

Microwave Farm's MF-AbsorberTM is microwave absorber in thin sheet format made of a mixture of polymer resin and metal magnetic powder which is thin and flexible and excellent in workability and can be easily bonded. This absorber can suppress radiation noise of electronic devices for wideband microwave frequency range and reduce surface current as well as surface reflection in cavity resonant application.



■ Features

- Available for Microwave Freq. range
- Lightweight, flexible, thin and excellent processability
- Wide absorption bandwidth
- Included Adhesive tape on backside

■ Markets

- Commercial communications
- Security and Defense
- Antenna Chamber
- Automotive, general electronics



■ Applications

- MF-Absorber can suppress radiation noise of electronic devices for wideband radio frequency range and is effective in reducing surface current as well as surface reflection in cavity resonant applications due to the high magnetic loss characteristics of materials.
- It suppresses the reflection inside the microwave module and is used to reduce cavity resonance of the module.
- It is particularly suitable for use in masts of ships and walls to reduce reflections and echoes to nearby antennas and to reduce overall radar signatures by attaching to vehicles.
- It can be used for various applications such as anechoic chamber, medical equipment facility.

■ Availability

- Standard sheet size : S1 (105 X 150 mm) , S2 (150 x 210 mm), S3 (210 x 300 mm : A4 Size)
- MF-Absorber can be used in different sizes, thicknesses and custom configurations on request.
- Thickness depends on the desired resonant frequency, and other resonant frequencies are available according to special request.

■ Instructions for USE

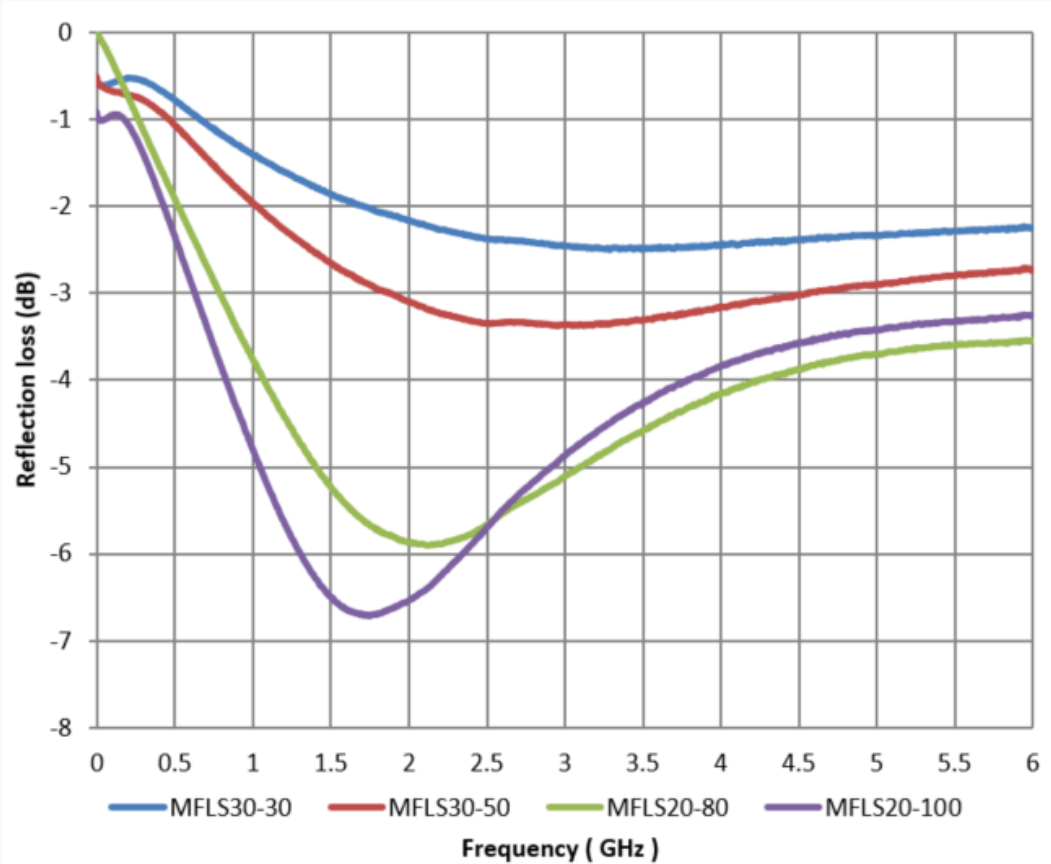
- MF-Absorber is designed to function directly in front of a metallic surface. Otherwise, a metallic foil should be bonded to the object.
- Epoxy and acrylic adhesives are recommended or use the self-adhesive version.
- To obtain a strong bond of the absorber to the object, the metallic surface should first be thoroughly cleaned with a degreasing solvent.
- MF-Absorber can be readily cut with a sharp knife and template.

