

Double coated tape

UTD-10B · UTD-20B(W) · UTD-30B(W)

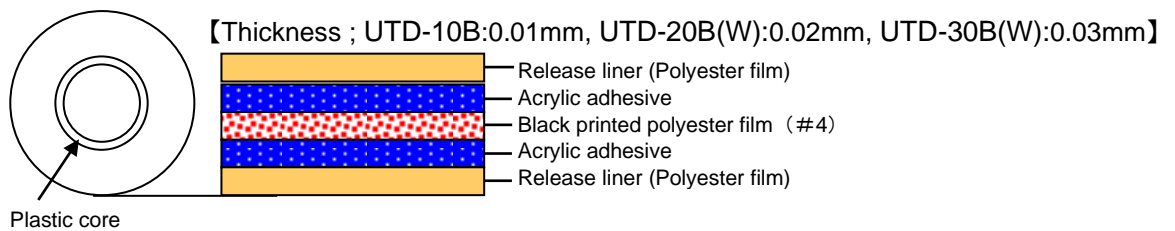
Outline

Nitto Denko UTD-10B, UTD-20B(W) and UTD-30B(W) are 0.01-0.03mm thick double-coated adhesive tapes.

The tapes have a #4 black printed 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 tapes thickness are 0.01-0.03mm.

Structure



Features

Tape thickness are 0.01mm, 0.02mm and 0.03mm. can be used for bonding in limited spaces or clearances.

Excellent thickness uniformity by using #4 printed polyester film.

Halogen-free type (Chloride compounds are not used for this product)

Excellent bonding performance to plastic material.

The tape minimizes dust emission by using polyester release liner and plastic core.

The ten hazardous materials restricted by the RoHS directive are not compounded.

Application

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

Standard size

Tape thickness(mm)	Width(mm)	Length(m)
0.01, 0.02, 0.03	25 - 500	50

For more information, please contact us.

UTD-10B · UTD-20B(W) · UTD-30B(W) 10-P-0272_E (1/7)

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Properties

● 180° peeling adhesion by substrate

Substrate	UTD-10B	UTD-20B(W)	UTD-30B(W)
ABS plate	2.4	6.5	8.2
Acrylic plate	3.3	7.9	10.3
Polycarbonate plate	3.3	7.8	10.0
Polyester film	3.1	8.0	10.8
Stainless steel plate	3.0	7.5	9.3
Polyimide film	3.3	7.5	9.7
Glass plate	3.3	7.9	9.8

(Unit: N/20 mm)

