

Products & Technologies



Inductors

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Compact current sense transformers

EPCOS has developed two series of current sense transformers that – thanks to their space-saving SMT design – are particularly suitable for compact DC/DC converters. They have dimensions of only 8.33 x 7.11 mm² and 4.7 x 3.5 mm², respectively. The primary winding is already integrated in all types, thus saving development and placement times. Both series cover winding ratios from 1:20 to 1:125.

The first series represents a compatible solution for existing designs based on an EE5 core. The DC resistance of the primary winding is 0.8 mΩ and the rated current is 20 A for all types of this series. They have a test voltage of 500 V AC.

The second series was developed as a miniature variant with the significantly more compact E4.2 core. The primary winding is integrated in the coil former in a space saving way. Its DC resistance is 2.5 mΩ and its rated current is 7 A. The test voltage of these types is 360 V AC.

Current sense transformers are used in control and protection circuits as well as for load detection in power supplies. Typical applications are DC/DC converters for mid-range outputs.