

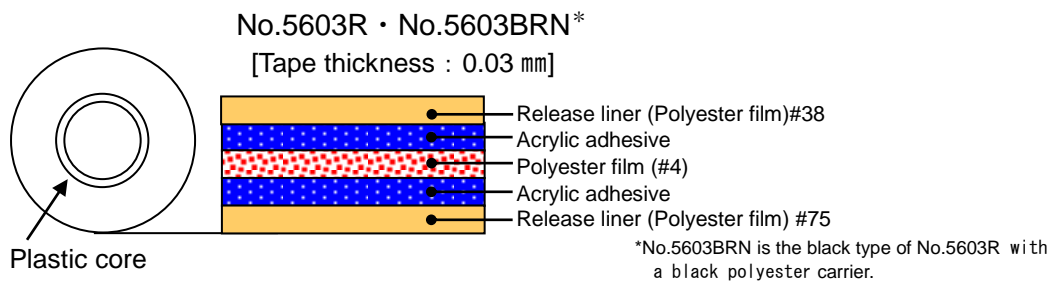
Double coated adhesive tape

No.5603R · No.5603BRN

Outline

No.5603R and No.5603BRN are 0.03mm-thickness double-coated adhesive tape consisting of acrylic adhesive with polyester carrier that use polyester film release liners and plastic cores.
No.5603R and No.5603BRN offer superior repulsion property for bonding peripheral components such as LCD and backlight modules.
The thickness of 0.03mm supports thinning of electronic devices.

Structure



Features

- Tape thickness is 0.03 mm. Can be used for bonding in limited spaces or clearances.
- With thin #4 polyester film offers good pre-processability.
- 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.
- Exhibit superior adhesion to high repulsion property such as FPC bending.
- Adhere well to plastic materials.
- Halogen-free* type. (*Chloride compounds are not used for this product.)
- 10 restricted substances by RoHS are not contained.

Application

- 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.

Standards Size

Tape thickness (mm)	Widths (mm)	Length (m)
0.03	30-500	50, 100

※For details, please contact one of our sales representative.

No. 5603R, No. 5603BRN 10-P-0184_E (1/6)

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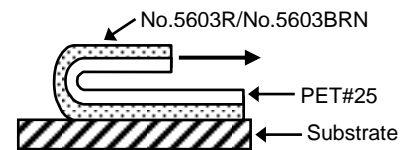
Properties

- 180 degree peeling adhesive strength for each substrate

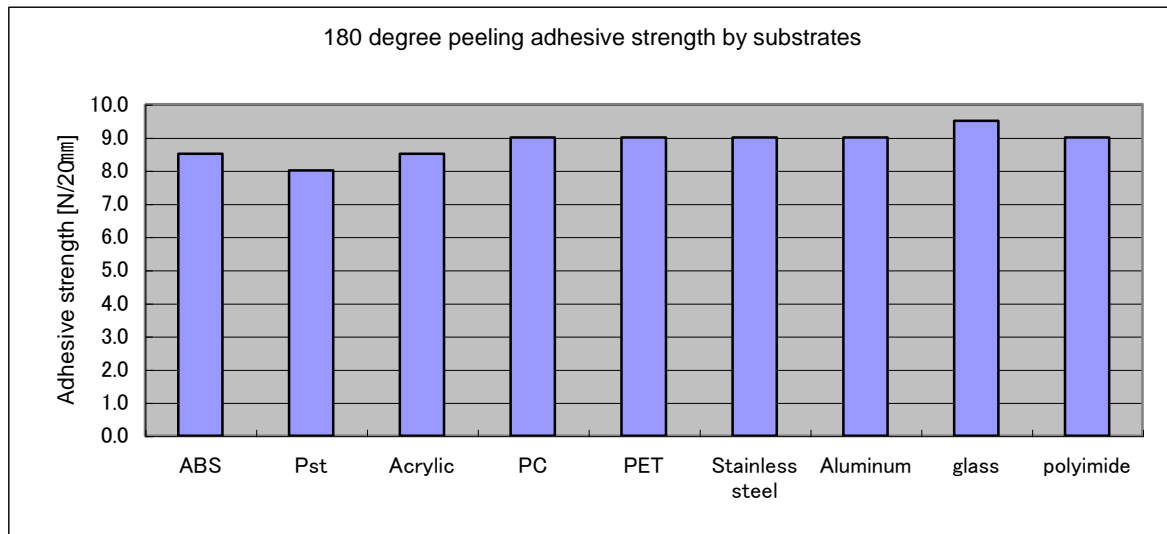
Substrates	No.5603R, No.5603BRN
ABS plate	8.5
Polystyrene plate	8.0
Acrylic plate	8.5
Polycarbonate plate	9.0
Polyester film	9.0
Stainless steel plate	9.0
Aluminum plate	9.0
Glass plate	9.5
Polyimide film	9.0

