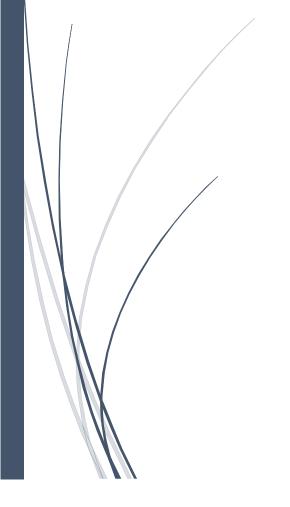
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Electrical Tapes

High Temperature Resistance Tapes
Electrical Insulation Tapes
Anti-Static Tapes
PCB Masking Tapes
Electro-Plating Masking Tapes







Fothershield

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FMC and Thermal Management Solutions

Fothershield's high quality technical tapes have been developed for a range of applications in the electronics industry including industrial electronics, avionics, telecommunications, and consumer electronics, many tapes having multi uses. Different widths are available, but typical widths offered are 12mm, 19mm, 25mm and 50mm width. Standard roll length 33m.

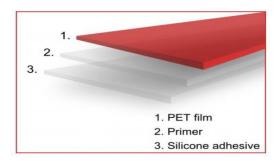
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1

HIGH TEMPERATURE RESISTANCE TAPES

The polyester and polyimide tapes are an excellent choice for high temperature applications. The high temperature resistant silicone adhesive resists temperatures of up to 250°C for short term exposure, and up to 180°C for longer periods.

FS-850 POLYESTER FILM WITH SILICONE ADHESIVE



Product Description

- PET film with silicone pressure sensitive adhesive
- Available in Green, Yellow, Blue, and Red Colours

Construction

- PET film
- Primer
- Silicone adhesive

Specification

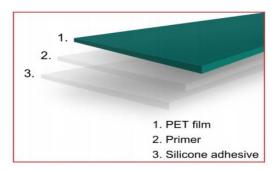
Item	Unit	Specification	Test Method
Base Thickness	μm	25 +/- 2	ASTM D3652
Total Thickness	μm	65 +/- 3	ASTM D3652
Peel Strength	g/in	750 +/- 100	ASTM D3330
Tensile Strength	Kg/inch	25~28	ASTM D3759
Elongation	%	10~30	-
Temperature Use Range	°C	-50 to +180 Long Term >200 Short Term	-
Breakdown Voltage	kV	5	ASTM D149
Chemical Resistance	-	Good	-

Typical Uses

- Powder coating and electro-plating masking
- Splicing siliconized papers and films

2

FS-857 POLYESTER FILM WITH SILICONE ADHESIVE



Product Description

- PET film with silicone pressure sensitive adhesive
- Dark Green Colour

Construction

- PET film
- Primer
- Silicone adhesive

Specification

Item	Unit	Specification	Test Method
Base Thickness	μm	50 +/- 2	ASTM D3652
Total Thickness	μm	80 +/- 3	ASTM D3652
Peel Strength	g/in	1150 +/- 150	ASTM D3330
Tensile Strength	Kg/inch	23~25	ASTM D3759
Elongation	%	8	-
Temperature Use Range	°C	-50 to +180 Long Term >200 Short Term	-
Breakdown Voltage	kV	7	ASTM D149
Chemical Resistance	-	Good	-

Typical Uses

- Powder coating and electro-plating masking
- Splicing siliconized papers and films

3

FS-854 POLYESTER FILM WITH SILICONE ADHESIVE



Product Description

- Silicone Adhesive Tape
- Clear Colour

Construction

- Silicone adhesive
- PET film

Specification

Item	Unit	Specification	Test Method
Base Thickness	μm	38 +/- 2	ASTM D3652
Total Thickness	μm	100 +/- 3	ASTM D3652
Peel Strength	g/in	1200 +/- 50	ASTM D3330
Tensile Strength	Kg/inch	23~25	ASTM D3759
Elongation	%	70	-
Temperature Use Range	°C	-50 to +180 Long Term >200 Short Term	-
Breakdown Voltage	kV	7	ASTM D149
Chemical Resistance	-	Good	-

Typical Uses

- Powder coating and electro-plating masking
- Splicing siliconized papers and films

