



SHENZHEN HFC CO.,LTD

EMI/EMC and Thermal Interface Materials Manufacturer

RF-absorber Materials

Product Description

- The RF-absorber materials refer to a kind of materials that can absorb the energy of electromagnetic wave emitted to its vicinity. These RF-absorber materials can be classified by material loss mechanism as resistance type, electrical medium type and magnetic medium type. Waveabsorbing materials produced by HFC are a type of magnetic medium materials.

Features

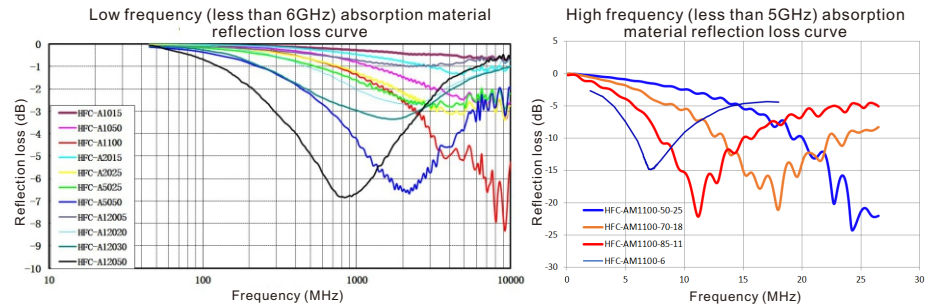
- Soft and ultra-thin
- Insulation properties
- Available in narrow spaces
- Flexible to cut various shapes
- Excellent performances of absorbing electromagnetic radiation noise
- High-strength adhesion effect makes it more reliable to install and use.

Applications

- EMI/EMC electronic components
- RFID anti-metal electronic tag
- NFC payment
- Wireless charging
- Magnetic screen

Product series			
Product series	HFC-A series	HFC-AM series	Thermal conductive wave-absorbing series
Permeability (μ'@1MHz)	10~250	10	10
Thickness range (mm)	0.03~3.0	0.2~3.0	0.5~3
Working frequency (Hz)	100M~10G	5G~30G	2G~30G

Characteristic Curve



SHENZHEN HFC CO.,LTD

📍 C Bldg, 3rd Industrial Zone, Fenghuang, Fuyong Town, Bao'an District, Shenzhen, China
☎ 86-755-23342723
✉ oversea@szemi.cn
🌐 <http://www.hfcglobal.com>



Company Profile

» Shenzhen HFC Co.,Ltd. which was established in 2003.Its factories located in the 1st and 3rd Industrial Parks, Fenghuang Fuyong Town, Bao'an District, Shenzhen, Wuhan Province and Chongqing, and offices in the USA, Japan, Hong Kong, Taiwan and Suzhou, Jiangsu, with more than 400 employees.

» We are a State High-Tech Enterprise focusing on R&D, manufacture and sales for thermal interface materials, EMI shielding materials, wave-absorbing materials and other innovative materials.

» We also have set up R&D Centers in South China, Chongqing, Wuhan and Taiwan. With deep and careful efforts in heat dissipation solution research, EMC solutions, innovative substrate development, etc., we have acquired more than 190 patents and won the International R&D100 Awards, CES Innovation Awards, Edison Awards and Golden Prize for International Exhibition of Inventions of Geneva, etc.

» We have passed a series of system certification such as ISO9001, ISO14001, IATF16949, IECQ-QC08000,OHSAS18001, etc.. And all our products are UL certified, and comply with environmental requirements such as RoHS/Halogen free. We are always moving towards the standard of "0" defect products.

20

years of experiences in intelligent manufacture

190+

patent rights

300+

production and testing equipment

5

major testing and laboratorylabs



4 R&D Centers:

Shenzhen R&D Center

Conductive materials:
Customized solutions for shielding materials

Thermal interface materials:
Thermal conductivity modification of polymer matrix

R&D of heat sink devices
R&D high performance TIM.