(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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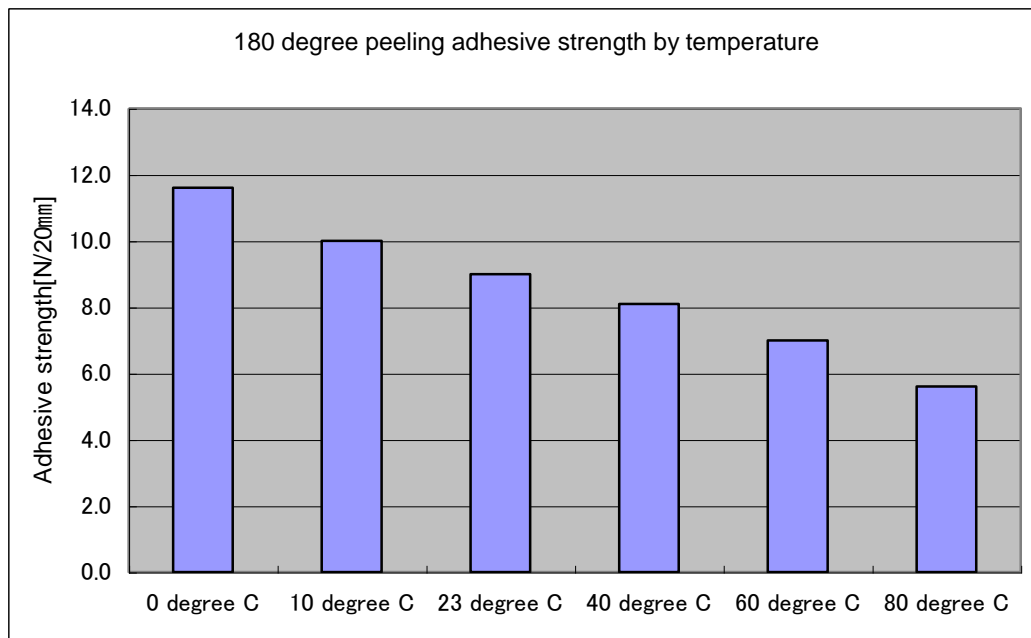
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Properties

● 180 degree peeling adhesive strength for each temperature

Temperature	No.5603R, No.5603BRN
0 degree C	11.6
10 degree C	10.0
23 degree C	9.0
40 degree C	8.1
60 degree C	7.0
80 degree C	5.6

(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
 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
 Applied at 23 degree C x 50%RH
 -> measured under each temperature

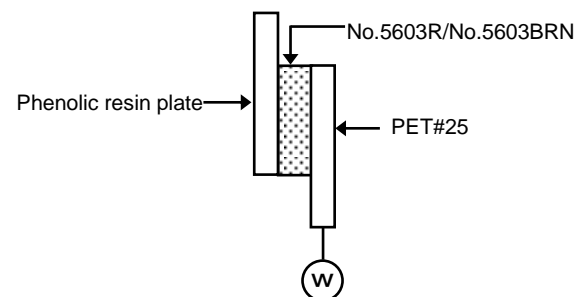


● Holding power

Temperature	No.5603R, No.5603BRN
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>



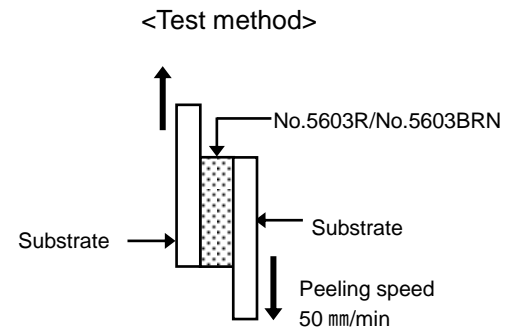
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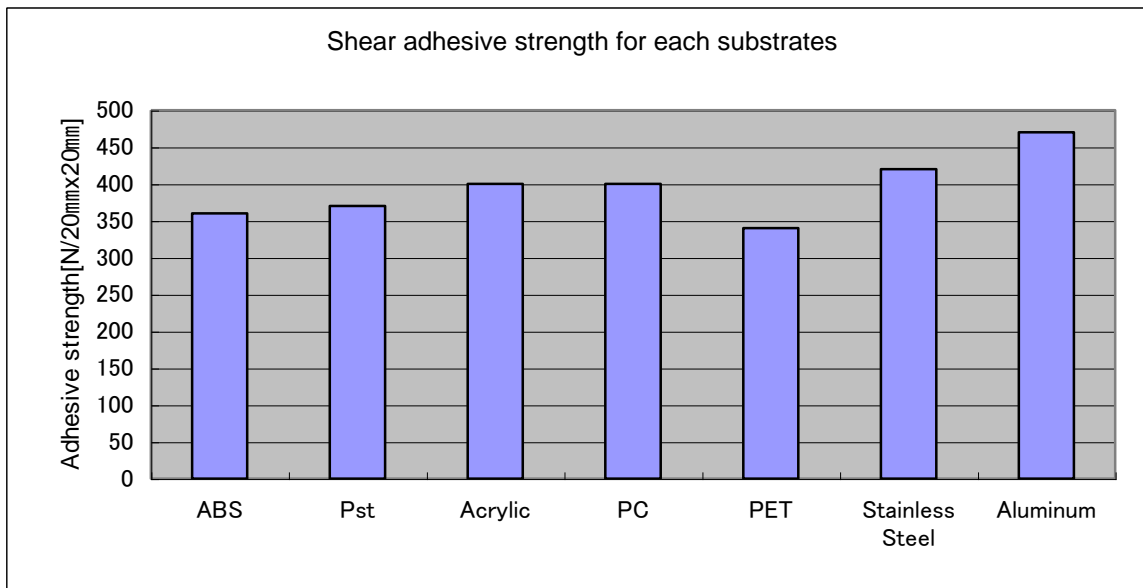
Properties

