

Date: 28.07.2017

Subject: 2,5kW - ultra-compact HB LLC self-leakage resonant transformer

Typical applications: Mobility, Drones, High efficiency DC-DC converter, electrical skateboards, portable electrical equipment.

Brief description: Half Bridge LLC topology resonant transformer, designed to achieve high performance in terms of weight / volume versus power transferred, secondary side rectification is performed by a synchronous rectification to achieve the highest efficiency.



Electrical performance

- Topology half-bridge primary side, double resonant capacitor, synchronous rectification secondary side
- Output Power up to **2,5 kW**
- Output current up to **100 A_{DC}**
- Efficiency up to **97%**
- Output voltage range from 12 to 80 V_{DC}
- Operative temperature range -40 ÷ +85 °C (derating can be applied depending on the output voltage)
- Thermal sensor NTC inserted into the primary windings connected on primary side pins
- High CFM ratings fan connected on primary side pins

Physical dimensions

- Overall dimensions **61x64mm height 75mm**
- Weight < **300g**
- Mechanical fixing 4x self-tapping screw 3mm
- Recommended PCB hole for air flux 50x35mm

