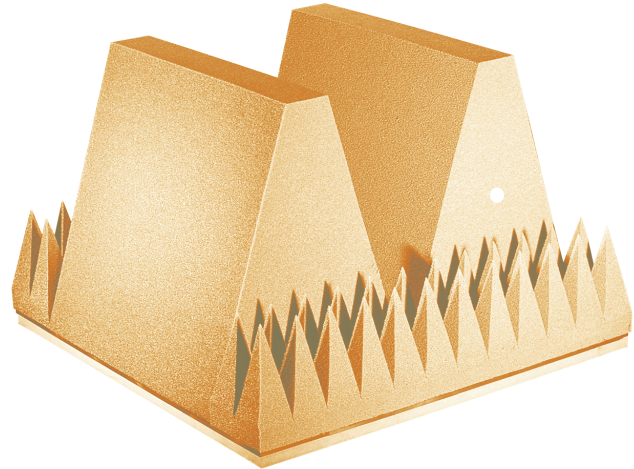


Features:

- 3m Chamber Applications
- Numerically Optimized Design Achieves Superior Performance
- Ultra Broadband Frequency Range 30MHz- 18GHz for RI Measurement
- 200 V/m Power Handling Capability
- Maximizes Test Volume – Less Than 1/2 the Depth of Traditional EMC Absorber
- Fire Retardant Meets NRL 8093 Tests 1, 2 & 3, TI #2693066, MIT MS-8-21, UL 94 and DIN 4102-B2
- Suitable for Retrofits to Upgrade Performance

*High Performance Hybrid
Ferrite Tile / Polyurethane Dielectric
From 30 MHz – 18 GHz**



Rantec FerroSorb™ FS-400 is the latest evolution in low profile anechoic technology. This numerically optimized hybrid combines high performance carbon-loaded foam absorber with precision-manufactured ferrite tile. The result is a space-saving profile that is less than half the depth of traditional foam-only products. FS-400 is ideal for EMC chamber applications that call for high performance requirements in compact environments, such as three meter and SpaceSaver™ EMC chambers.

The FS-400 design features an ultra broadband 30 MHz to 18 GHz frequency range and achieves superior levels of absorption and power-handling capability. Chambers designed with FerroSorb™ FS-400 will meet the +/- 4 dB normalized site attenuation requirements specified in ANSI C63.4 and EN 50147-2.

Applications

FerroSorb™ FS-400 is designed for applications in three meter EMC chambers. The product is ideal for FCC Class B compliance product testing, and EN 50147-2 regulations. FS-400 can also be used for compliance testing to IEC 61000-4-3, EN 55022, and other common EMC test applications.

Description

FerroSorb™ FS-400 is manufactured from high quality, low density polyurethane foam and undergoes 15 quality assurance checks during production.

The manufacturing process begins with the foam being submerged and impregnated with a proprietary, conductive carbon formula. It is then inspected and force-dried. After drying, the foam is submerged and impregnated in a water-soluble salt solution and is again inspected and

force-dried. This double-immersion process ensures FerroSorb's high levels of fire retardancy and resistance to moisture. The foam is then cut into a precise wedge configuration and an attractive, fire-retardant coating is applied for an added level of protection. The polyurethane dielectric is mounted on a specially formulated, precision-machined ferrite tile. To enhance high frequency performance, additional 15 cm (6 in) pyramidal absorbers are positioned at the base of the larger absorber.

Features

FerroSorb™ FS-400 has a unique composite construction that combines the best of ferrite tile technology with high performance anechoic absorber to achieve an ultra broadband operating frequency of 30 MHz to 18 GHz.

Absorption/reflectivity performance of FS-400's 400 mm (15.75 in) size is superior to dielectric material measuring more than twice its depth.

FS-400 has excellent power handling capability for today's immunity standards testing, and can safely handle continuous exposure to fields up to 200 V/m.

FS-400 is ideal for retrofits and new installations. The product's reduced size, as compared to traditional foam-only absorber, means that overall room size can be reduced, resulting in significant total project savings.

FerroSorbTM FS-400 is fire retardant and meets the standards of NRL 8093 Tests 1, 2 & 3, TI #2693066, MIT MS-8-21, UL 94, and DIN 4102-B2: Tests for Flammability.

Non-destructive reflectivity measurements are performed on every piece of FerroSorb. In the critical low frequency range of 30 MHz to 500 MHz, a vertical coaxial waveguide is utilized. Testing at higher frequencies is performed using the NRL Arch technique. These precise tests assure quality of the complete absorber, resulting in optimized chamber performance.

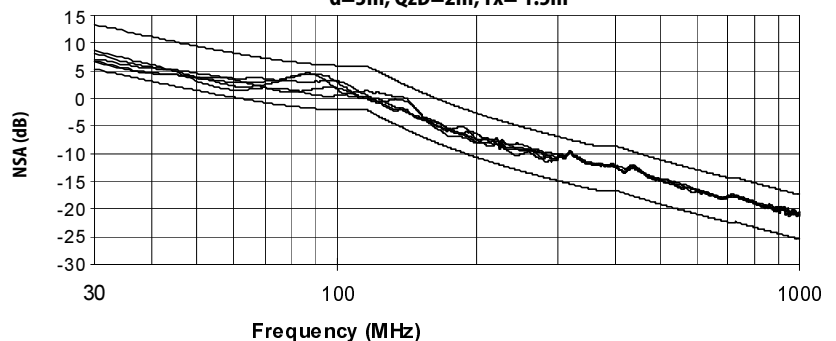
Electrical Properties

PART #	FREQUENCY	POWER HANDLING
FS-400	30 MHz - 18 GHz	200 V/m CW

Physical Properties

PART #	HEIGHT OVERALL	UNIT SIZE (SQUARE)	NOMINAL WEIGHT	MOUNTING	RATINGS: FIRE RETARDANT
FS-400	400.0 mm 15.7 in	600.0 mm 23.6 in	19 kg 41 lb	Mechanical Fastener	NRL 8093 Tests 1,2,3, TI #2693066, MIT MS-8-21, UL 94 and DIN 4102-B2

STD 3m Chamber: Measured NSA, Vert. Pol.,
d=3m, QzD=2m, Tx= 1.5m



STD 3m Chamber: Measured Delta NSA
Vert. Pol., d=3m, QzD=2m, Tx=1.5m

