

NITOFLON™ HR-S051

Outline

NITOFLON™ HR-S051 is a release film that combines polytetrafluoroethylene (PTFE) with polyimide film. It combines the thermal stability of polyimide with the release properties of PTFE.

Structure

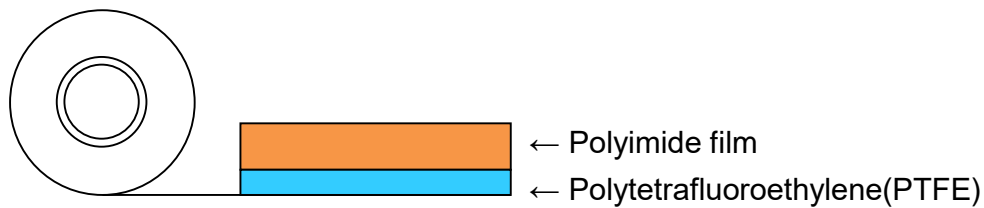


Fig.1 Structure

Features

- It combines the thermal stability (mechanical strength and dimensional stability) of polyimide and the releasability of PTFE.
- It has excellent heat resistance and can be used as a release film even at high temperatures of 300°C.
- Excellent thermoelectric conductivity due to its thinness.

Applications

- Mold release in TCB (Thermal Compression Bonding) process in semiconductor manufacturing

Properties

Table 1 General properties

Item		Unit	Characteristic value
Thickness		mm	0.03
Tensile strength		MPa	205
Elongation		%	50
Surface roughness (Rmax)		um	0.5~1
Thermal conductivity		W/(m·K)	0.15
Dimensional change rate 300°C x 1 minute	MD	%	-0.04
	TD		-0.02

Notes

- When disposing of this product, please dispose of it according to the local regulations. When incinerating it, please use an appropriate disposal equipment otherwise harmful fluorine gas would be generated.
- Do not heat it above 400°C as fluorine gas may be generated.
- This product is for industrial use. Please do not use it on the human body.
- Store in a cool place away from direct sunlight.