

Vishay Dale

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



DESIGN SUPPORT TOOLS AVAILABLE



FEATURES

- Magnetically shielded construction
- Operating temperature up to 155 °C
- 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 <u>www.vishay.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)

| STANDARD ELECTRICAL SPECIFICATIONS | | | | | | | |
|------------------------------------|--|-------------------|-------------------|-----------------------------------|--------------------------------------|--------------------------|----------|
| | L ₀ INDUCTANCE ± 20 % AT 100 kHz, 0.25 V, 0 A | DCR TYP. 25 °C | DCR MAX. 25 °C | HEAT RATING CURRENT DC TYP. | SATURATION CURRENT DC TYP. (A) | | SRF TYP. |
| PART NUMBER | (µĤ) | (m Ω) | (m Ω) | (A) ⁽¹⁾ | 20 % DROP (2) | 30 % DROP ⁽³⁾ | (MHz) |
| IHLP3232DZERR22M51 | 0.22 | 1.68 | 1.86 | 36 | 32 | 44 | 117 |
| IHLP3232DZERR47M51 | 0.47 | 2.38 | 2.55 | 27 | 19 | 24 | 77 |
| IHLP3232DZERR68M51 | 0.68 | 3.3 | 3.53 | 21.5 | 12 | 17 | 51 |
| IHLP3232DZERR82M51 | 0.82 | 3.7 | 4 | 20 | 15 | 22 | 49 |
| IHLP3232DZER1R0M51 | 1.0 | 4.58 | 4.9 | 19 | 15 | 22 | 45 |
| IHLP3232DZER1R5M51 | 1.5 | 6.78 | 7.25 | 15.5 | 14 | 20 | 35 |
| IHLP3232DZER2R2M51 | 2.2 | 11.7 | 12.5 | 11.5 | 14 | 20 | 32 |
| IHLP3232DZER3R3M51 | 3.3 | 15.4 | 16.48 | 10.6 | 11.8 | 16 | 23 |
| IHLP3232DZER4R7M51 | 4.7 | 26.6 | 28.46 | 7.2 | 9.1 | 12 | 18 |
| IHLP3232DZER5R6M51 | 5.6 | 29.6 | 31.67 | 6.9 | 9 | 12 | 18 |
| IHLP3232DZER6R8M51 | 6.8 | 33.5 | 35.9 | 6.8 | 6.3 | 9.2 | 15.3 |
| IHLP3232DZER100M51 | 10 | 50 | 53.5 | 5.1 | 5.2 | 7 | 13 |
| IHLP3232DZER150M51 | 15 | 62 | 66.34 | 4.8 | 3.6 | 4.5 | 10 |
| IHLP3232DZER220M51 | 22 | 103 | 110.21 | 3.7 | 3.8 | 5 | 9 |
| IHLP3232DZER330M51 | 33 | 149 | 159.43 | 3.1 | 3.2 | 4.2 | 6.1 |

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 ΔT of 40 °C
- $^{(2)}$ DC current (A) that will cause L₀ to drop approximately 20 %
- $^{(3)}$ DC current (A) that will cause L₀ to drop approximately 30 %