FS-830 POLYIMIDE FILM WITH SILICONE ADHESIVE



Product Description

- Very high temperature resistance
- Excellent chemical and electrical resistance
- Excellent insulation properties
- Amber Colour

Construction

- Polyimide film
- Silicone adhesive

Specification

Item	Unit	Specification	Test Method
Base Thickness	μm	25 +/- 2	ASTM D3652
Total Thickness	μm	70 +/- 3	ASTM D3652
Peel Strength	g/in	600 +/- 100	ASTM D3330
Tensile Strength	Kg/inch	15~17	ASTM D3759
Elongation	%	85~95	-
Temperature Use Range	°C	260	-
Dielectric Strength	kV/mm	98.5	ASTM D149
Dielectric Breakdown	Kv	6.9	ASTM D149
Chemical Resistance	-	Good	-
Surface resistivity	Ω/sq	10 ¹³	ASTM D257

Typical Uses

- Masking terminals on printed circuit boards
- High temperature clamping and insulation applications
- Wave Soldering applications

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FS-836 POLYIMIDE FILM ANTI STATIC WITH SILICONE ADHESIVE



Product Description

- Anti-static polyimide film with silicone adhesive
- High temperature resistance
- Excellent chemical and electrical resistance
- Anti-static insulation properties
- Amber Colour

Construction

- Polyimide film
- Low static treatment
- Silicone adhesive

Specification

Item	Unit	Specification	Test Method
Base Thickness	μm	25 +/- 2	ASTM D3652
Total Thickness	μm	50 +/- 3	ASTM D3652
Peel Strength	g/in	630	ASTM D3330
Temperature Use Range	°C	200	-
Dielectric Strength	kV/mm	118	ASTM D149
Dielectric Breakdown	Kv	5.9	ASTM D149
Chemical Resistance	-	Good	-
Conductivity	Ω/cm	3 x 10 ⁷	-
Surface resistivity	Ω/sq	6 x 10 ⁹	ASTM D257

Typical Uses

- Protecting components against static discharge
- Anti-static insulation applications

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FS-930 POLYIMIDE FILM DOUBLE SIDED WITH SILICONE ADHESIVE



Product Description

- Very high temperature resistance
- Excellent chemical and electrical resistance
- Silicone Adhesive
- Removable double sided release tape
- Amber Colour

Construction

- Transparent release tape
- Silicone adhesive
- Polyimide film
- Silicone adhesive
- White paper release liner

Specification

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Item	Unit	Specification	Test Method
Base Thickness	μm	25 +/- 2	ASTM D3652
Total Thickness	μm	100 +/- 3	ASTM D3652
Peel Strength	g/in	650	ASTM D3330
Tensile Strength	g/cm²	7000	ASTM D3759
Elongation	%	>50	ASTM D3759
Temperature Use Range	°C	230	-
Dielectric Strength	kV/mm	118	ASTM D149
Dielectric Breakdown	Kv	8	ASTM D149
Chemical Resistance	-	Good	-

Typical Uses

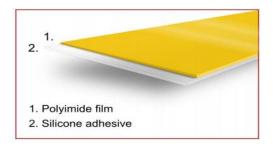
- Masking terminals on printed circuit boards
- High temperature clamping and insulation applications
- Wave Soldering applications

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ELECTRICAL INSULATION TAPES

The polyimide films with silicone adhesive give electrical insulation together with high strength, good chemical resistance and high temperature resistance. The tapes are available with single or double sided silicone adhesive and an anti-static version is also available.

FS-830 POLYIMIDE FILM WITH SILICONE ADHESIVE



Product Description

- Very high temperature resistance
- Excellent chemical and electrical resistance
- Excellent insulation properties
- Amber Colour

Construction

- Polyimide film
- Silicone adhesive

Specification

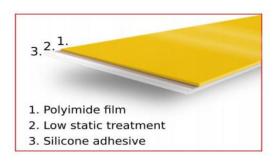
Item	Unit	Specification	Test Method
Base Thickness	μm	25 +/- 2	ASTM D3652
Total Thickness	μm	70 +/- 3	ASTM D3652
Peel Strength	g/in	600 +/- 100	ASTM D3330
Tensile Strength	Kg/inch	15~17	ASTM D3759
Elongation	%	85~95	-
Temperature Use Range	°C	260	-
Dielectric Strength	kV/mm	98.5	ASTM D149
Dielectric Breakdown	Kv	6.9	ASTM D149
Chemical Resistance	-	Good	-
Surface resistivity	Ω/sq	10 ¹³	ASTM D257

