

IHTH-1500MZ-5A and IHTH-1500TZ-5A Automotive Grade IHTH Through-Hole Inductors Deliver Saturation Current Up to 156 A in Compact 1500 Case Size to Replace Larger, More Expensive Solutions; Offer Continuous High Temperature Operation to +155 °C

Product Benefits:

- Compact 1500 case size
- High saturation current to 156 A
- Very low typical DCR down to 0.19 mΩ
- Continuous high temperature operation to +155 °C
- Handle high transient current spikes without hard saturation
- Excellent temperature conductivity via their housing
- RoHS-compliant, halogen-free, and [Vishay Green](#)



Market Applications:

- High current filters for 12 V / 48 V hybrid electric (HEV) and mild hybrid electric (MHEV) vehicle output converters; off-road diesel injection drivers; catalytic pulse width modulation (PWM) heaters; and electrical motors

The News:

Vishay Intertechnology introduces two new Automotive Grade IHTH high current, high temperature through-hole inductors in the compact 1500 case size. For automotive applications, the Vishay Dale IHTH-1500MZ-5A (0.47 μH to 4.7 μH) delivers high saturation current of 156 A and very low typical DCR down to 0.19 mΩ, while the IHTH-1500TZ-5A (6.8 μH to 100 μH) offers saturation current of 106 A and typical DCR down to 1.1 mΩ. Both inductors feature continuous high temperature operation to +155 °C.

- Based on IHLP® technology, the shielded, composite construction of the IHTH-1500MZ-5A and IHTH-1500TZ-5A enables a compact size of 38.1 mm by 38.1 mm with profiles of 12.75 mm and 19.81 mm, respectively
- The devices can replace much larger and more expensive competing solutions
- High resistance to thermal shock, moisture, and mechanical shock

The Key Specifications:

Part number	IHTH-1500MZ-5A	IHTH-1500TZ-5A
Inductance (μH)	0.47 to 4.7	6.8 to 100
DCR typ. (mΩ)	0.19 to 1.13	1.1 to 21.5
DCR max. (mΩ)	0.20 to 1.19	1.2 to 22.6
Heat rating current (A)	60.6 to 134.7 ⁽¹⁾	12.2 to 63.3 ⁽¹⁾
Saturation current (A)	60.0 to 109.4 ⁽²⁾ / 90.1 to 156.2 ⁽³⁾	23.2 to 75.5 ⁽²⁾ / 33.7 to 106.2 ⁽³⁾

⁽¹⁾ DC current (A) that will cause an approximate ΔT of 40 °C

⁽²⁾ DC current (A) that will cause L₀ to drop approximately 20 %

⁽³⁾ DC current (A) that will cause L₀ to drop approximately 30 %



NEW PRODUCT INFORMATION



Product Group: Vishay Dale, Inductors / October 2021

Availability:

Samples and production quantities of the IHTH-1500MZ-5A and IHTH-1500TZ-5A are available now, with lead times of eight to 10 weeks.

To access the product datasheets on the Vishay Website, go to

<http://www.vishay.com/ppg?34570> (IHTH-1500MZ-5A)

<http://www.vishay.com/ppg?34559> (IHTH-1500TZ-5A)

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