Featuring Ferrite Core Technology, New Automotive Grade Edge-Wound, Through-Hole Inductor With Low 15.4 mm Max. Profile Delivers Saturation Current to 230 A, Offers High Temp. Operation to +155 °C and Low DCR to Reduce Power Losses and Increase Efficiency

Product Benefits:

- Rated current up to 72 A
- Saturation currents up to 230 A
- Features ferrite core technology for high efficiency where AC losses are critical
- Low 15.4 mm maximum profile
- AEC-Q200
- Operating temperature range from -55 °C to +155 °C
- Edge-wound coil construction provides low DCR of 1.1 mΩ maximum
- Operating voltage up to 500 VDC
- Hot-dipped tin plating reduces the risk of whisker growth
- RoHS-compliant, halogen-free, and Vishay Green

Market Applications:

- DC/DC converters, inverters, and motor and switching noise suppression
- High current, high temperature automotive systems, such as on-board chargers for electric (EV) and hybrid electric vehicles (HEV)

The News:

Vishay Intertechnology introduces a new Automotive Grade IHDF edge-wound, through-hole inductor with rated current up to 72 A and saturation currents up to 230 A. Featuring ferrite core technology and a low 15.4 mm maximum profile, the Vishay Custom Magnetics IHDF-1300AE-1A operates over a demanding temperature range from -55 °C to +155 °C with low AC and DC power losses and excellent heat dissipation.

- Low DCR minimizes losses and improves rated current performance for increased efficiency
- 75 % higher rated current compared to competing ferrite-based solutions
- Low profile package allows designers to meet the harsh mechanical shock and vibration requirements needed for AEC-Q200 qualification, while minimizing board height to save space
- Vishay can customize the device's mounting orientation, termination type, nominal inductance, and isolation voltage rating on request

The Key Specifications:

Case size	1300
Profile (mm)	15.4
Inductance (µH)	1.0 to 5.0
DCR max. (mΩ)	0.79 to 1.11
Heat rating current (A)	59 to 72
Saturation current (A)	78 to 230(1)
SRF typ. (MHz)	15 to 39

(1) DC current (A) that will cause L_0 to drop approximately 20 %

Availability:
Samples and production quantities of the new inductor are available now, with lead times of 12 weeks.

To access the product datasheet on the Vishay Website, go to
http://www.vishay.com/ppg?34557 (IHDF-1300AE-1A)

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