

Double-coated adhesive tape

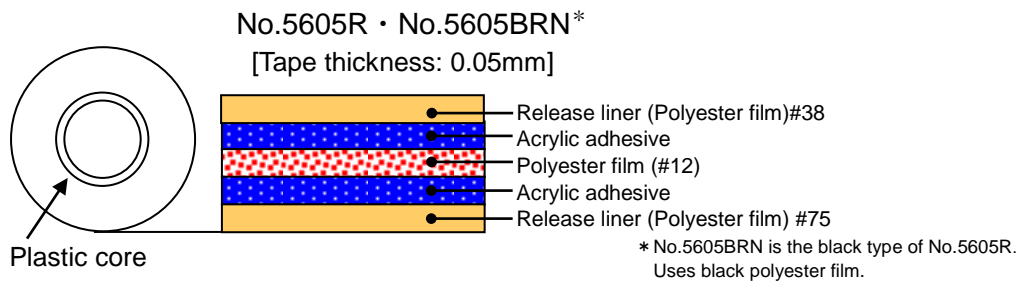
# No.5605R · No.5605BRN

## Outline

Nitto Denko No.5605R and No.5605BRN are 0.05mm-thickness double-coated adhesive tape consisting of acrylic adhesive with polyester carrier.

Using a polyester film release liner and plastic core, the double-coated adhesive tapes are ideal for bonding applications such as peripheral parts of LCD backlight modules.

## Structure



## Features

- Offers strong bonding for FPC, reflective sheets and housing used for LCD and backlight modules.
- Tape structure minimizes dust emission by using polyester release liner and plastic core.
- High repulsion property for FPC.
- Adheres well to various plastics.
- Halogen-free type. (Chloride compounds are not used for this product.)
- Ten restricted substances by RoHS are not contained.

## Applications

- Fixing of reflective sheets used for LCD and backlight modules of digital cameras and cellular phones.
- Fixing of parts for compact home appliances.
- Fixing of FPC to housing.

## Standard size

Tape thickness (mm)	Width (mm)	Length (m)
0.05	30-500	50,100

For more information, please contact us.

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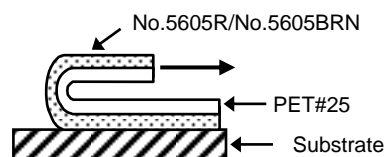
**Properties**

- 180 degree peeling adhesion for each substrate

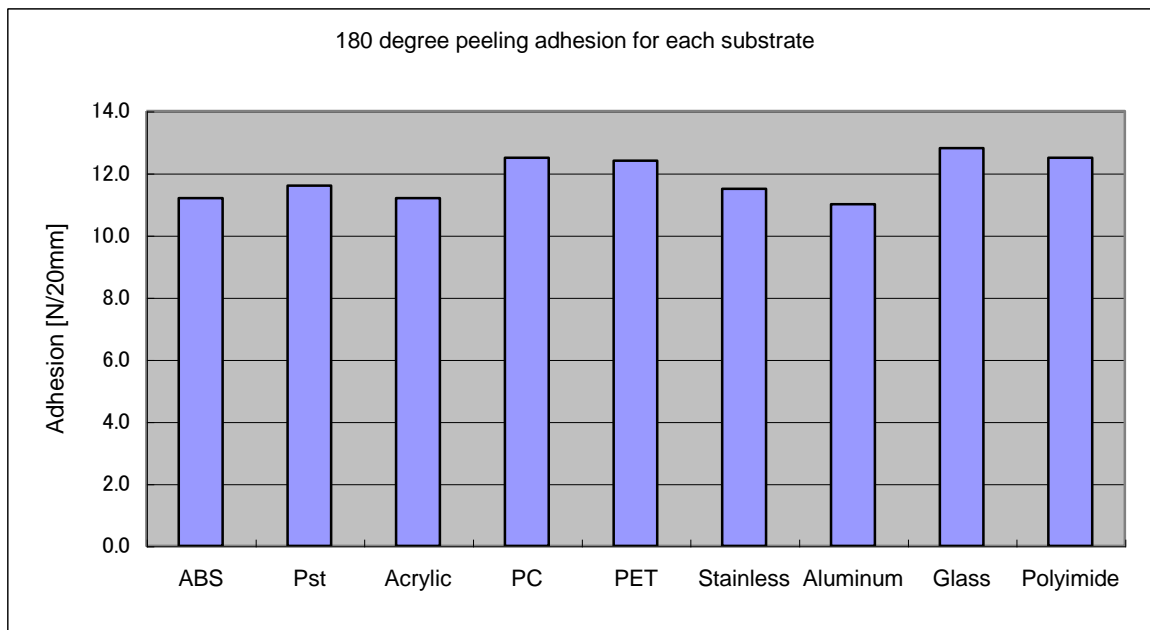
Substrate	No.5605R, No.5605BRN
ABS plate	11.2
Polystyrene plate	11.6
Acrylic plate	11.2
Polycarbonate plate	12.5
Polyester film	12.4
Stainless steel plate	11.5
Aluminum plate	11.0
Glass plate	12.8
Polyimide	12.5