Typical Uses

- Masking terminals on printed circuit boards
- High temperature clamping and insulation applications
- Wave Soldering applications

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FS-836 POLYIMIDE FILM ANTI STATIC WITH SILICONE ADHESIVE



Product Description

- Anti-static polyimide film with silicone adhesive
- High temperature resistance
- Excellent chemical and electrical resistance
- Anti-static insulation properties
- Amber Colour

Construction

- Polyimide film
- Low static treatment
- Silicone adhesive

Specification

Item	Unit	Specification	Test Method
Base Thickness	μm	25 +/- 2	ASTM D3652
Total Thickness	μm	50 +/- 3	ASTM D3652
Peel Strength	g/in	630	ASTM D3330
Temperature Use Range	°C	200	-
Dielectric Strength	kV/mm	118	ASTM D149
Dielectric Breakdown	Kv	5.9	ASTM D149
Chemical Resistance	-	Good	-
Conductivity	Ω/cm	3 x 10 ⁷	-
Surface resistivity	Ω/sq	6 x 10 ⁹	ASTM D257

Typical Uses

- Protecting components against static discharge
- Anti-static insulation applications

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FS-930 POLYIMIDE FILM DOUBLE SIDED WITH SILICONE ADHESIVE



Product Description

- Very high temperature resistance
- Excellent chemical and electrical resistance
- Silicone Adhesive
- Removable double sided release tape
- Amber Colour

Construction

- Transparent release tape
- Silicone adhesive
- Polyimide film
- Silicone adhesive
- White paper release liner

Specification

•			
Item	Unit	Specification	Test Method
Base Thickness	μm	25 +/- 2	ASTM D3652
Total Thickness	μm	100 +/- 3	ASTM D3652
Peel Strength	g/in	650	ASTM D3330
Tensile Strength	g/cm²	7000	ASTM D3759
Elongation	%	>50	ASTM D3759
Temperature Use Range	°C	230	-
Dielectric Strength	kV/mm	118	ASTM D149
Dielectric Breakdown	Kv	8	ASTM D149
Chemical Resistance	-	Good	-

Typical Uses

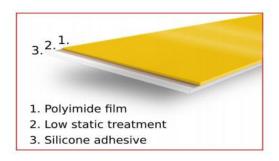
- Masking terminals on printed circuit boards
- High temperature clamping and insulation applications
- Wave Soldering applications

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ANTI-STATIC TAPES

Used to prevent a build-up of static electricity, the anti-static tapes help prevent the build-up of static electricity which attracts dust and other contaminants.

FS-836 POLYIMIDE FILM ANTI STATIC WITH SILICONE ADHESIVE



Product Description

- Anti-static polyimide film with silicone adhesive
- High temperature resistance
- Excellent chemical and electrical resistance
- Anti-static insulation properties
- Amber Colour

Construction

- Polyimide film
- Low static treatment
- Silicone adhesive

Specification

Item	Unit	Specification	Test Method
Base Thickness	μm	25 +/- 2	ASTM D3652
Total Thickness	μm	50 +/- 3	ASTM D3652
Peel Strength	g/in	630	ASTM D3330
Temperature Use Range	°C	200	ı
Dielectric Strength	kV/mm	118	ASTM D149
Dielectric Breakdown	Kv	5.9	ASTM D149
Chemical Resistance	-	Good	ı
Conductivity	Ω/cm	3 x 10 ⁷	ı
Surface resistivity	Ω/sq	6 x 10 ⁹	ASTM D257

Typical Uses

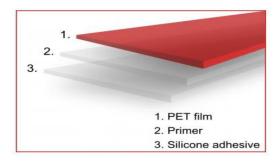
- Protecting components against static discharge
- Anti-static insulation applications

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PCB MASKING TAPES

Ideal for wave soldering masking use, the high temperature polyester and polyimide tapes have silicone adhesive and are available in a range of colours.