Chongqing R&D Center

Wave-absorbing materials:
Water soluble matrix development
Eco-friendly matrix development

WuHan R&D Center

Innovative base material development

Taiwan R&D Center

Heat dissipating module research
Heat dissipation scheme research

Thermal Interface Material

Thermal Conductive Gasket ««

Our products are self-developed and all can be customized according to customer needs.



General series				
1.0~5.0 (W/m·K)	0.2~18 (mm)	18~60 25~60 (Shore C)	≥8 (KV/mm)	V-0
Thermal conductivity range	Thickness range	Hardness range	Breakdown voltage	UL -94

Super soft series				
1.0~10.0 (W/m·K)	0.8~4 (mm)	20~40 (Shore 00)	≥5 (KV/mm)	V-0
Thermal conductivity range	Thickness range	Hardness range	Breakdown voltage	UL-94

Low density series				
1.5~2.0 (W/m·K)	1~3 (mm)	25~50 (Shore C)	≥8 (KV/mm)	2.0 (g/cc)
Thermal conductivity range	Thickness range	Hardness range	Breakdown voltage	Density

Anti-RF series				
3.0 (W/m·K)	1~4 (mm)	35~50 (Shore C)	≥8 (KV/mm)	≤3.5 (@1MHz)
Thermal conductivity range	Thickness range	Hardness range	Breakdown voltage	Dielectric constant

Anisotropic series				
7.0~50.0 (W/m·K)	0.3~3 (mm)	40~70 (Shore 00)	120*120 (mm)	V-0
Thermal conductivity range	Thickness range	Hardness range	Standard size	UL-94

Low oil output series				
1.0~12.0 (W/m·K)	0.3~18 (mm)	30~55 (Shore 55)	≥5 (KV/mm)	≤0.8%
Thermal conductivity range	Thickness range	Hardness range	Breakdown voltage	Oil leakage rate

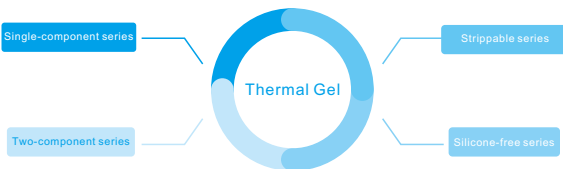
Low stress series				
3.0 (W/m·K)	0.5~2 (mm)	33 (Shore C)	≥8 (KV/mm)	≥30% (@50psi)
Thermal conductivity	Thickness range	Hardness range	Breakdown voltage	Compression ratio

Anti-high humidity change series				
3.0 (W/m·K)	0.5~4 (mm)	25 (Shore C)	≥5 (KV/mm)	≥2*10 ¹³ (@1-cm)
Thermal conductivity	Thickness range	Hardness range	Breakdown voltage	Volume resistivity

Thermal Gel ««

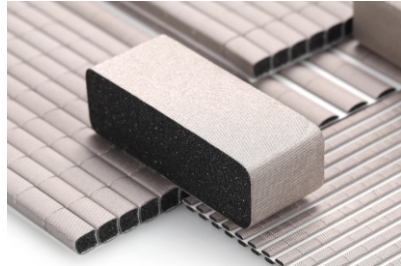
Application Features: Low stress, Be used for automatic dispensing

Recommended Application Fields: Mobile phones, new energy battery modules, fixed thermal conduction of battery structure, electric insulation and embedment of power supplies and thermal management of heteromorphosis interface



Shielding Material

Our products are developed with our own processes, and all can be customized according to customer needs.

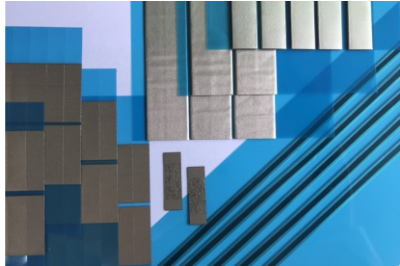


FOF Gasket

Product Structure:
Conductive fabric +PU foam + conductive PSA

Application Features

- Excellent shielding performance and electric conductivity
- Available in various cross section / Customized for irregular shape
- Soft, high compression ratio.

