# Thin**Flex-BSNT -25KA**
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:

BSNT － 25 K A
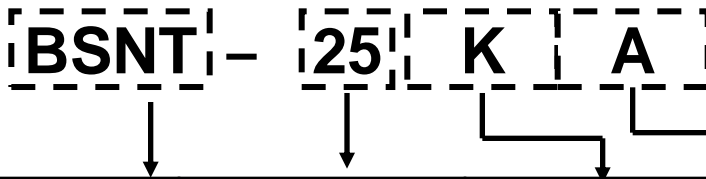
Product	Adhessive Thickness	Release Film Code	Release Paper Code
BSNT :Bonding Sheet	25:25um	K	A
Supply Size	Wide:250/500 ±1mm ; Length:200 +2/-0m (Roll type)		

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

3. Constructions:

Release PET
Halogen Free Epoxy Adhesive
Release paper

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4. Product Property :

Item	Unit	BSNT-25KA	Test Method
Peel Strength			
Base film side	**kgf/cm**	$\geqq 0.8$	**IPC-TM650 2.4.9**
Copper side	**kgf/cm**	$\geqq 0.8$	**IPC-TM650 2.4.9**
Solder float	**PASS**	**288℃10sec**	**IPC-TM650 2.4.13**
Insulation Resistance	**Ω**	$\geqq 1.0 \times 10^{13}$	**IPC-TM650 2.5.17**
Surface Resistance	**Ω**	$\geqq 1.0 \times 10^{13}$	**IPC-TM650 2.5.17**
Volume Resistance	**Ω-cm**	$\geqq 1.0 \times 10^{14}$	**IPC-TM650 2.5.17**
Dielectric Constant	**-**	**3.1**	**Resonance Method SPDR**
Dissipation Factor	**-**	**0.044**	**Resonance Method SPDR**
Resin Flow	**μm**	$\geqq 200$	**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 。

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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.

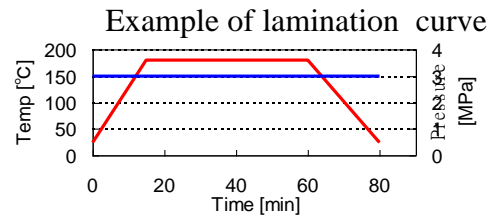● **Pre-Press(The following are the recommended conditions)**
  1)Vacuum press: 70~100℃ / 10~20sec / 0.5~1.0MPa / Vacuum 10sec
  2)Roll press: 90~110℃ / 0.5~1.5m/min / 0.5~1.0MPa

●**Traditional press.**

180~190℃/45~60min/3~6MPa

Proposed Cushion stack ：TPX/PE/Kraft paper

Example of lamination curve

● **Quick press**

180~190℃/100~120sec(Pre-heat 10sec)/3～4MPa (Gauge100～130kgf/cm^2)

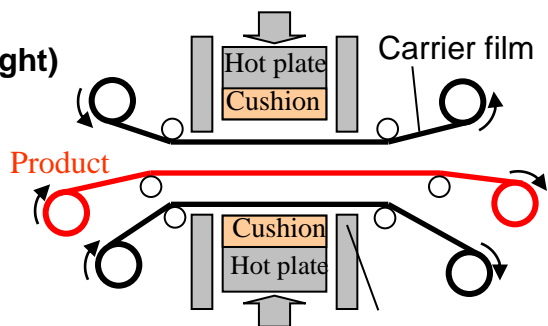**Proposed Cushion stack ：CR2040MT4**

After Baking：160℃x2~3Hr

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

Condition：160~180℃/60~100sec/1~4MPa

Proposed Cushion stack ：CR2040MT4

After Baking ：160℃/2~3Hr

Carrier film

Hot plate

Cushion

Product

Cushion

Hot plate

Vaccuum 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±10°C
Humidity : 50±20%

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