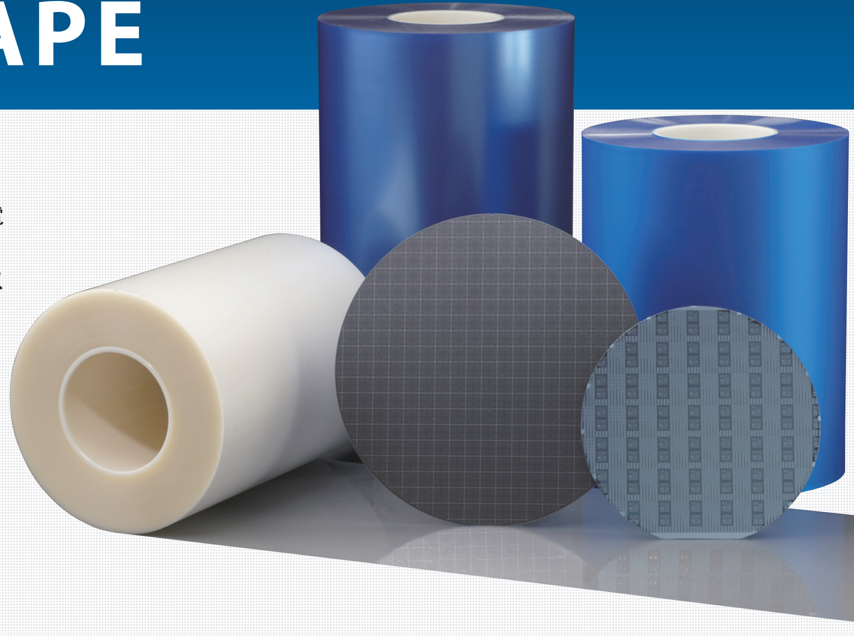
ELEGRIP® TAPE



概要

背磨膠帶，是在研磨硅片背面時，用於保護硅片正面(帶電路的面)的膠帶。
以不需洗淨工程的黏着劑設計為理念，兼具低微塵性、以及穩定的研削性。

Overview

Back grinding tapes protect the surface of wafer circuits and prevent them from becoming damaged during back grinding.
Featuring an adhesive agent that eliminates the need for cleaning, ELEGRIP® tapes ensure low particle count and stable grinding performance.

背磨膠帶

Back Grinding Tape

特長

- 對桂片正面凹凸不平的貼附性
- 進行背面研磨時的穩定的研削性（低TTV※1）
- 由于實現了穩定的低微塵特性，無需洗淨工程
- 黏着力的經時變化小，剝離性穩定

※1 TTV：Total Thickness Variation（整體厚度變化）

Features

- Exhibits superior adhesive qualities on roughness of patterned surfaces
- Ensures stable grinding performance during back grinding (Low TTV*1)
- Delivers stable low particle count performance, eliminating the need for cleaning
- Exhibits stable adhesive strength, unaffected by storage time

*1 TTV=Total Thickness Variation

一般物理特性／Physical Properties

品種 Product number	基材 Base Film	顏色 Color	総厚度 Total Thickness (μm)	黏着粘着劑厚度 Adhesive Thickness (μm)	黏着力 Adhesive Strength (N/20mm)	探針黏性 Probe Tack (N/20mm²)	備注 Remarks
BGE-122S	EVA	LB	140	20	1.30	1.19	標準類型 Standard types
BGE-122V			140	20	1.59	1.72	
BGE-124S			160	40	1.41	1.29	用於有凹凸的硅片研削 For middle-bumped wafers
P系列	PET	T	85	35	18.04	13.97	用于剝下BG膠帶（無離形膜） For detaping back grinding tape (release linerless)

備注／上述數值是代表值，並非保證值。
顏色：LB（淡藍）、T（透明）
不包括離形膜（保護膜）的厚度。

Notes: The above-mentioned values are representative values only, and are not guaranteed.
Colors: LB=light blue, T=transparent
The thickness of the release liner is not included.

