

<Market Research Report>

Technology & Market Trends Report on EMI Shielding Film -2023-

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1. Global market size of EMI shielding film (Y2022)

-Market breakdown by application, by type of film, and by manufacturers

2. Market size and forecasts for EMI shielding films (Y2021-2032)

-Market forecast of EMI shielding film by application, and by type of film

3. EMI shielding film manufacturers' entry products, business trends, development trends, supply relations, etc.

4. Trend of application (Adoption trend, technology & market trends, etc.)

-Smartphone, Tablet PC/others, Automotive, and Telecommunication base stations

5. Manufacturers' Case Studies of EMI shielding film

Surveyed Products/Classification & Surveyed Manufacturers

1. Surveyed Products (EMI Shielding Film) / Classification

EMI shielding film mainly used in electronic devices such as FPC/rigid flexible boards, PCBs, and parts.

1) Form/structure type

- Film/sheet: Thin metal (vapor deposition/plating, and ultra-thin metal foil type), and Conductive resin type
- Adhesive tape: Thin metal foil type, Conductive fiber, and others

2) Application

- Smartphone: Smartphone, Cellular phone
- Tablet PC/others: Tablet PC, Notebook PC, Smartwatch, Digital camera, and other small electronic equipment
- Automotive: Electronic devices for Infotainment, for Sensor, for LED, for Switch, and for Powertrain
- Telecom/Industrial/others: Telecommunication base station/facility, FA equipment/Inspection equipment, Medical equipment, and others

2. Surveyed Manufacturers

Surveyed products		Manufacturers
EMI shielding film	Film/sheet	Seiwa Electric Mfg., TATSUTA Electric Wire and Cable, TOYOCEM, Panasonic, Guangdong Zhongchen Industrial, Guangzhou Fangbang Electronics, InkTek, Shenzhen KNQ Technology, Suzhou Chengbangdali Material Technology, Youlchon, ZhengyeTechnology, etc.
	Adhesive tape	Kitagawa Industries, Seiwa Electric Mfg., Seiren, Takeuchi Industry, TATSUTA Electric Wire and Cable, DIC, Dexerials, Teraoka Seisakusho, TOKIN, Nitto Denko, 3M Company, ICH, Meixin New Material, Parker Hannifin, Suzhou Chengbangdali Material Technology, tesa Group, Wida Tech Printing, etc.
FPC/Rigid-flex PCB/Assembly		Zhen Ding Technology Holding, Nippon Mektron, Suzhou Dongshan Precision Manufacturing, FLEXium Interconnect, BH, Fujikura, Murata Manufacturing Company, Sumitomo Electric Printed Circuits, etc.

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Sample (1)

Summary

Market Size and Forecast by Type for EMI Shielding Film

			2022	2023	2025	2027	2029	2032	CAGR
Film/sheet	Thin metal	VD/plating							
		UT metal foil							
	Conductive resin								
	Subtotal								
Adhesive tape	Thin metal foil								
	Conductive fiber								

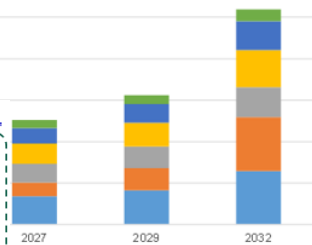
As For Smartphone, Market Size and Forecast of EMI Shielding Film

			2022	2023	2025	2027	2029	2032	CAGR
Film/sheet	Thin metal	VD/plating							
		UT metal foil							
	Conductive resin								
	Subtotal								
Adhesive tape	Thin metal foil								
	Conductive fiber								

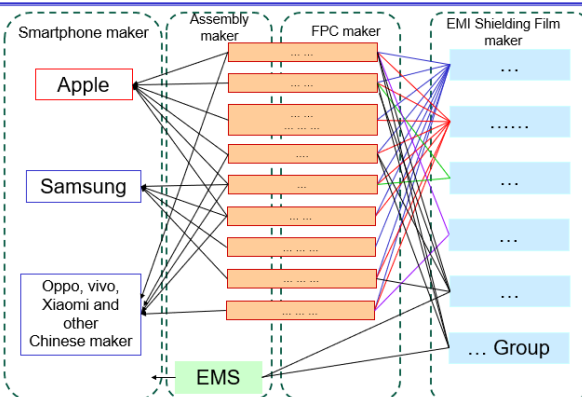
As For Automotive, Market Size and Forecast of EMI Shielding Film