FS-850 POLYESTER FILM WITH SILICONE ADHESIVE



Product Description

- PET film with silicone pressure sensitive adhesive
- Available in Green, Yellow, Blue, and Red Colours

Construction

- PET film
- Primer
- Silicone adhesive

Specification

Item	Unit	Specification	Test Method
Base Thickness	μm	25 +/- 2	ASTM D3652
Total Thickness	μm	65 +/- 3	ASTM D3652
Peel Strength	g/in	750 +/- 100	ASTM D3330
Tensile Strength	Kg/inch	25~28	ASTM D3759
Elongation	%	10~30	-
Temperature Use Range	°C	-50 to +180 Long Term	-
		>200 Short Term	
Breakdown Voltage	kV	5	ASTM D149
Chemical Resistance	-	Good	-

Typical Uses

- Powder coating and electro-plating masking
- Splicing siliconized papers and films

FS-830 POLYIMIDE FILM WITH SILICONE ADHESIVE



Product Description

- Very high temperature resistance
- Excellent chemical and electrical resistance
- Excellent insulation properties
- Amber Colour

Construction

- Polyimide film
- Silicone adhesive

Specification

Item	Unit	Specification	Test Method
Base Thickness	μm	25 +/- 2	ASTM D3652
Total Thickness	μm	70 +/- 3	ASTM D3652
Peel Strength	g/in	600 +/- 100	ASTM D3330
Tensile Strength	Kg/inch	15~17	ASTM D3759
Elongation	%	85~95	-
Temperature Use Range	°C	260	-
Dielectric Strength	kV/mm	98.5	ASTM D149
Dielectric Breakdown	Kv	6.9	ASTM D149
Chemical Resistance	-	Good	-
Surface resistivity	Ω/sq	10 ¹³	ASTM D257

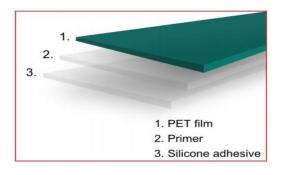
Typical Uses

- Masking terminals on printed circuit boards
- High temperature clamping and insulation applications
- Wave Soldering applications

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ELECTRO PLATING MASKING TAPES

FS-857 POLYESTER FILM WITH SILICONE ADHESIVE



Product Description

- PET film with silicone pressure sensitive adhesive
- Dark Green Colour

Construction

- PET film
- Primer
- Silicone adhesive

Specification

Item	Unit	Specification	Test Method
Base Thickness	μm	50 +/- 2	ASTM D3652
Total Thickness	μm	80 +/- 3	ASTM D3652
Peel Strength	g/in	1150 +/- 150	ASTM D3330
Tensile Strength	Kg/inch	23~25	ASTM D3759
Elongation	%	8	-
Temperature Use Range	°C	-50 to +180 Long Term >200 Short Term	-
Breakdown Voltage	kV	7	ASTM D149
Chemical Resistance	-	Good	-

Typical Uses

- Powder coating and electro-plating masking
- Splicing siliconized papers and films

EMC and Thermal Management Solutions

NOTES

When applying tapes to any surface it is important to ensure that the surface is free from all contaminants such as oil, grease, powder, dust or release agents. Tapes should be fully tested on the substrates in the application they are intended for. Adhesive performance should be checked when using substrates containing plasticisers. It is the customer's responsibility to decide on the tapes suitability for the intended application. Unless stated, all values are average.

APPLICATION INSTRUCTIONS

- Ensure that all surfaces to be bonded are clean and free from dust and grease
- The surface to be bonded should be dry, and free from loose particles
- The best cleaning medium is solvent such as Isopropyl alcohol applied with a clean cloth
- For optimum bonding sufficient pressure should be applied to the surface area to be bonded
- The adhesive is pressure sensitive. Best results are achieved with maximum surface contact under pressure
- Avoid load bearing to the bond directly after application
- Recommended application temperature +20°C to +36°C
- Minimum application temperature should not be below +10°C

All technical data herein is accurate to the best of our knowledge based on our most up to date testing information and material specifications. This information is not presented as a warranty or guarantee and is not intended to be all inclusive as to conditions of use. The data herein represents typical properties and is not to be used as a basis for a specification.