Q. ELEGRIP®的基材的種類有哪些？
What kinds of base films do you have?

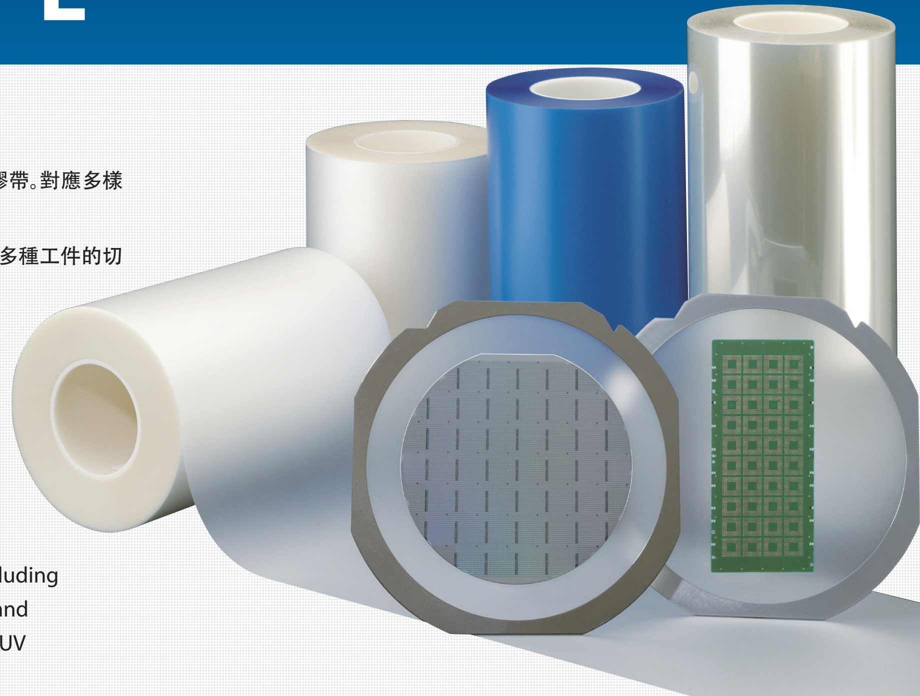
A. ELEGRIP®的基材是有聚氯乙烯（PVC）、聚烯烴（PO）、聚對苯二甲酸乙二酯（PET）、乙烯-醋酸乙烯酯共聚物（EVA）。
We have 4 types. Polyvinyl chloride (PVC), polyolefin (PO), polyethylene terephthalate (PET), and ethylene vinyl acetate (EVA).

Q. 選定膠帶，需要什麼信息？
What kind of information is needed to choose suitable tapes?

A. 工件種類、以及工件表面的材質、尺寸、加工條件等。
綜合考慮以上各個因素，針對易出現的問題推薦。
We suggest the tape that fits your needs and applications, regarding surface material and size of the workpiece, and processing conditions.

Denka

ELEGRIP® TAPE



概要

一般感壓型的切割膠帶，是在各種硅片等的切割工程中使用的膠帶。對應多樣化的需求，提供最適合的膠帶。
UV型的切割膠帶，是在各種硅片、封裝基板、陶瓷、玻璃、水晶等多種工件的切割工程中使用的膠帶。通過使用紫外線，降低黏着力，使之更易剝離。

Overview

Pressure-sensitive adhesive type is used while dicing various types of wafers. We provide the best possible tapes to meet your ever diversifying range of needs.
UV type is used while dicing a wide range of workpieces, including various types of wafers, package substrates, ceramics, glass, and crystal. For the ease of peeling, UV dicing tape is exposed to UV light, thereby weakening its adhesive strength.

切割膠帶（一般感壓型）

Dicing Tape (pressure-sensitive adhesive type)

特長

- 優越的經時穩定性
- 備有2色（乳白、淡藍）
- 帶電防止型（選項）

Features

- Superior storage time stability
- Two available colors: milky white and light blue
- Anti-static types are also available (optional)

