



Ferrites and accessories

Ferrite polymer composites General information

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Ferrite polymer composites

General information

Ferrite cores are familiar as brittle, rigid and bulky components for high-inductance coils and transformers. The performance of such ferrites depends very much on external influences such as temperature, pressure, electromagnetic fields and frequency.

FPC is a homogeneous mixture of ferrite powder and plastic with outstanding mechanical and magnetic properties. This rugged material can be processed into injection-molded parts or thin, flexible film to open up innovative applications.

The new C351 film is suitable for high-temperature applications up to 200 °C and is UL 94-V0-listed. It is also available in various thicknesses from 0.2 to 0.4 mm. Special shape of foil on request (various width, separated piece by piece, etc.). FPC film of materials C350 and C351 can also be supplied in self-adhesive versions.

FPC film is ideal for EMC applications, e.g. to shield coils against metals or absorb interference at frequencies of 500 MHz and higher. It opens up many other applications, such as implementation of low-profile coils for identification systems and electronic article surveillance in retailing and logistics, for sensors or contactless smart cards. This innovative material is also suitable as spacing between ferrite cores – instead of air gaps or non-magnetic films – to suppress leakage fields, for instance, or to adjust the biasing curve.

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