(Unit: N/20 mm)  
 Sample width: 20mm  
 Lining material: PET #25  
 Pressing condition:  
 1 pass back and forth with  
 a 2 kg roller at 23 degree C/50%RH  
 Applying condition:  
 23 degree C/50%RH x 30min  
 Peeling speed: 300 mm/min  
 Peeling angle: 180 degree  
 Measurement temperature:  
 23 degree C /50%RH

<Test method>



[Conforms to JIS Z-0237]



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**Properties**

● 180 degree peeling strength for each temperature

Temperature	No.5605R, No.5605BRN
0 degree C	15.0
10 degree C	13.2
23 degree C	11.5
40 degree C	10.5
60 degree C	8.3
80 degree C	5.7

(Unit: N/20 mm)

Substrate: Stainless steel plate

Sample width: 20mm

Lining material: PET #25

Pressing condition:

1 pass back and forth with a 2 kg roller at 23 degree C/50%RH

Applying condition:

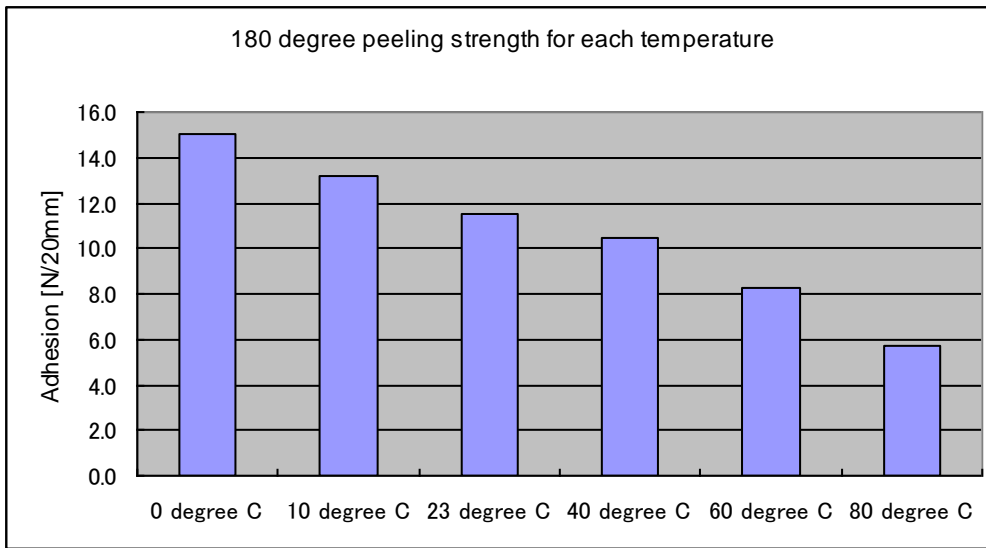
Measurement temperature x 30min

Peeling speed: 300 mm/min

Peeling angle: 180 degree

Measurement temperature:

