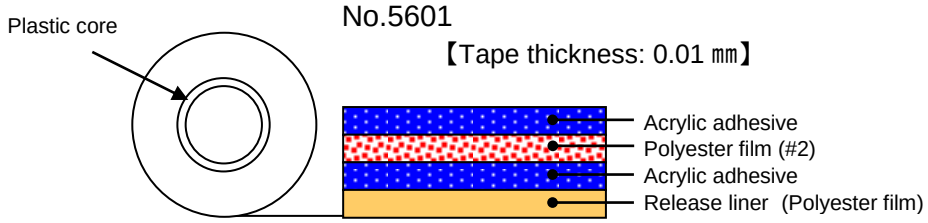
Super thin double-coated adhesive tape

No.5601

Outline

Nitto Denko No. 5601 is 0.01mm thick double-coated adhesive tape.
The tape has a #2 polyester film as a base coated on both sides with acrylic adhesive and offers superior bonding performance to plastic films and moldings.
The tape facilitates thinner electronic equipment, as tape thickness is 0.01mm.
Also, it is has an excellent converting and working performance by using #2 polyester film.

Structure



Features

- Tape thickness is 0.01mm. Can be used for bonding in limited spaces or clearances.
- Excellent thickness uniformity by using polyester film.
- Uses thin #2 polyester film for superior conversion prior to use and offers less blocking and oozing.
- Excellent bonding performance to plastic material.
- The tape minimizes dust emission by using polyester release liner and plastic core.
- Halogen-free type. (Chloride compounds are not used for this product.)
- The ten hazardous materials restricted by the RoHS directive are not compounded.

Applications

- Fixing of reflective sheets and optical waveguide films used for LCD backlight modules such as digital camera and cellular phone.
- Fixing of film for compact electronics.
- Fixing of thin layered films, splicing and fixing for metal foil end.

Standards size

Tape thickness (mm)	Widths (mm)	Length (m)
0.01	16 - 500	100

For more information, please contact us.

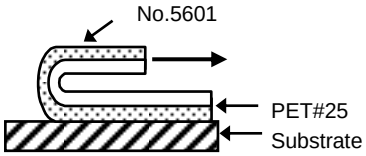
Properties

●180° peeling adhesion by substrate

Substrate	No.5601
ABS plate	5.1
Polystyrene plate	6.1
Acrylic plate	5.8
Polycarbonate	6.5
Polyester film	5.6
Stainless steel plate	6.0
Aluminum plate	4.8
Glass plate	5.6

(Unit: N/20 mm)
Backing: PET#25
Peeling speed: 300 mm/min
Peeling angle: 180°
Pressure application condition: *1pass back and forth with 2kg
Substrate: Stainless steel plate

〈Test method〉



●180° peeling adhesion by temperature

Temperature	No.5601
10℃	5.1
23℃	6.0
40℃	5.6
60℃	4.5
80℃	4.4

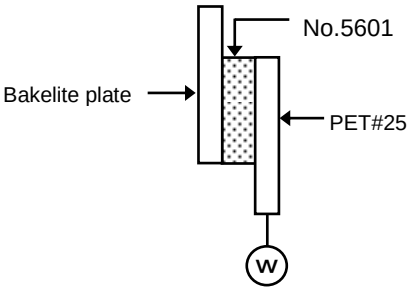
(Unit: N/20 mm)
Backing: PET#25
Peeling speed: 300 mm/min
Peeling angle: 180°
Measurement temperature: 10°C, 23°C, 40°C, 60°C, 80°C,
*Application under various temperatures
→Measurement under various temperatures
Substrate: Stainless steel plate

●Holding power

Temperature	No.5601
40℃	0.3

(Unit：mm/hr)
Measurement temperature: 40℃
Tape area: 10mm x 20mm
Load: 4.9N（500g）
Substrate: Bakelite plate

〈Test method〉

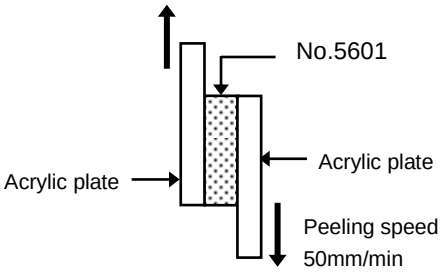


●Shear strength

Temperature	No.5601
23℃	450

(Unit: N/20 mm x 20mm)
Substrate: Acrylic plate / Acrylic plate
Tape area: 20mm x 20mm
Peeling speed: 50 mm/min
Measurement condition: 23°C x 50%RH
Measurement method:
A specimen is prepared and shear strength is measured after allowing it to set 30 minutes.

