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## New IFLP-4040DZ-01 Low-Profile, High-Current Inductors

### The Key Benefits:

- Industry's first series of low-profile, high-current inductors with a 3 % DCR tolerance
- Feature compact dimensions of 0.40 in. by 0.40 in. [10.16 mm by 10.16 mm] with a very low maximum height profile of 0.157 in. [4.00 mm]
- Offer saturation currents ranging from 20 A to 36 A and inductance values from 0.34  $\mu$ H to 0.62  $\mu$ H
- With a low 0.88-m $\Omega$  DCR and ferrite as its core material, the new IFLP series is the most efficient inductor in its class
- Handle high transient current spikes without hard saturation



### The Key Applications:

- Voltage regulator module (VRM) and dc-to-dc converter applications in end products including next-generation mobile devices, notebooks, desktop computers, servers, graphic cards, portable gaming devices, personal navigation systems, personal multimedia devices, and automotive systems. Typical applications include low-profile, high-current power supplies and point of load (POL) converters, distributed power systems, and field-programmable gate arrays (FPGAs).

### The News:

## Vishay Announces Industry's First Low-Profile, High-Current Inductors to Offer 3 % DCR Tolerance With Saturation Currents up to 36 A and Low DCR of 0.88 m $\Omega$ in 4040 Footprint

Vishay Intertechnology, Inc. (NYSE: VSH) announces the industry's first series of low-profile, high-current inductors with a 3 % DCR tolerance for current sensing applications.

- Occupy the standard 4040 footprint shared by lower-profile inductors with a 20 % lower DCR
- Its high efficiency allows less power drain on power-limited battery systems, eliminating core-loss increases over time, and giving end-users reliable, long-term performance.



# New Product Info



**Product Group:** Vishay Dale, Inductors / **February 2007**

- Packaged in an RoHS-compliant, 100 % lead (Pb)-free shielded, composite construction for high resistance to thermal shock, moisture, mechanical shock, and vibration

## Key Device Specifications:

- 3 % DCR tolerance
- Dimensions of 0.40 in. by 0.40 in. [10.16 mm by 10.16 mm]
- 0.157-in. [4.00-mm] max. height profile
- Saturation currents ranging from 20 A to 36 A
- 0.88-m $\Omega$  DCR
- Inductance values from 0.34  $\mu$ H to 0.62  $\mu$ H
- $\pm$ 20 % standard inductance tolerance
- 5-MHz operation frequency
- Operating temperature range of -55 °C to +125 °C

**The Perspective:** Vishay's new IFLP-4040DZ-01 is the industry's first series of low-profile, high-current inductors with a 3 % percent DCR tolerance for current sensing applications. With the lowest DCR/ $\mu$ H for their respective package sizes and saturation currents up to 36 A, the new IFLP inductors serve as high-performing, space- and power-saving solutions for voltage regulator module (VRM) and dc-to-dc converter applications in a broad range of electronic products.

**Availability:** Samples and production quantities of the new IFLP-4040DZ-01 inductors are available now. Lead time for production quantities is eight to ten weeks.

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