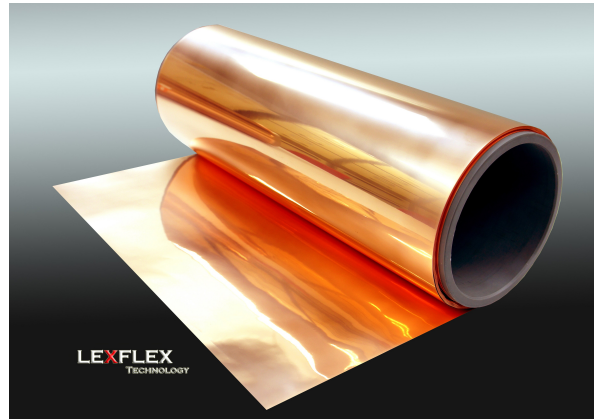


LEXFLEX 2 L-FCCL



- LEXFLEX DS Double-Sided Flexible Copper Clad Laminate (2L-FCCL) is an ideal ultra thin adhesiveless material for modern high-end electronics market. LEXFLEX -SD is excellent for fine pitch COF, FPC and semi-additive process due to its excellent dimensional stability, high peel strength, uniform copper thickness, good thermal resistance and etching performance
- Sputtered type LEXFLEX provides customized copper thickness ranging from 1 μm to 18 μm for special applications
- Various substrates can be provided by special request

Manufacturing Process:

Sputter Special Materials Layer

Sputter Copper Seed Layer

Electroplate desired Copper Thickness

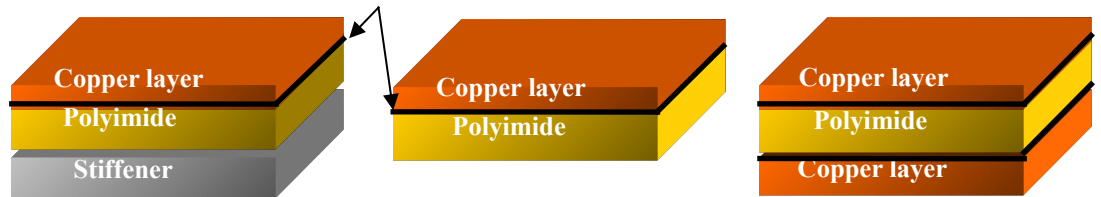
Laminate Stiffener (*Special Process)

Slit to Desired Width

Vacuum Packaging

Structure

Special materials layer



LEXFLEX -SS for COF (LCD)

LEXFLEX -SS for FPC S-Side

LEXFLEX -SD for FPC D-Side

Technical Features

- High Peel Strength
- Excellent Bending Endurance
- Excellent Flexural Endurance
- Excellent Dimensional Stability
- Excellent Copper Uniformity
- Good Etching Performance
- Excellent Fine Pattern
- High Modulus
- Good Thermal and Humidity Resistance
- Halogen Free

Applications

- COF Applications especially for OLED, LCD and PDP Flat Panel display
- FPCB
- Semi-Additive Process
- Mobile Phones
- RFID
- Organic Solar Battery Soft Electronic Board
- Ultra Capacitors and lithium-iron-phosphate (LiFePO₄) batteries

Storage Conditions

Pinnacle SD are warranted for six months with the original packaging and stored at the temperature of 4 – 26 °C and below 70% relative humidity. The products do not require refrigeration and should not be frozen.

2L-FCCL Standard

Model	Copper - A	Polyimide	Copper - B	Core Diameter
SS – 1025	10 μm	25 μm	–	3" or 6"
DS - 1025	10 μm	25 μm	10 μm	
DS – 8025	8 μm	25 μm	8 μm	
DS – 8125	8 μm	12.5 μm	8 μm	
DS – 6025	6 μm	25 μm	6 μm	

* Other substrate types and copper thickness can be provided by special request.

Material Properties

Property		Unit	Value
Peel Strength	As Received	Kgf/cm	≥1.2
Dimensional Stability	MD	%	± 0.04
	TD		±0.04
Heat Shrinkage (300°C)		%	0.05
Dielectric Constant			3.1
Tensile Strength		MPa	≥ 340
Tensile Modulus		MPa	4800
Elongation		%	50
Volume Resistivity		MΩ·cm	10 ¹⁰
CTE (50 - 300°C)		ppm/°C	16
Moisture Absorption (100°C RH)		%	1.8
Flammability			UL- 94V/H
Hazardous Substances			RoHS

Made in Hong Kong