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Specification

Items	MFLS20-80	MFLS20-100	MFLS30-30	MFLS30-50
Freq. range (GHz)	< 6.0			
Peak & Center Freq. (GHz)	2.0	2.0	3.0	3.0
Standard thickness (mm)	0.8	1.0	0.3	0.3
Standard size (mm)	S1 : 105 X 150 S2 : 150 X 210 S3 : 210 x 300 (A4 size)			
Surface resistance (Ω)	1x10 ⁶ (min)			
Specific gravity	3.4 ± 0.5			
Temp. Range (°C)	-30 to 90			
Hardness (Shore A)	93 ± 5			

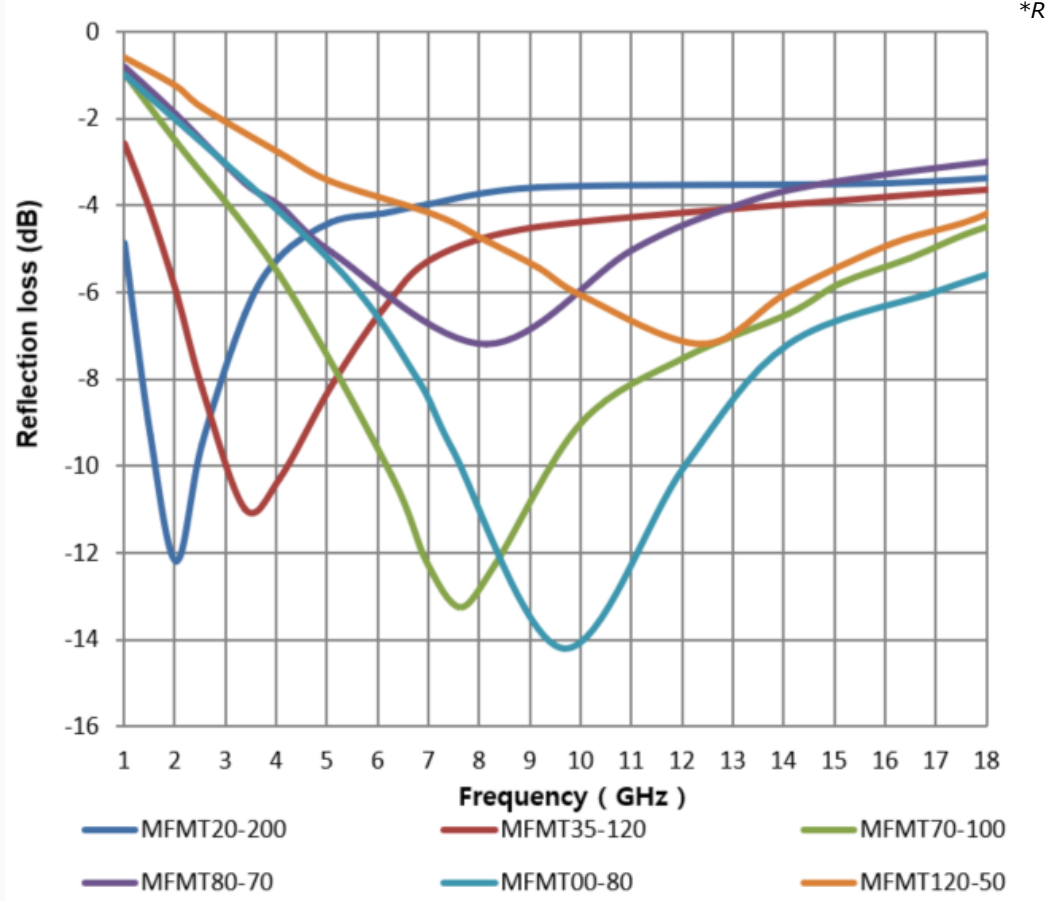
*ROHS Compliant



