

NEW PRODUCT INFORMATION Product Group: Vishay Dale, Inductors / September 2022

# Offered in Compact 0603, 0805, and 0806 Case Sizes With Low Profiles of 0.8 mm, New IHHP Power Inductors Save Space and Increase Efficiency in IoT Devices and Portable Electronics

# **Product Benefits:**

- Available in compact 0603, 0805, and 0806 case sizes with low 0.8 mm profiles
- Low maximum DCR down to 24 mΩ
- High saturation current to 5.2 A
- Heat rating current up to 4.9 A
- Operate over a temperature range from -55 °C to +125 °C
- RoHS-compliant, 100 % lead (Pb)-free shielded, composite powdered iron alloy construction

### **Market Applications:**

 DC/DC converters and power supply modules for notebook PCs, tablets, IoT, and other handheld, batterypowered electronics

# The News:

Vishay Intertechnology expands its IHHP series of low profile, high current power inductors with three new devices in compact 0603, 0805, and 0806 case sizes. Combining low DCR and core losses with a low maximum height of 0.8 mm, the Vishay Dale IHHP-0603ZH-01, IHHP-0805ZH-01, and IHHP-0806ZH-01 are designed to save space and increase efficiency in Internet of Things (IoT) devices and portable electronics.

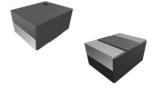
• The magnetic-alloy power inductors offer low acoustic noise and provide magnetic shielding to prevent interference with nearby components

Part number	IHHP-0603ZH-01	IHHP-0805ZH-01	IHHP-0806ZH-01
Case size	0603	0805	0806
Inductance @ 1 MHz (µH)	0.47 to 1.0	0.47 to 2.2	0.47 to 2.2
DCR typ. @ 25 °C (mΩ)	36 to 95	26 to 90	20 to 75
DCR max. @ 25 °C (mΩ)	43 to 110	33 to 110	24 to 90
Heat rating current typ. (A) <sup>(1)</sup>	2.0 to 3.3	1.8 to 3.9	2.6 to 4.9
Heat rating current max. (A) <sup>(1)</sup>	1.8 to 3.0	1.6 to 3.7	2.3 to 4.5
Saturation current typ. (A) <sup>(2)</sup>	2.3 to 3.4	2.1 to 4.8	2.9 to 5.2
Saturation current max. (A) <sup>(2)</sup>	2.1 to 3.1	1.9 to 4.3	2.7 to 4.7

# The Key Specifications:

<sup>(1)</sup> DC current (A) that will cause an approximate  $\Delta T$  of 40 °C

<sup>(2)</sup> DC current (A) that will cause  $L_0$  to drop approximately 30 %







#### Availability:

Samples and production quantities of the new inductors are available now, with lead times of 14 weeks for large orders.

To access the product datasheets on the Vishay Website, go to <a href="http://www.vishay.com/ppg?34589">http://www.vishay.com/ppg?34589</a> (IHHP-0603ZH-01)</a> <a href="http://www.vishay.com/ppg?34591">http://www.vishay.com/ppg?34590</a> (IHHP-0805ZH-01)</a> <a href="http://www.vishay.com/pg?34591">http://www.vishay.com/pg?34590</a> (IHHP-0806ZH-01)

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