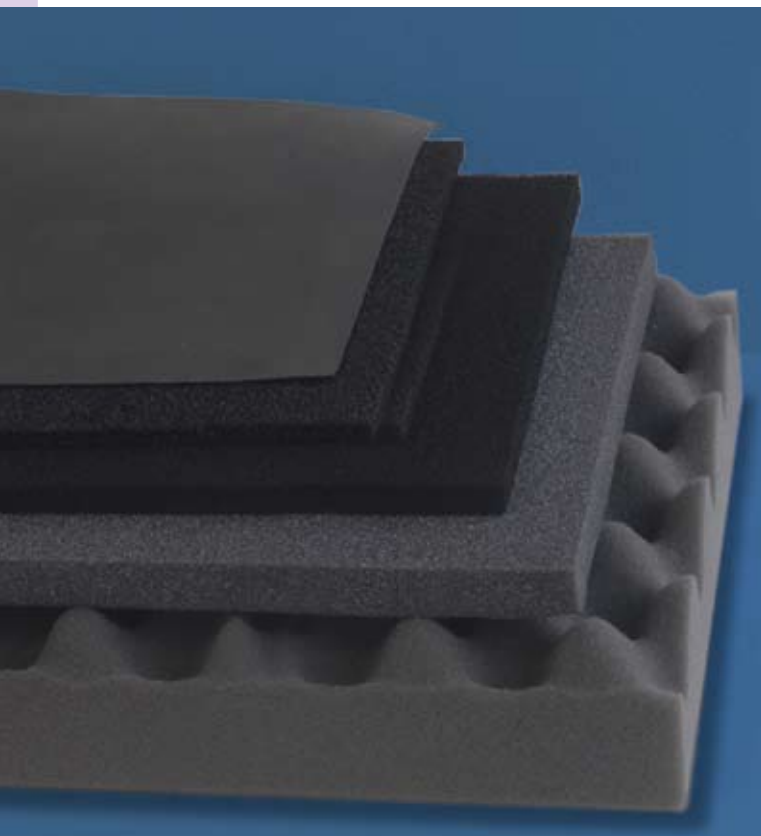
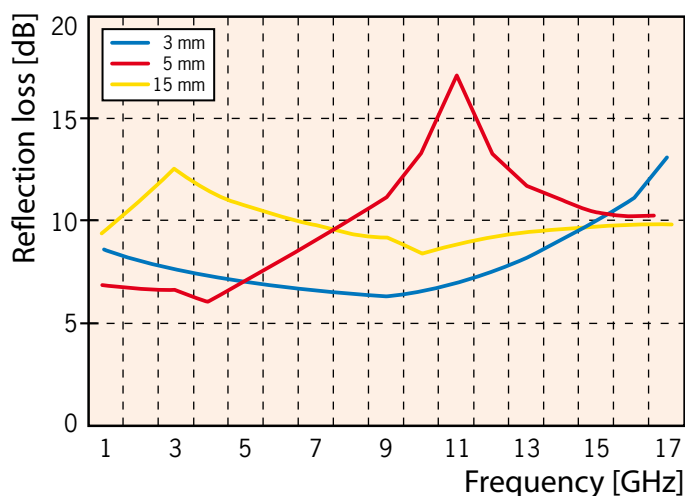


Absorbers 3500

Sheets and pyramids



Reflection loss



Conductive ferrite absorber

This Ferrite based absorber is both light and flexible and absorbs electronic waves, reduces noise and also absorbs shocks. Depending on the absorber thickness, it covers a range of 30 MHz to 5GHz.

The thicker type is more effective for lower frequencies. The absorber can be delivered with a conductive or a non-conductive adhesive.

EMI absorbing materials are commonly found amongst high-tech products such as LCD electronic devices, laptop and desktop computers. Electromagnetic wave absorbing materials are composed of dielectric materials mixed with ferrite, a magnetic material, with varying shapes and sizes. They are intended to absorb electromagnetic energy at normal and large incident angles over a wide range of frequencies.

Standard size 210x297 mm, thickness 1,0-3,0 mm.

Specification

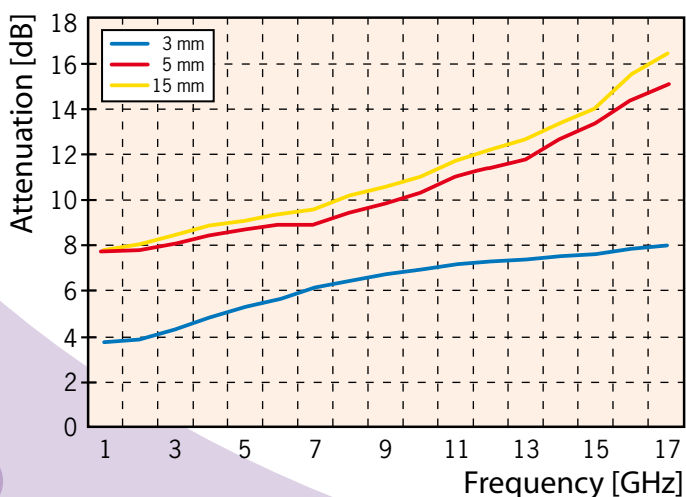
Property	Test Value
Thickness	0.1 to 3.0 mm
Standard Size	A4 (210 x 297 mm)
Temperature Range	-25 to +100
Specific Gravity	2.9 to 4.7
Elongation	>60 to > 400
Frequency Range	30Mhz ~ 5Ghz
Reflectivity	-4dB ~ 10dB
Thermal Conductivity	-40°C ~ + 130°C
AC Permeability	μ / 15
Insulation Resistance	2.5 x 106 V
Electric Strength	7.9 kv
Tensile Strength	>40 to >100 kg/cm2
Values depend on thickness	

