Dexerials

Technical Data Sheet

Thermosetting adhesive tapes for FPC D3510 series

Featuers

■Application to lead free solder reflow process in moisture absorption condition is possible.

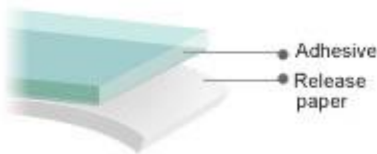
■Excellent bonding strength for polyimide film, glass epoxy ,aluminum and stainless steel plate.

■It has the excellent bonding reliability in the peel test under the water and moisture absorption conditions.

■Initial tuck is free, so that it can prevent from adhesion of garbage and a workability is improved.

■It is possible to store at room temperature.

Structure



	D3510-25	D3510-50
Component types	Acrylic/epoxy	Acrylic/epoxy
Carrier	Non-carrier	Non-carrier
Color	White	White
Adhesive thickness(μ m)	About 25	About 50
Release paper thickness(μ m)	About 125	About 125
Peel strength(N/10mm)※	14	16
Standard size(width×length)	500mm×100m	500mm×100m

※ Peel strength is meaured at an angle of 90 degrees

<Standard bonding conditions>

■Short-time bonding under a vacuum and cured in oven process
- Bonding temp. 160℃ to 180℃
- Bonding pressure 1MPa to 2MPa
- Bonging time 1min. to 2min.
- Curing condition 150℃、60min.

■Long-time bonding process
- Bonding temp. 160℃ to180℃
- Bonding pressure 2MPa to 3MPa
- Bonding time 30min. to 60min.

Application

■ Fitting for the stiffeners for FPC(polyimide film(PI), glass epoxy(GE), aluminum(Al) and stainless steel (SUS)) which requires a heat history ,such as solder reflow process.

Technical data

1. Bonding strength on various type of stiffneres(90° peeling)

<Test piece and test condition>

Stiffeners:PI,GE,AL,SUS

Width:10mm

Bonding condition :Standard bonding condition

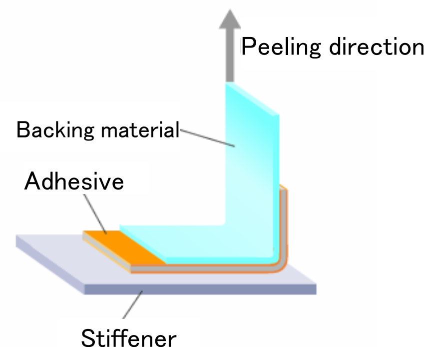
Measurement environment:23℃±5℃ 60%±20%RH

Peeling speed:50mm/min.

Backing material:CCL(=Copper clad laminate)

Peel strength (under the water):Drop water on the peeling interface .

Peel strength (heat and moisture):Condition is C-96/40/90.



<90° peel strength test>

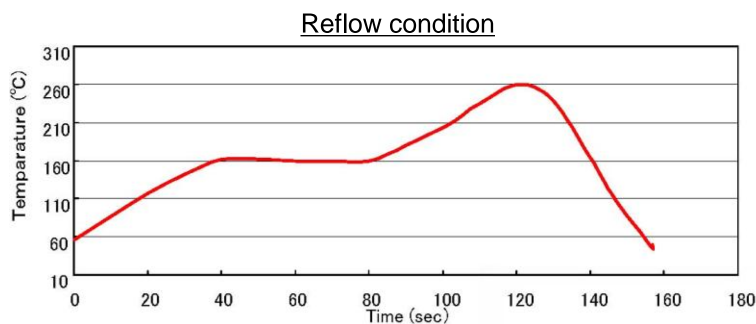
Unit N/cm

Test method	Stiffener	D3510-25	D3510-50
Peel strength (initial state)	PI	14	16
	SUS	16	18
	AL	16	18
	GE	15	17
Peel strength (under the water)	PI	14	16
	SUS	16	18
	AL	16	18
	GE	15	17
Peel strength (Heat and moisture C-96/40/90)	PI	15	16
	SUS	17	19
	AL	17	19
	GE	15	17

2.Solder heat resistance data in reflow process

<Test condition>

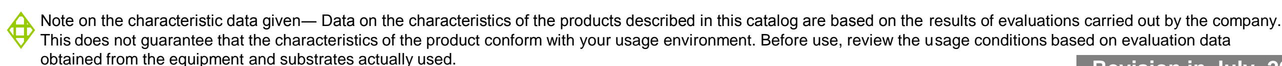
Structure : CCL /Adhesive(25 or 50μ m) /PI or SUS or AL or GE
Bonding condition : Standard bonding condition
Preprocessing condition : C-96/40/90
Reflow condition : It tested, as shown in the following graph.



<Results>

Stiffener	D3510-25	D3510-50
PI	PASS	PASS
SUS	PASS	PASS
AL	PASS	PASS
GE	PASS	PASS

PASS : The state that has not bubbles or dose not separate after the solder reflow process


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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