

Application Specification

114-19027

NUMBER

AMP SECURITY CLASSIFICATION

DC

I

1. SCOPE:

This specification covers the requirements for the application of AMP Micro-MaTch Surface Mount Compatible (SMC) connectors, pn. 100411 - series. These SMC connectors are suitable for epoxy and paperphenolic PC-boards.

2. REQUIREMENTS.

2.1. PC-board lay-out.

The AMP Micro-MaTch SMC connector to be applied on the solder side of the PC-board after the soldering process. The recommended PC-board lay-out is shown on the customer drawing. This lay-out is different for epoxy and paperphenolic board material. For accuracy of hole configuration, see fig. 1.

2.2. Plating.

For the contact areas, square 0,75 mm min. as shown on C-100411 Sh. 2, the following plating is recommended:

- min. 35 µm Cu
- Sn plating 4-100 µm Sn

Remark for the tin plating:

A tin plating thickness of more than 100 µm is not recommended, due to the small size of the contact area, its surface may become dome shaped in case of tin plating thickness in excess of 100 µm (fig. 2). This may introduce improper contact between contact spring and the contact area. Therefore AMP recommend to enlarge the contact area as much as possible (fig. 3).

2.3. Placing the SMC connectors.

For the application on PC-boards a special insertion tool is available.* Before insertion of the connector, the PC-board and the connector have to be aligned. For the height of the connector above the PC-board surface after insertion, see drawing C-100411.

***Tooling numbers:**

- | | |
|------------|---|
| 1-677438-0 | (manual press) |
| 677438-2 | (pneumatic press without x-y table) |
| 677438-3 | (pneumatic press with x-y table) |
| x-677462-x | (customer related tooling for x-y table) |
| 1-677462-1 | (standard parts customer related tooling:) |
| | - Baseplate |
| x-433650-x | - indexing profile ass'y (for x- and y- axis) |
| x-434420-x | (upper tooling ass'y) |
| | (lower tool) |

DOC. CENTRE

07 OKT. 1992

COPYRIGHT 19 BY AMP-HOLLAND B.V. ALL INTERNATIONAL RIGHTS RESERVED.

				DR. DATE H. v.d. Steen 30/06/92	AMP	AMP-HOLLAND B.V. s-Hertogenbosch, The Netherlands.	
				CHK. DATE H. v.d. Steen 01/07/92			
LOC. I	A	H-9861	HS	18/08/92	NAME Application of Micro-MaTch female SMC Connector		
SIZE A4	0	H-9861	HS	04/06/92			
				APP. DATE J. Janssen <i>[Signature]</i> 20/9-92	NO. 114-19027	SHEET 1 OF 2	REV. A
LTR	REV.	RECORD	DR.	DATE			

Application Specification

114-19027

NUMBER

AMP SECURITY CLASSIFICATION

DC

3. INSPECTION CRITERIA:

For a visual examination of the connector the following criteria do apply:

- The height of the mating face of the connector shall be in accordance with the dimension mentioned on drawing C-100411.
- All posts of the contacts shall come through the PC-board.
- The contact point of the contact spring shall properly hit the specified contact area (fig. 3).

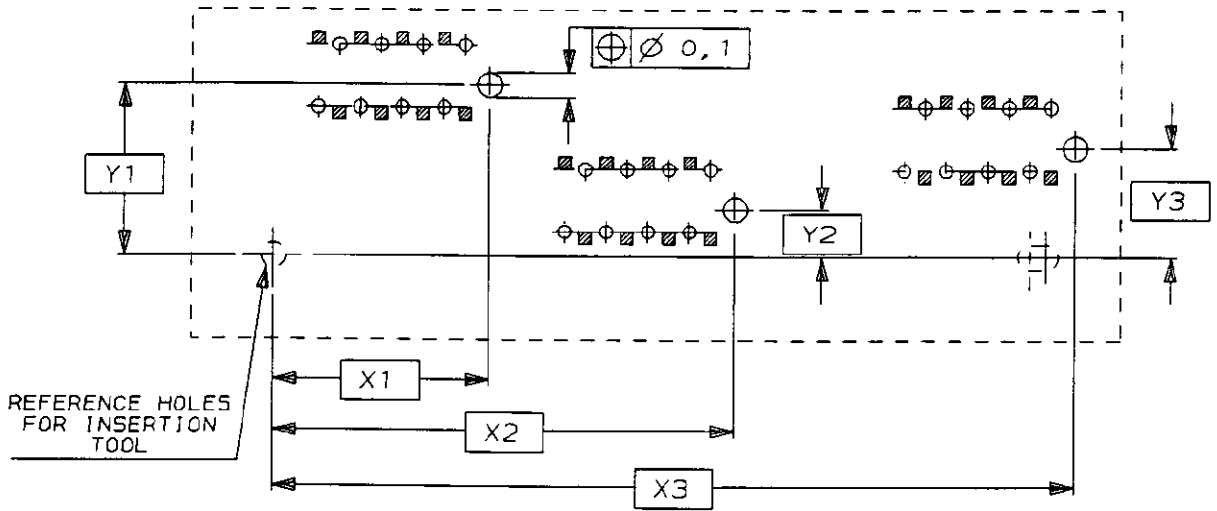


FIG 1.

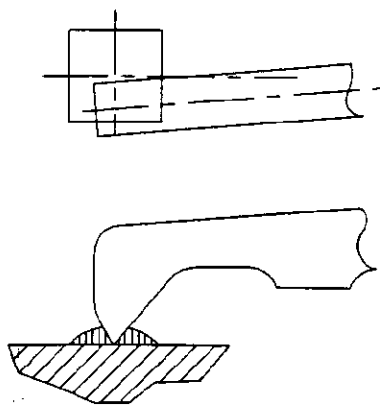
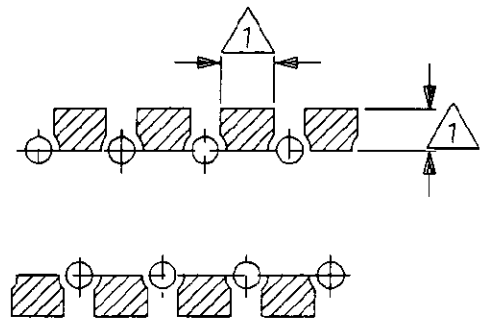


FIG 2.



△ ENLARGE CONTACT AREA AS MUCH AS POSSIBLE

FIG 3.

COPYRIGHT 19 BY AMP-HOLLAND B.V. ALL INTERNATIONAL RIGHTS RESERVED.

LOC.

H

SIZE

A4

AMP

AMP-HOLLAND B.V.
s-Hertogenbosch,
The Netherlands.

NO.

114-19027

SHEET

2 OF 2

REV.

A