Backing: PET#25

Peeling speed: 300 mm/min

Peeling angle: 180°

Pressure application condition: *1pass back and forth with 2kg

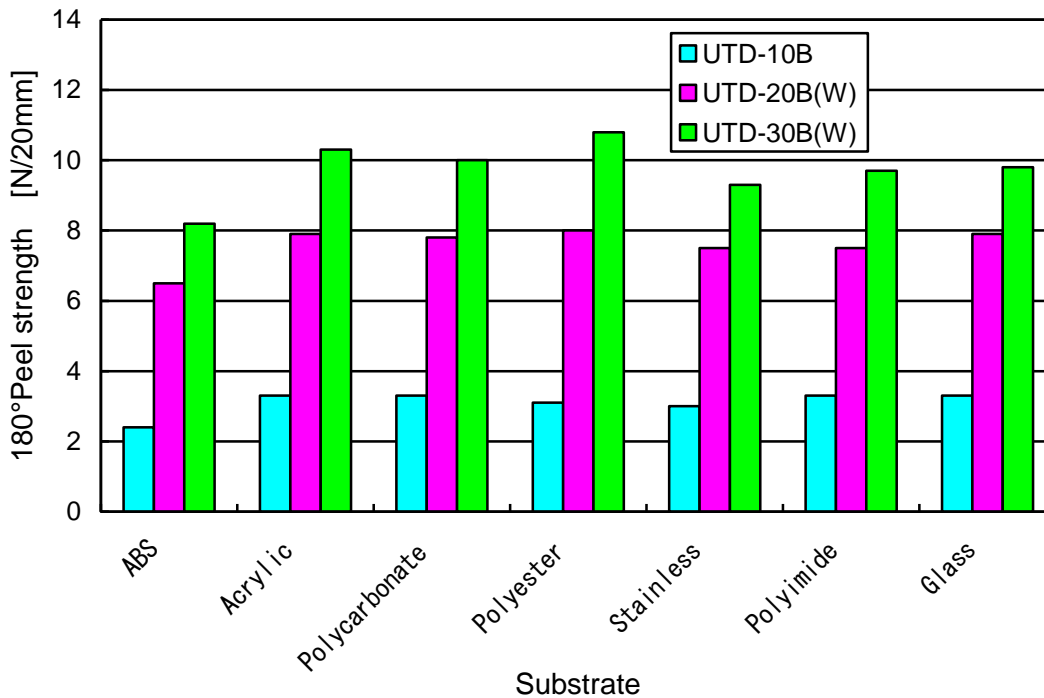
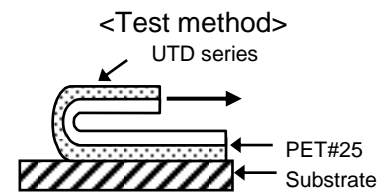


Fig. 180° peeling adhesion by substrate

UTD-10B · UTD-20B(W) · UTD-30B(W) 10-P-0272_E (2/7)

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Properties

●180°peeling adhesion by temperature

Temperature	UTD-10B	UTD-20B(W)	UTD-30B(W)
0°C	6.1	9.6	12.2
10°C	5.7	8.8	11.2
23°C	3.0	7.5	9.3
40°C	2.7	7.1	9.0
60°C	2.4	6.0	7.5
80°C	2.0	5.4	6.7

(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

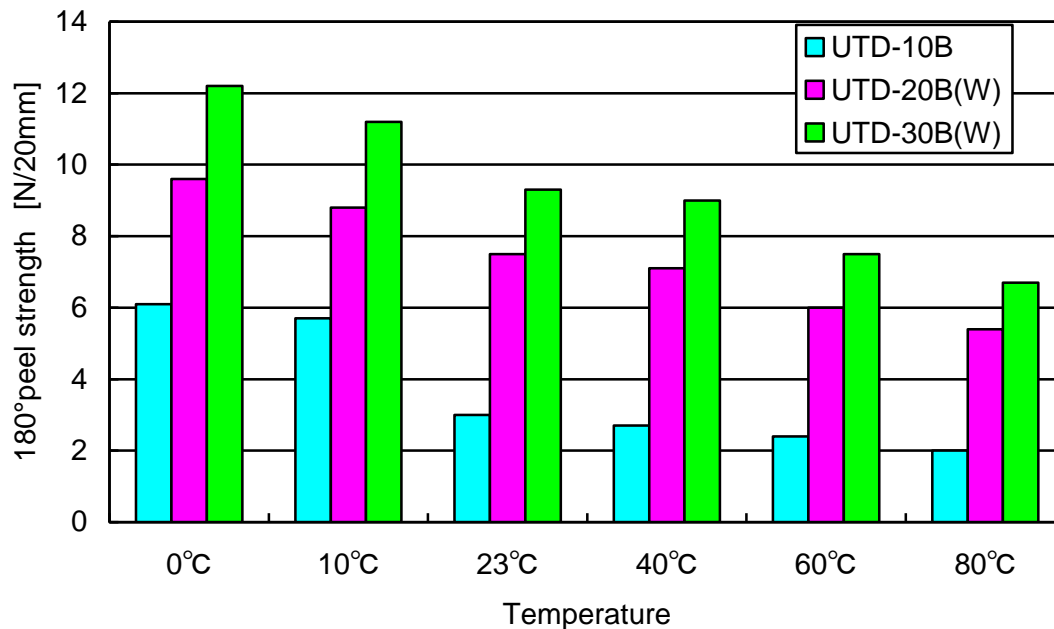


Fig. 180°peeling adhesion by temperature

UTD-10B · UTD-20B(W) · UTD-30B(W) 10-P-0272_E (3/7)