Absorber foam

This RoHS compliant coated open cell foam is used as an absorbing material, especially for application with frequencies 1 - 17 GHz. Typical applications are antenna hats, test boxes and PCB housings. It can be supplied as a die cut (see page 26) or as sheets. Absorber sheets are available in 3, 5 and 15 mm thickness and with or without PSA. Standard sheet size: 200x300 mm.

Temperature spec: - 40 to +100 degrees Celsius, hardness shore: 40 +/- 20.

Absorption rate



Absorbers 3500

Sheets and pyramids



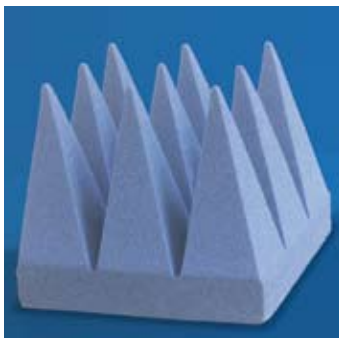
Hybrid absorber

These absorbers are the most popular solution for 3m, 5m and 10m EMC chambers in the market.

They are composed of pyramidal, full tip SAM or

truncated SMT pulsing the matching layer to separate the pyramidal part from the ferrite part. Through optimization, this product has a superb performance across 30MHz to 18GHz.

The ferrite performs from 30MHz to 1GHz and the foam performs above 1GHz.



Ferrite tiles

The 100mm tiles can be installed individually using screws or adhesive and are optionally available in panel format. Tiles are surface ground on all sides to precise mechanical tolerances, minimizing gaps between adjacent tiles to ensure maximum low-frequency performance.

Tile Absorber

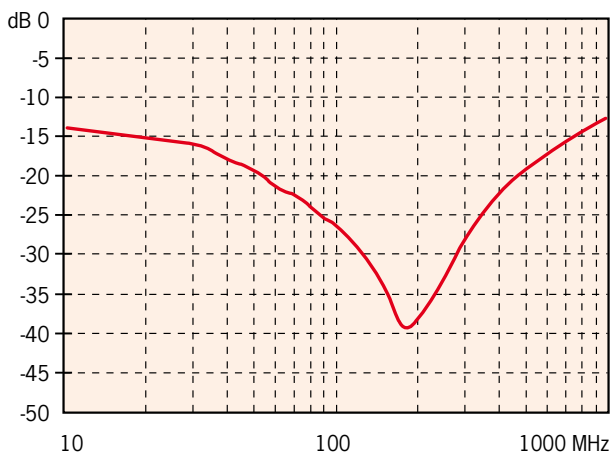
Ferrite Tile is the industry standard size and exhibits excellent overall performance versus cost.

Features

- Absorption of low electromagnetic waves
- Wide frequency and fire resistant.

Applications

- EMC Electromagnetic wave anechoic chamber.
- Electromagnetic wave reflection of buildings.



Thermal interface material in solid and liquid form



Thermal interface material

Thermal interface material is used to fill the gaps between thermal transfer surfaces, such as between microprocessors and heat sinks, in order to increase thermal transfer efficiency. These gaps are normally filled with air which is a very poor conductor. The material is easy to handle and is not messy. It is available in solid and liquid form and in various thicknesses.

Thermal conductivity

The thermal conductivity of the interface material has a significant impact on its thermal performance. The high thermal conductivity guarantees sufficient heat transfer, resulting in a better cooling solution and the desired heat dissipation.

Properties

- Good insulation properties
- Heat-conducting
- Good compressibility
- Flexible
- Environmentally friendly

Benefits

- Smooth surface
- Very good thermal transfer properties even at very low contact pressure
- Low hardness
- High self-adhesion
- UL listed
- Thickness 0.01 to 8 mm

This film is especially suitable for high-power applications. It has excellent thermal and electrical properties. Thanks to its good performance, the material can be used reliably in densely packed electronic applications.

Standard part numbers

Part number	Thermal conductivity W/mK	Thermal resistance K/W	Hardness Shore 00	Characteristics
Tim-600	6.0	0.20	60-70	highest thermal conductivity
Tim-500	5.0	0.25	75	high thermal conductivity
Tim-300	3.0	0.41	65	flexible, high thermal conductivity
Tim-320	2.5	0.50	30-35	very soft, good dielectric properties
Tim-255	2.0	0.85	30	soft, high thermal conductivity
Tim-202	1.4	0.90	25	good price-performance-ratio
Tim-212lb	1.4	0.90	30	low bleeding behaviour
Tim-105	1.3	0.95	60	good compressibility
Tim-200	1.0	1.5	10	soft, highly compressible
Tim-210lb	1.0	1.5	15	low bleeding behaviour