0, 10, 23, 40, 60, 80 degree C



● Holding power

Temperature	No.5605R, No.5605BRN
40 degree C	0.1
80 degree C	0.1

Substrate: Phenolic resin plate

Applying condition: Measurement temperature x 30min

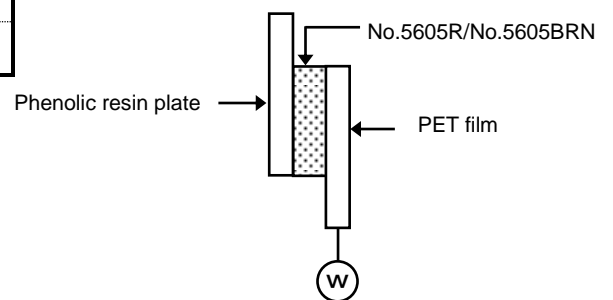
Measurement temperature: 40, 80 degree C

Application area: 20 mm x 10 mm

Load: 4.9N(500g)

Loading time: 1 hr

<Test method>



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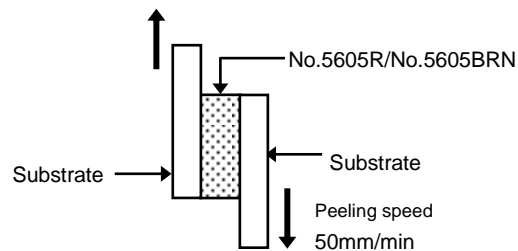
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**Properties**

● Shear strength for each substrate

Substrate	No.5605R, No.5605BRN
ABS plate	360
Polystyrene plate	370
Acrylic plate	400
Polycarbonate plate	400
Polyester film	340
Stainless steel plate	420
Aluminum plate	470

<Test method>



(Unit: N/20mmx20mm)

Sample: 20mm x 20mm

Peeling speed: 50 mm/min

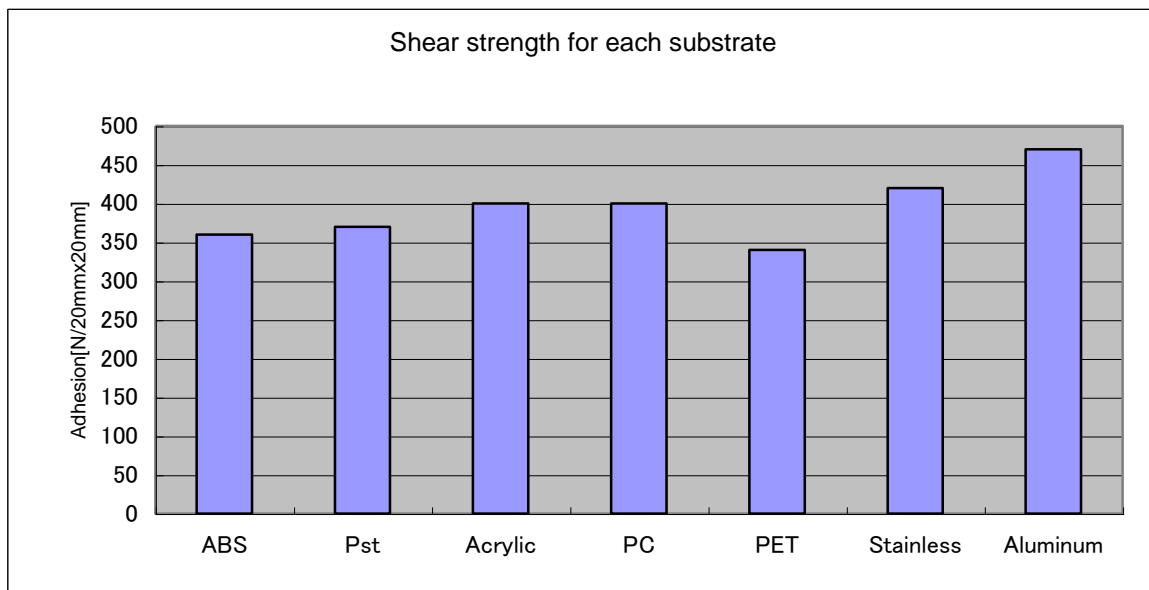
Pressing temperature: 23 degree C/50%RH

Applying condition: 23 degree C/50%RH x 30 min

Measurement temperature: 23 degree C/50%RH

Measurement method:

Make test pieces, leave them for 30min,  
measure shear strength.



