



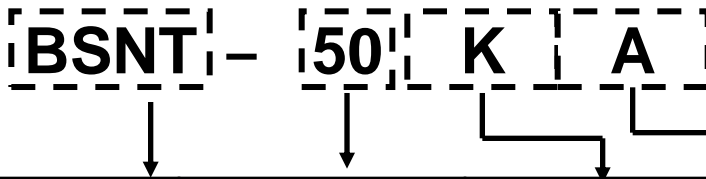
ThinFlex-BSNT -50KA Bonding sheet

ThinFlex-BSNT It is an adhesive film formed by applying epoxy resin adhesive on the backing film. It is usually used in the FPC industry, Rigid-Flex Board, and also partially used in the bonding of reinforcement and heat-resistant materials.

1. Product Characteristics:

- * Excellent heat resistance
- * Excellent chemical resistance
- * Excellent thermal, mechanical and electrical properties
- * Products can meet the environmental requirements of RoHs/Reach....

2. Specifications:



Product	Adhesive Thickness	Release Film Code	Release Paper Code
BSNT :Bonding Sheet	50:50um	K	A
Supply Size	Wide:250/500 ±1mm ; Length:200 +2/-0m (Roll type)		

*Other thicknesses and dimensions are available on customers' demand.

3. Constructions:

Release PET
Halogen Free Epoxy Adhesive
Release paper



4. Product Property :

Item	Unit	BSNT-50KA	Test Method
Peel Strength			
Base film side	kgf/cm	≧ 0.8	IPC-TM650 2.4.9
Copper side	kgf/cm	≧ 0.8	IPC-TM650 2.4.9
Solder float	PASS	288℃ 10sec	IPC-TM650 2.4.13
Insulation Resistance	Ω	≧ 1.0×10 ¹³	IPC-TM650 2.5.17
Surface Resistance	Ω	≧ 1.0×10 ¹³	IPC-TM650 2.5.17
Volume Resistance	Ω-cm	≧ 1.0×10 ¹⁴	IPC-TM650 2.5.17
Dielectric Constant	-	3.1	Resonance Method SPDR
Dissipation Factor	-	0.044	Resonance Method SPDR
Resin Flow	μm	≧ 200	ThinFlex
Glass transfer temperature, Tg	℃	65	DMA
Coefficient of thermal expansion, CTE	ppm/K	102	TMA
Voltage endurance	KV/mm	250	ASTM-D149
Tensile elastic modulus	Gpa	0.6	IPC-TM-650 2.4.19
Tensile strength	Mpa	23	IPC-TM-650 2.4.19
Elongation	%	164	IPC-TM-650 2.4.19
Thickness Tolerance	%	±10%	Micrometer
UL Flame grade	-	94VTM-0 *	UL

*UL Composite composite test , For intermediate layer BSNT , Use on both sides LCAS (PI 25um+Ad 10um) The above data are the test statistical results, not the guaranteed values .



5.Lamination and Process Conditions

ThinFlex Bonding sheet are typically used in the following ranges:

Method of use :

First of all, tear off the paper, attached to the substrate , finally, tear off from the PET.

● Pre-Press(The following are the recommended conditions)

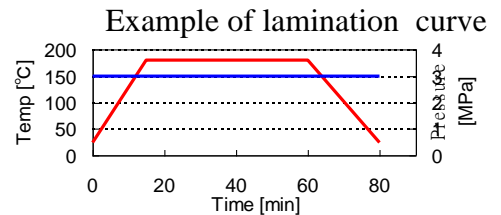
1)Vacuum press: 70~100°C / 10~20sec / 0.5~1.0MPa / Vacuum 10sec

2)Roll press: 90~110°C / 0.5~1.5m/min / 0.5~1.0MPa

● Traditional press.

180~190°C/45~60min/3~6MPa

Proposed Cushion stack : TPX/PE/Kraft paper



● Quick press

180~190°C/100~120sec(Pre-heat 10sec)/3~4MPa (Gauge100~130kgf/cm²)

Proposed Cushion stack : CR2040MT4

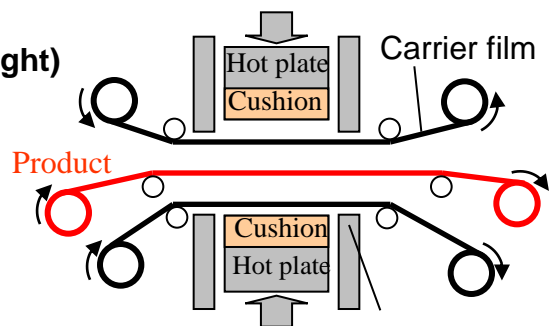
After Baking : 160°Cx2~3Hr

● R to R Method Vacuum Press(Refer to right)

Condition : 160~180°C/60~100sec/1~4MPa

Proposed Cushion stack : CR2040MT4

After Baking : 160°C/2~3Hr



Vacuum seal



6. Storage:

ThinFlex-BSNT will meet its shelf-life for at least 2 months from product date and stored in the original packaging in a dry place at temperatures below 5°C

7. Back to the temperature parameter :

Time : At least 2 hours

Temperature : $20 \pm 10^{\circ}\text{C}$

Humidity : $50 \pm 20\%$

Note: The information and data contained in this technical literature is believed to be accurate and is offered in good faith for the benefit of the user. The user should make his own tests to verify the suitability of this product for any application before its use. All data are typical values only and subject to change without notice.

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