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Vishay Dale

RoHS

COMPLIANT

HALOGEN FREE

GREEN

(5-2008)

Low Profile, High Current IHLP® 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 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) ⁽³⁾	SATURATION CURRENT DC TYP. (A) (4)
0.47	0.89	0.95	63.0	87.0
1.0	1.36	1.46	53.0	42.0
2.2	2.25	2.41	38.5	38.0
3.3	3.06	3.27	32.2	32.0
4.7	4.89	5.23	24.0	26.0
10.0	10.20	10.91	16.0	20.0
15.0	15.85	16.96	12.5	13.0
22.0	21.28	22.27	11.7	11.0
33.0	36.6	39.2	10.2	10.0

Notes

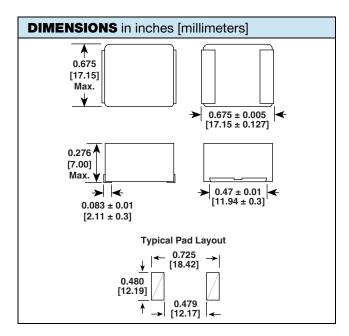
- $^{(1)}$ All test data is referenced to 25 $^{\circ}$ C ambient
- (2) Operating temperature range 55 °C to + 155 °C
- $^{(3)}$ DC current (A) that will cause an approximate ΔT of 40 $^{\circ}$ C
- $^{(4)}\,$ DC current (A) that will cause L_0 to drop approximately 20 %
- (5) The part temperature (ambient + 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.
- (6) Maximum recommended operating voltage (across inductor) = 200 V

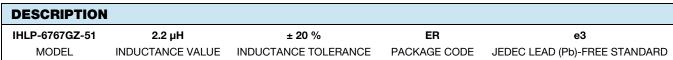
FEATURES

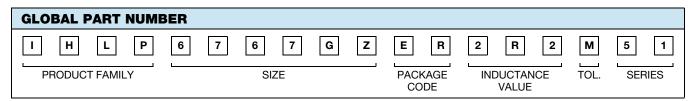
- High temperature rating, up to 155 °C
- Shielded construction
- Frequency range up to 750 kHz
- Lowest DCR/µH, in this package size
- Handles high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction
- Material categorization: For definitions of compliance please see <u>www.vishav.com/doc?99912</u>

APPLICATIONS

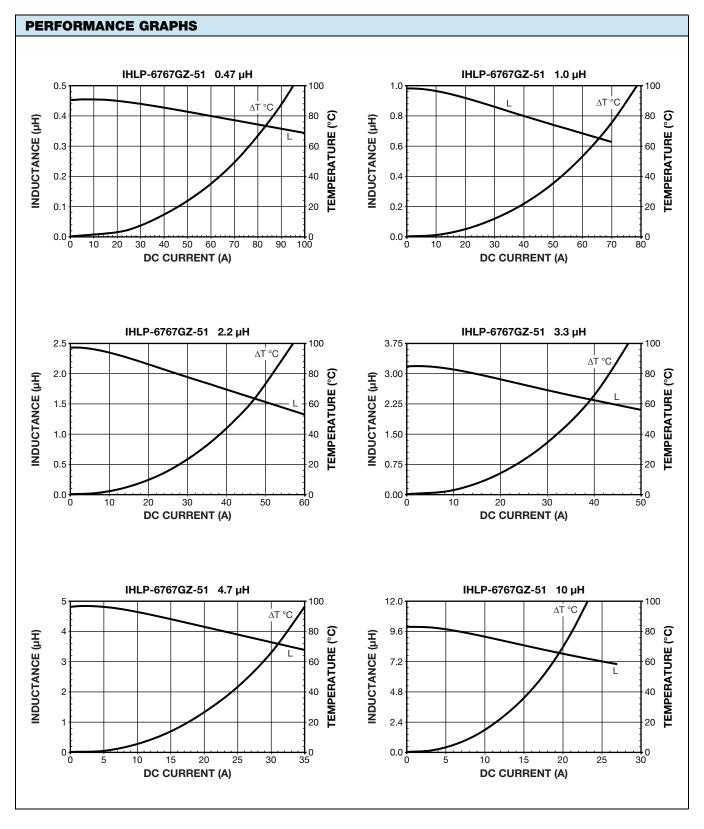
- PDA/notebook/desktop/server applications
- High current POL converters
- · Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array (FPGA)





