



Ferrites and accessories

EQ cores
General information

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EQ planar cores for power applications

Integrating ferrite cores into the PCB has become a common technology in the power supply market. In those low-profile designs ferrite planar cores with low losses and high saturation are widespread. The trends are increasing the power density of the throughput transformer and the current in the output inductor. Ferrite cores are considered a key component for these targets. TDK Electronics has extended the range of planar ferrite cores to meet the new requirements.

Besides the standard ELP core series TDK Electronics offers now extended series of planar cores with round center post: EQ 13 to EQ 30 and ER 9.5 to ER 32. This wide range of shapes improves the design capabilities for individual power converter solutions. Customer-specific heights can be supplied as well as different air gap requirements for all series.

All TDK Electronics planar cores are available in the well-known TDK Electronics power materials. Preferred materials are N97 and N92. N97 is optimized for low losses, N92 for high saturation current in the output chokes. N87 is suitable for standard requirements. For frequencies higher than 400 kHz, we recommend N49. The material N95 is available for several EQ planar cores and provides stable low power losses across a temperature range from +25 °C up to +120 °C.

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