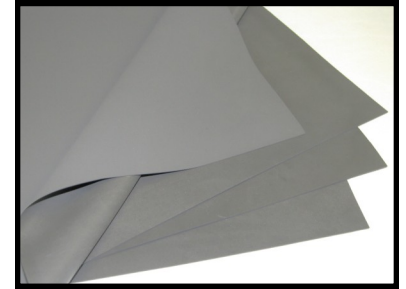




# Tuned Frequency Absorber

## MR12-0016-00



MAST Technologies' Tuned Frequency Absorber product series is a thin magnetically loaded sheet stock. Tuned Frequency Absorbers, also known as resonant frequency absorbers, provide great reflection loss at a discrete frequency, typically offering 20dB of attenuation. Tuned Frequency Absorbers offer a narrowband of absorption, typically +/-10% of the resonant frequency, so are best used when a single discrete frequency is trying to be absorbed. MAST Engineers can tune an absorber to any frequency from 1 to 40 GHz, by simply changing the formulation and thickness.

### APPLICATIONS

- Ship MASTs
- Specular return (RCS)
- Discrete frequency absorption
- Antenna isolation & patterning
- Aircraft seals
- Aircraft ducts
- Instrument housings

### FEATURES & BENEFITS

- Tough material can survive outdoor exposure
- Very thin for compact locations
- Flexible elastomeric material will not crack
- Narrow frequency range
- RoHS Compliant
- Halogen Free

### TYPICAL PROPERTIES

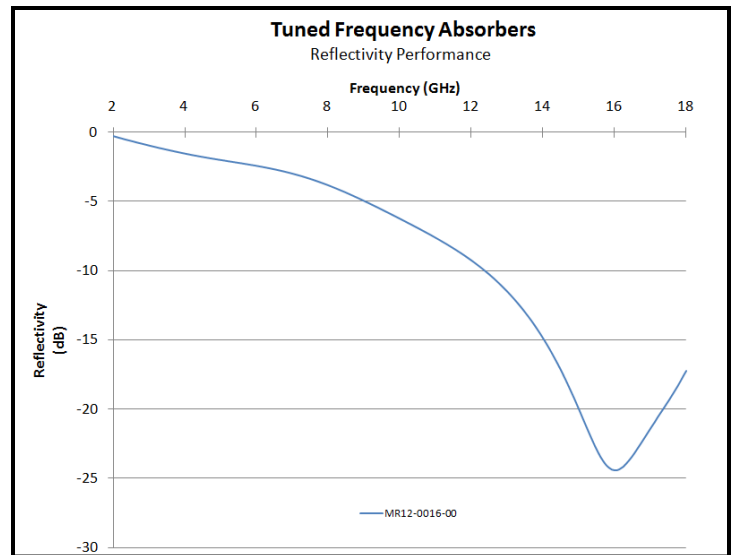
- Frequency: 16.0 GHz
- Thickness: 0.043" (1.1mm)
- Adhesive Thickness: 0.005" (0.05mm)
- Color: Dark Grey
- Elastomer: Nitrile
- Operating Temperature: -60°F to 300°F
- Flammability Rating: Not Rated
- Hardness: Shore A 60-80

### PART NUMBERING: MR12-0016-XX

- 00: No PSA backing
- 01: PSA backing
- >10: Die Cut

### ELECTRICAL PERFORMANCE

This performance plot illustrates the reflection loss performance of this material. Reflection loss is measured on an NRL arch, for more information on the NRL arch test set-up, please refer to Tech Bulletin 101. Additional electrical test data may be available upon request.



### METHOD OF APPLICATION

The primary method of application for Tuned Frequency Absorbers is utilizing a Pressure Sensitive Adhesive (PSA) backing. MAST proudly uses 3M transfer tapes on it's Tuned Frequency Absorbers. Contact MAST technical representatives for a data-sheet on the PSA.

Other liquid and paste adhesives may be recommended. Contact a MAST technical representative for more information.

### AVAILABILITY

- Standard Sheet Sizes: 20" x 20" (564 x 564mm)
- 24" x 24" (769 x 769 mm)
- Format: Sheets, Die Cut, Kiss Cut Pads

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