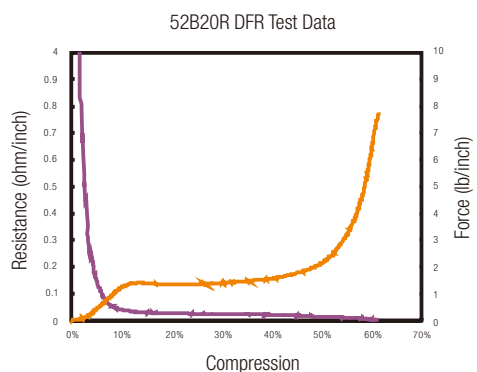


Conductive Foam

Product Description:

CF is a type of brand new shielding material. It is an X-Y-Z-axis conductive material of which the shielding effectiveness is greater than traditional FOF gaskets.

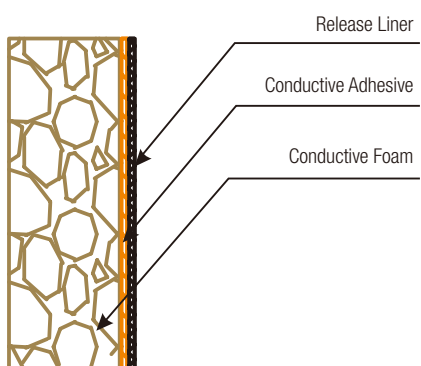
The CF is composed of 3 layers, with the first layer being conductive foam, the second layer conductive fabric tape or conductive adhesive, and the third layer is the liner.



A conductive foam test data

Product Features:

- A wide range of thickness selection (0.3~5.0mm)
- Good conductivity, high shielding effectiveness (≥ 80 dB)
- Very soft, suitable for circumstances which do not allow greater pressure
- Low price and good performance in a shielding material
- Meets RoHs and REACH requirements and is Halogen free



Standard:

Product NO	Material	Thickness (mm)	Volume Resistivity ($\Omega \cdot \text{cm}$)	Surface Resistivity (Ω/\square)	Shielding Effectiveness (dB)	Sample
52Q03	Cu+Ni+tape	0.3	1.0	0.2	≥ 80	
52Q05	Cu+Ni+tape	0.5	1.0	0.2	≥ 80	
52Q10	Cu+Ni+tape	1.0	1.0	0.2	≥ 80	
52Q20	Cu+Ni+tape	2.0	1.0	0.2	≥ 80	
52Q30	Cu+Ni+tape	3.0	1.0	0.2	≥ 80	

SHENZHEN FRD SCIENCE & TECHNOLOGY CO., LTD.

FRD Building, 8# Gaofa Industrial Park, Beihuan Blvd,

Nanshan District, Shenzhen, China

Tel: 86-755-8608-1680 40066-90066

Fax: 86-755-8608-1689

FRD (HONG KONG) CO., LTD.

Unit 503, 5/F, Silvercord, Tower 2,30 Canton Road, Tsimshatsui,

Kowloon Hong Kong

Tel: 852-3519-5726

Fax: 852-3013-7466

KUNSHAN FRD ELECTRONIC MATERIALS CO., LTD.

FRD Industrial Park, 258 Dongping Road, Bacheng, Kunshan, China

Tel: 86-512-5785-1188

Fax: 86-512-5785-1199

TIANJIN FRD SCIENCE & TECHNOLOGY CO., LTD.

FRD Industrial Park, 160 Xiangyuan Road, JINGJIN Science&Tech Valley,

Wuqing District, Tianjin, China

Tel: 86-22-5969-5716

Fax: 86-22-5969-5718

● BEIJING ● SHANGHAI ● XI'AN ● WUHAN ● TAIPEI ● SAN JOSE (USA) ● SEATTLE (USA) ● NETHERLANDS

FRD CF/FOF/EMI Tape Overview



EMI Shielding / Thermal Interface / Electronic Support Materials

www.frd.cn

info@frd.cn

©2016 FRD
0519-V1.2-Yang

Conductive Fabric

Product Description:

FRD is currently the only metallized fabric supplier in China who has electroless plating and vacuum plating capabilities.

Product Features:

- A wide range of thickness selection (0.015~0.4mm)
- Good conductivity, high shielding effectiveness (≥ 80 dB)
- Excellent antioxidant, anti-corrosion
- Very good wear resistance, high reliability (≥ 1 million times)
- Meets RoHs, REACH and UL94-V0 requirements, and is a fully integrated solution for an EMI shielding material



Standard:

Product NO	Material	Thickness (mm)	Surface Resistivity (Ω/\square)	Shielding Effectiveness (dB)	Sample
502E	Taf-PET woven Cu+Ni	0.05 / 0.08	0.05	≥ 80	
501D	PRS-PET woven Cu+Ni	0.08	0.05	≥ 80	
55A04	PET Non-woven Cu+Ni	0.2 / 0.4	0.03	≥ 60	
502Q	PET woven Black conductive +Cu	0.08	0.06	≥ 60	
501F	PRS-PET woven Cu+Ni	0.12	0.05	≥ 80	
501G	PRS-PET woven Cu+Ni	0.14	0.05	≥ 80	
501H	PRS-PET woven Cu+Ni	0.18	0.05	≥ 80	