[Graph As For Automotive, Market Size and Forecast by Type for EMI Shielding Film -Value Base-]

Market Size and Forecast by Type for EMI Shielding Film (Y2022-2032)



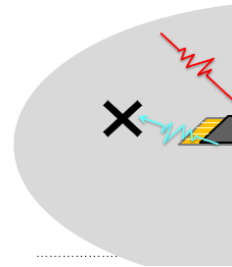
Supply Chain in smartphones



Chapter 1, Technology and Market Trend of EMI Shielding Film

1. Definition and role of the product under study (EMI Shielding Film)

- 2) Roles of EMI shielding films:
- (1) Prevents malfunctions and performance degradation caused by
 - (2) Prevent leakage of
 - (3) Stabilize



4. Form/structure and constituent materials of EMI Shielding Films

2) Adhesive tape

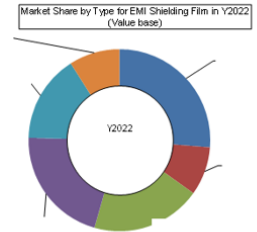
Type	Structure (cross section figure) *figure: Schematic diagram for double side type	Constituent material						
		Base resin			Conductive filler		Others	
		Epoxy	Urethane	Others	Ag coated Cu	Ag	Others	Others
Thin metal foil	Adhesive (base resin) / Thin metal foil / Conductive filler			M (....)				Metal foil:
Conductive fiber	Adhesive (base resin) / Conductive cloth / fiber / Conductive filler			M (....)				Conductive fiber (cloth/non-woven fabric):-plated fiber,-plated fiber etc.
Others (Conductive resin, Conductive foam-based type, etc.)	Adhesive (base resin) / Conductive filler							-

6. Adoption status of EMI

Application	FPC/FPC module parts	Film/Thin metal UT / ft		
		VD/plating		
Tablet PC	Display module			
	Camera module			
	Dock flex/Sub board			
	Antenna For AIP			
	connection module For other antenna			
	Connection FPC (Dock/Sub/Display/Backlight, etc.)			
	Battery module			
	Others	Switch module		
		Speaker FPC		
		Other sensor FPC		
Notebook PC	Connection FPC			
	Sub board			
	Mechanical parts			
Digital camera	Camera			
	Display module (for monitor)			
	Connection FPC			
		Between boards		
	Sensors			
	Mechanical parts			

Market Share by Type for EMI Shielding Film (Y2022)

breakdown (Value) Y2022]

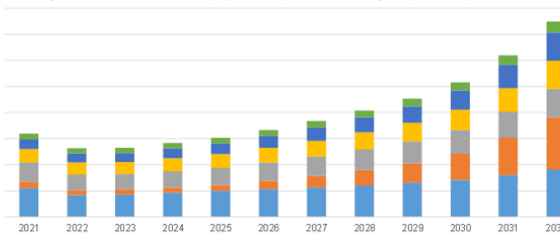


Symbol Y: partially adopted, *As for adhesive tape, auxiliary adoptions are also included.

14. Changes and forecasts in the market size of EMI Shielding Film by application (Y2021-2032)

[Graph Changes and forecasts in the market size by type for Smartphone of EMI Shielding Film -Value Base-]

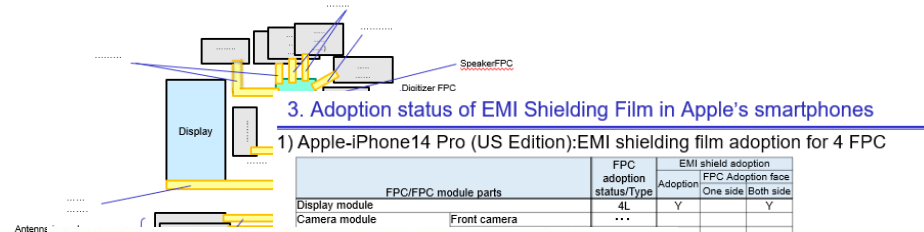
Changes and forecasts in the market size by type for Smartphone of EMI Shielding Film (Y2021-2032)