Specification

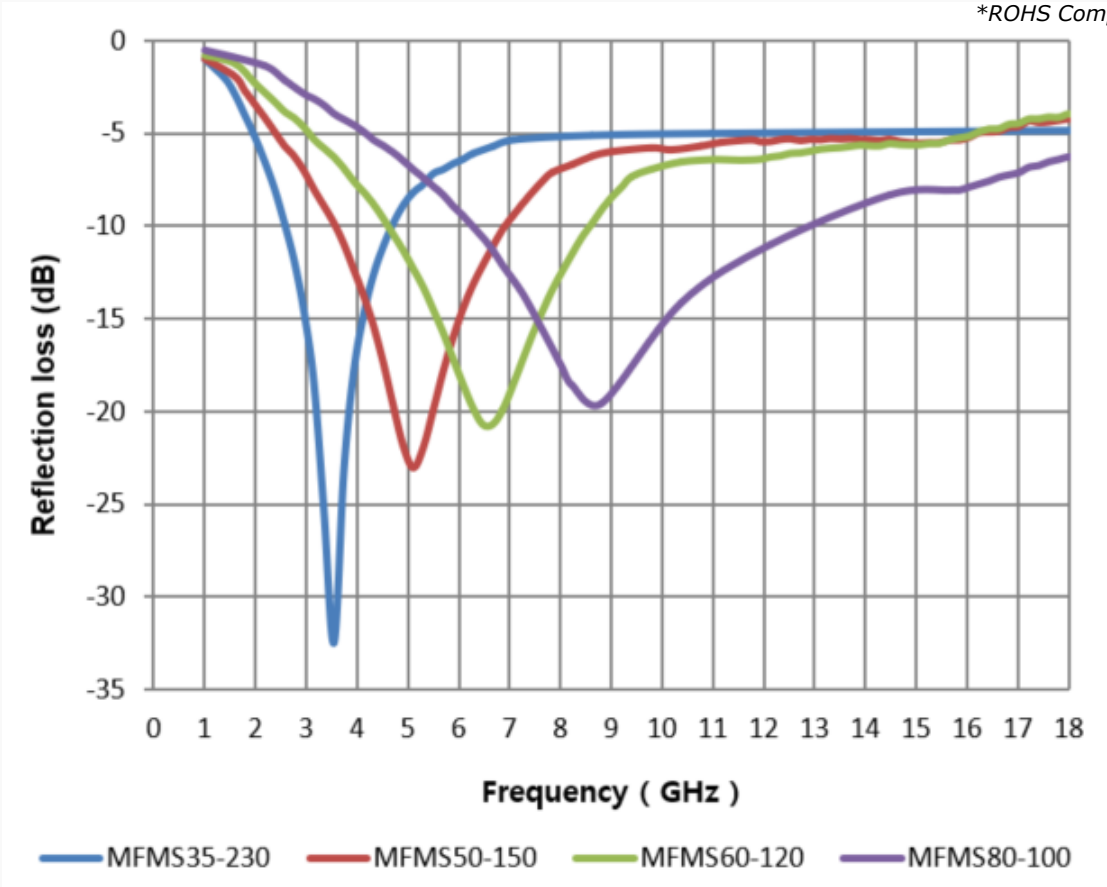
Items	MFMT20-200	MFMT35-120	MFMT70-100	MFMT80-70	MFMT100-80	MFMT120-50
Freq. range (GHz)	< 18.0					
Peak &Center Freq. (GHz)	2.0	2.0	7.0	8.0	10.0	12.0
Standard thickness (mm)	2.0	1.2	1.0	0.7	0.8	0.5
Standard size (mm)	S1 : 105 X 150 S2 : 150 X 210 S3 : 210 x 300 (A4 size)					
Surface resistance (Ω)	1x10 ⁶ (min)					
Specific gravity	3.7 ± 0.7					
Temp. Range (°C)	-30 to 90					
Hardness (Shore A)	93 ± 5					