一般物理特性／Physical Properties

品種 Product Number	基材 Base Film	顏色 Color	総厚度 Total Thickness (μm)	黏着劑厚度 Adhesive Thickness (μm)	黏着力 Adhesive Strength (N/20mm)	探針黏性 Probe Tack (N/20mm²)	推薦工件 Recommended Workpieces	備注 Remarks
F-90MW	PO	MW	90	10	0.97	0.91	硅(Si) 砷化鎵(GaAs) 其他半導體 Silicon (Si), gallium arsenide (GaAS) and other types of semiconductors	對應非PVC PVC - free
T-80MW	PVC		80		0.91	0.85		優越的經時穩定性 Superior storage time stability
T-80HW					1.84	1.29		
T-80MB		LB			0.89	0.83		
T-80HB					1.65	1.13		
T-120HW		MW	120		1.70	1.56		
TA-80MW			80		1.1	0.95		符合RoHS規範 RoHS corresponding product
TA-80HW					2.1	1.35		
TA-80MB		LB			0.93	0.97		
TA-80HB					1.47	1.15		
TA-120HW		MW	120		2.25	1.3		

備注／上述數值是代表值，並非保證值。
顏色：MW（乳白）、LB（淡藍）
不包括離形膜（保護膜）的厚度。

Notes: The above-mentioned values are representational values only, and are not guaranteed.
Colors: MW=milky white, LB=light blue
The thickness of the release liner is not included.

Denka

切割膠帶(UV型)

Dicing Tape (UV type)

特長

- 品種齊全,膠層可有多種厚度(5μm～)
- 減少背崩以及防止飛料,以及芯片飛濺
- 實現Easy Pick up(容易剝離)
- 對EMC(Epoxy molding compound,半導體環氧合成高分子封裝材)等較難接着的工件,也具有優質的貼附性
- 防靜電型(選項)

Features

- Wide range of items available with different adhesive thicknesses (5μm-)
- Prevents from die-fly and chipping (cracking) on the backside surface
- Easy pickup (easy to peel)
- Exhibits superior adhesive qualities for workpieces that are incredibly anti-adhesive, such as those made from EMC (epoxy molding compounds)
- Anti-static types are available (optional)

一般物理特性／Physical Properties

品種 Product number	基材 Base Film	顏色 Color	総厚度 Total Thickness (μm)	黏着劑厚度 Adhesive Thickness (μm)	黏着力(UV照射後) Adhesive Strength (after UV irradiation) (N/20mm)	探針黏性 Probe Tack (N/20mm²)	推薦工件 Recommended Workpieces	備注 Remarks
UDV-80J	PVC	T	80	10	2.64(0.10)	1.98	硅(Si) 砷化鎵(GaAs) 其他半導體 Silicon (Si), gallium arsenide (GaAS) and other types of semiconductors	良好的剝離性 Exhibits excellent pickup
UDV-100J			100		2.30(0.18)	2.18		
UAV-80J			80		4.8(0.05)	1.7		符合RoHS規範 RoHS corresponding product
UAV-100J			100		4.9(0.05)	2.0		
UHP-0805MC	PO	MW	85	5	3.41(0.11)	1.16		減少背崩 Limits amount of chipping and cracks on the backside surface
UHP-0805M6			85		9.80(0.14)	1.40		
UHP-1005M3			105		4.39(0.10)	2.47		
UHP-1005AT			105		1.97(0.05)	1.65		良好的剝離性 Exhibits excellent pickup
UHP-110AT			110	10	2.58(0.05)	2.27		
UHP-110BZ			110		2.83(0.05)	2.55		
UHP-110M3			110		6.54(0.09)	3.39		可用於小芯片 Compatible with small-sized chips
UHP-1025M3			125	25	11.05(0.09)	5.03	封裝基板 Package substrate (BGA/QFN etc)	可用於難接着的工件 Compatible with workpieces that are incredibly anti-adhesive
UHP-1510M3			160	10	5.86(0.10)	3.97		
UHP-1525M3			175	25	11.49(0.09)	5.10		
UEP-1410M3			150	10	12.60(0.10)	5.00		
UEP-1420M3			160	20	15.5(0.10)	6.10		
UEP-1420M4			160	20	20.4(0.10)	7.60		
UDT-1005M3	PET	T	105	5	7.09(0.03)	4.36	玻璃,水晶 Glass, crystal	減少背崩 Limits the amount of chipping and cracks on the backside surface
UDT-1025M3			125	25	21.39(0.05)	7.63		
UDT-1025MC			125	25	28.18(0.05)	8.63		
UDT-1025SG			125	25	35.04(0.16)	6.56		
UDT-1915MC			203	15	19.83(0.04)	3.76		

