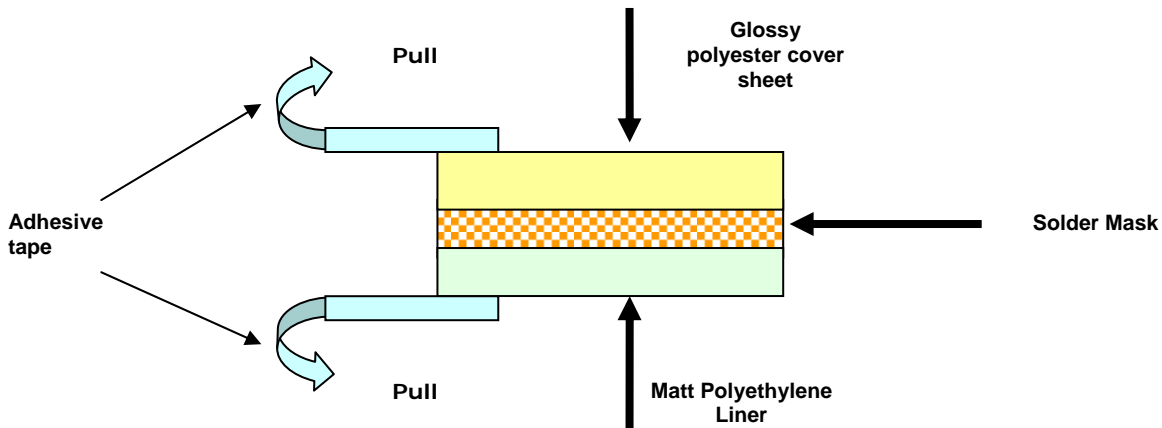


DRY FILM SOLDER MASK

(Part Numbers: 500-195-1 & 500-195-2)

Figure 1: Removing layer of protective film Polyethylene film



PREPARATION

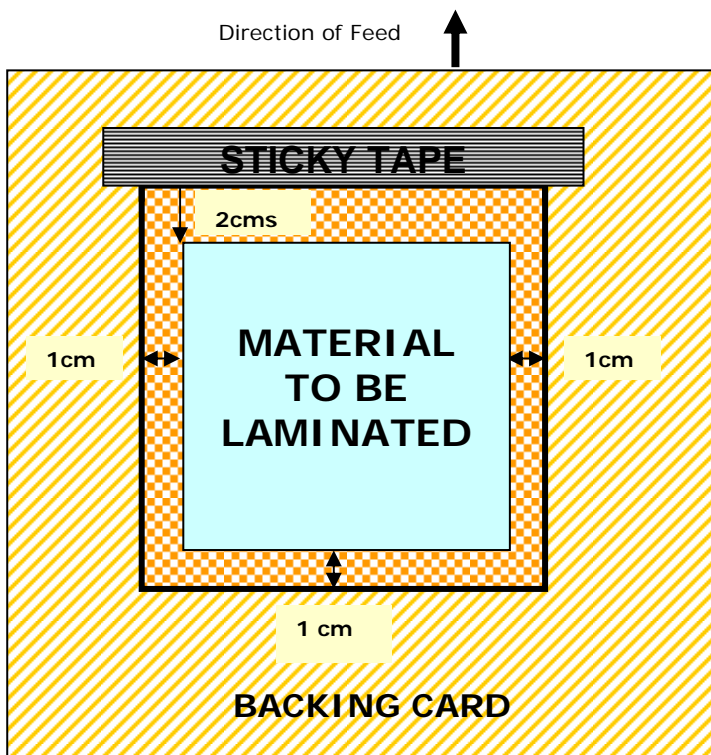
For hand lamination, and for loading of Roll Laminators, the protective matt polyethylene liner has to be removed. To achieve this, two small pieces of adhesive tape should be stuck to both sides of a corner of the soldermask. (**fig 1**) They are then peeled away, which will remove the polyethylene liner. Please note: Normal laminating temperature is 110° - 115°C.

APPLICATION

The underside of the soldermask material (the side that was in contact with the removed matt polyethylene liner) is the side to be applied to the top of the PCB. The top gloss polyester liner is left in place.

For sheet lamination the card method of applying dry film is to be used (**fig 2**)

Figure 2: Positioning material on backing sheet or card prior to lamination



Speed should be set on 4 to 5 and Temperature at 110° - 115°C.

- 1) Tape the Soldermask film down to a piece of card with the exposed Soldermask side down.
- 2) Lift the film up and slide the material to be laminated underneath the film, holding the film away from the surface of the material
- 3) Push the card into the laminator and hold the film taut against the laminator case while card and material pass through the laminator (see figure 2)

PLEASE NOTE: The dimensions shown are as a guide only and are not absolute

EXPOSURE

The soldermask material should be exposed with a suitable artwork for 50-70 seconds in a pre-warmed Mega Electronics U.V. exposure unit. The resist is negative working, so wherever the UV light exposes that resist is hardened. A positive artwork is therefore needed for a solder-mask. For optimum resolution a vacuum U.V. should be used.

IMMEDIATELY after exposure the top piece of gloss polyester liner should be removed and the panel allowed to stand for 15-20 minutes. Precautions should be taken to ensure the panel is not exposed to excessive natural light during this time.

DEVELOPING

Mega's Potassium Carbonate base Dry Film Developer (Part: 500-164 & 500-162) should be used. Developing temperature: 35°C. Mega's Immerse Tank developing tanks are suitable (PA Series), but for optimum resolution a Mega Spray Processor should be used.

CURING

The developed image should be cured for 30 minutes in our UV unit, then at 100°C in a fan oven for 1 hour. Alternatively, satisfactory curing can be achieved with 60 minutes in the UV unit.



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