*ROHS Compliant



Specification

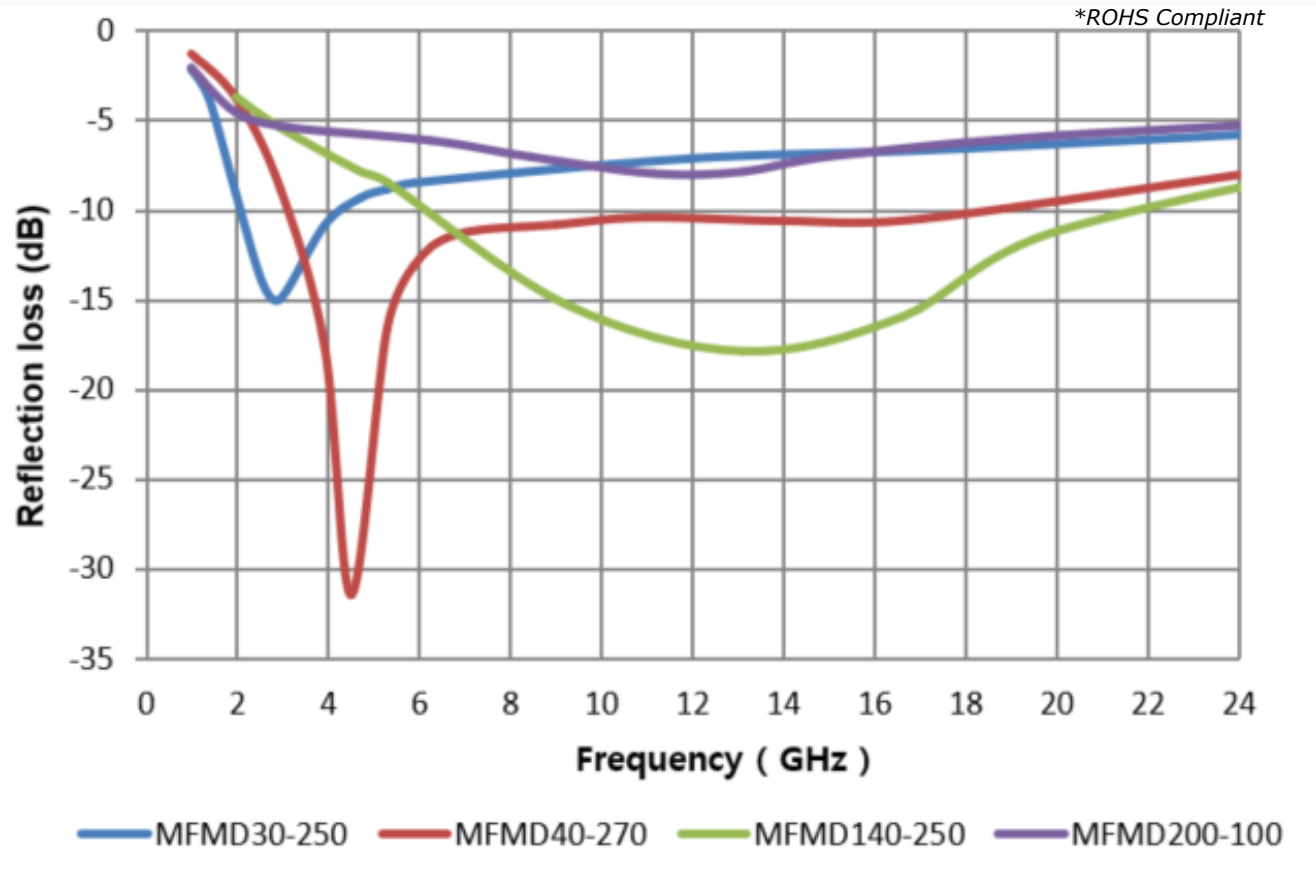
Items	MFMS35-230	MFMS50-150	MFMS60-120	MFMS80-100
Freq. range (GHz)	< 18.0			
Peak &Center Freq. (GHz)	3.5	5.0	6.0	8.0
Standard thickness (mm)	2.3	1.5	1.2	1.0
Standard size (mm)	S1 : 105 X 150 S2 : 150 X 210 S3 : 210 x 300 (A4 size)			
Surface resistance (Ω)	1x10 ⁶ (min)			
Specific gravity	3.7 ± 0.7			
Temp. Range (°C)	-30 to 90			
Hardness (Shore A)	93 ± 5			



