

Products & Technologies



Inductors

June 2006

Space-saving TP modules for DSL systems

EPCOS has succeeded in integrating a filter choke and two PTC thermistors for surge-current protection in a single component, the Transformer Protection (TP) module for DSL systems. A combination of the newly developed rectangular PTC and a modified standard filter choke permits both functional units to be stacked on top of each other, thus halving the space requirement compared with the discrete solution. Some 100 mm² are saved for each TP module, which corresponds to 72 cm² for the new line

cards with 72 lines.

The filter choke with its symmetrical design and electrical properties is matched exactly to the requirements of the GEMINAX chip set from Infineon Technologies. Modifying the geometry of the transformer enabled a reduction of the DC resistance of the coil by 20 percent, thus significantly improving the DC bias behavior of the entire system.

The TP module satisfies the requirements of ITU-T, K20, K21, K45 and the British Telecom Standards.