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Properties

●Holding power

Temperature	UTD-10B	UTD-20B(W)	UTD-30B(W)
40°C	0.3	0.3	0.3
80°C	0.6	0.6	0.6

(Unit : mm/hr)

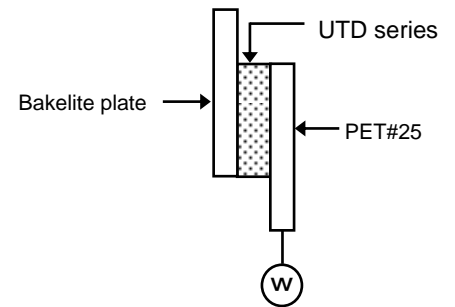
Measurement temperature: 40, 80°C

Tape area: 10mm x 20mm

Load: 4.9N (500g)

Substrate: Bakelite plate

〈Test method〉



●Shear strength

Temperature	UTD-10B	UTD-20B(W)	UTD-30B(W)
23°C	430	550	580

(Unit: N/20 mm x 20mm)

Substrate: Acrylic plate / Acrylic plate

Tape area: 20mm x 20mm

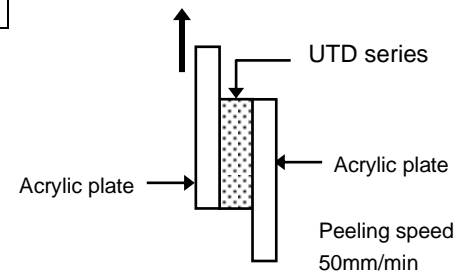
Peeling speed: 50 mm/min

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〉



●180°Peeling adhesion by pressure

Pressure	UTD-10B	UTD-20B(W)	UTD-30B(W)
0.1 k g	2.5	6.2	8.5
0.5 k g	2.8	6.9	8.8
2 k g	3.0	7.5	9.3
5 k g	3.2	7.7	9.6

(Unit : N/20mm)

Backing: PET#25

Peeling speed: 300mm/min

Peeling speed: 180°

Measurement condition: 23°Cx50%RH

Substrate: Stainless steel plate

Pressure application condition

*1 pass back with forth with 0.1 kg, 0.5kg, 2kg, 5kg

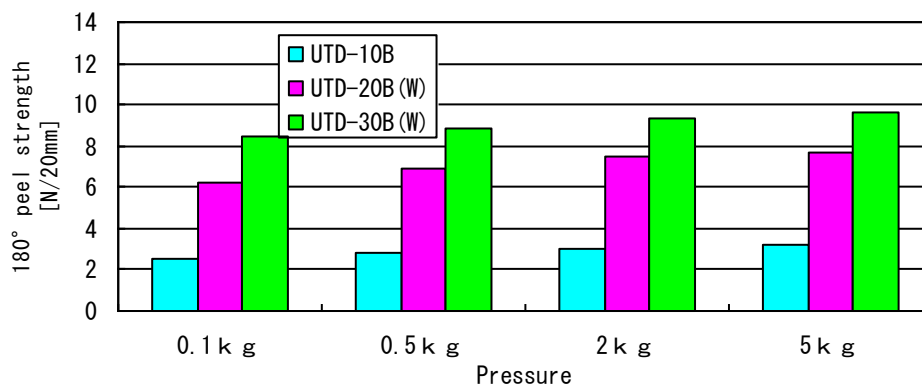


Fig. 180°Peeling adhesion by pressure

UTD-10B · UTD-20B(W) · UTD-30B(W) 10-P-0272_E (4/7)