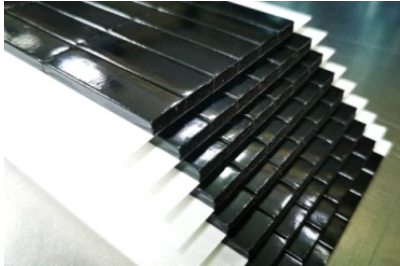


Half-wrapped Gasket

Product Structure:
Conductive fabric/Tin-plated PI + PU foam+ Conductive tape

Application Features

- Low stress
- Low impedance
- Wide compressible range

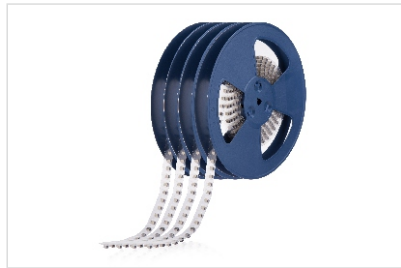


Graphite Foam

Product Structure:
Graphite + PU foam + PSA

Application Features

- Low thermal resistance, high thermal conductivity coefficient
- Good rebound resilience



SMT Gasket

Product Structure:
PI film-copper-tin/gold + adhesive + silicon Rubber/Foam

Application Features

- High temperature resistant
- Good oxidation resistance
- Can be used for SMT automatic machine

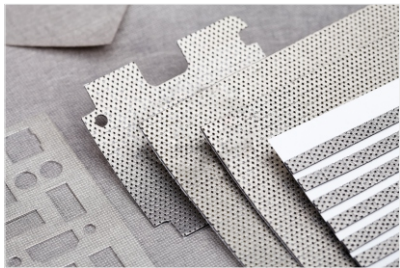


XYZ Conductive Foam

Product Structure:
PI film-copper-tin/gold + adhesive + silicon Rubber/Foam

Application Features

- XYZ Axis conductivity
- Lower resistance

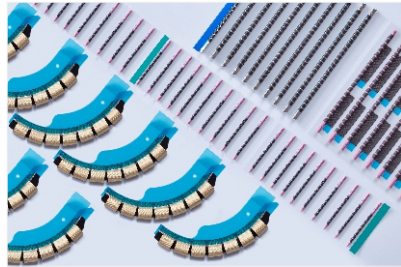


Conductive PE

Product Structure:
Electroplated layer+Basic material+Conductive PSA

Application Features

- Excellent surface and vertical conductivity
- Strong elongation performance

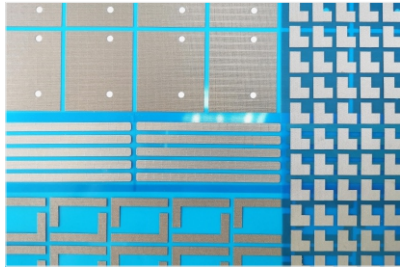


Conductive Fabric Over Air

Product Structure:
Conductive fabric + Conductive tape

Application Features

- Low stress
- Special anti-counterfeiting structure

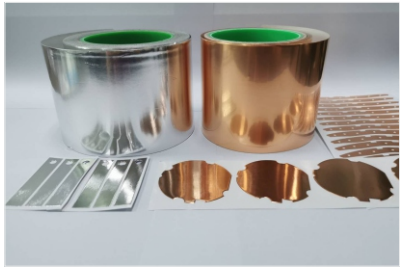


Conductive Fabric Tape

Product Structure:
Conductive fabric + conductive adhesive

Application Features

- Mainly applied to microelectronic assembly
- High initial adhesion, conductivity and anti-chemical performances



Copper/Aluminum Tape

Product Structure:
CU/AL Foil + Conductive/Non-conductive adhesive

Application Features

- Excellent shielding effectiveness
- Stable performance and easy to process