

FERROSORB FS EMC ABSORBER FS-980 FerroSorb™ EMC Absorber

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Our FS-980 absorber provides satisfactory reflectivity performance for meeting conventional test site validation method below 1 GHz while providing superior anechoic performance from 300 MHz to 18 GHz. It is anticipated that test sites built with FS-980 absorber treatment will meet test site requirements in both low (30 MHz to 1 GHz) and high-frequency range (above 1 GHz) ranges, using known current and future validation methods. Test sites lined with FS-980 can also be used for immunity measurements, safely handling exposure to continuous RF field intensities up to 540 V/m.

* Chambers lined with FerroSorb have been demonstrated to perform at frequencies extending up to 40 GHz.

Key Features

- **Ultra Broadband Frequency Range**
30 MHz to 18 GHz*
- **Better than -10dB Reflectivity** 30 MHz to 100 MHz
- **Better than -20 dB Reflectivity** 100 MHz to 300 MHz
- **Better than -30 dB Reflectivity** 300 MHz to 18 GHz
- **540 V/m Power Handling Capability**
- **Numerically Optimized Curvilinear Wedge Design**
- **Meeting ETSI Requirements for Absorber Return Loss**
- **Per IEEE-STD-1128 Recommended Test Methods**

Features

Manufacturing Process

FerroSorb FS-980 is manufactured from high quality, low density polyurethane foam that undergoes 15 quality assurance checks during production. The manufacturing process begins with the foam being impregnated with a proprietary, conductive carbon formula. The foam is then cut into a precise curvilinear wedge configuration by a computer controlled saw. The shaped absorber is next bonded to a precision machined ferrite tile with a tuned dielectric layer, and tested.

Testing Process

Every piece of FerroSorb undergoes non-destructive reflectivity testing following the recommended square coax test method by IEEE-STD-1128. A vertical coaxial waveguide is used for testing across the 30 MHz to 500 MHz low frequency range. Higher frequency testing is performed using an NRL arch. This thorough testing process assures that FerroSorb FS-980 delivers consistent, repeatable performance.

Specifications

Electrical Specifications

Frequency Minimum: 30 MHz

Frequency Maximum: 18 GHz

Power Handling: 540.0 V/m CW

Physical Specifications

Nominal Weight: 25.0 kg (55.12 lb)

Overall Height: 100.0 cm (39.37 in)

Unit Size (Square): 100.0 cm (39.37 in)

Fire Retardant Ratings: NRL 8093 Tests 1, 2 & 3, TI #2693066, MIT MS-8-21, UL 94 and DIN 4102-B2