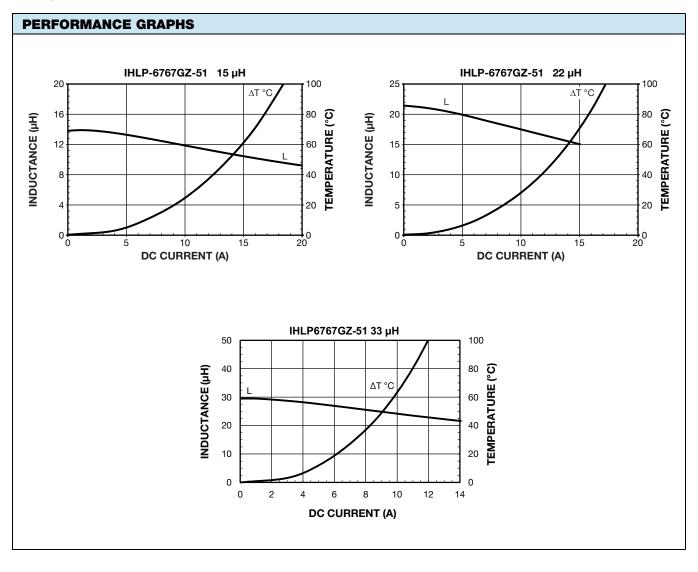






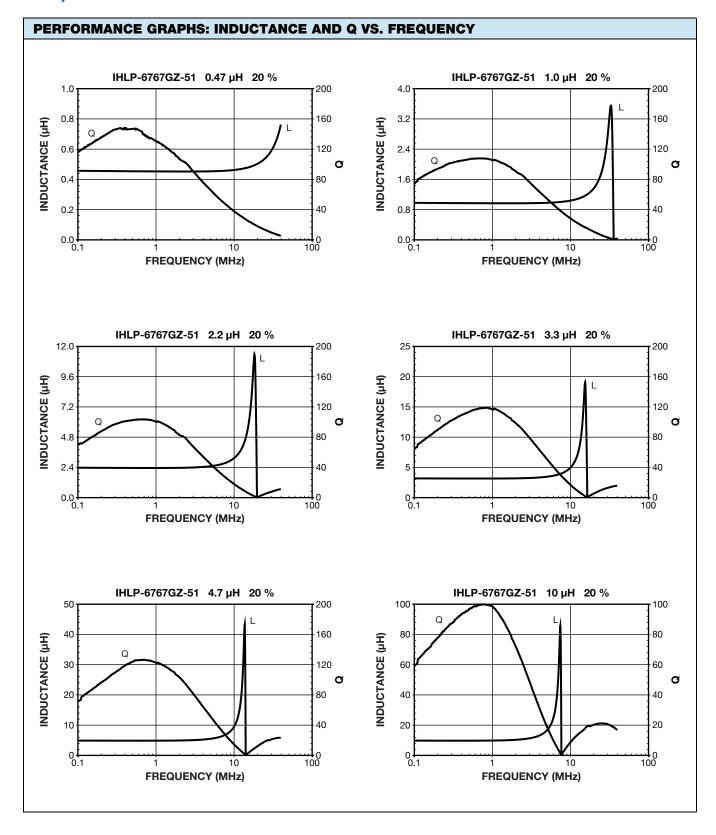




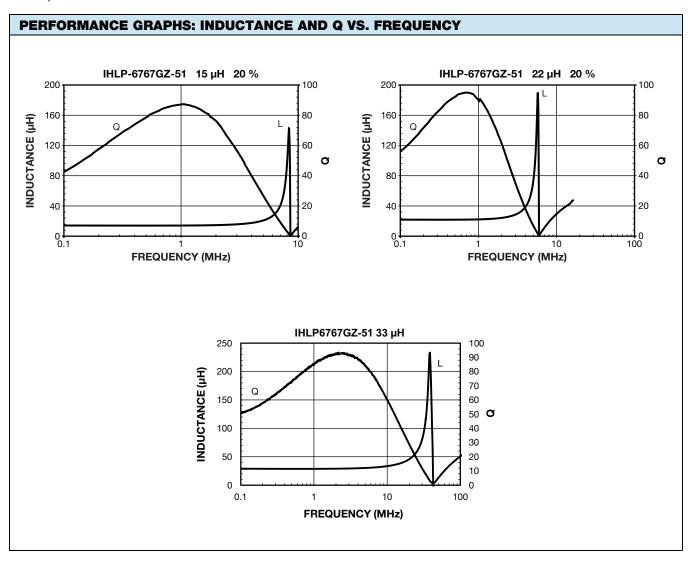














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Vishay

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Material Category Policy

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.

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