



Vishay Intertechnology Shielded IFDC and Semi-Shielded IFSC Series Ferrite Inductors Now Available in 2020DE, 3232DB, and 5050HZ Case Sizes

August 7, 2024

Cost-Effective Wirewound Inductors Offer Saturation Currents to 14 A, Inductance to 1 mH, and 40 % Lower DCR Than Previous-Generation Devices

MALVERN, Pa. , Aug. 07, 2024 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today announced that it has extended its shielded IFDC and semi-shielded IFSC series of wirewound, surface-mount ferrite inductors with three new devices in the 2020DE, 3232DB, and 5050HZ case sizes. Offering improved performance at a lower cost than previous-generation ferrite solutions, the Vishay Dale inductors combine higher inductance and current ratings with lower DCR for computer and consumer applications.

The [IFDC-5050HZ](#), [IFSC-2020DE-01](#), and [IFSC-3232DB-01](#) match the performance of previous-generation ferrite solutions — but with a 60 % smaller size — while offering enhanced performance compared to similar-sized devices, including higher operating temperatures to +125 °C and operating voltages of 120 V. Additionally, the IFSC-2020DE-01 and IFSC-3232DB-01 feature 40 % lower DCR, while the IFDC-5050HZ supports higher saturation currents up to 14 A.

While other high performance inductors typically offer a maximum inductance of 100 µH, the devices released today achieve significantly higher values of 470 µH for the IFSC-2020DE-01 and IFSC-3232DB-01 and 1 mH for the IFDC-5050HZ. Furthermore, by utilizing efficient manufacturing techniques and a simple bobbin style wirewound construction, IFSC and IFDC series inductors provide a more cost effective solution over IHLP inductor technology while still delivering high quality and reliability.

With the enhanced efficiency enabled by their low loss ferrite core construction and low DCR, the devices are ideal for use as energy storage inductors in a variety of DC/DC conversion topologies found in consumer electronics and battery-powered devices. Moreover, the IFSC and IFDC families make cost-effective solutions in differential LC filter topologies for noise suppression on power lines. Focus markets include consumer entertainment devices such as televisions, sound bars, and audio and gaming systems; general computing equipment such as desktops, monitors, and scanners; as well as other household appliances. In these applications, the IFDC-5050HZ — which features a coil enclosed in an exterior magnetic material that contains stray flux — minimizes EMI and crosstalk to nearby components.

Device Specification Table:

Part number	IFSC-2020DE-01	IFSC-3232DB-01	IFDC-5050HZ
Shielding	Semi-shielded	Semi-shielded	Shielded
Size (mm)	6.0 x 6.0 x 4.5	8.0 x 8.0 x 4.2	12.3 x 12.3 x 8.0
Inductance (H)	1 to 470	0.9 to 100	3.3 to 1000
DCR typ. (m)	14 to 2000	6 to 290	11 to 1640
Heat rating current (A)	0.35 to 4.2	1 to 7.8	0.9 to 10.3
Saturation current (A) ⁽¹⁾	0.4 to 8.5	1 to 11	0.9 to 14
SRF typ. (MHz)	2 to 110	6 to 85	1.3 to 35

⁽¹⁾DC current (A) that will cause L0 to drop approximately 30 %

Samples and production quantities of the IFSC and IFDC inductors are available now, with lead times of 10 to 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.

The DNA of tech[®] is a registered trademark of Vishay Intertechnology, Inc.

Vishay on Facebook: <http://www.facebook.com/VishayIntertechnology>

Vishay Twitter feed: <http://twitter.com/vishayindust>

Link to product datasheets:

<http://www.vishay.com/ppg?34083> (IFSC-2020DE-01)

<http://www.vishay.com/ppg?34607> (IFSC-3232DB-01)

<http://www.vishay.com/ppg?34612> (IFDC-5050HZ)

Link to product photo:

<https://www.flickr.com/photos/vishay/albums/72177720319340717>

For more information please contact:

Vishay Intertechnology
Peter Henrici, +1 408 567-8400
peter.henrici@vishay.com

or
Redpines
Bob Decker, +1 415 409-0233
bob.decker@redpinesgroup.com