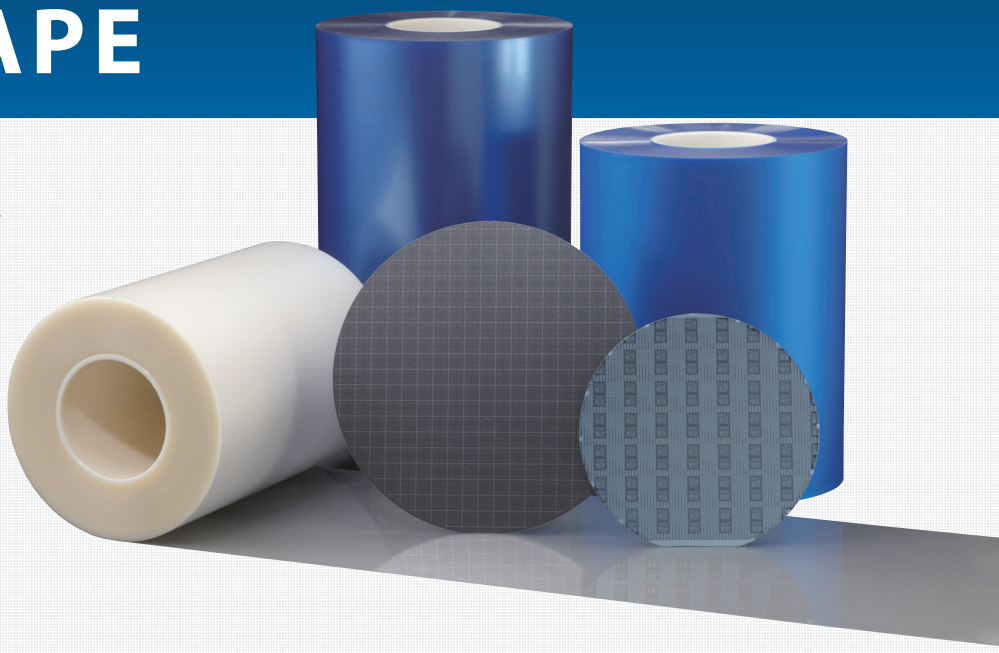
ELEGRIP® TAPE

概要

背磨胶带，是在研磨硅片背面时，用于保护硅片正面（带电路的面）的胶带。
以不需洗净工程的粘着剂设计为理念，兼具低微尘性、以及稳定的研削性。

Overview

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



背磨胶带（一般感压型）

Back Grinding Tape (pressure-sensitive adhesive type)

● 特长

- 对硅片正面凹凸不平的贴附性
- 进行背面研磨时的稳定的研削性（低TTV※1）
- 由于实现了稳定的低微尘特性，无需洗净工程
- 粘着力的经时变化小，剥离性稳定

※1 TTV：Total Thickness Variation（整体厚度变化）

● Features

- Exhibits superior adhesive quality 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

一般感压型／pressure-sensitive adhesive type

一般物理特性／Physical Properties

品种 Product number	基材 Base Film	颜色 Color	总厚度 Total Thickness (μm)	粘着剂厚度 Adhesive Thickness (μm)	粘着力 Adhesive Strength (N/20mm)	探针粘性 Probe Tack (N/20mm²)	备注 Remarks
BGE-122S	EVA	LB	140	20	1.30	1.19	标准类型 Standard types
BGE-124S			160	40	1.41	1.29	用于有凹凸的硅片研削 For middle-bumped wafers
P系列	PET	T	85	35	18.04	13.97	用于剥下BG胶带（无离形膜） For detaping back grinding tape (release linerless)

备注 / 上述数值是代表值，并非保证值。
颜色：LB（淡蓝）、T（透明）、MW（乳白）
不包括离形膜（保护膜）的厚度。

Notes: The above-mentioned values are representative values only, and are not guaranteed.
Colors: LB=Light Blue, T=Transparent, MW=Milky white
The thickness of the release liner is not included.

