



New IHSR-2525CZ-51 Commercial IHSR High Temperature Inductor in the 2525 Case Size With a Slim 3 mm Profile Delivers Ultra Low DCR for Multi-Phase Power Supplies; Features High Operating Temperature to +155 °C

Product Benefits:

- Offered in the 7.4 mm by 6.6 mm by 3.0 mm 2525 case size
- High operating temperature up to +155 °C
- Low typical DCR of 0.38 mΩ
- Low inductance down to 0.056 μH
- Extremely stable inductance over temperature and current
- Handles high transient current spikes without saturation
- RoHS-compliant, halogen-free, and [Vishay Green](#)



Market Applications:

- Filtering and multi-phase DC/DC conversion in notebooks, desktops, and servers; POL converters; graphics cards; distributed power systems; and FPGAs

The News:

Vishay Intertechnology introduces a new commercial IHSR high temperature inductor in the 7.4 mm by 6.6 mm by 3.0 mm 2525 case size. Designed for multi-phase, high current power supplies and filters, the Vishay Dale IHSR-2525CZ-51 offers a 50 % reduction in DCR over typical power inductors, excellent inductance stability over the entire operating temperature range, and soft saturation compared to ferrite solutions.

- Based on Vishay's popular IHLP® technology
- Optimized for energy storage in DC/DC converters up to 10 MHz and high current filtering applications up to the SRF of the inductor
- The device's low typical DCR and inductance allow for higher current density than competing technologies, while its 3 mm profile enables slimmer end products
- Packaged in a 100 % lead (Pb)-free shielded, composite construction that reduces buzz noise to ultra low levels
- Offers high resistance to thermal shock, moisture, and mechanical shock



The Key Specifications:

Case size	2525
Inductance (μH)	0.056 to 0.100
DCR typ. ($\text{m}\Omega$)	0.38 to 0.97
DCR max. ($\text{m}\Omega$)	0.40 to 1.02
Heat rating current (A)	46 to 58 ⁽¹⁾
Saturation current (A)	31 to 45 ⁽²⁾ / 46 to 64 ⁽³⁾
SRF (MHz)	186 to 535

⁽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 %

Availability:

Samples and production quantities of the IHSR-2525CZ-51 are available now, with lead times of 12 weeks.

To access the product datasheet on the Vishay Website, go to <http://www.vishay.com/ppg?34578> (IHSR-2525CZ-51)

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