



Vishay Intertechnology Automotive Grade IHDM Inductors Offer Stable Inductance and Saturation at Temps to +180 °C

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Featuring Powdered Iron Alloy Core Technology, Edge-Wound, Through-Hole Devices Provide Low DCR to Reduce Power Losses and Increase Efficiency

MALVERN, Pa., Aug. 06, 2025 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today introduced two new IHDM Automotive Grade edge-wound, through-hole inductors in the 1107 case size with soft saturation current to 422 A. Featuring a powdered iron alloy core technology, the Vishay Inductors Division's IHDM-1107BBEV-2A and IHDM-1107BBEV-3A provide stable inductance and saturation over a demanding operating temperature range from -40 °C to +180 °C with low power losses and excellent heat dissipation.

The edge-wound coil of the devices released today provides low DCR down to 0.22 mΩ, which minimizes losses and improves rated current performance for increased efficiency. Compared to competing ferrite-based solutions, the IHDM-1107BBEV-2A and IHDM-1107BBEV-3A offer 30 % higher rated current and 30 % higher saturation current levels at +125 °C. The inductors' soft saturation provides a predictable inductance decrease with increasing current, independent of temperature.

With a high isolation voltage rating up to 350 V, the AEC-Q200 qualified devices are ideal for high current, high temperature power applications, including DC/DC converters, inverters, on-board chargers (OBC), domain control units (DCU), and filters for motor and switching noise suppression in internal combustion (ICE), hybrid (HEV), and full-electric (EV) vehicles. The inductors are available with a selection of two core materials for optimized performance depending on the application.

Standard terminals for the IHDM-1107BBEV-2A and IHDM-1107BBEV-3A are stripped and tinned for through-hole mounting. Vishay can customize the devices' performance — including inductance, DCR, rated current, and voltage rating — upon request. Customizable mounting options include bare copper, surface-mount, and press fit. To reduce the risk of whisker growth, the inductors feature a hot-dipped tin plating. The devices are RoHS-compliant, halogen-free, and [Vishay Green](#).

Device Specification Table:

Part number	IHDM-1107BBEV-2A	IHDM-1107BBEV-3A
Inductance (μH)	0.47 to 7.5	0.68 to 12.0
DCR typ. (mΩ)	0.22 to 2.11	
DCR max. (mΩ)	0.27 to 2.20	
Heat rating current typ. (A) ⁽¹⁾	31 to 128	35 to 125
Saturation current typ. (A)	96 to 343 ⁽²⁾ / 118 to 422 ⁽³⁾	49 to 202 ⁽²⁾ / 61 to 248 ⁽³⁾
SRF typ. (MHz)	29 to 217	21 to 181

⁽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 %

⁽³⁾ DC current (A) that will cause L_0 to drop approximately 30 %

Samples and production quantities of the IHDM-1107BBEV-2A and IHDM-1107BBEV-3A are available now, with lead times of 14 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 1000 Company listed on the NYSE (VSH). More on Vishay at www.Vishay.com.

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Link to datasheet:

<http://www.vishay.com/ppg234659> (IHDM-1107BB-xA)

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