

Super heat-resistant double-coated adhesive tape

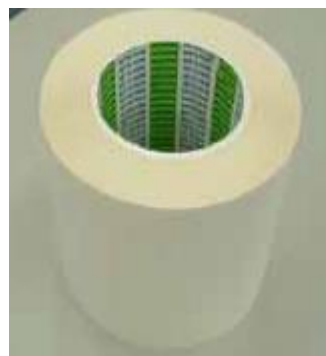
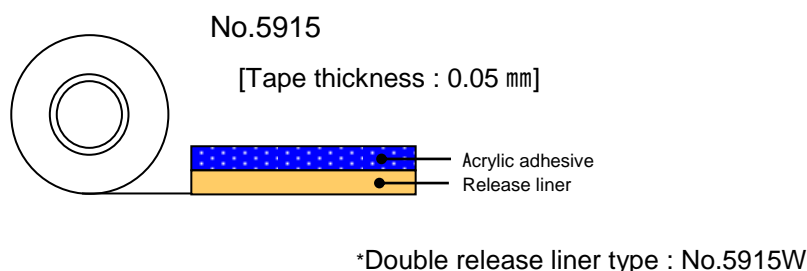
No.5915

Outline

Nitto Denko adhesive transfer tape No.5915 offers superior heat resistance, adhesive properties, and chemical resistance.

The adhesive contains almost no volatile compounds so that the tape can be used various area such as electronics.

Structure



Features

- Superior heat resistance.
- High adhesive strength and superior adhesive reliability.
- Offers superior chemical resistance.
- Minimal Volatile gas.
- Excellent workability and processability.
- Ten restricted substances by RoHS are not contained.

Applications

- Fixing electronics components for requiring heat resistance.
- Fixing FPCs.
- Other applications requiring heat resistance.

Sizes

Tape thickness (mm)	Standard width (mm)	Length (m)
0.05	10-500	50

For details, please contact us.

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Properties

● 180 degree peeling adhesion for each substrate

Substrate	No.5915
Stainless steel plate	11.6
Polyimide film	7.5
Bakelite	10.5
Aluminum plate	10.3
ABS plate	7.6
Acrylic plate	9.6
Polystyrene plate	7.6
Polycarbonate plate	8.0
PET plate	7.5

(Unit: N/20 mm)

Tape area: 20mm width

Lining material: PET#25

Pressing condition:

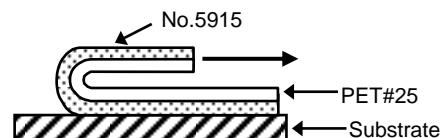
1 pass back and forth with 2-kg roller
at 23 degree C/50%RH

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



● 180 degree peeling strength for each temperature (Laminate at each temperature)

Temperature	No.5915
0 degree C	9.5
23 degree C	11.6
40 degree C	9.0
60 degree C	9.1
80 degree C	6.3
100 degree C	5.0
120 degree C	4.5

(Unit: N/20 mm)

Substrate: Stainless steel plate

Tape area: 20mm width

Lining material: PET#25

Pressing condition:

1 pass back and forth with 2-kg roller
at each temperature

Applying condition: Each temperature for 30min

Peeling speed: 300 mm/min

Peeling angle: 180 degree

Measurement temperature:

0 degree C, 23 degree C, 40 degree C, 60 degree C
80 degree C, 100 degree C, 120 degree C

● 180 degree peeling strength for each pressure

Pressure	No.5915
0.1kg roller	7.5
0.5kg roller	8.1
2kg roller	11.6
5kg roller	11.8

(Unit: N/20 mm)

Substrate: Stainless steel plate

Lining material: PET#25

Pressing condition:

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

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●Holding power

Temperature	No.5915
23 degree C	0.1
40 degree C	0.1
60 degree C	0.2
80 degree C	0.2
100 degree C	0.2
120 degree C	0.2

(Unit : mm/hr)

Substrate: Phenol resin plate

Applying condition:

Measurement temperature x 30min

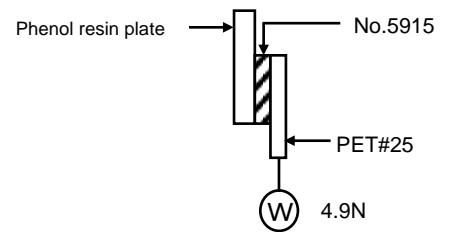
Measurement temperature:

23 degree C, 40 degree C, 60 degree C, 80 degree C, 100 degree C, 120 degree C

Tape area: 20mm x 10mm

Load: 4.9N(500g)

Load time: 1 hr



●Shearing adhesive strength

Substrate	No.5915
Stainless steel plate	275
Aluminum plate	390
ABS plate	275
Acrylic plate	290
Polycarbonate plate	210
PET plate	235

(Unit: N/20mmx 20mm)

Tape area: 20mm x 20mm

Pressing condition:

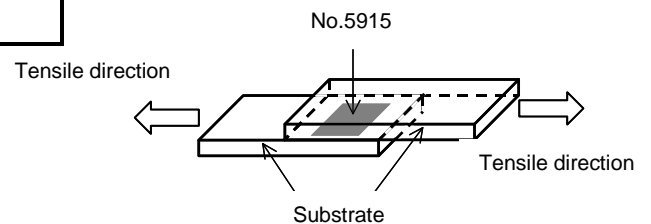
1 pass back and forth with

5-kg roller at 23 degree C/50%RH

Measurement temperature :

23 degree C/50%RH x 30min

Peeling speed: 50mm/min



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Properties

- 180 degree peeling adhesion -Aging(durability) at each condition after applying

Condition		No.5915
Initial (23 degree C/50%RH x30min)		11.6
-30 degree C x 30 days		12.0
70 degree C	1 day	19.5
	7 days	20.9
	14 days	20.7
	30 days	20.7
40 degree C 92%RH	14 days	21.7
	30 days	25.5
60 degree C/90%RH x 30days		15.3
Heat Shock [100cycles] *1		18.5
Heat Shock [40cycles]*2		18.0

(Unit: N/20 mm)

Substrate: Stainless steel plate

Lining material: PET#25

Pressing condition:

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

Applying condition: Refer to the left fig.

Peeling speed: 300 mm/min

Peeling angle: 180 degree

Measurement temperature: 23 degree C/50%RH

*1: Heat shock condition

[-40 degree C x 30min <-> 90 degree C x 30min]
x 100 cycles

*2: Heat shock condition

[-20 degree C x 6hr->(1hr)->60 degree C/95% RHx6hr->
(1hr->)] x 40 cycles

- Outgas

	No.5915
Outgas quantity	10

(Unit: micron g/cm2)

Equipment : GC/MS

Heat condition: 120 degree C x 10min

Sampling method: purge- and-trap headspace method

Determinate quantity standard: n-Decan

- Thermal conductivity

	No.5915
Thermal conductivity	0.15

(Unit: W/m K)

Guarded Hot Plate method

Measured by (ASTM E1530-93)

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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.
- Avoid setting or using such that significant stress is placed on the tape for several hours after 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 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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