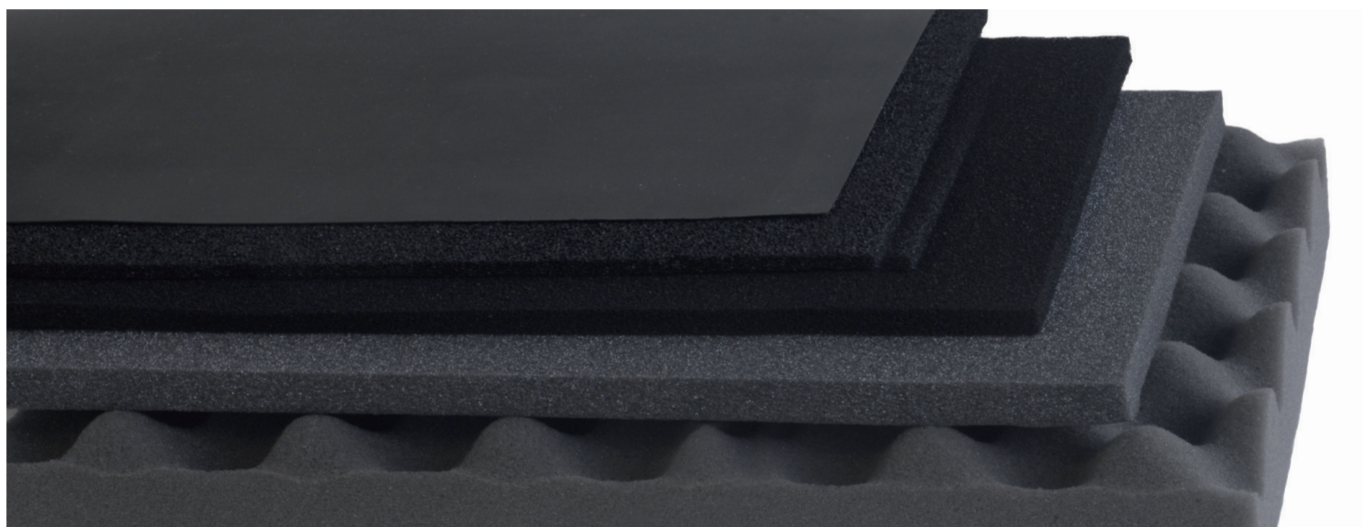


Microwave absorber foam 3500



These absorbers can be used at higher frequencies than traditional shielding and can also be used with other EMI/RFI shields to extend frequency range.

The microwave absorbers can be installed easily with pressure-sensitive adhesive (PSA), often directly onto high-frequency board-level components, to absorb unwanted radiated and surface-wave EMI/RFI and to meet FCC requirements without shielding.

Our Microwave absorber foam is RoHS compliant. It is a coated, open-cell foam and is used as a microwave absorbing material, especially for applications with frequencies of 1 to 17 GHz. The product acts like a free-space resistor to incoming electromagnetic energy.

The Microwave absorber foam is available in a soft and a hard variant. The type you choose depends on the force you want the foam to be able to withstand, if necessary.

Microwave absorber products can solve EMI/RFI problems without additional shielding and enable advanced technologies including automotive radar, military, and commercial wireless applications.

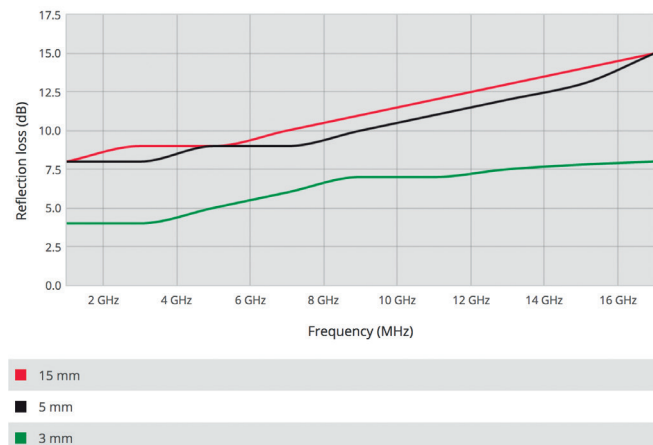
Typical applications

- Antenna hats
- Test boxes
- PCB shielding/housings
- Military applications
- EMI reduction
- Antenna pattern shaping
- Radar cross reduction

Versions

- A **soft version** which can be easily compressed to 75% is available as die cut or in the form of sheets. The soft microwave absorber sheets are available with thicknesses of 3, 6, and 15 mm and with or without PSA. (Pressure-sensitive adhesive). Max. sheet size 1000 x 1000 mm
- A **hard version** which can carry more weight and keeps its shape and position more easily is available with a thickness of 6 mm and 12 mm. Other thicknesses are available on request. Max. sheet size 555 x 355 mm

Reflection loss (soft version)



» Microwave absorber foam 3500

Product specifications 3500 Soft

Material	Dissipative (carbon-loaded) polyethylene
Colour	Black
Cell	Closed cells, rigid
Density	30 kg/m ³
Usage temperature	-70°C / +95°C
Tensile strength	300 kPa
Elongation at break:	65%
Resistance to compression	@ 25%: 40 kPa @ 40%: 80 kPa @ 50%: 120 kPa @ 60%: 180 kPa
Shore Hardness	62 OO (ISO868 1985)

Electrical properties

Surface resistance	< 109 Ω (IEC 61340-3-2)
Volume resistance:	< 108 Ω
Decay time	From 1000V to 100V: < 2 seconds

Product specifications 3500 Hard

Material	PU foam with conductive latex impregnation
Colour	Black
Cell	Open cells, flexible
Density	24 kg/m ³
Usage temperature	N.D.
Tensile strength	70 kPa
Loose after heating process:	-30% (140°C, 16 hrs)
Loose after humidity process	-30% (105°C, 3hrs)
Elongation at break	100%
Resistance to compression	-@ 50%: 3 kPa
Hardness	120-140 N (BS4443 part 2 method 7 1988)
Class	A (BS3379 1991)

Electrical properties

Surface resistance	< 109 Ω (IEC 61340-3-2)
Volume resistance:	< 108 Ω
Decay time	From 1000V to 100V: < 2 seconds

Order example

Series	Thickness	Width (mm)	Length (mm)	Adhesive
3500 : Microwave absorber foam	3SOFT : 3 mm thick (soft) 6SOFT : 6 mm thick (soft) 15SOFT : 15 mm thick (soft) 6HARD : 6 mm thick (hard) 12HARD : 12 mm thick (hard)	Specify the length in mm. Soft version: max. 1000 mm Hard version: max. 555 mm	Specify the length in mm. Soft version: max. 1000 mm Hard version: max. 355 mm	PSA : With pressure sensitive adhesive NA : No adhesive