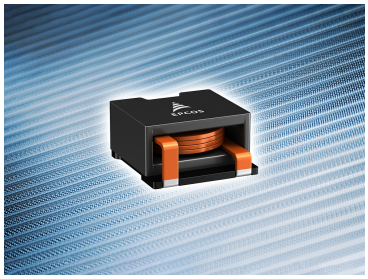
Inductors **May 12, 2016**

Compact SMT high-current chokes



TDK Corporation has extended its portfolio of EPCOS ERU SMT power inductors with the ERU19 choke series that comprises ten different types. The inductance values of the new ERU chokes extend from 1.0 µH to 30 µH and their saturation currents range from 10.1 A DC to 43 A DC.

The outstanding feature of these new power inductors is their compact design: With a footprint of just 19.9 mm x 20.5 mm, they have low insertion heights of 8.35 mm (1.0 µH) to 10.85 mm (30 µH), depending on the type.

This low-profile design is based on a flat rectangular helical winding technology which results in lower losses. The DC resistances are between 1.20 mΩ and 18.65 mΩ.

The B82559*A019 series of high-current chokes is designed for operating temperatures of between -40 °C and +150 °C. They can be used as output and storage chokes in a wide variety of power supply topologies. These include point-of-load (POL) converters, DC-DC converters, high-current switch-mode power supplies and xEV applications. The components of the new series are RoHS-compatible and qualification to AEC-Q200 is pending.

Main applications

- Output and storage chokes for point-of-load (POL) converters, DC-DC converters, high-current switch-mode power supplies and xEV applications

Main features and benefits

- Compact dimensions thanks to flat rectangular helical winding
- High saturation currents of up to 43 A DC
- Low losses