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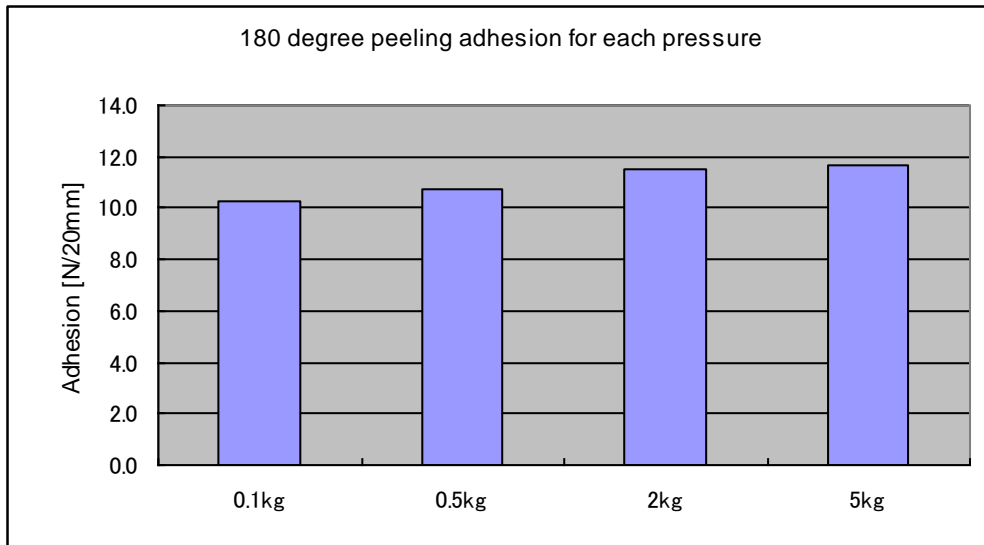
**Properties**

● 180 degree peeling strength for each pressure

Pressure	No.5605R, No.5605BRN
0.1 kg	10.3
0.5 kg	10.7
2 kg	11.5
5 kg	11.7

(Unit: N/20 mm)

Lining material: PET #25  
 Peeling speed: 300 mm/min  
 Peeling angle: 180 degree  
 Applying condition:  
 23 degree C/50%RH x 30min  
 Measurement temperature:  
 23 degree C / 50%RH  
 Pressure condition:  
 1 pass back and forth with a 0.1kg, 0.5kg, 2kg, 5kg roller



● 180 degree peeling strength after lamination

Condition	No.5605R, No.5605BRN	
-30 degree C	1 day	11.5
	14 days	12.5
	30 days	13.0
50 degree C	1 day	13.0
	14 days	15.0
	30 days	16.0
40 degree C 92%RH	1 day	12.5
	14 days	14.5
	30 days	15.5
Heat shock	100 cycles	13.4

(Unit: N/20 mm)

Substrate: Stainless steel plate  
 Lining material: PET #25  
 Pressure condition:  
 1 pass back and forth with a 2 kg roller at 23 degree C/50%RH  
 Application condition: See the left table  
 Peeling speed: 300 mm/min  
 Peeling angle: 180 degree  
 Measurement temperature: 23 degree C/50%RH

\*Heat shock: -30degree C <-> 80 degree C each 1 hr

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## Precautions when using

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- 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

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- 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

 <b>WARNING</b>
<ul style="list-style-type: none"><li>● 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.</li><li>● Use in combination with another method of joining if there is possibility of an accident.</li></ul>

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