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Specification

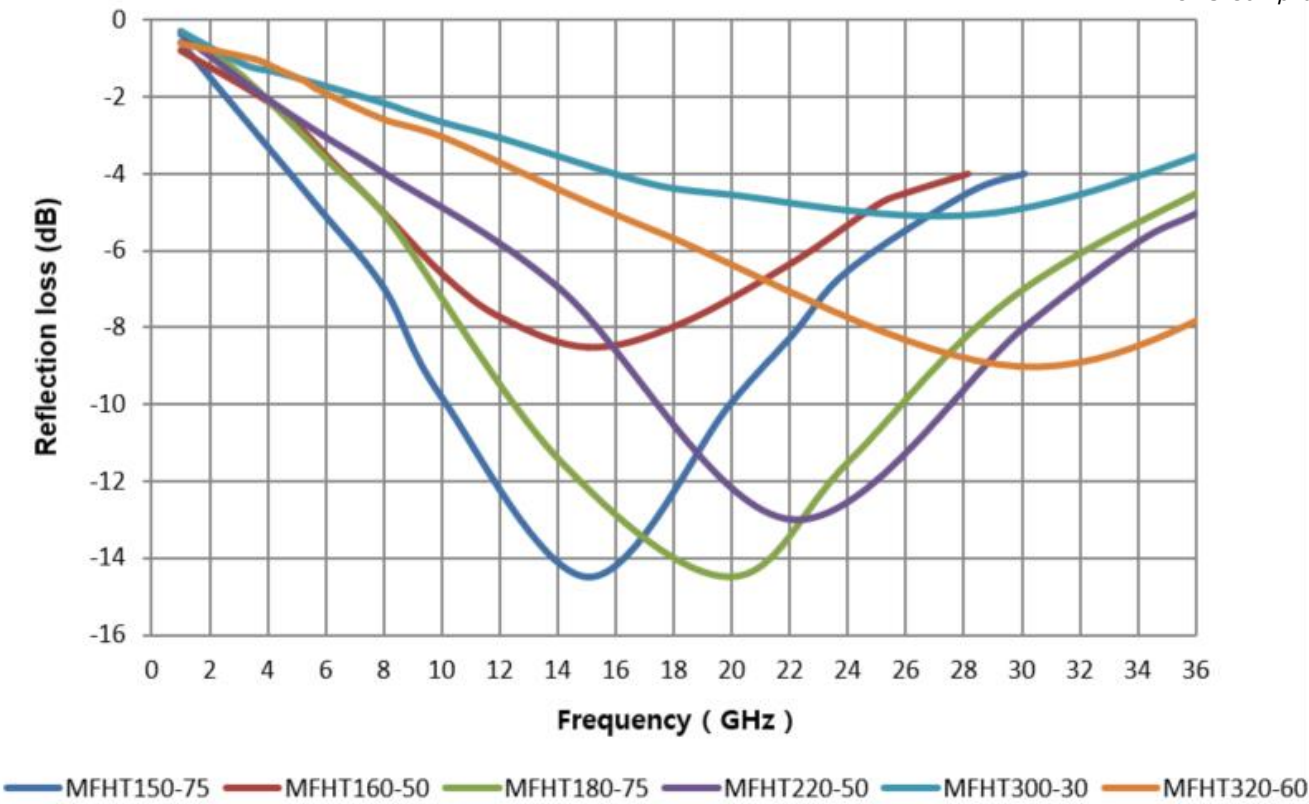
Items	MFMD30-250	MFMD40-270	MFMD140-250	MFMD200-100
Freq. range (GHz)	< 24.0			
Peak &Center Freq. (GHz)	3.0	4.4	14.0	20.0
Standard thickness (mm)	2.5	2.7	2.5	1.0
Standard size (mm)	S1 : 105 X 150 S2 : 150 X 210 S3 : 210 x 300 (A4 size)			
Surface resistance (Ω)	1x10 ⁶ (min)			
Specific gravity	3.4 ± 0.5			
Temp. Range (°C)	-30 to 90			
Hardness (Shore A)	93 ± 5			



Specification

Items	MFHT150-75	MFHT160-50	MFHT180-75	MFHT220-50	MFHT300-30	MFHT320-60
Freq. range (GHz)	< 26.0			< 36.0		
Peak &Center Freq. (GHz)	15.0	16.0	18.0	22.0	30.0	32.0
Standard thickness (mm)	0.75	0.5	0.75	0.5	0.3	0.6
Standard size (mm)	S1 : 105 X 150 S2 : 150 X 210 S3 : 210 x 300 (A4 size)					
Surface resistance (Ω)	1x10 ⁶ (min)					
Specific gravity	3.4 ± 0.5					
Temp. Range (°C)	-30 to 90					
Hardness (Shore A)	93 ± 5					

