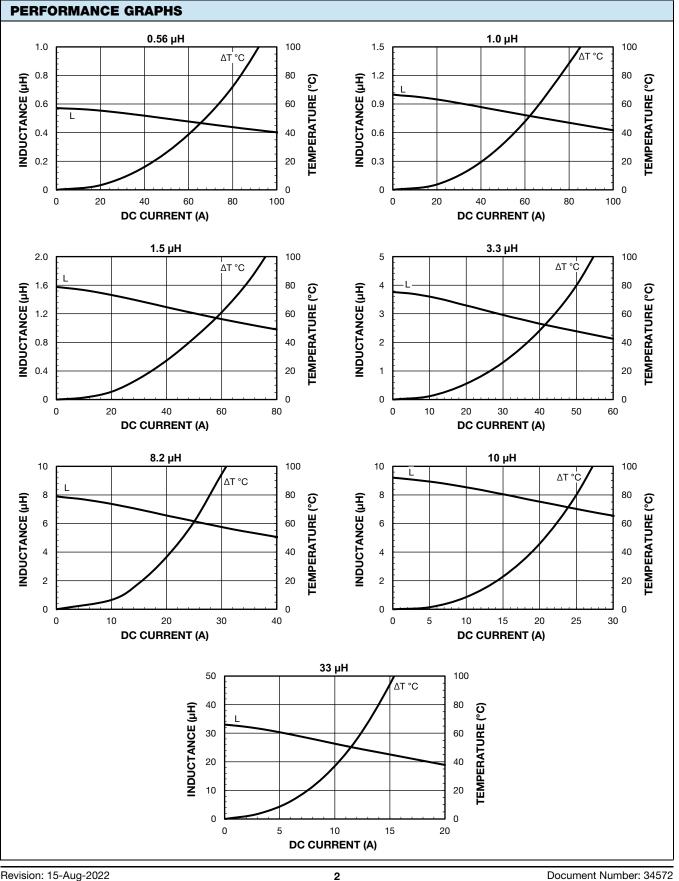
RoHS COMPLIANT HALOGEN

FREE GREEN

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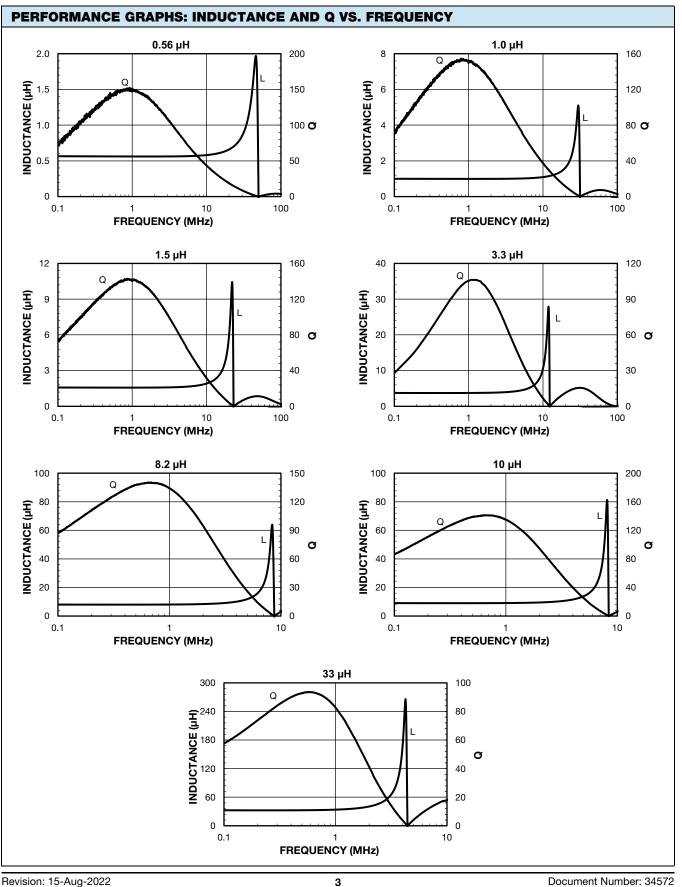
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## **ISHAY** www.vishay.com

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