

Electrically conductive foam 5770

Structure with foam as its central layer, suitable for EMI shielding and absorbing gaskets

This conductive foam is made of polyurethane foam coated with copper and nickel. Compression is 25% to 75%. The maximum application temperature is between 60 and 70 degrees Celsius.

The material will return to almost its original height when released. The foam is covered with a layer of conductive polyurethane to protect it from environmental influences and to prevent burrs when cutting. Its conductivity is excellent in all directions (X, Y, and Z). Conductive foam is fire retardant as well as Restriction of Hazardous Substances (RoHS) compliant.

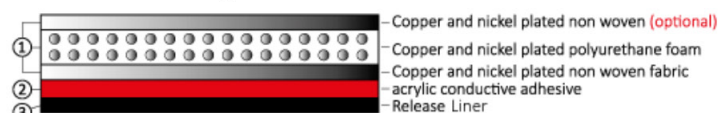
Characteristics:

- Available in thicknesses of 1, 1.5, 2, 2.2, 3.0, 3.4 and 5 mm
- Several layers can be joined together for thickness, on request
- Excellent electric conductivity throughout the material
- Excellent electromagnetic shielding effect
- High workability due to adhesion
- Easy die cutting, kiss cutting and slitting
- 950 mm roll width

Applications

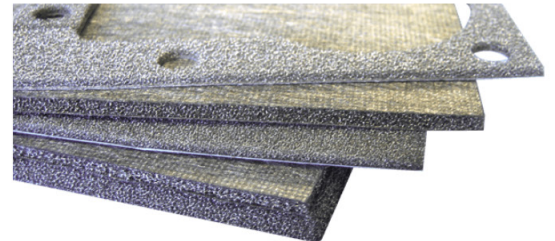
- Mobile phone
- Noise filter core
- Cable tray
- Shielded rooms

Technical drawing



Conductive foam technical drawing

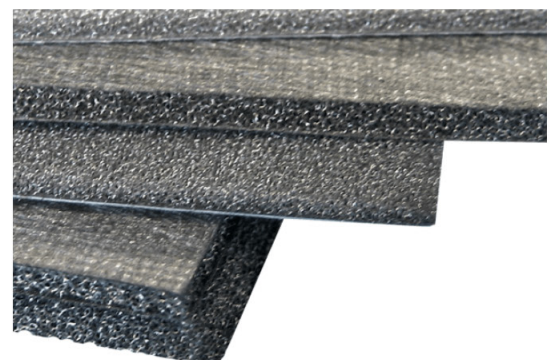
Technical data



Conductive foam in various thicknesses and cut to shape



Conductive foam can be cut into any shape according to your CAD drawing. The round parts have a copper and nickel plated non-woven top layer - this is optional



Conductive foam has an open cell structure which makes it easy to compress

Technical data

Item	Data
Material thickness (other sizes on request)	1, 1.5, 2, 2.2, 3.0, 3.4 or 5 mm (other sizes on request)
Colour	Gray
Width	Max. 950 (mm)
Length	Depending on thickness material 50 meters max.
Adhesive strength (gf/25mm)	>1.000
Holding strength (sec)	>3.600
Surface resistance (Ω /sq)	0.2
Surface resistance (Ω /in)	1.0 max
Volume resistance (Ω /sq)	0.2
Top-bottom resistance (Ω /in)	1.0 max
Restriction of Hazardous Substances (RoHS)	Compliant
Fire retardant (cm/min)	Pass
Max. application temperature	Between 60 and 70 degrees

Material specifications

- Mesh: woven polyester, copper, and nickel coated
- Conductive foam: polyurethane foam (copper and nickel coated)
- PSA: acrylic ester polyol copolymer + nickel powder
- PU coating: polymer resin (polyurethane)
- Release liner: CP paper avg 150 μ m

Benefits and options

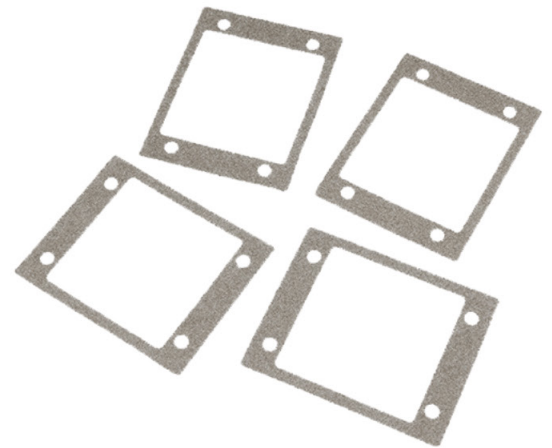
- With or without self-adhesive
- Supplied as sheets, strips or die-cuts
- With water seal
- Resistant to high temperatures, with cooling holes
- Reinforced with non-woven fabric on 1 or 2 sides
- PSA attachment method option
- Nickel/copper metalization
- X-Y-Z axis conductivity
- Tolerance of \pm 0.5 mm
- I/O static applications/gasket replacement

