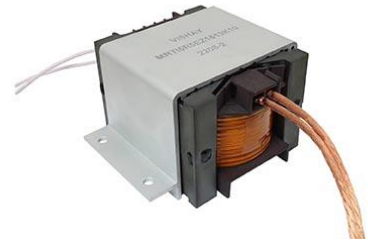


New MRTI5R5EZ Integrated Resonant Transformer / Inductor Saves Space, Simplifies PCB Layouts in LLC Applications, While Offering Fully Tunable Magnetizing and Leakage Inductance, Minimal Parasitic Variation, and Excellent Heat Dissipation Performance

Product Benefits:

- Tunable magnetizing inductance down to 25 μH and leakage inductance down to 6.2 μH
- Minimal parasitic variation optimizes capacitor selection
- Provides a customizable turns ratio
- Operating frequencies from 100 kHz to 350 kHz
- Rated power from 4 kW to 6 kW with 400 V to 800 V input voltage
- Rated current to 28 A
- 2500 V isolation voltage rating
- Includes a bracket for cold plate mounting with raised bosses
 - Flush-mount options available
- Standard M4 ring terminals
 - Customizable lead lengths and terminal types available
- Offered with an optional thermal gap pad on the mounting surface



Market Applications:

- On-board chargers and half- / full-bridge resonant power supply transformers in industrial controls, solar inverters, and military, avionics, and construction equipment

The News:

Vishay Intertechnology introduces a new resonant transformer for inductor-inductor-capacitor (LLC) applications that features both the transformer and an integrated inductor in a single package. Designed to save PCB space while simplifying layouts and reducing component mounting requirements, the 5.5 kW Vishay Custom Magnetics MRTI5R5EZ offers fully tunable magnetizing and leakage inductance with minimal parasitic variation.

- The MRTI5R5EZ is the first transformer of its kind to utilize a second middle transformer leg to complete the resonant inductor portion of the circuit
 - Other implementations require an additional magnetic core to deliver the same performance
 - Not only does this unique construction save space, but it also simplifies designs by eliminating the need for interconnects or jumpers from the resonant inductor to the transformer's winding
- The transformer's losses can be moved from the core to the coil as needed to deliver the best performance and heat dissipation



The Key Specifications:

- Frequency: 100 kHz to 350 kHz
- Rated power: 4 kW to 6 kW
- Rated current: 17 A to 28 A
- Leakage inductance: 6.2 μ H to 12 μ H
- Magnetizing inductance: 25 μ H to 74 μ H
- Size (L x W x H): 88 mm by 102 mm by 56 mm

Availability:

Samples and production quantities of the MRTI5R5EZ are available now, with lead times of four weeks for samples and 16 to 20 weeks for production quantities.

To access the product datasheet on the Vishay Website, go to <http://www.vishay.com/ppg?34588> (MRTI5R5EZ)

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