Dexerials

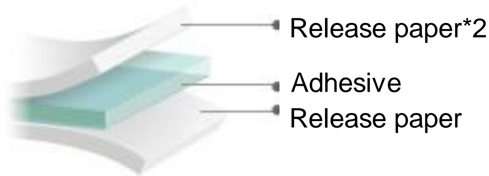
Technical Data Sheet

Heat resistant adhesive transfer tapes for FPC
G4200D/G4200DW

Features

- Both adhesive and release paper resist heat deterioration during the reflow process.
- Ideal for bonding FPC materials such as Polyimide, Stainless steel plate (SUS304), Glass epoxy, etc.
- Resistant to high temperature of lead free solder reflow (Top 260℃)
- Excellent workability for punching and bonding.
- Adhesive tape with lower environmental impact with UV curable manufacturing method (Non solvent adhesive coating process).

Structure



Product name	G4200D	G4200DW *2
Main component	Acrylic	Acrylic
Carrier	Non-carrier	Non-carrier
Color	Translucent	Translucent
Adhesive thickness (μm)	About 50	About 50
Release paper thickness (μm)	About 95	About 95+130
Bonding strength (N/20mm) *	9	9
St'd size (width & length)	500mm × 100m	500mm × 100m

* 180° peeling strength (Substrate :Polyimide)
*2 G4200DW is with both side release paper.

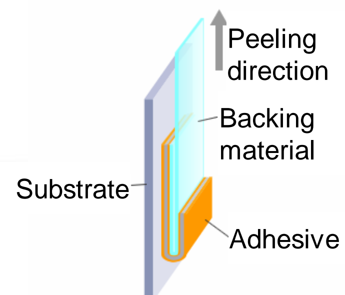
Suitable use

- Ideal for bonding stiffener to FPC and bonding FPC to housing of electronic equipment.

Technical data

1. Bonding strength on various type of substrate (180° peeling)

<Test piece condition>
Tape width: 20mm
Bonding condition: One stroke with 2-kg roller
Measuring condition: 23℃±5℃ 60%±20%RH
Peeling speed: 300mm/min
Backing material: 25μmPET
[Left at RT for one hour before measurement]



<180° peeling strength test>

<Results>

(N/20mm)

Substrates	Polyimide	Glass epoxy	Stainless steel	Aluminum	PET
180° peeling strength	9	10	10	9	8

2. Bonding strength before and after lead free reflow process (180° peeling)

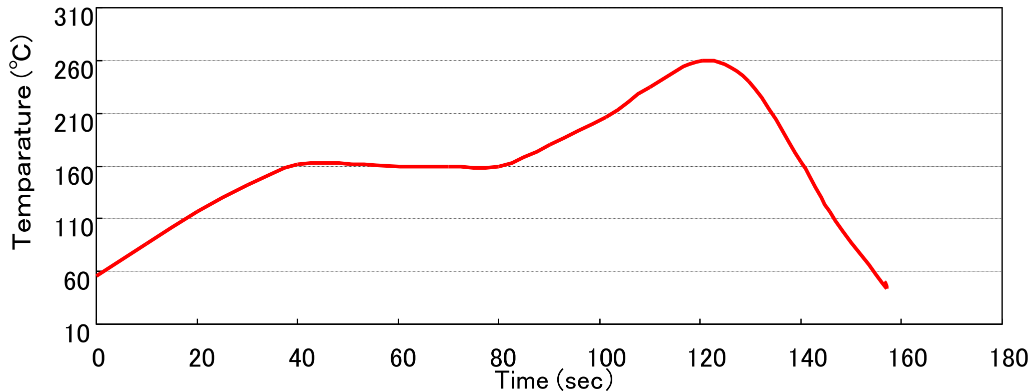
<Test piece condition>
Tape width: 20mm
Bonding condition: One stroke with 2-kg roller
Measuring condition: 23℃±5℃ 60%±20%RH
Peeling speed: 300mm/min
Backing material: 25μmPET
[Left at RT for one hour before measurement]
[Attach adhesive tape to polyimide or glass epoxy and reflow without removing release paper before measurement under the following conditions.]

<Results>

(N/20mm)

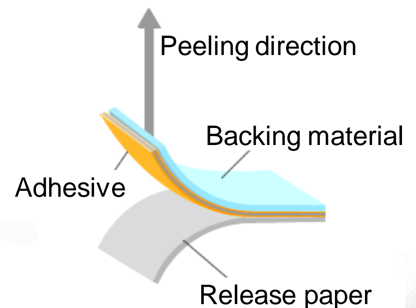
Substrate	Polyimide	Glass epoxy
Before reflow	9	10
After reflow	10	10

<Profile of lead free solder reflow process>



3. Bonding strength of release paper before and after reflow (T-peel)

<Test piece condition>
Tape width: 50mm
Measuring condition: 23℃±5℃ 60%±20%RH
Peeling speed: 300mm/min
Backing material: 25μm Polyimide
[Left at RT for one hour before measurement]
[Attach adhesive tape to polyimide and reflow without removing release paper before measurement under the following conditions.]



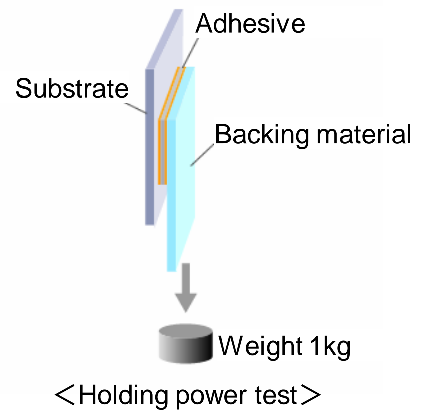
<Peeling strength test of release paper>

<Results>

(N/50mm)

	Before reflow	After reflow
Release paper peeling strength	0.3	0.3

4. Holding power at different temperatures

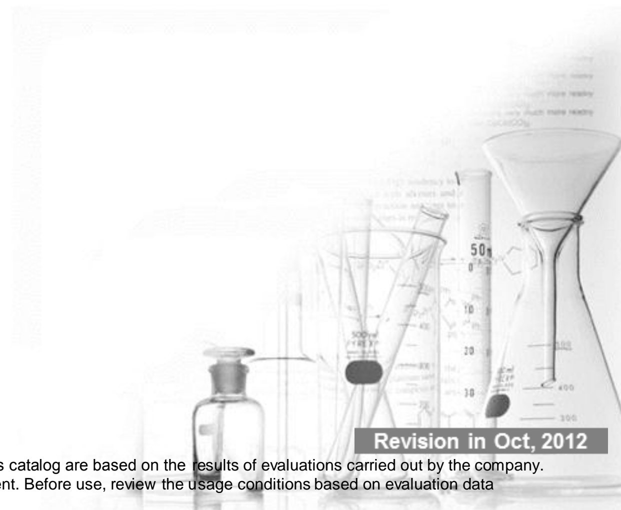


＜Test piece condition＞
Substrate: Stainless steel plate (SUS304)
Bonding area: 25mm × 25mm
Bonding condition: One stroke with 2-kg roller
Backing material: 25μmPET
[Left at RT for one hour and then at each temperature for 30 minutes before measurement]
[Creep length after one hour application of 1-kg load]

<Results>

(mm)

Temperature	80℃	120℃
Creep length	0.1	0.2



Note on the characteristic data given— Data on the characteristics of the products described in this catalog are based on the results of evaluations carried out by the company. This does not guarantee that the characteristics of the product conform with your usage environment. Before use, review the usage conditions based on evaluation data obtained from the equipment and substrates actually used.

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