## **Engineering Design Kit Contents**

MAST Technologies' Engineering Design Kit contains just a sample of products available. These samples are intended to be cut and utilized during the design process for cavity resonance disruption, surface wave attenuation, reflection loss or insertion loss. For further information or how to integrate these materials, please contact a MAST Technologies Technical Representative.



MAST Part Number	Туре	Thickness (inch/mm)	Frequency (GHz)
MR21-0001-01	Cavity Resonance	0.020/0.5	14 to 40 GHz
MR21-0003-01	Cavity Resonance	0.040/1.0	9 to 14 GHz
MR21-0005-01	Cavity Resonance	0.060/1.5	5 to 9 GHz
MR21-0007-01	Cavity Resonance	0.080/2.0	3 to 7 GHz
MR51-0002-02	Low Frequency	0.020/0.5	50 MHz to 4 GHz
MR51-0006-02	Low Frequency	0.040/1.0	50 MHz to 4 GHz
MF11-0002-01	Reticulated Foam	0.500/12.8	8 to 40 GHz
MF22-0001-01	Lossy Foam	0.125/3.2	1 to 20 GHz
MS32-0002-00	Suppress-n-Sink Absorber + Thermal Pad	0.040/1.0	1.0 to 8 GHz
MS32-0004-00	Suppress-n-Sink Absorber + Thermal Pad	0.080/2.0	0.5 to 12 GHz



Innovative Materials for Integrated Solutions

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## **RF Absorbing Elastomers**



Performance Specifications			
Thicknesses:	0.010″ to 0.150″	Operating Temp (°F):	-60 to 375
RoHS Compliant:	Yes	Sheet Sizes:	12″ x 12″ 12″ x 24″ 24″ x 24″
UL94-VO Rated:	Yes	PSA Available:	Standard with -01 suffix

#### Features and Benefits

- Thin form factor
- Tough material can survive outdoor exposure
- RoHS Compliant/Halogen Free
- UL-94 Rated

### **Typical Applications**

- Concealment
- Electronic enclosures
- Antenna systems
- Wireless networking equipment
- Test and measurement systems



Product Series	Frequency Range	Attenuation Type	Performance
MR1 – Tuned Frequency	Tuned from 1.0 to 100.0 GHz	Narrowband specular reflection loss	-20 dB at frequency of design
MR2 – Cavity Resonance	Broadband from 1.0 to 40.0 GHz	Cavity resonance reduction	-10 dB within the performance band
MR3 – Surface Wave	Broadband from 1.0 to 40.0 GHz	High loss surface wave attenuation	-10 dB within the performance band
MR5 – Low Frequency	Broadband from 50 MHz to 3 GHz	Insertion Loss or Mode Suppression	-10 dB within the performance band

Part numbering and further technical data available at www.masttechnologies.com

# **RF Absorbing Foam**



Performance Specifications			
Thicknesses:	0.062″ to 4.5″	Operating Temp (°F):	-40 to 220
RoHS Compliant:	Yes	Sheet Sizes:	12″ x 12″ 24″ x 24″
UL94 Rated:	Optional	PSA Available:	Standard with -01 suffix

#### Features and Benefits

- Lightweight
- Broadband performance
- RoHS Compliant/Halogen Free

### **Typical Applications**

- Antenna systems
- Millimeter wave technologies
- PIM reduction
- Wireless networking equipment
- Test and measurement systems



	Product Series	Frequency Range	Attenuation Type	Performance
	MF11 – Reticulated Foam	4.0 to 100.0 GHz	Broadband multiple angle reflection loss	-30dB within the per
	MF22 – Lossy Foam	0.5 to 40 GHz	Broadband insertion loss	-30dB within the per
	MF32 – Convoluted Foam	4.0 to 100 GHz	Broadband multiple angle reflection loss	-20dB within the per
	MF51 – Multilayer Broadband	0.5 to 40.0 GHz	Broadband multiple angle reflection loss	-30dB within the per

Part numbering and further technical data available at www.masttechnologies.com

### **Other Product Areas**







Contact a MAST Technologies technical representative for more information on the products list above.

#### Typical Attenuation Performance

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