Vishay Intertechnology Automotive Grade IHDF Edge-Wound Inductor With Low 15.4 mm Max. Profile Delivers Saturation Current to 230 A

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Featuring Ferrite Core Technology, Through-Hole Device Offers High Temp. Operation to +155 °C and Low DCR to Reduce Power Losses and Increase Efficiency

MALVERN, Pa., April 24, 2024 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today introduced 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.

The edge-wound coil construction provides low DCR of 1.1 mΩ maximum, which minimizes losses and improves rated current performance for increased efficiency. Compared to competing ferrite-based solutions, the IHDF-1300AE-1A offers 75 % higher rated current. The device's 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.

With an operating voltage up to 500 VDC, the AEC-Q200 qualified inductor is ideal for DC/DC converters, inverters, and motor and switching noise suppression. Target applications include high current, high temperature automotive systems, such as on-board chargers for electric (EV) and hybrid electric vehicles (HEV).

Vishay can customize the IHDF-1300AE-1A's mounting orientation, termination type, nominal inductance, and isolation voltage rating on request. To reduce the risk of whisker growth, the inductor features a hot-dipped tin plating. The device is RoHS-compliant, halogen-free, and Vishay Green.

Device Specification Table:

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 %*

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

Vishay manufactures one of the world's largest portfolios of discrete semiconductors and passive electronic components that are essential to innovative designs in the automotive, industrial, computing, consumer, telecommunications, military, aerospace, and medical markets. Serving customers worldwide, Vishay is **The DNA of tech.**® Vishay Intertechnology, Inc. is a Fortune 1,000 Company listed on the NYSE (VSH). More on Vishay at www.Vishay.com.

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Link to product datasheet:
http://www.vishay.com/ppg?34557 (IHDF-1300AE-1A)

Link to product photo:
https://www.flickr.com/photos/vishay/albums/72177720315777058

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