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

www.vishay.com/patents

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Document Number: 34345

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Pb-free

ROHS COMPLIANT

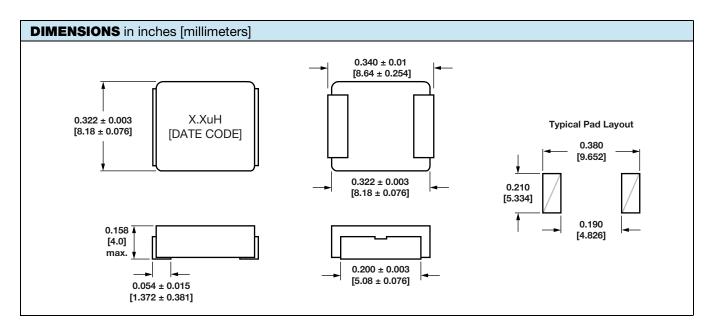
HALOGEN

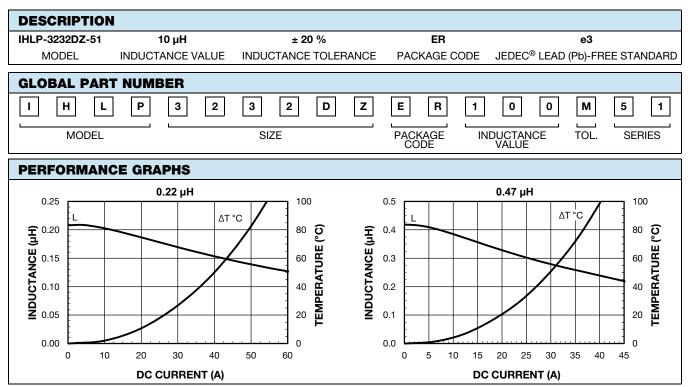
FREE

GREEN (5-2008)



