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MagRAM and Electrical RF Absorbing Parts and Prototyping Service

Attenuate unwanted RFI and EMI in your new or existing designs



Application of a near field RF absorber to a flat surface usually just calls for MWT's MAS-310 flexible urethane MagRAM RF absorbing sheets or dye cut parts. They are highly effective in suppressing cavity (AKA travelling) waves. However, MWT works to provide RF control solutions that are geared to our customers needs. With that in mind, we offer metallic magnetic absorber products (<u>code: MAS</u>) or alternatively, electrically conductive carbon products (<u>code: ME</u>) incorporated into a number of different resins to create diverse formats to control RFI in your unique

application.

Epoxy based molded parts (MAS or ME-330): Our customers often need a rigid design that conforms to exacting size standards with low off gassing properties. MWT's 320 type parts can fill this need. They are made of epoxy resin custom molded to cover or be positioned near a noisy circuit, thereby suppressing EMI at the source. Metallic (MAS) or Carbon based (ME) RF absorbers are incorporated into the epoxy base. These parts can be designed to attenuate unwanted RF signals from 1GHz to over 40 GHz. The custom designed parts are made to your specifications and requirements to allow for quick and easy integration into your products. Two dimensional products are available with the option of an integral adhesive to ensure a robust connection to the substrate.

3D Printed plastic parts (MAS or ME-340): In order to help keep your budget in line, we offer a modern 3D scanning and prototype printing service, which allows for small scale production or prototyping of 3D parts in nylon, ABS, or PLA. In order to minimize cost of 3D parts, customers can supply us with a 3D CAD file created in SolidWorks or AutoCAD, or provide a finished STL file. Otherwise, we can create the file for you at a nominal cost. Production of larger numbers of parts can be custom molded from plastic or epoxy based resins as your requirements increase.

Dip coating (MAS or ME-350): For more complex and form fitting designs, we can use our masked dip coat process to create a form fitting PVC layer over a 3D object (such as a RFID antenna or IC board cover). This results in a neat, elegant and durable RF absorbing sheath over an otherwise difficult to cover part.