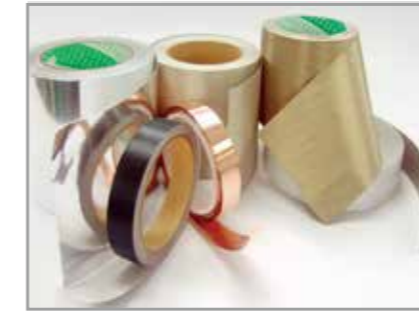
Conductive Tape

Product Description:

FRD's conductive tape series includes Copper-foil tape, Aluminum-foil tape, and conductive fabric tape. Conductive tapes are widely used in devices such as equipments, components, ESD grounding and EMI shielding, especially in mobile communication equipment. They are applied to cell phone for shielding and to its LCD screen and keyboard for purposes of adhesion, fixing, ESD and conductive grounding.

Product Features:

- Low price, good performing shielding material
- Installation is simple and diverse and suitable for paste or slot
- Meets RoHs, REACH and UL-94V0 requirements and is Halogen free



Standard:

Product NO	Material	Thickness (mm)	Steel Adhesion Force (kg/in)	Surface Resistivity (Ω/\square)	Shielding Effectiveness (dB)	Sample
54B005A	Cu+Ni+tape	0.03 / 0.05 / 0.10 / 0.15 / 0.20	≥ 0.8	0.05	≥ 60	
53B014	Cu+Ni+tape	0.14	≥ 0.8	0.05	≥ 60	
54B012B	Black Conductive +Cu+tape	0.12	≥ 0.8	0.05	≥ 60	
54B005B	Cu+Ni+tape	0.05 / 0.10 / 0.15 / 0.20	≥ 0.8	0.05	≥ 60	
56B005A	Cu+Conductive tape	0.05 / 0.08	≥ 0.8	0.05	≥ 60	
56F0006	Cu+sn	0.06	≥ 0.8	0.05	≥ 60	
57B101	Al+Conductive tape	0.05 / 0.09	≥ 0.8	0.05	≥ 60	

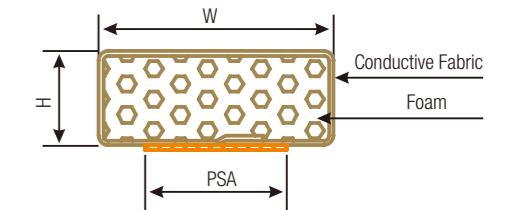
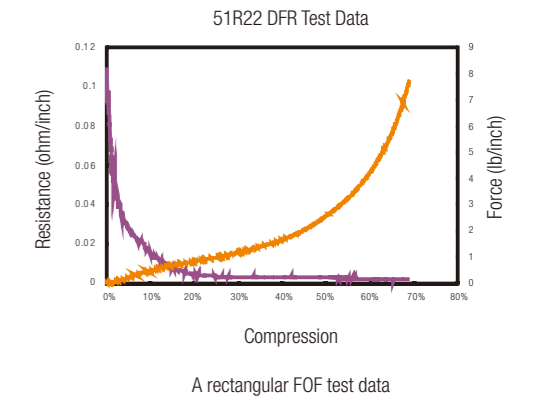
Fabric Over Foam

Product Description:

FOF is particularly suitable under the circumstances of limited capacity and closing pressure. FOF is a good blend of both high performance shielding and lower cost. It may be widely used in interior electronic chassis, industrial equipment and notebook and laptop computers, as well as mobile communication devices.

Product Features:

- Good conductivity, high shielding effectiveness (≥ 80 dB)
- A good antioxidant, anti-corrosion
- Very good wear resistance, high reliability (≥ 1 million times)
- Very soft, suitable for the circumstance can not provide greater pressure
- Low price, good performance of shielding material
- Installation is simple and diverse, suitable for paste, slot
- Products meet ROHS, Halogen Free, REACH, UL94-V0 requirements



Standard:

Properties	Units	Value	Standard	Advantages
Shielding Effectiveness	dB	> 80	MIL-DTL- 83528C	High shielding effectiveness
Surface Impedance	ohm/square	< 0.05	ASTM F390	Ultra-low-impedance
Wear Resistance	Times	1,000,000	ASTM D4966-98	Strong wear resistance to ensure that the use of one million times, there will not be significantly decreased shielding performance
Compression Set	-	< 15%	ASTM D3574	A small residual deformation to ensure long-term reliable performance
Compression Forces	lbs./in	1-5	ASTM D3574	Low compression force can maintain close contact between the joints
Flammability	-	UL94-V0	UL 94	According to customer requirements, providing a variety of flame-retardant grades of products to choose from
ROHS	-	Pass	IEC 62321	All products are environmentally friendly
Halogen-free	-	Pass	IEC 61249-2-21	According to customer requirements, to provide halogen-free products
Service Temperature	$^{\circ}\text{C}$	-40~85	ASTM D746	-