Nitto
Innovation for Customers

Product Data Sheet

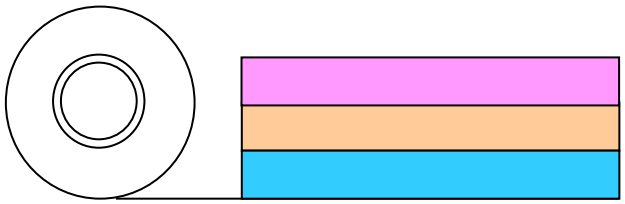
Masking tape for printed circuit boards

ELEP Masking N-700S

Outline

ELEP Masking N-700S is a masking tape for terminal area during the solder leveling process on printed circuit boards. It offers excellet solder resistance, flux resistance and adhesion with light peeling and minimal adhesive residue, also prevents infiltration of the flux and solder solution.

Construction



Natural rubber pressure sensitive adhesive
Crepe paper
Polyolefin film

Features

●Light unwinding and easy application.
●Special adhesive offers firm adhesion to printed circuit boards, stable adhesion during process.
●Adhesion increases if pressed with a heating roller.
●Excellent resistance to solder and flux, preventing infiltration of the solution.
●Withstand harsh usage conditions and leaves minimal adhesive residue.
●Minimal change in adhesive strength after laminating enables to be easy peeling.

Applications

Masking to prevents infiltration of mainly the solder and flux solution during solder leveling process of printed circuit boards.

Standard Size・Color

Item	Thickness (mm)	Width (mm)	Length (M)	Color
N-700S	0.28	12/15/18	50	White

*Contact us for information concerning sizes other than the above.

General properties

Item	Unit	N-700S
Thickness *1	mm	0.28
Adhesive Strength *2	N/18mm	7.00
Unwinding Force *3	N/18mm	4.60
Tensile Strength *4	N/18mm	80
Elongation *4	%	7
Solder resistance *5		○
Flux resistance *5		○
Adhesive residue *5		○△

○:Very good ○△:Good

Test Method

*1:Nominal thickness

*2:Adherend Stainless steel plate, Tensile speed 300mm/min, Peeling angle 180°

*3:Tensile speed 300mm/min

*4:Tensile speed 300mm/min, strength and elongation when breaking

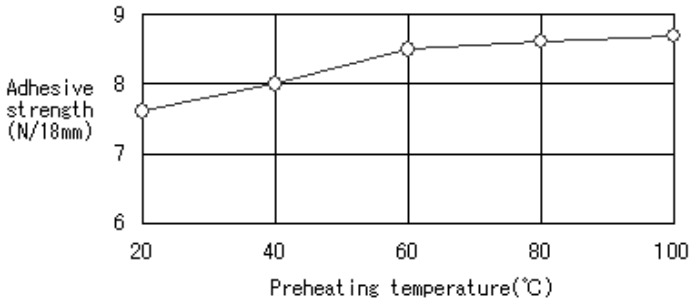
*5:A test specimen is applied to the board by applying a 2kg rubber roller once in each direction, and then exposed to immersion. After that, it is left for 2 hours or more in the atmosphere of 23℃ and 55%RH, and is peeled at an angle of 180°in 300mm/min. It is evaluated visually.

Immersion conditions Solder : 250℃x 10sec.

Immersion conditions Flux : normal temperature x 10sec.

Relation between Application Conditions and Adhesive Strength

The sample is applied manually to the PCB and then it is preheated for 30 seconds at specific temperatures. After the sample is pressed with roller, the adhesive strength (adhesion to PCB) is determined. The obtained adhesive strength is shown as below.



Precautions

- ●Duly inspect the adaptability of this product to your intended use, prior to its application.
  We may conduct the adaptability test in your favor. However, its content and results do not guarantee your use. It is of your responsibility to ultimately determine its adaptability.
- ●The characteristics and preformance of this product depend on the type of adherend, environment of use, and conditions/period after application. Always test (including the appearance) before changing the adherend (composition/surface roughness), conditions or use.
- ●When the product is applied to PVC adherends with plasticizer or surface-active adherends (electrolyzed, chemically treated, polished, etc.), it may become difficult to release or tend to leave deposits, as time passes.
- ●When applying the product to a display material, test with particular attention on appearance defects. Stain, cloudiness or unevenness may appear on the surface of the display material, depending on its type. Traces of air bubbles may be left if they are trapped during application.
- ●Aforementioned problems may also arise when the product is stored for a long period of time after application.
- ●Do not ues the product outdoors.
- ●Wipe off any grease, moisture or dust on the adherend before application.
- ●When coating after the surface protective material has been peeled, products should be used upon giving sufficient consideration to surface washing, below-surface processing and sintering conditions and confirming the adhesiveness of the coating.