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Properties

- 180°Peeling adhesion after application (increase)

		UTD-10B	UTD-20B(W)	UTD-30B(W)
23°C	0.5hrs	3.0	7.5	9.3
	4hrs	3.0	7.9	9.7
	12hrs	3.2	8.3	10.2
	24hrs	3.4	8.6	10.6
	48hrs	3.6	9.1	11.0
	72hrs	3.7	9.4	11.1

(Unit : N/20mm)

Backing: PET#25

Peeling speed: 300mm/min

Peeling angle: 180°

Measurement condition: 23°Cx50%RH

Substrate: stainless steel plate

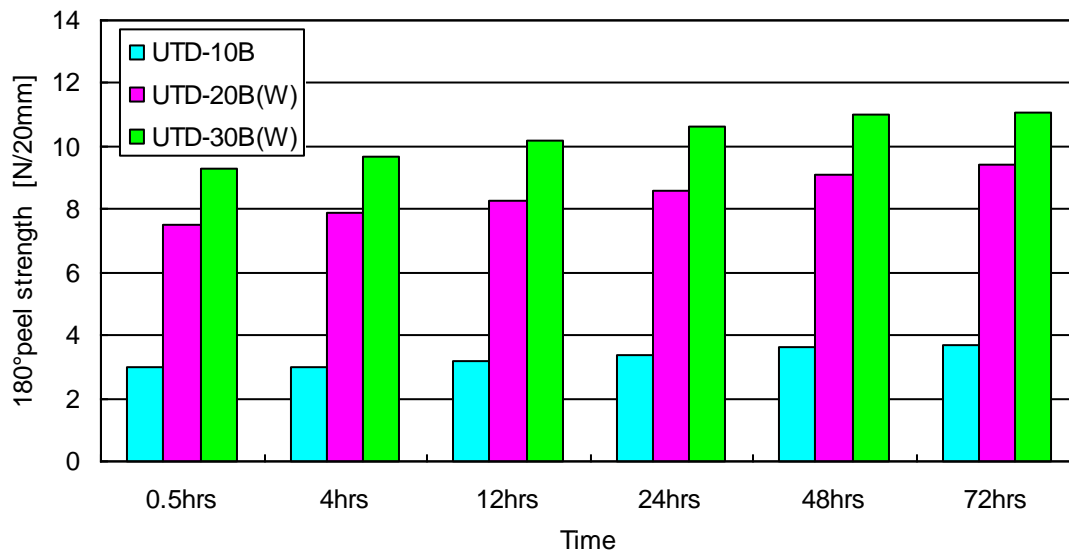


Fig. 180°Peeling adhesion after application (increase)

UTD-10B · UTD-20B(W) · UTD-30B(W) 10-P-0272_E (5/7)

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Properties

- 180°peeling adhesion (change after application)

Temperature	Time	UTD-10B	UTD-20B(W)	UTD-30B(W)
23°C	1day	3.0	7.5	10.6
	14days	3.4	7.9	10.9
	30days	3.9	8.1	11.7
40°C92%RH	1day	3.2	7.6	11.0
	14days	3.6	8.0	11.4
	30days	4.1	8.5	12.2
50°C	1day	3.2	7.7	11.3
	14days	3.5	8.1	11.8
	30days	4.7	8.3	12.6
70°C	1day	3.3	8.0	11.5
	14days	4.8	8.6	12.8
	30days	5.1	9.2	14.0

(Unit : N/20mm)
 Backing: PET#25
 Peeling speed: 300mm/min
 Peeling angle: 180°
 Measurement condition:
 23°Cx50%RH
 Substrate: stainless steel plate

UTD-10B · UTD-20B(W) · UTD-30B(W) 10-P-0272_E (6/7)

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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
<ul style="list-style-type: none">● 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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