Shielding effectiveness 100 Mhz - 1 GHz

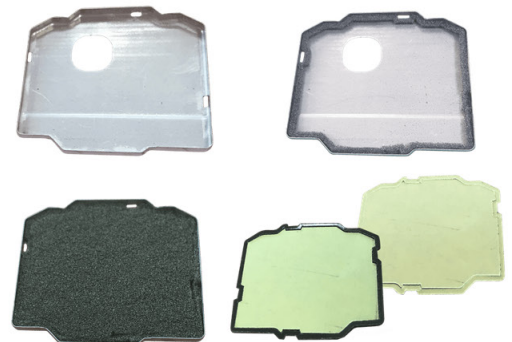
- 1.5 mm thickness, 80 dB - 83 dB
- 2.4 mm thickness, 88 dB - 104 dB
- 3.5 mm thickness, 80 dB - 103 dB



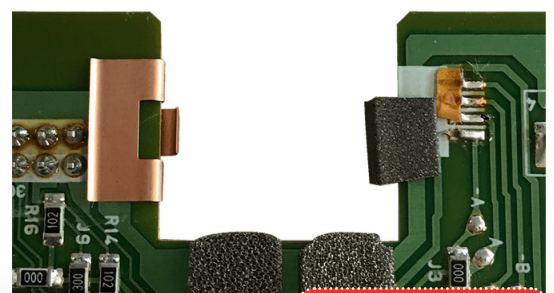
Conductive foam kiss cut according to customer's requirements. The conductive foam pieces can be easily removed from the release liner and be stuck into place with the electrically conductive adhesive.



Very thin (1mm thick) Conductive foam cut according to customer needs

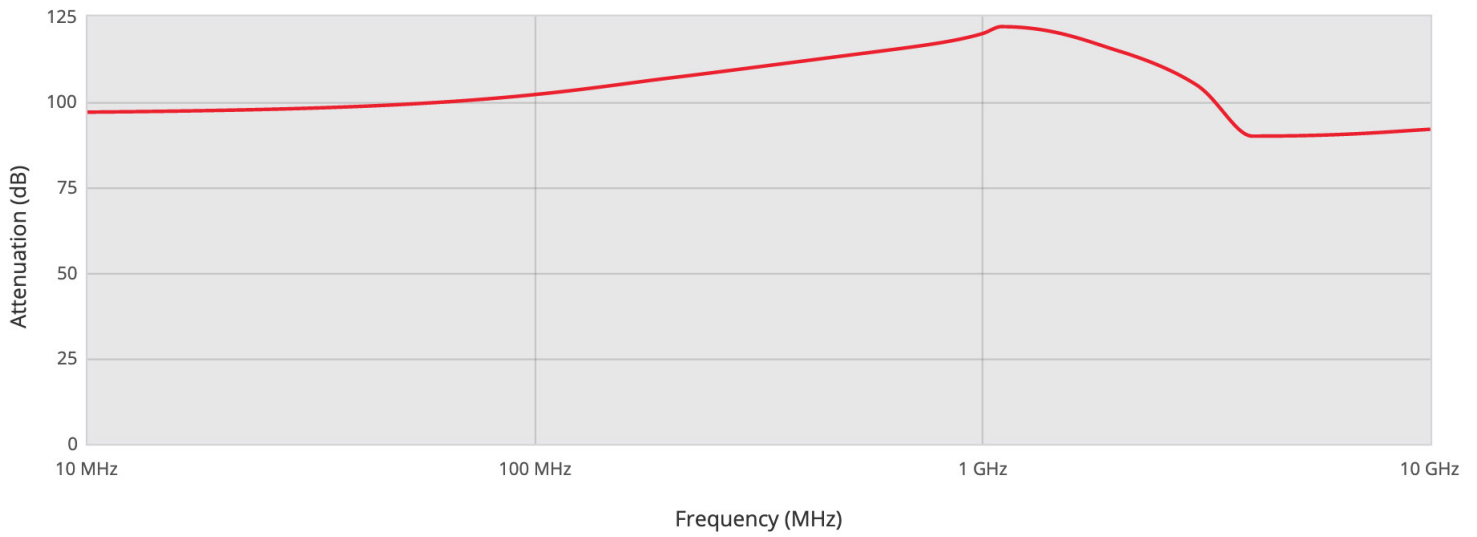


Product example of 5770 Conductive foam in use



Produkt anfragen

Shielding performance



■ Measurement 1

Series	Width (mm)	Length (mm)	Thickness	Adhesive	Optional
5770			Available: 1, 1.5, 2, 2.2, 3.0, 3.4, 5 mm. Other on request	Select an option: SSA 01 : Standard adhesive (non-conductive) NON 02 : Without self adhesive CSA 03 : With conductive self adhesive	Select an option: S : Standard PU-foam top layer T : Top layer Copper and nickel plated non woven

* Note: The red blocks are required