Denka

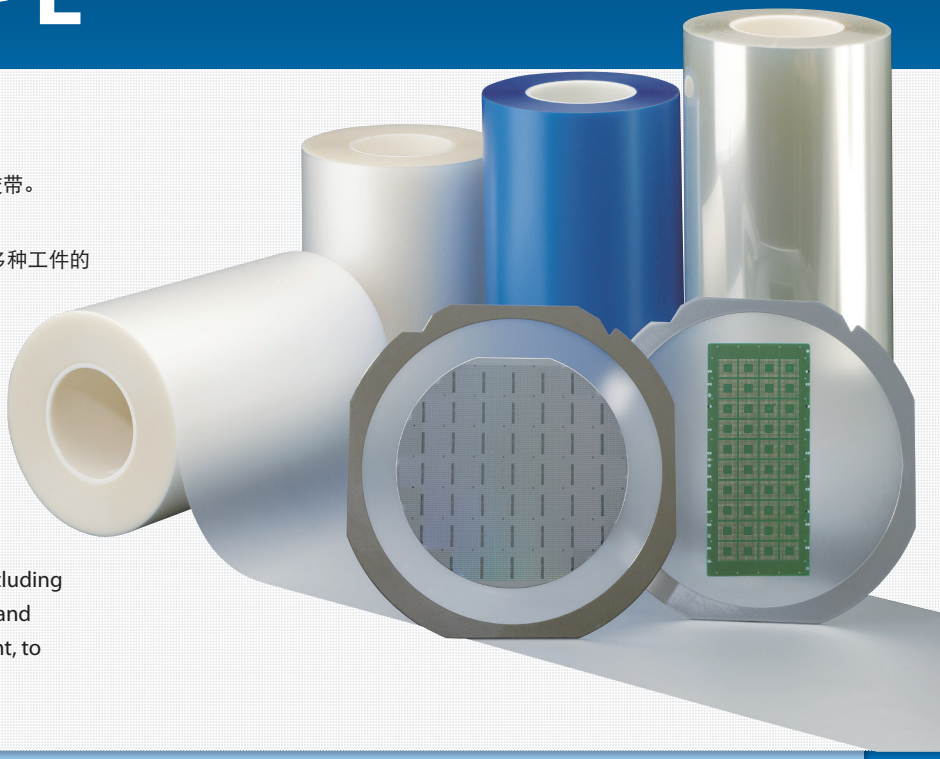
ELEGRIP® TAPE

概要

一般感压型的切割胶带，是在各种硅片等的切割工程中使用的胶带。
对应多样化的需求，提供最适合的胶带。
UV型的切割胶带，是在各种硅片、封装基板、陶瓷、玻璃、水晶等多种工件的切割工程中使用的胶带。
通过使用紫外线，降低粘着力，使之更易剥离。

Overview

Pressure-sensitive adhesive tape is used while dicing various types of wafers. We provide the best possible tapes to meet various range of needs.
UV type is used while dicing a wide range of work-pieces, including various types of wafers, package substrates, ceramics, glass, and crystal. For easy peeling, UV dicing tape is exposed to UV light, to weaken its adhesive strength.



切割胶带（一般感压型）

Dicing Tape (pressure-sensitive adhesive type)

● 特长

- 优越的经时稳定性

● Features

- Superior storage time stability

一般物理特性／Physical Properties

品种 Product Number	基材 Base Film	颜色 Color	总厚度 Total Thickness (μm)	粘着剂厚度 Adhesive Thickness (μm)	粘着力 Adhesive Strength (N/20mm)	探针粘性 Probe Tack (N/20mm²)	推荐工件 Recommended Workpieces	备注 Remarks
F-90MW	PO	MW	90	10	0.97	0.91	硅（Si） 砷化镓(GaAs) 其他半导体 Silicon (Si), gallium arsenide (GaAS) and other types of semiconductors	对应非PVC PVC - free
F-0805TA			85	5	0.23	1.13		
F-0830TA			110	30	0.36	1.8		

备注／上述数值是代表值，并非保证值。
颜色：MW（乳白）
不包括离形膜（保护膜）的厚度。

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

Denka

切割胶带（UV型）

Dicing Tape (UV type)

● 特长

- 品种齐全，胶层可有多种厚度(5μm～)
- 减少背崩以及防止飞料，以及芯片飞溅
- 实现Easy Pick up(容易剥离)
- 对EMC(Epoxy molding compound，半导体环氧合成高分子封装材)等较难接着的工件，也具有优质的贴附性
- 防静电型(选项)

● Features

- Wide range of items available with different adhesive thicknesses (5μm-)
- Prevents die-fly off 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 EMC (epoxy molding compounds)
- Anti-static types are available (optional)