Vishay Dale

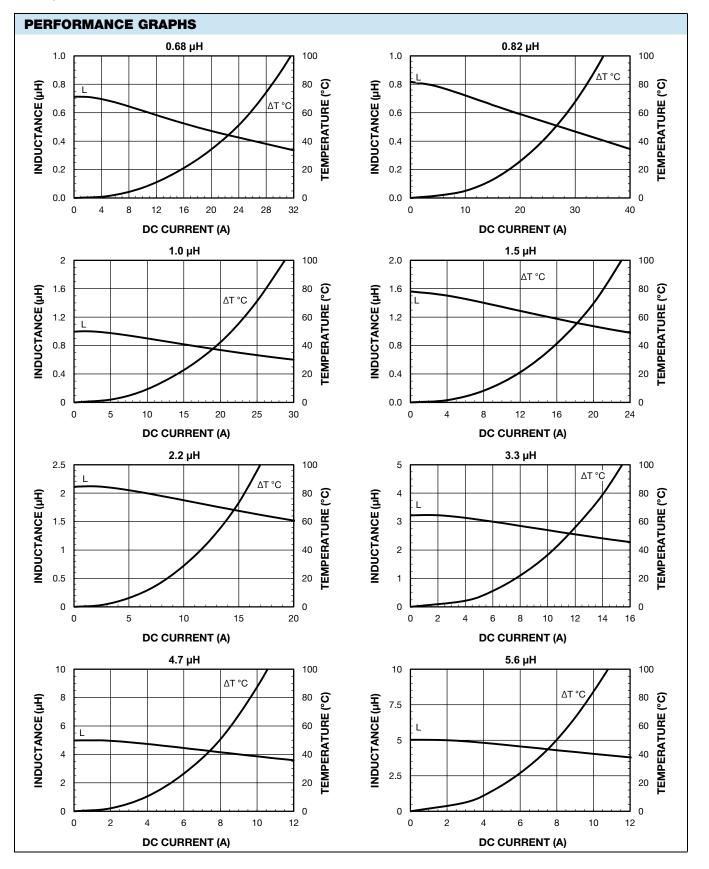




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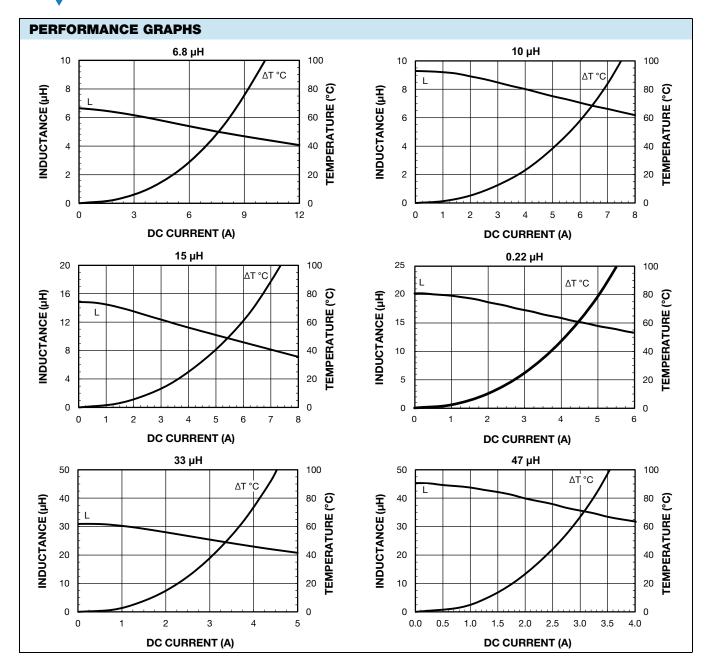
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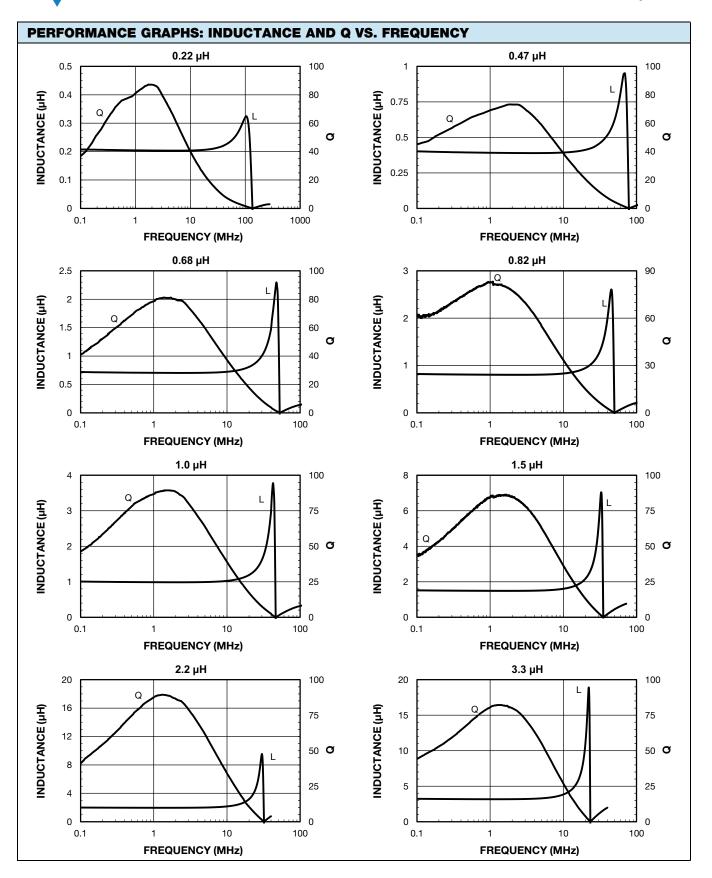
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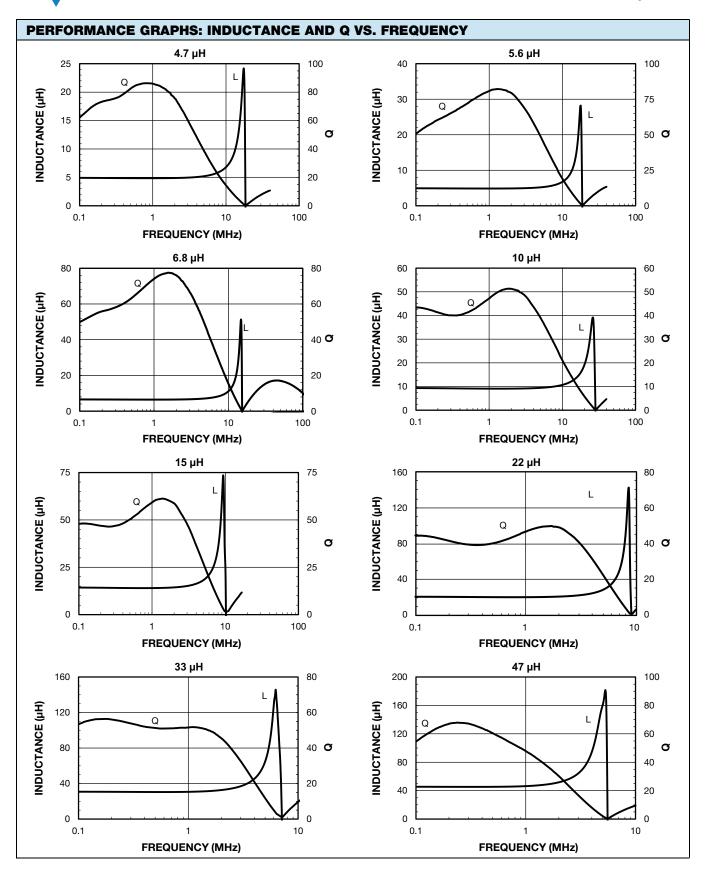
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