

## FOR PRINTED CIRCUIT BOARDS

and Automatic-Assembly



For the joining of the top cover foil of Surface Mount Component Tapes self-adhesive Steierform Tape Connectors are needed. These enable trouble free and continuous peeling of the cover tape where component tapes are joined together. The carrier tapes are connected with "Siemens Brass Shims" which are applied with the "Siemens Splicing Tool". Steierform Cover Tape Connectors for 8, 12, 16, 24 and 44/56 mm components tapes (1,000 pieces/roll or in single cut lengths 1,000 pieces/carton) as well as brass shims and the splice tool are available ex stock.





8 mm paper tapes are conveniently joined using Steierform SMD Double Splice Tapes. No fixtures or tooling are required as alignment of the component tapes to be joined is taken care of by the integrated positioning aid. This patented product, developed together with Siemens AG, joins the cover tape from the top as well as from below the component tape at the precisely maintained original pitch spacing! Available ex stock in size 22 x 40 mm (500 pieces/carton).





Every SMD tape needs a length of cover tape 'tail' for getting started in a feeder. When a partially used reel is to be used that does not have a leader tape, creating a 'tail' has up to now caused some components to be lost while peeling off the cover tape. To avoid this wastage, the cover tape is extended by applying a Steierform Cover Tape Extender! Steierform Cover Tape Extenders are available ex stock in the sizes 5 x 396 mm, 9 x 396 mm, 18 x 396 mm and 34 x 396 mm.



Prior to storing a partially used reel of SMDs its free end ought to be safely secured. The fluorescent orange Steierform Reel Sealers have a non-adhesive portion at one end and can be easily peeled back without leaving any residue and are even reuseable. No more unintentional unravelling of a reel! Available from stock in two sizes: 50 x 7 mm and 50 x 11 mm (2,500 pieces/roll)





**PCB Arrows** 





Marking Arrows

Mini Arrows yellow

Mini Arrows red



Order-No.: 3.3805.00, 10 x 5 mm,

10.000 Pieces/Roll

Order-No.: 3.3807.00, 5 x 7 mm,

5.000 Pieces/Roll

Order-No.: 3.3810.00, Ø 10 mm,

2.000 Pieces/Roll

Order-No.: 3.5310.00, 10 x 18 mm,

5.000 Pieces/Roll

Order-No.: 5.5153.10, 5 x 3 mm,

5.000 Pcs./Bag

Order-No.: 5.5153.20,

5.000 Pcs./Bag

**SMD-Trial Placement** 



When setting up a pick and place machine the first off run is often carried out by placing SMDs onto a thin, highly transparent double sided adhesive foil Steierform 87-92403. The position, orientation and presents/absence of components can then be manually or automatically inspected. The foil is removed without adhesive residues being left on the surface of the PCB. Expensive component can be reclaimed for further use. Available in different sizes.

SMD-Trial Print Foil for Solder Paste and Adhesive

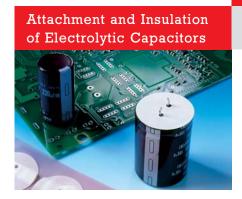


When printing or dispensing solder paste or adhesive in the set up phase machine parameters can be checked by printing/dispensing not on the PCB direct but onto a highly transparent, single sided adhesive foil Steierform 87-50201, temporarily attached to the board. This avoids having to clean PCBs - the foil can be easily removed without leaving any adhesive residues. Available in different sizes.



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Very tall electrolytic capacitors can often be unstable when placed on printed circuit boards until their leads have been soldered. In order to improve their stability on populated boards, even after wave soldering these capacitors can be held in place with double-sided adhesive pads (with or without holes) from Steierform 87-92401. Identically shaped pads in Steierform 87-12309 (singlesided adhesive) are also available solely for the purpose of adding additional insulation.

# Masking for Wave Soldering



During the wave soldering process some areas of PCBs need to be protected from molten solder:

- cut outs and holes for THT components (Through Hole Technology)
- mounting holes for later fitting of large capacitors or insertion of connectors
- positions to be occupied later by heat sensitive components.

Depending on the process die cut pads can be used: Steierform 87-30131 or Steierform 87-33604 (both to 220°C), Steierform 87-40138 (to 200°C) or Steierform 87-60157 (to 180°C). We recommend customers to establish the compatibility of any materials with the specific processes used.

## **High Temperature Protection** for Reflow Soldering



This process exposes boards to elevated temperatures for longer than with wave soldering. At temperatures of around 260°C some areas have to be protected for approximately 5 minutes. High temperature masking can be required when reflow is immediately followed by wave soldering and holes for retrofit components need to be kept clear of solder. Die cut shapes from Steierform 87-62315 (glass fibre fabric to 250°C) and Steierform 87-15500, Steierform 87-83410 or Steierform 87-12602 (all polyimide foils, suitable for exposures 260°C - 300°C). The pads can normally be removed without adhesive residues after the processes. We recommend that trials be carried within the relevant parameters to ensure suitability in every respect.

#### Masking for PCB Coating Applications



Populated boards for some aerospace, chemical industry applications etc need to be covered with a protective coating. To ensure that certain areas of the PCB remain uncoated, for e.g. grounding or to retain close mechanical tolerances the edges are covered with a precise mask of Steierform 87-33604. The carrier is foil with special paper and the adhesive allows removal without residue. Depending on the type of coating and the drying temperature used other materials such as Steierform 87-40132 or Steierform 87-31704 could also be considered.

#### Labels for PCB Identification



For the unambiguous identification of printed circuit boards thermally resistant Labels, Steierform 87-82003 (total thickness 0.045 mm) or Steierform 87-82004 (total thickness 0.08 mm) can be used. The polyimide foil, coated white, can be durably printed with thermal transfer printers and suitable thermal transfer ribbons.

Certified to ISO 9001:2008 und ISO/TS 16949:2002

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