● Shear adhesive strength for each substrate

Substrates	No.5603R, No.5603BRN
ABS plate	370
Polystyrene plate	360
Acrylic plate	360
Polycarbonate plate	370
Polyester film	280
Stainless steel plate	550
Aluminum plate	400



(Unit: N/20mmx20mm)
Tape area: 20mm x 20mm
Pressing condition:
1 pass back and forth with a 2 kg roller
Peeling speed: 50mm/min
Applying condition:
23degreeC/50%RH x 30 min
Measurement temperature: 23 degree C/50%RH
Measurement method:
Create a sample then leave it for 30min.
And then measure shear adhesive strength.



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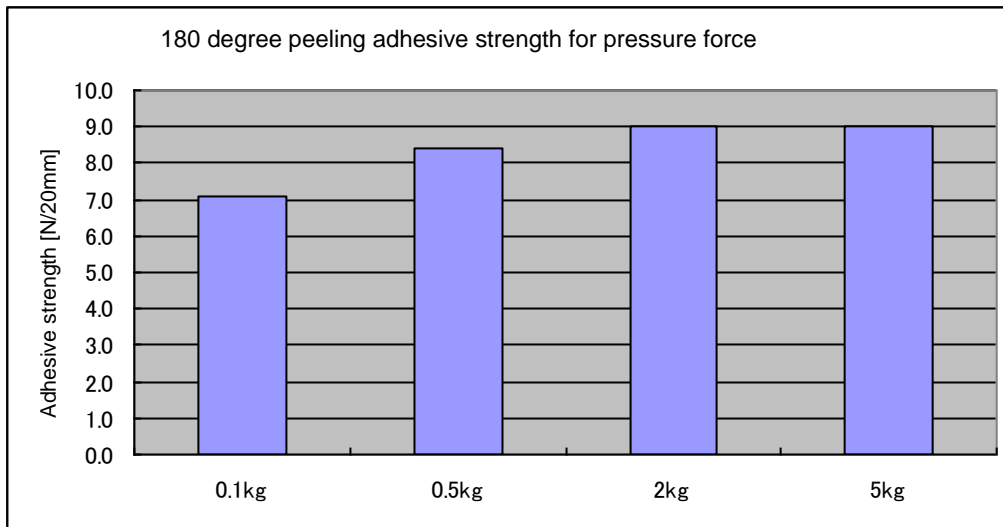
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Properties

● 180 degree peeling adhesive strength for pressing force

Pressing force	No.5603R, No.5603BRN
0.1 kg	7.1
0.5 kg	8.4
2 kg	9.0
5kg	9.0

(Unit: N/20 mm)
Lining material: PET #25
Peeling speed: 300 mm/min
Peeling angle: 180 degree
Applying condition:
23degreeC/50%RH x 30 min
Measurement temperature: 23 degree C/50%RH
Pressing condition: 1 pass back and forth with a
0.1kg, 0.5kg, 2kg, 5kg



● 180 degree peeling adhesive strength – variation after applying

Conditions		No.5603R, No.5603BRN
-30 degree C	1 day	9.0
	14 days	10.1
	30 days	10.8
50 degree C	1 day	10.5
	14 days	12.7
	30 days	14.0
40 degree C/92%RH	1 day	10.5
	14 days	10.8
	30 days	11.0
Heat shock	100 cycles	9.0

(Unit: N/20mm)
Substrate: Stainless steel plate
Backing material: PET#25
Pressing condition:
1 pass back and forth with a 2kg roller
at 23 degree C/50%RH
Application condition: See the left table
Peeling speed: 300 mm/min
Peeling angle: 180 degree
Measurement temperature: 23degreeC/50%RH

*Heat shock: -30 degree C
<-> 80 degree C for 1 hour each

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Precautions when using

- Remove all oil, moisture and dirt from the surface of the substrate before applying.
- Since the tape is pressure-sensitive adhesive, be sure to apply enough pressure with a roller or press when applying. Otherwise it might be affected to its properties and appearance.
- The tape may not adhere well to extremely uneven or distorted surfaces. Enough Leveling off the surface should be required before applying.
- It takes certain time to get full adhesive strength after applying, keep away the tape from any stress for a several hours after applying.

Precautions when storing

- Please be sure to keep the tape in its box when not using.
- Please keep in a cool and dark place away from direct sunlight.

Safety precautions

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.

Published in March 2019

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