

C-RAM™ FGMM

Flexible, broadband, magnetic microwave absorber

Description

C-RAM™ FGMM is a broadband magnetically loaded flexible sheet material, which absorbs an average of 10 dB of incident RF energy across a frequency range of 4 to 10 GHz, over a wide range of incidence angles.

Availability

Standard sheet size is 12" x 12" (305 mm x 305 mm).

C-RAM™ FGMM can be supplied in other sizes, or per customer specified configurations upon request.

C-RAM™ FGMM can be supplied with a metal backing (-ML), order as FGMM-ML.

C-RAM™ FGMM can also be supplied with a peel-and-stick pressure sensitive adhesive backing, order as FGMM/PPGA.

As a standard, The C-RAM™ FGMM base material is silicone, but it can also be supplied in a urethane base version.

Applications

- Lining of antenna shrouds to minimize side lobes.
- Free space reflectivity reduction.
- Reduce radar cross section or backscattering.

Method of application

C-RAM™ FGMM can be applied to a substrate by using a silicone RTV adhesive. The sheet must be in intimate contact with a metal surface for proper performance. For best results, the material should be scuffed with sandpaper, wiped with alcohol to remove dust and grease, and have a silicone primer applied to the metal substrate.

C-RAM™ FGMM can also be supplied with a pressure sensitive adhesive backing (/PPGA).

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for the intended use and assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.

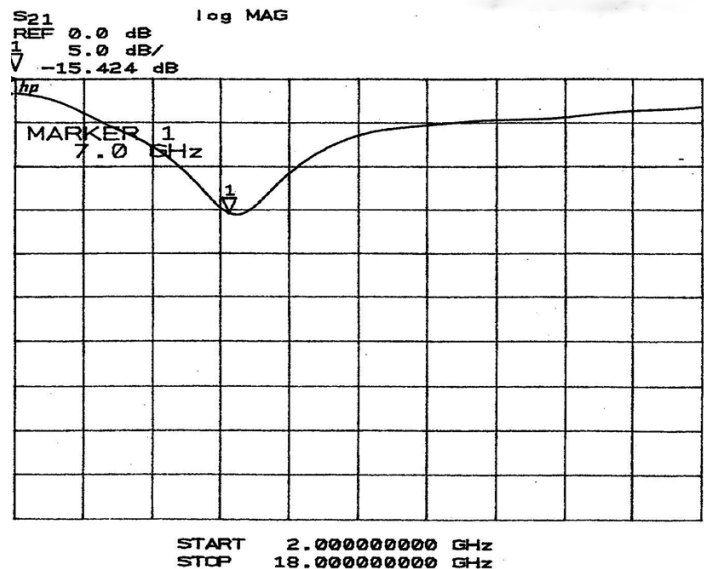
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Typical properties

Frequency range	4 to 18 GHz
Color	Grey
Flammability	Non-flammable
Reflectivity performance	approx. -10 dB from 4 to 10 GHz (see graph below)
Thickness	0.040 in (1.01 mm)
Weight	4.9 kg/m ² (1.0 lb/ft ²)
Service temperature	-60 to +150°C (-80 to +300°F)
Hardness, shore A	85

Typical reflectivity

The graph below shows typical free-space reflectivity performance of C-RAM™ FGMM, expressed as dB down from metal plate reflection, as a function of frequency. Measurement is made on a NRL near-field type arch.



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