*ROHS Compliant

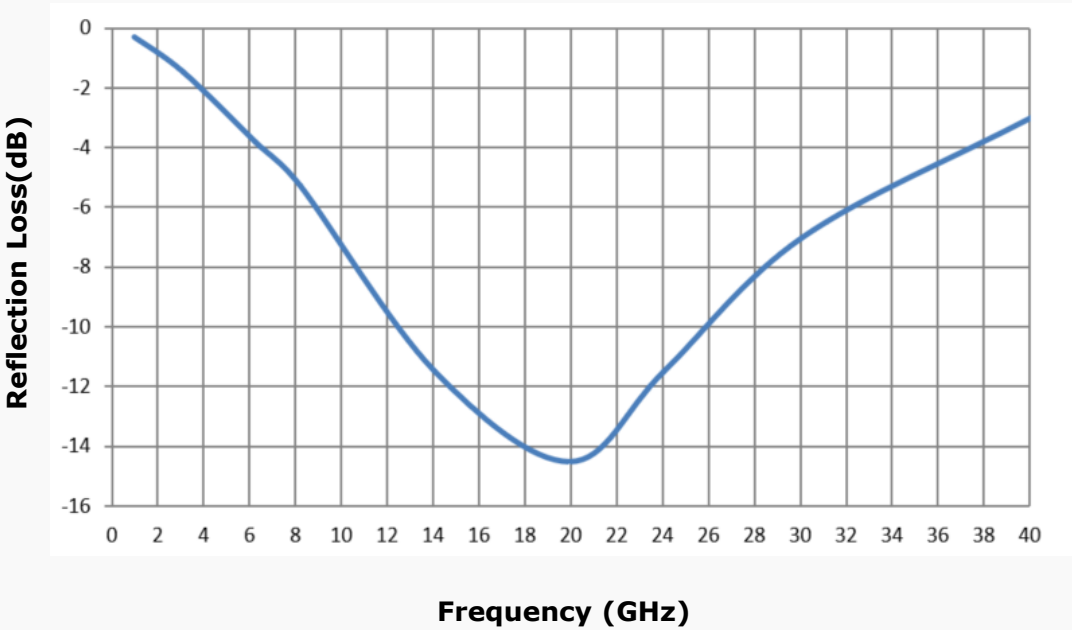


Specification

Scope	Items	MFHT200-75
Electrical	Freq. range (GHz)	< 40
Material	Standard thickness (mm)	0.75
	Standard size (mm)	S1 : 105 X 150 S2 : 150 X 210 S3 : 210 x 300 (A4 size)
	Surface resistance (Ω)	1x10 ⁶ (min)
	Specific gravity	4.0 ± 0.5
	Temp. Range (°C)	-30 to 90
	Hardness (Shore A)	90 ± 5

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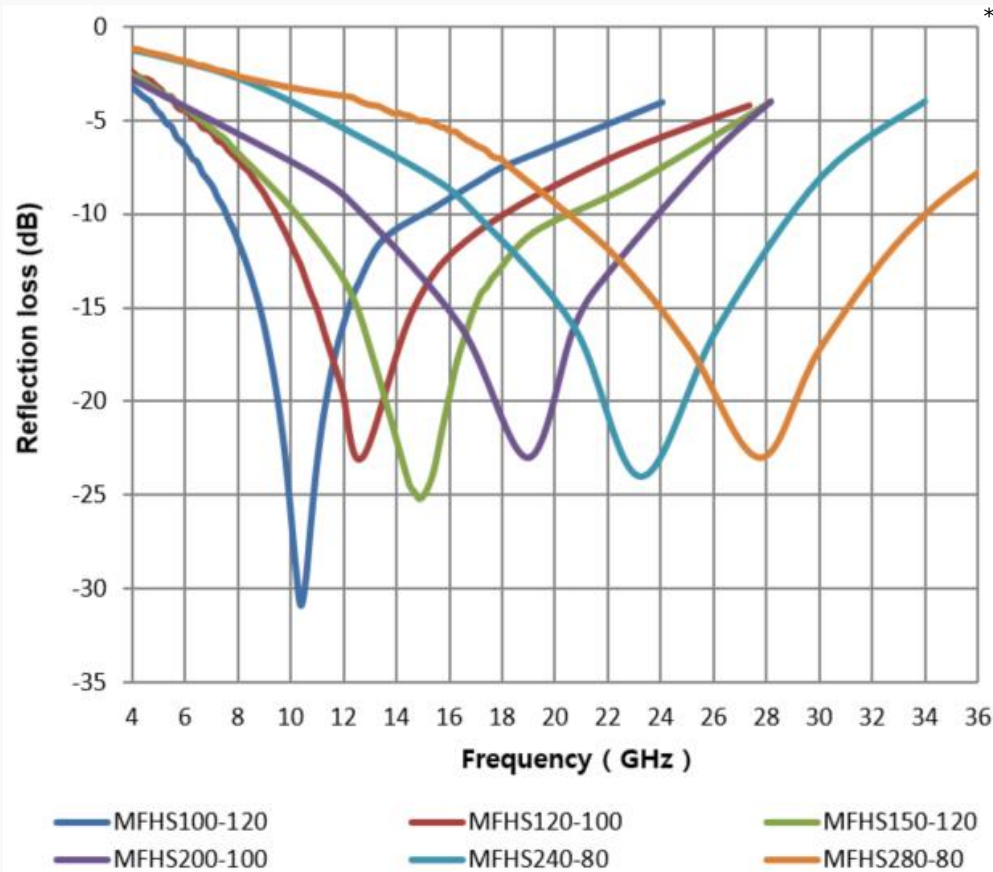
MFHT200-75



