



## New IHSR-2525CZ-5A Automotive Grade IHSR High Temperature Inductor in the 2525 Case Size With a Slim 3 mm Profile Delivers Ultra Low DCR, High Current Filtering for Multi-Phase Power Supplies; Features High Operating Temperature to +155 °C

### Product Benefits:

- AEC-Q200 qualified
- Offered in the 7.4 mm by 6.6 mm by 3.0 mm 2525 case size
- High operating temperature up to +155 °C
- Inductance is stable over temperature and current
- Low typical DCR of 0.38 mΩ
- Low inductance down to 0.056 μH
- Handles high transient current spikes without saturation
- RoHS-compliant, halogen-free, and [Vishay Green](#)



### Market Applications:

- Filtering and DC/DC conversion in engine and transmission control units, ADAS microprocessors, and entertainment / navigation systems, in addition to noise suppression for motors, windshield wipers, power mirrors and seats, and heating and ventilation blowers

### The News:

Vishay Intertechnology introduces a new AEC-Q200 qualified 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 in under the hood automotive applications, the Vishay Dale IHSR-2525CZ-5A offers a 50 % reduction in DCR over typical power inductors and excellent temperature stability for inductance and saturation compared to ferrite solutions.

- 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:

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

<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 20 %

<sup>(3)</sup> DC current (A) that will cause  $L_0$  to drop approximately 30 %

### Availability:

Samples and production quantities of the IHSR-2525CZ-5A 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?34579> (IHSR-2525CZ-5A)

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