〈Test method〉



Properties

●180° Peeling adhesion by pressure

Pressure	No.5601
0.1kg	3.3
0.5kg	5.1
2kg	6.0
5kg	6.1

(Unit：N／20mm)
Backing: PET#25
Peeling speed: 300mm/min
Peeling speed: 180°
Measurement condition: 23℃x50%RH
Pressure application condition
*1 pass back with forth with 0.1 kg、0.5kg、2kg、5kg
Substrate: Stainless steel plate

●180° Peeling adhesion after application(increase)

Temperature	Time	No.5601
23℃	0.5hrs	6.0
	4hrs	6.0
	12hrs	6.1
	24hrs	6.1
	48hrs	6.4
	72hrs	6.4

(Unit：N/20mm)
Backing: PET#25
Peeling speed: 300mm/min
Peeling angle: 180°
Measurement condition: 23℃x50%RH
Substrate: stainless steel plate

●180° peeling adhesion(change after application)

Temperature	Time	No.5601
23℃	1 day	6.1
	14 days	6.7
	30 days	6.8
40℃92%RH	1 day	6.1
	14 days	6.9
	30 days	7.1
50℃	1 day	6.4
	14 days	7.3
	30 days	7.5
70℃	1 day	6.7
	14 days	8.3
	30 days	8.2

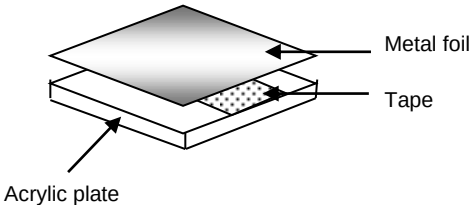
(Unit：N/20mm)
Backing: PET#25
Peeling speed: 300mm/min
Peeling angle: 180°
Measurement condition: 23℃x50%RH
Substrate: stainless steel plate

Properties

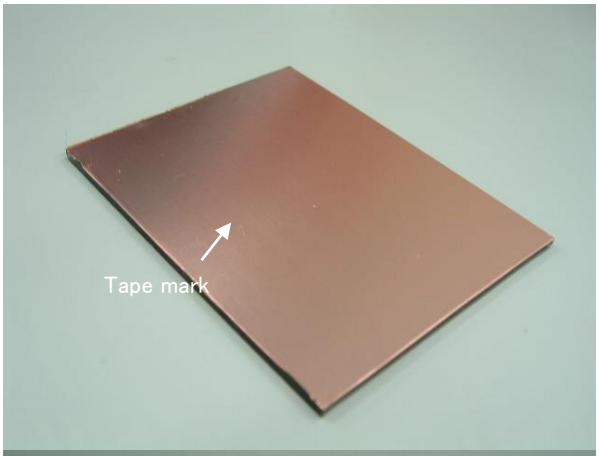
●Unevenness（Observe the unevenness on applied metal foil)

〈Test method〉

- Metal foil : Rolled cooper foil #35
- Substrate: Acrylic plate
- Size: 50mm × 70mm
- Tape area:20mm width x 70mm



〈No.5601〉



〈0.10mm-thick double coated tape〉

*Super thin, No.5601 does not stand out the unevenness where the tape applied.

Precautions when using

- Remove all oil, moisture and dirt from the surface of the substrate before applying.
- The tape employs pressure-sensitive adhesive. Be sure to apply pressure with a roller or press when applying. Failure to do so could affect properties or appearance.
- The tape may not adhere well to significantly uneven or distorted surfaces. Level off the surface as much as possible before applying.
- Because it is very thin, you should avoid applying large loads for at least several hours following application.

Precautions when storing

- Be sure to keep the tape in its box when not using.
- Keep in a cool dark place not exposed to direct sunlight.

Safety precautions

WARNING

- Make sure the product is suitable for the application (objective and conditions) before attempting to use. The tape may come off depending on the substrate to which it is applied or conditions under which it is applied.
- Use in combination with another method of joining if there is possibility of an accident.

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