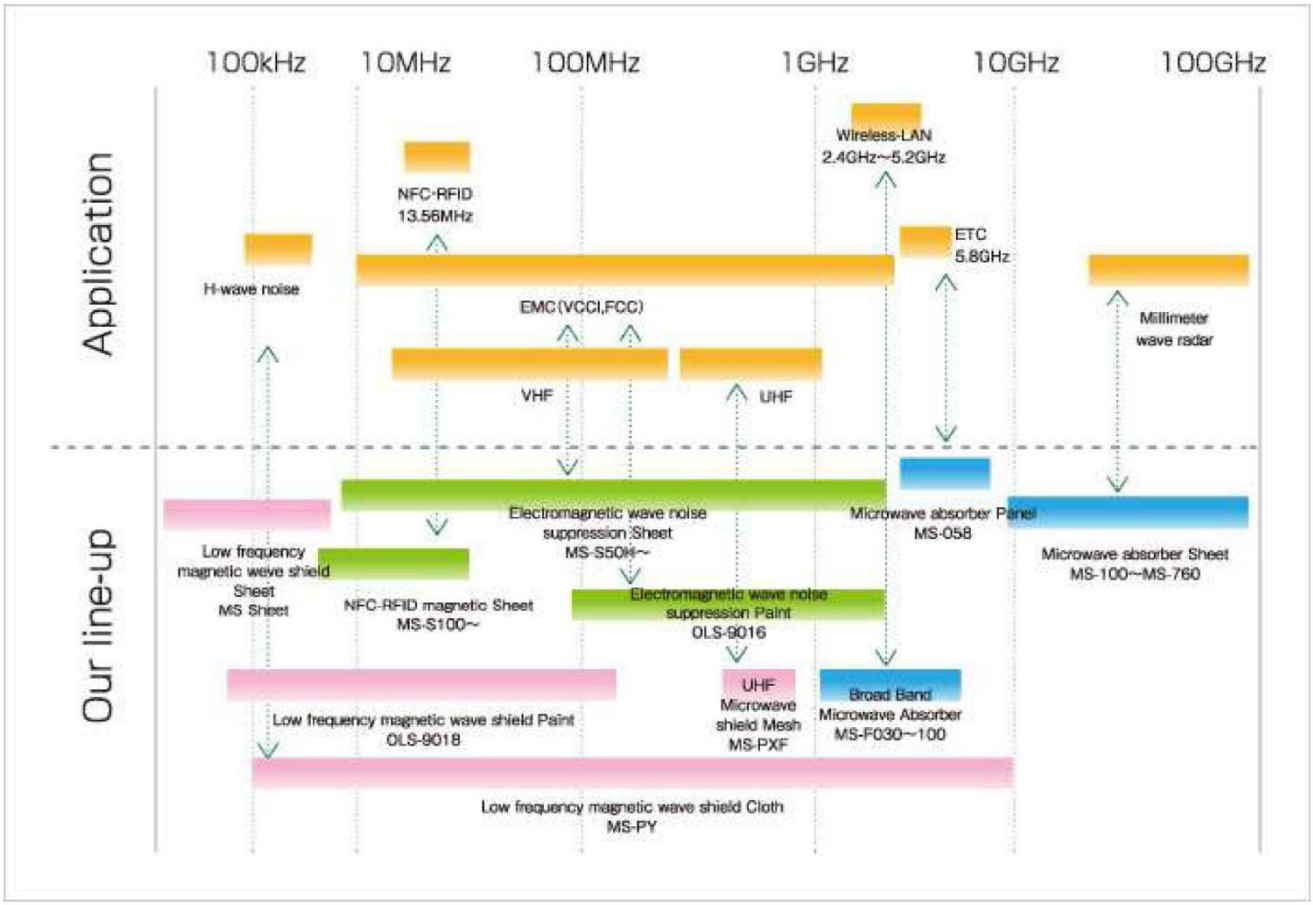
Microwave Absorbers Inc.

RF Absorbing and Shielding Materials

- Absorbing Properties: Up to 94 GHz, up to – 40 dB
- Shielding Properties: Up to 10 GHz, up to – 80 dB
- Customised Materials available on request



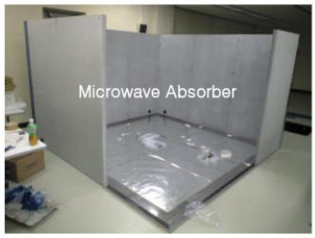
Microwave Absorbers Inc.

Light Weight Anechoic Chamber & Shield Tent

OLTUS portable shield rooms consists of a new material: Polyester cloth coated with soft magnetic material by our proprietary process. This cloth blocks frequencies between 100 KHz and 10 GHz. As a lightweight and highly portable chamber, it provides over40 dB shielding against cellular phone, wireless LAN, Bluetooth, UWB and RFID signals. Additionally, it is an effective anechoic chamber for testing antennas and RF modules.

< Light Weight Anechoic Chamber >

Light Anecdote Chamber for Mobile R&D2.4m×2.4m



Small Chamber for UHF-RFID R&D

Product No.	MSR-PY
Absorb Frequency	300MHz ~ 10GHz
Shield Frequency	100KHz ~ 10GHz
Standard Size (W * L * H)	2.4 m* 2.4 m *2 m, 1.8 m * 1.8 m * 2 m, 1.8 m * 0.9m * 0.9m Size as requested
Materials	EM Shield Cloth, RF Absorber Panel, Al. Sheet Floor

<Shield Tent>

1. Double layered tent can achieve -40 dB shielding (MST-PY)
2. Easy set up, small storage space
3. Size and specification as requested.