Chapter 2, Trends of Applications

2. Adoption status of FPCs and EMI Shielding Films used in smartphones

1) Summary drawing of the configuration of a smartphone's primary devices, PCBs, and FPC/FPC modules
 Below is a summary drawing of the configuration of a smartphone's primary devices,



3. Adoption status of EMI Shielding Film in Apple's smartphones

1) Apple-iPhone14 Pro (US Edition):EMI shielding film adoption for 4 FPC

FPC/FPC module parts	FPC adoption status/Type	EMI shield adoption	
		Adoption	FPC Adoption face
	4L	Y	One side Both side
Display module	...	Y	Y
Camera module	...		
Front camera	...		

6. Adoption status of EMI Shielding Film (adhesive tape type)



7. Market trends of FPCs for smartphones

1) Changes and forecasts in the market size (Y2021-2032)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	CAGR
Display Module													
Camera Module													
Dock flex, sub board													

Example of adhesive tape EMI shielding film used smartphones is shown.

8. Technology and market trends of major FPCs / Adoption trends of EMI shielding films

*The adoption of EMI shielding film is

[Technology trend of device, FPC and EMI shielding in display modules]

Display technology	Number of pixels (Advanced products)	Y2022	Y2023	Y2025	Y2027	Y2029	Y2032	Remarks
	OLED adoption ratio							
FPC	FPC type	SS or DS						
		ML or R/F						
	Supports high speed							
	FPC base material							
Needs for EMI shielding films/sheet	Shield characteristics							
	Others							

Chapter 3, Manufacturers' Case Studies

Company Profile

Head office location	Entry Status by Type and EMI Shielding Film Products		
Capital			
Number of employees			
Business outline	Product type	Market entry status	Main product / number
Annual sales	Film/sheet	Thin metal	VD/plating
EMI shielding film sales (Estimated by JMS)			UT metal foil
			Conductive resin
	Adhesive tape	Thin metal foil	
			Conductive fiber

[Summary]
 *Tatsuta Electric Wire and Cable Co., Ltd.

Overview of EMI Shielding Film Products

Product series / number	Structure	Product overview
SF-PC SF-PC		<ul style="list-style-type: none"> *They are *The layer structure consists of *The protective layer *The main application *Press conditions (if) *The film thickness *The shielding effect *The main application
SF-PC SF-PC		<ul style="list-style-type: none"> *They are *The layer structure *The protective layer *Press conditions (if) *The film thickness *The shielding effect *The main application

Production & Development Site

1) Production site / capacity

Production site	Capacity	Production item
TotalSQM/month	SF-PC5000, SF-PC5500, SF-PC5600 and others

Sales Status/Sales Breakdown

3) Sales Breakdown (Y2022)

	Smartphone	Tablet PC/others	Automotive	Telecom/Industrial/others	Total
Volume	Film/sheet	Thin metal	VD/plating	UT metal foil	
		Conductive resin			
		Subtotal			
	Adhesive tape	Thin metal foil			
		Conductive fiber			
		Others			
		Subtotal			
		Total(000 SQM)			
Value	Film/sheet	Thin metal	VD/plating	UT metal foil	
		Conductive resin			
		Subtotal			
	Adhesive tape	Thin metal foil			
		Conductive fiber			
		Others			
		Subtotal			
		Total(000USD)			

Example of TATSUTA Electric Wire and Cable Co., Ltd.

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Applicant's Department: _____.

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*Branch: Kobunacho Branch (Phone:+81-3-3661-3111), [Branch code: 105]
*Branch address: 8-1 Nihonbashi Kobunacho, Chuo, Tokyo 103-0024 Japan
*Account Number: 105-1653912,
*Account Name: Japan Marketing Survey Co., Ltd.

Please make the payment in 15 business days. Please transfer the payment the way the amount above will be deposited in our account.