



# SUPPRESSION COMPONENTS OVERVIEW



## EMI SUPPRESSION BEADS

Fair-Rite offers a broad selection of ferrite EMI suppression beads with guaranteed minimum impedance specifications.



## BEADS-ON-LEADS

Beads-on-leads are ferrite suppression devices supplied assembled on tinned copper for automated circuit board assembly.



## PC BEADS

Multiple single-turn or multi-turn printed circuit board beads are available in 44 or 52 materials.



## WOUND BEADS

Wound beads available in 6 or 11 hole configurations, both with or without windings, in 44 and 61 material.



## SM BEADS (Common Mode)

Available in both broadband and high-frequency materials and various sizes for suppression of EMI noise.



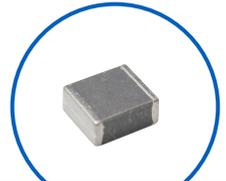
## SM BEADS (Differential Mode)

The rugged construction of these SM beads lowers the DC resistance and increases current carrying capacity compared to plated beads.



## MULTI-APERTURE CORES

Can be used in a variety of applications including suppression, balun (balanced – unbalanced) designs, common-mode chokes, and other broadband transformers.



## CHIP BEADS

100% tested for impedance and DC resistance. They are available in standard, high and GHz signal speeds.



## ROUND CABLE CORES

Offered in several different materials, these mitigate both differential and common-mode conducted EMI from 200 kHz up through 1 GHz.



## ROUND CABLE SNAP-ITS

Available in several materials to suppress differential or common-mode conducted EMI from 200 kHz up through 1 GHz.



## FLAT CABLE CORES

Can accommodate multi-conductor flat cables in widths from 8.9mm (0.35") up to 77mm (3.02").



## FLAT CABLE SNAP-ITS

Can accommodate multi-conductor flat cables in up to 64mm (2.52") wide. These are available in two materials to reduce broadband conducted EMI from one to hundreds of MHz.



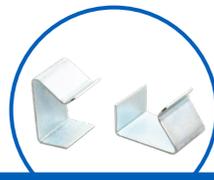
## CONNECTOR PLATES

All connector plates are supplied in our NiZn 44 material grade ideally suited for this application with its high impedance and high resistivity.



## MISCELLANEOUS CORES

Fair-Rite Products offers a selection of ferrite cores in special geometries. Cores are tooled and manufactured with our 43 or 77 materials.



## FLAT CABLE CORES ASSEMBLY CLIPS

Fair-Rite Products offers several securing clips to accommodate the assembly of our split flat cable suppression cores.



## FLEXIBLE FERRITE

NiZn flexible ferrite available in six initial permeabilities. Useful in the mitigation of radiated emissions, sheets are available in thicknesses ranging from 0.1mm to 0.5mm.



## POWER & INDUCTIVE COMPONENTS OVERVIEW



**RODS**

Used extensively in high energy storage designs due to their high DC saturation levels. These are also used for inductive components that require temperature stability and high Q.



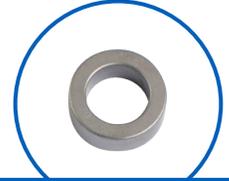
**ANTENNA/RFID RODS**

Available in three materials to cover the frequency range from 50kHz to 25MHz: 78 for less than 200kHz, 61 for 0.2 to 5MHz and 67 for greater than 5MHz



**BOBBINS**

Fair-Rite Products offers bobbins made in our 44 material for higher frequency designs and our 77 material for higher power designs.



**TOROIDS**

Fair-Rite offers this versatile geometry in various materials, from our lowest to our highest permeability.



**COATED TOROIDS**

Smaller Toroids (<9.5mm) can be supplied Parylene C coated. Larger Toroids (>9.5mm) can be supplied with a uniform coating of thermo-set plastic.



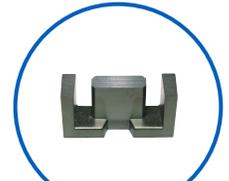
**POT CORES**

Commonly used in high Q inductors, tuned circuits, and wide band transformers, pot cores are available in 78, 95 and 98 materials for operating frequencies up to 200kHz.



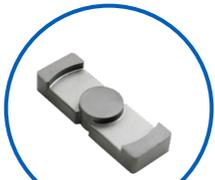
**E CORES**

Offer an economical design approach for inductive applications in a variety of designs. They are widely applied in differential-mode inductors and power converter transformers.



**EFD CORES**

Designed to maximize volume in a low profile package providing improved heat dissipation.



**ETD CORES**

Makes optimal use of volume area for maximum power throughput and increased efficiency, specifically for forward power converter transformers.



**EER CORES**

Widely used in switched-mode power supplies and permit off-line designs where IEC and VDE isolation requirements must be met.



**EP CORES**

Reduce the effect of residual air gap upon the effective permeability of the core thereby minimizing coil volume for a given inductance while providing excellent shielding.



**PLANAR CORES**

Ideal for integrating with PCB designs since they have a smaller footprint than other power geometries. Available in our 95, 98 and 78 materials.



**PQ CORES**

Developed for use in power applications, the large surface area of PQ cores aid in heat dissipation. Available in 78, 95 and 98 materials



**RM CORES**

Available in 78, 95 and 98 materials for operating frequencies up to 200kHz, typical applications for RM cores include power chokes and broad band transformers.



**U CORES**

Offers an economical core design with a nearly uniform cross-sectional area. Long legs can provide high voltage isolation and low leakage inductance. Available in 77 material.

For more information on these and other products visit **FAIR-RITE.COM**