Shield Tent 2.4 m * 2.4 m
MST-PY

UHF-RFID Shield 2.4 m * 2.4 m
MST-PXF

Product No.	MST-PY	MST-PXF
Shield Frequency	100 KHz - 10 GHz (-40 dB)	500MHz ~ 5GHz (-30 dB)
Characteristics	High Shield performance (-40 dB) Magnetic Wave Shield (-20 dB)	Air permeability & Translucent
Standard Size (W * L * H)	2.4 m * 2.4 m * 2 m, 1.8 m * 1.8 m * 2 m, 1 m * 1 m * 1.5 m Size as requested	
Materials	Shield Cloth, Frame, Al. Sheet Floor To be Provided without frame	

Microwave Absorbers Inc.

Electromagnetic Wave Shield Cloth

MS-PY is a new material: polyester cloth specially plated with soft magnetic metal that effectively blocks RF at frequencies from 100 KHz to 10 GHz. It is well suited for preventing interference between communication devices as well as cellular phones, inverters, measurement equipment.

1. Shields low frequency magnetic fields. (MS-PY)
2. Excellent for shielding high frequencies.
3. Light weight and easily cut and sewed.

< MS - PY Electric Magnetic wave Shield Cloth>

MS-PY Shield Cloth

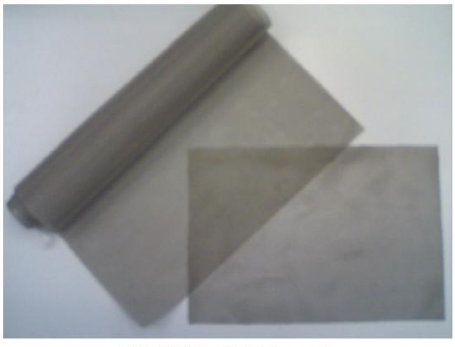
Suppress Radio noise

H-wave shield curtain

Guard Uniform

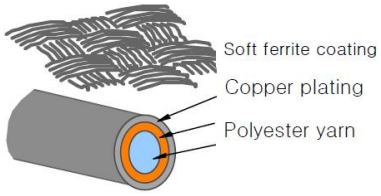
Guard RF noise

< MS-PXF RF shield mesh>



MS-PXF Shield mesh

UHF—RFID Ghost read



Product No.	MS-PY	MS-PXF
Frequency	100 KHz - 10 GHz	300 MHz - 5 GHz
Characteristics	Very High Shield (- 80 dB) H wave shield (100 KHz)	High shield (- 50 dB) Transparent & Air permeability
Standard size	1100 mm * 20 M	1000 mm * 20 M
Thickness	150 μm	250 μm
Materials	Polyester Cloth with Soft ferrite plating	

Microwave Absorbers Inc.

Microwave Broad Absorber Panel

MS – F series panels are used for control of RF energy at wireless LAN, TPMS, Zigbee, Active Tag, RFID and mobile phone frequencies. They have excellent performance at normal and grazing incidence.

1. They can absorb UHF microwave at grazing incidence.
2. Thy can absorb broad band microwave.
3. Light in weight, and size and shape can be adjusted as necessary.
4. As multi layered, it widen frequency range.

<MS-F Microwave Absorber Panel>

Shield Box for UWB Test

MS-F050

MS－F030 with Cover

GPS Radar Dome

Shield Box for Wireless LAB

Light Anechoic Chamber

Product Number	MA-F030	MA-F050	MA-F100
Effective Frequency	2 GHz - 76 GHz	1 GHz—76GHz	300 MHz—76GHz
Standard Thickness	30 mm	50 mm	100 mm
Standard Size	850 mm * 850 mm, 850 mm * 1750 mm		
Material	Calcium Carbonate impregnated with Dielectric Material		
Standard Weight	0.5 kg / panel (10mm, 850 mm * 1750 mm)		
Operating Temp.	-30 C - 85C		

Microwave Absorbers Inc.

Microwave Absorber Sheet

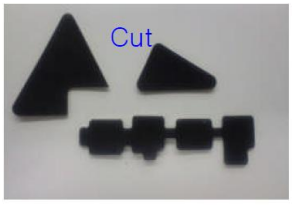
MS-058 through 940 provides excellent absorption performance at normal and grazing incidence over frequencies from 5.8 GHz to 94 GHz. Small lots are available for use at frequencies not listed below.

1. High RF absorption at grazing and normal incidence.
2. Light weight. Conformable.

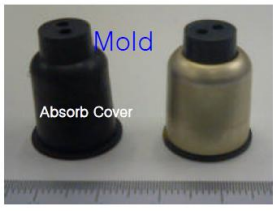
Product No.	Frequency	Absorb Performance	Thickness	Application
MS-058	5.8 GHz	-25 dB <	2.7 mm	ETC-DSRC
MS-100	10 GHz	-20 dB <	1.4 mm	X-band Radar
MS-240	24 GHz	-20 dB <	2.0 mm	Near field radar
MS-600	60 GHz	-20 dB <	2.2 mm	High Speed W-LAN
MS-760	76 GHz	-20 dB <	1.6 mm	Vehicle-Vehicle radar
MS-940	94 GHz	-20 dB <	2.1 mm	Millimeter wave imaging
MS-760KW	10 ~ 76 GHz	-5 dB <	1.0 mm	Millimeter wave Noise

<Custom made by frequency and shape>

Microwave Absorber Sheet



16GHz Microwave Circuit Noise Reduction



18GHz Microwave Connector Cover

< Measurement, Design and Work on site >

Reflection Reduction at 5.8GHz ETC Toll Booth

Reflection Reduction at 6.3GHz Antenna

ETC Toll Booth 5.8GHz Measure