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Specification

Items	MFHS100-120	MFHS120-100	MFHS150-120	MFHS190-100	MFHS240-80	MFHS280-80
Freq. range (GHz)	< 20.0		< 26.0		< 32.0	< 36.0
Peak & Center Freq. (GHz)	10.2	12.5	15.0	19.0	24.0	28.0
Standard thickness (mm)	1.2	1.0	1.2	1.0	0.8	0.8
Standard size (mm)	S1 : 105 X 150 S2 : 150 X 210 S3 : 210 x 300 (A4 size)					
Surface resistance (Ω)	1x10 ⁶ (min)					
Specific gravity	3.4 ± 0.5					
Temp. Range (°C)	-30 to 90					
Hardness (Shore A)	93 ± 5					

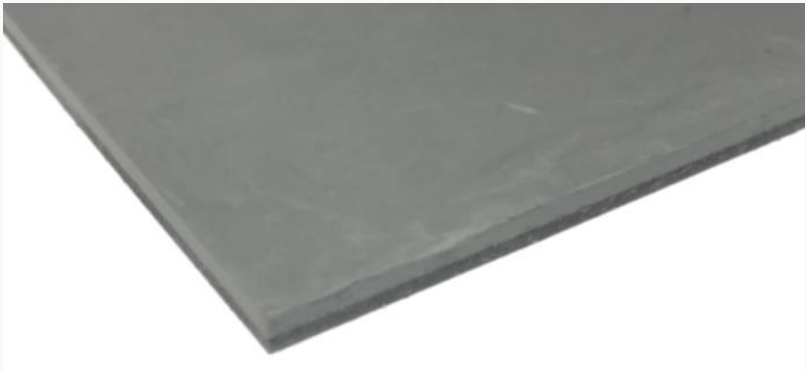


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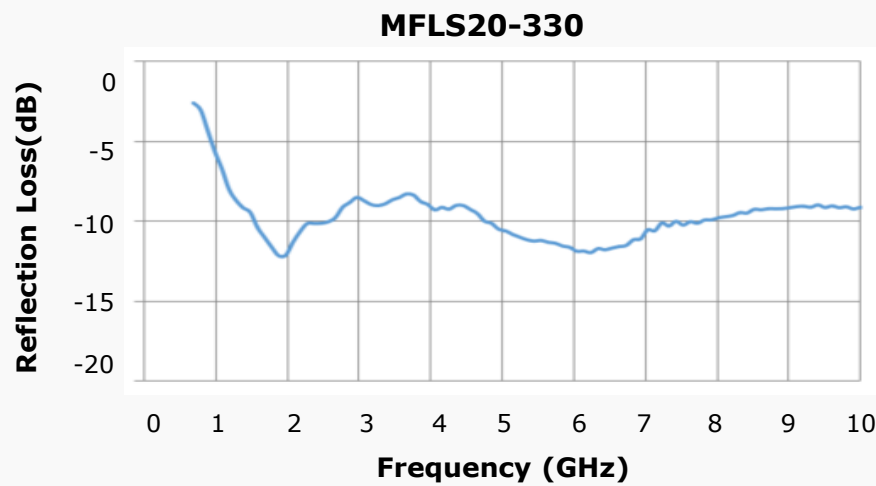
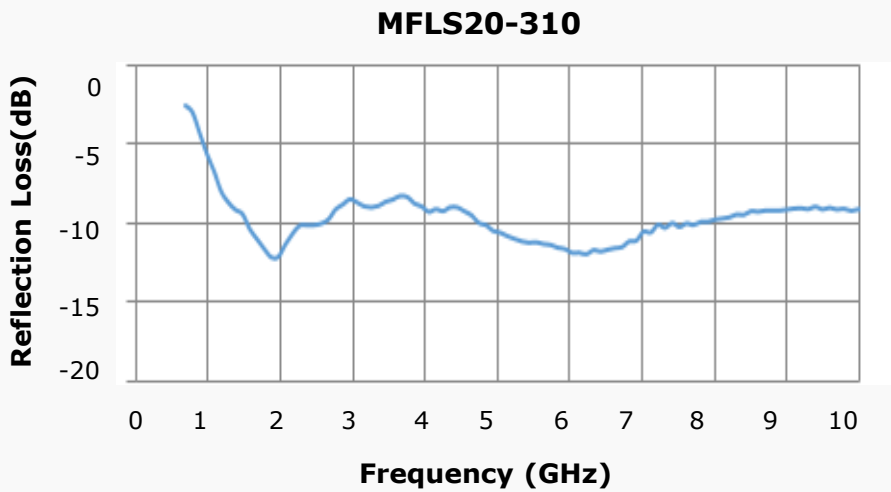
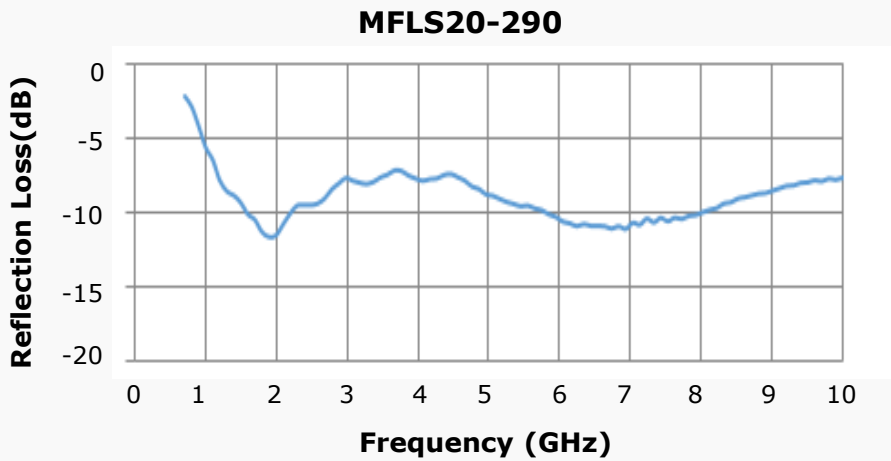
