AUTOMOTIVE

RoHS

COMPLIANT HALOGEN

FREE

GREEN

(5-2008)



Vishay Custom Magnetics

Low Profile, Through-Hole, High Current Inductors, Edge-Wound Series



LINKS TO ADDITIONAL RESOURCES



MARKINGS



| STANDARD ELECTRICAL SPECIFICATIONS | | | | | |
|--|-------------|--|-----|----------------------|---|
| L ₀ INDUCTANCE ± 10 % AT 100 kHz, 0.25 V, 0 A (μH) | DCR MAX. | HEAT RATING CURRENT DC TYP. ⁽¹⁾ (A) | | SRF TYP. (MHz) | HIPOT CORE TO WIRE, 500 V _{DC} , 2 s (mA) |
| 1.0 | 0.79 | 72.0 | 230 | 39 | < 2 |
| 2.2 | 1.11 | 59.0 | 149 | 23 | < 2 |
| 3.3 | 1.11 | 59.0 | 112 | 18 | < 2 |
| 4.7 | 1.11 | 59.0 | 92 | 16 | < 2 |
| 5.0 | 1.11 | 59.0 | 78 | 15 | < 2 |

Notes

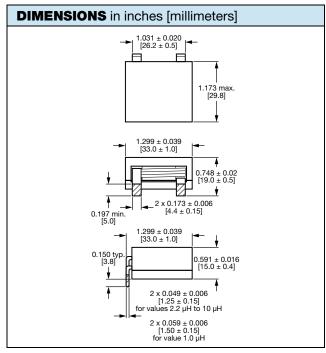
- All test data is referenced to 25 °C ambient
- Operating temperature range -55 °C to +155 °C
- The part temperature (ambient + temp. rise) should not exceed 155 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application
- (1) DC current (A) that will cause an approximate ΔT of 40 °C
- $^{(2)}$ DC current (A) that will cause L_0 to drop approximately 20 %

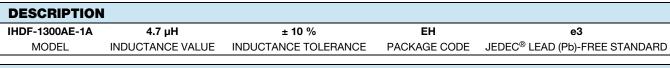
FEATURES

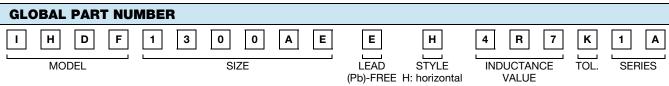
- Low loss ferrite core for high performance designs with minimal ac power losses
- Low DCR losses that provides high rated current performance
- Low profile package better for mechanical shock and vibration
- Hot dipped Sn plating provides low risk of whisker growth
- AEC-Q200 qualified
- · Custom options are available
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

APPLICATIONS

- · High current and high temperature applications
- DC/DC converters
- · High current motor and switching noise suppression
- Inverters
- On board chargers



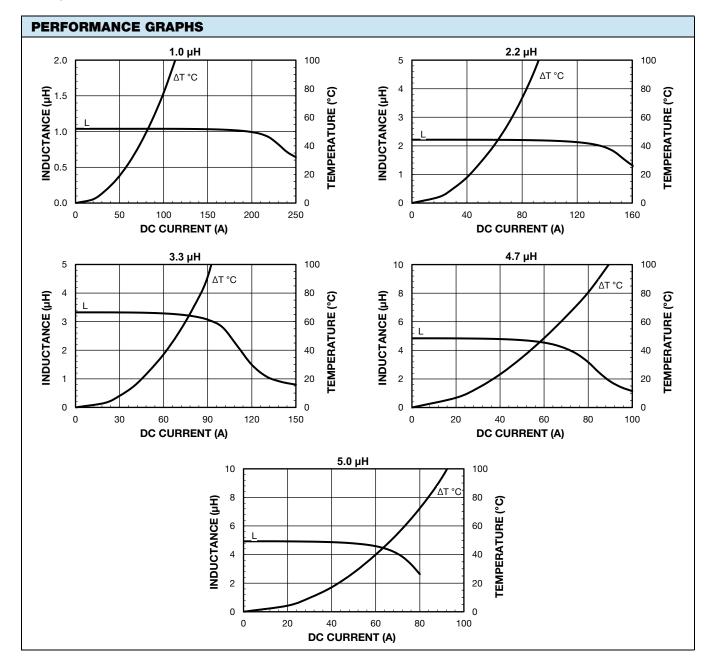




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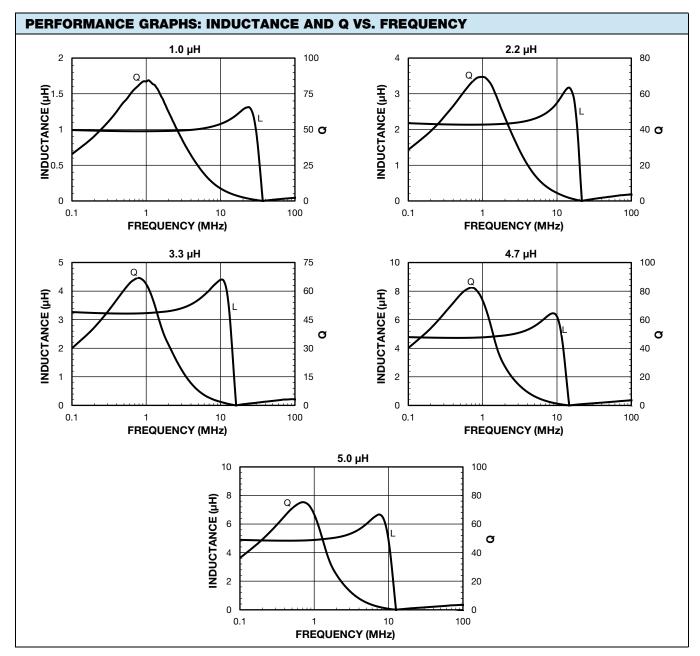


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