

MMG 3DP-Shield® Technology for 3D Printer Filaments



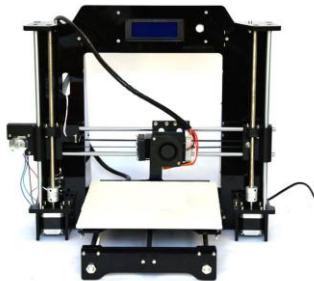
MMG 3DP-Shield® technology powders are designed to provide electro-magnetic shielding structures to 3D printer filaments.

With North American based know-how and a high capacity manufacturing facility, MMG has been supplying advanced electromagnetic powders to industries such as:

- Aviation
- Military
- Automotive
- Medical
- Industrial

Product Highlights:

- Extreme wide temperature range
- Several materials available covering wide frequency spectrum from kHz to GHz
- Several particle sizes available
- Ability to mix to thermoplastics

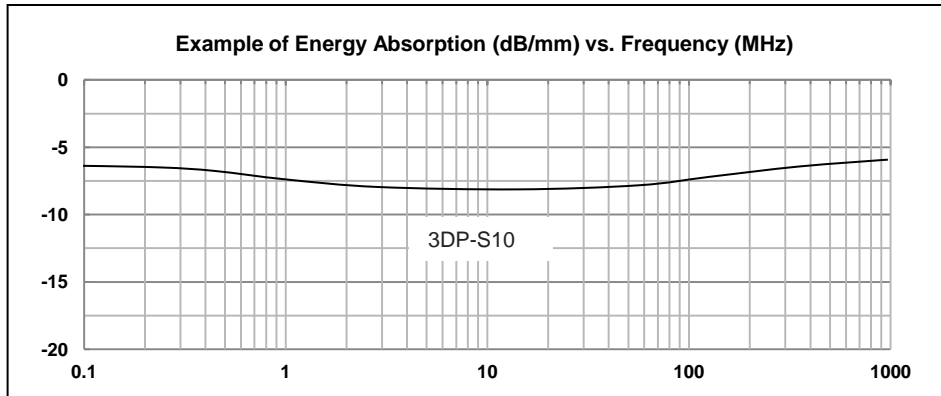


MMG Advanced Microwave Materials Overview:

In keeping with our market leader status in the Radio Frequency industry, MMG presents a new line of Advanced Microwave Materials. These materials are ready to use fully sintered powders specially designed to absorb electro-magnetic energy from below 1 MHz to above 30 GHz range.

Several grades are available, ranging from low permeability insulating particles to high permeability conductive particles.

MMG's unique powder processing technique offers superior magnetic density allowing for full application flexibility including extrusion, molding, injection, spray in place, fill in place, potting compound, magnetic fluid, function additive and thin film solutions.



MMG 3DP-Shield® Material Highlights:

- Several materials available targeting frequencies from kHz to GHz
- The powder compounds are specially designed to be mixed with thermoplastic 3D printer filaments
- Capable of concentrating electromagnetic energy towards a target
- Complex shapes, endless geometry options, no restriction in sizes and or thicknesses
- Light weight and weather resistant
- Low dimensional tolerances
- The finished part can be machined, diced, die cut or polished
- High strength material
- Penetration into restricted spaces
- Grain sizes from .002 to .02 inches (50 to 500 µm)
- High mechanical and chemical stability
- Complete assembled solution direct from MMG or assembled at your facility

MMG applications engineering staff is available to assist in engineering your solution in compounding or providing a complete assembled solution.



MMG is a global supplier and world leader in advanced design, development, assembly and manufacture of magnetic materials and components.

MMG offers a diverse and comprehensive product line in soft ferrites, permanent magnets, powder technology, with a wide array of advanced application specific products and technologies.

MMG has world class manufacturing bases in North America and Asia and applications engineering staffed facilities around the world.

MMG is perfectly positioned to provide local support to all our customers for all their magnetic needs.

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