一般物理特性／Physical Properties

品种 Product number	基材 Base Film	颜色 Color	总厚度 Total Thickness (μm)	粘着剂厚度 Adhesive Thickness (μm)	粘着力(UV照射后) Adhesive Strength (after UV irradiation) (N/20mm)	探针粘性 Probe Tack (N/20mm²)	推荐工件 Recommended Workpieces	备注 Remarks
UAV-80J	PVC	T	80	10	4.6(0.05)	1.4	硅(Si) 砷化镓(GaAs) 其他半导体 Silicon (Si), gallium arsenide (GaAS) and other types of semiconductors	符合RoHS规范 RoHS corresponding product
UAV-100J			100		4.73(0.05)	1.68		
UHP-0805MCN	PO	MW	85	5	3.41(0.11)	1.16		减少背崩 Limits amount of chipping and cracks on the backside surface
UHP-0810SGE2			90	10	6.8(0.15)	1.22		
UHP-1005M3			105	5	4.39(0.10)	2.47		
UHP-1005AT			105		1.97(0.05)	1.65		良好的剥离性 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		可用于小芯片 Compatible with small-sized chips
UHP-1025M3			125	25	11.05(0.09)	5.03	封装基板 Package substrate (BGA/QFN etc)	可用于难接着的工件 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-N	PET	T	105	5	7.09(0.03)	4.36	玻璃，水晶 Glass, crystal	减少背崩 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		

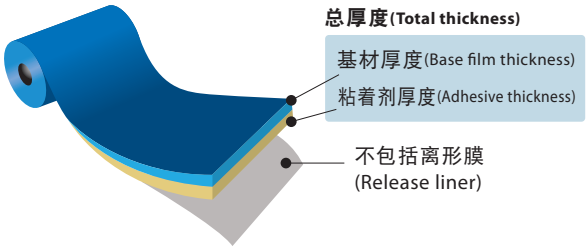
备注／上述数值是代表值，并非保证值。
颜色：MW（乳白）、T（透明）
UV照射条件：累计光量=150mJ/cm²以上
不包括离形膜(保护膜)的厚度。

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/cm² or more
The thickness of the release liner is not included.

参考资料：粘着胶带性能表示、试验方法

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

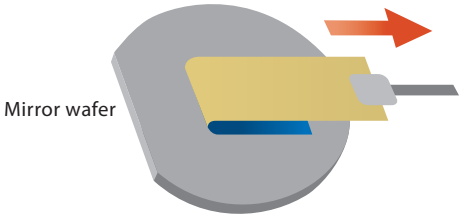
总厚度 Total Thickness



胶带厚度＝基材厚度＋粘着剂厚度
不包括离形膜(PET保护膜：38um)的厚度

Total thickness = Base film thickness + Adhesive thickness
Release liner (PET: 38μm) is not included.

粘着力 Adhesive Strength



把一小段胶布贴到 adherend 上，
以180度方向撕离时所需要的力量

Pressure mount the to an adherend,
and then measure the force of 180 degree direction.

伸展 Elongation

以胶带长度方向拉伸，测量伸展率

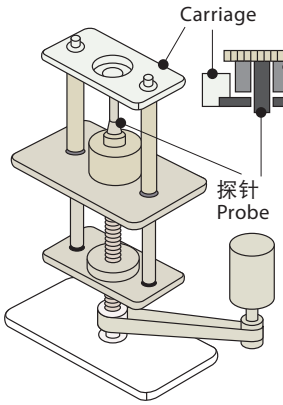
The degree of elongation, measured when
both ends of the tape are pulled outward.

拉伸强度 Tensile Strength

夹住胶带两端(间距100mm)，拉断胶带时的力量

Pull both ends of a 100 mm-long tape outward,
and then measure the force applied when the tape is tore.

探针粘性 Probe Tack



用探针接触胶带(面积20mm²)
以垂直方向分离时所需的力量

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.

Q 探针粘性是指什么？
What is probe tack?

A. **所谓探针粘性，是指将探针与粘着胶带瞬间接触，透过测定拉开时的强度的方法，评价粘着表面粘性的方法之1。**

Probe tack is a method for measuring the stickiness of the adhesive surface. Contact the probe against the adhesive tape for short time, and then measure the force needed to remove the probe from the tape.

Q ELEGRIP®的基材的种类有哪些？
What kinds of base films do you have?

A. **ELEGRIP®的基材是有聚氯乙烯(PVC)、聚烯烃(PO)、聚对苯二甲酸乙二酯(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 选定胶带，需要什么信息？
What kind of information is needed to choose suitable tapes?

A. **工件种类、以及工件表面的材质、尺寸、加工条件等。综合考虑以上各个因素，针对易出现的问题推荐。**

Based on information such as work-piece type, work-piece surface material, size, machine parameter applicable tape can be recommended.