■ Specification : Broadband 2-Layer Type for Antenna Chamber

Items	MFLS20-290	MFLS20-310	MFLS20-330
Freq. range (GHz)	< 10.0		
Peak &Center Freq. (GHz)	2.0 & 6.0		
Standard thickness (mm)	2.9	3.1	3.3
Standard size (mm)	S4 : 150 X 300		
Surface resistance (Ω)	1x10 ⁶ (min)		
Specific gravity	3.7 ± 0.7		
Temp. Range (°C)	-30 to 90		
Hardness (Shore A)	93 ± 5		

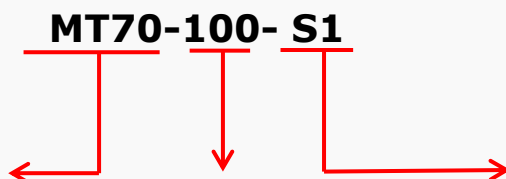
*ROHS Compliant



■ **Specification : Broadband 2-Layer Type for Antenna Chamber**



■ Selection Guide



Absorber type

MT70
HT200

Thickness

75 : 0.75 mm
100 : 1.0 mm

Size

S1 : 105 X 150 mm
S2 : 150 X 210 mm
S3 : 210 X 300 mm (A4 Size)
S4 : 150 X 300 mm (For 2-Layer)

S1



S2



S3



S4

