



FERRITE CORES · POWDER CORES · AMORPHOUS & NANOCRYSTALLINE CORES
BOBBINS & MOUNTING HARDWARE · THERMISTORS, FILTERS & CHOKES



FERRITE CORES

Manufacturers Represented:

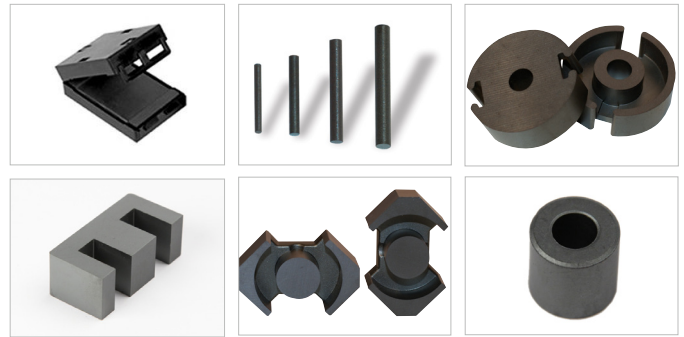
- Fair-Rite
- National
- EPCOS
- Ferroxcube
- Magnetics
- Magnetics
- TDK

Group Description:

Ferrites are ceramic, homogeneous materials composed of various oxides with iron oxide as their main constituent. Depending on the application, there are two types of ferrite core material.

Manganese-Zinc ferrite (MnZn) is used in applications requiring higher permeability and saturation levels, generally for high frequency transformer applications - important characteristics being high flux density and/or low core losses.

Nickel-Zinc ferrite (NiZn) is used in applications needing higher resistivity and is more suitable for frequencies above 1 MHz. Applications are EMC, filtering, power, wireless transfer of power, etc. Cores can also be classified by shape: Toroidal cores, U core, E cores, I cores, Pot cores, cylindrical cores, etc. Core geometries can be modified by machining to meet specific magnetic and mechanical requirements. Core gapping, Toroidal slotting and custom machining available.



POWDER CORES

Group Sub-categories:

- MPP
- High Flux
- AmoFlux®
- Kool Mu®
- XFlux®

Manufacturers Represented:

- Magnetics, Inc.

Group Description

Powder Core products are distributed air gap cores primarily used in power inductor applications, specifically switched-mode power supply (SMPS) output filters (DC inductors). Other power applications include differential inductors, boost inductors, buck inductors and flyback transformers. Powder Core material characteristics are high resistivity, low hysteresis and eddy current losses and excellent inductance stability under both DC and AC conditions. Powder Core materials are not pressed with an organic binder so there is no thermal aging.



AMORPHOUS & NANOCRYSTALLINE CORES

Group Sub-categories:

- Cobalt-based
- Iron-based

Manufacturers Represented:

- Toshiba:
- AMOBEDS®
- SPIKE KILLER®
- Hitachi Metals:
- FINEMET®
- Metglas®

Group Description

Amorphous metals are produced by using a rapid solidification technology where molten metal is cast into thin solid ribbons by cooling at a rate of one million degrees C/sec. Amorphous magnetic metal has high permeability due to no crystalline magnetic anisotropy allowing smaller, lighter and more energy efficient designs in many high frequency applications for inverters, adjustable speed drives and power supplies. Due to the material having no crystalline magnetic anisotropy, amorphous magnetic metal has high permeability which makes it an ideal option for applications in the alternative energy sector. **Amorphous iron (Metglas®)** and **nanocrystalline (FINEMET®)** work well in mag amp and high efficient power applications while **amorphous cobalt (Toshiba)** works well in suppression devices.



BOBBINS & ACCESSORIES

Group Sub-categories:

- Ferrite Bobbins
- Surface Mount
- Through Hole
- Lamination Bobbins
- Toroid Mounts
- Solenoids

Manufacturers Represented:

- Miles-Platts
- Ferroxcube
- Magnetics
- EPCOS

Group Description

Bobbins, also known as coil formers, are used for efficient winding and termination of magnetic components. Dexter provides precision plastic injection moldings for use in electrical, automotive and medical sectors.

In addition to standard bobbin offerings, Dexter is able to configure customizations, including pin modifications, higher and lower profiles and custom stack heights. More than half of Dexter products are custom designs specific to application requirements. Dexter also supplies mounting clamps (clips), toroid mounts and toroid headers.



ELECTRONICS

Group Sub-categories:

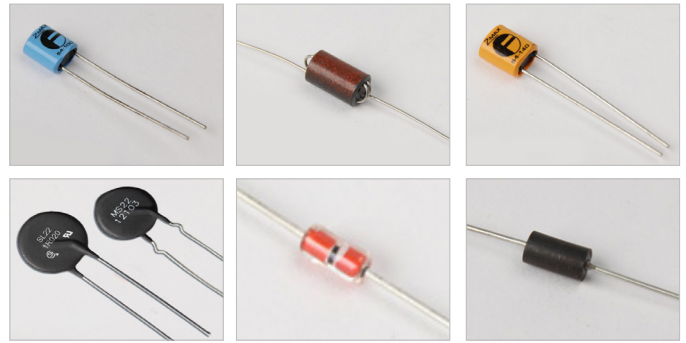
- Thermistors
- Beads-on-leads
- Chokes/Filters
- Capacitors

Manufacturers Represented:

- Ferronics
- EPCOS
- Ametherm
- Fair-Rite
- TDK
- RTI Electronics

Group Description

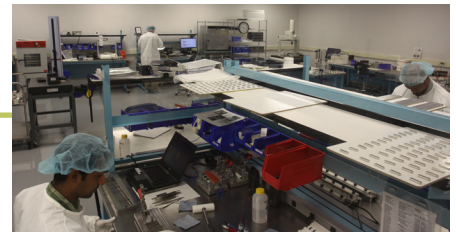
As a prime supplier for cores into the power supply industry, Dexter has expanded to include electronics such as thermistors, capacitors, beads, chokes, resistors and filters for varying power supply applications. We can assist in choosing the correct component for your application.



SOLUTIONS TO FIT YOUR DESIGN NEEDS

- Engineering & Design Assistance
- Inductance Testing
- Special Packaging
- Bag and Tag
- Bar Coding
- Custom Fabrication
- System Assembly
- Inventory Management
- Material Warehousing
- Coating
- ISO9001 / AS9100

On-site Class 10000
Clean Room



Stocked Parts for
Immediate Delivery



Core Gapping and
Toroid Slotting



Dexter Magnetic Technologies was founded as Permag Corporation in 1951 as the FIRST global magnetic materials distributor.

Since then, Dexter Magnetic Technologies has become your essential magnetic partner. The company's growing supply chain offers the most diverse offerings of current magnetic materials. Our experienced engineers and support staff can help you choose the correct "off-the-shelf" components or assist in a custom, cost effective solution to your needs.

Dexter continues to invest in a strong future, with AS9100 certified facilities and ISO7 Clean Room capabilities.

magnetic solutions: realized and optimized

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