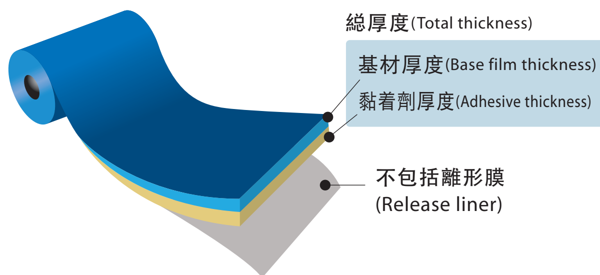
備注／上述數值是代表值,並非保證值。
顏色: MW (乳白)、T (透明)
UV照射條件: 累計光量=150mJ/cm2以上
不包括離形膜(保護膜)的厚度。

Notes: The above-mentioned values are representative values only, and are not guaranteed.
Colors: MW=milky white, T=transparent
UV irradiation condition: Cumulative amount of light=150mJ/cm^2 or more
The thickness of the release liner is not included.

參考資料：黏着膠帶性能表示、試驗方法

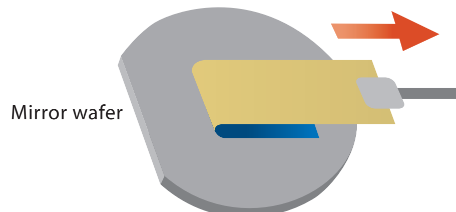
Reference: How to identify and test the properties of adhesive tapes

総厚度 Total Thickness



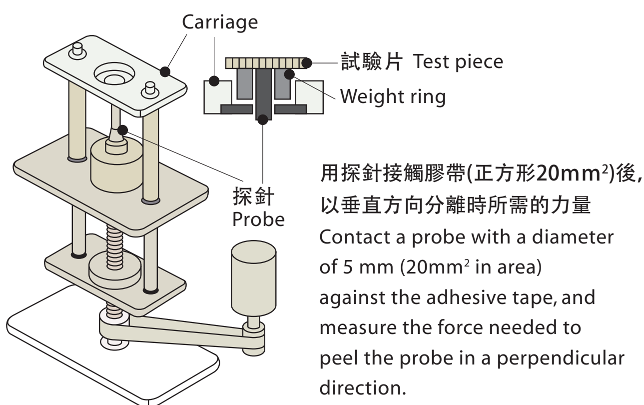
貼帶厚度＝基材厚度＋黏着劑厚度
不包括離形膜(PET保護膜: 38μm)的厚度
Total thickness = Base Film Thickness+ Adhesive Thickness
Release liner (PET: 38μm) is not included.

黏着力 Adhesive Strength



把一小段膠布貼到 adherend上,
以180度方向撕離時所需的力量
Press strip of tape to an adherend,
and then measure the force of 180 degree peel.

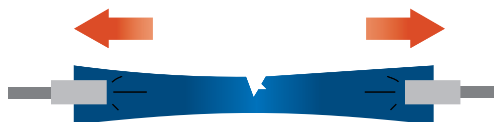
探針黏性 Probe Tack



用探針接觸膠帶(正方形20mm²)後,
以垂直方向分離時所需的力量
Contact a probe with a diameter of 5 mm (20mm² in area) against the adhesive tape, and measure the force needed to peel the probe in a perpendicular direction.

拉伸強度 Tensile Strength

夾住膠帶兩端間距爲100mm, 拉斷膠帶時的力量
Pull both ends of a 100 mm-long tape outward,
and then measure the force applied when the tape is cut.



伸　展 Elongation

以膠帶長度方向拉伸, 測量伸展率
The degree of elongation, measured when
both ends of the tape are pulled outward.

Q 探針黏性是指什麼?
What is probe tack?

A. 所謂探針黏性, 是指將探針與粘着膠帶瞬間接觸, 透過測定拉開時的強度的方法, 評價黏着表面黏性的方法之一。
Probe tack is a method for measuring the stickiness of the adhesive surface. Contact the probe against the adhesive tape for a second, and then measure the force needed to remove the probe from the tape.