

1. INTRODUCTION

This specification covers the requirements for application of AMP* ZIF-Line 50 PC Board Connectors. The connectors are designed to accept flat conductor circuitry having a .050-in. centerline spacing.

NOTE: All dimensions are given in inches unless otherwise specified.

2. REFERENCE MATERIAL

2.1. AMP Product Specification 108-16025 covers performance requirements for ZIF-Line 50 connectors.

2.2. AMP Corporate Bulletin No. 52 provides information for soldering.

2.3. Each AMP product component is assigned a part number and product codes are assigned to unique designs within a product family. It is impractical to provide a complete listing, however, the following typical numbers are provided for correspondence purposes: REF PART NO. 487576; PRODUCT CODE 5626.

3. NOMENCLATURE

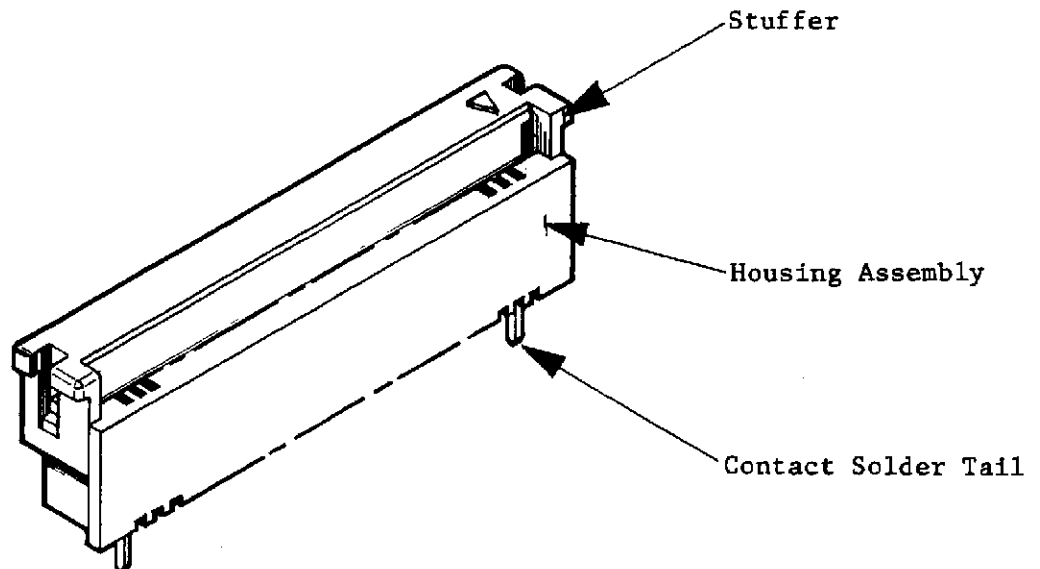


Fig. 1 Nomenclature

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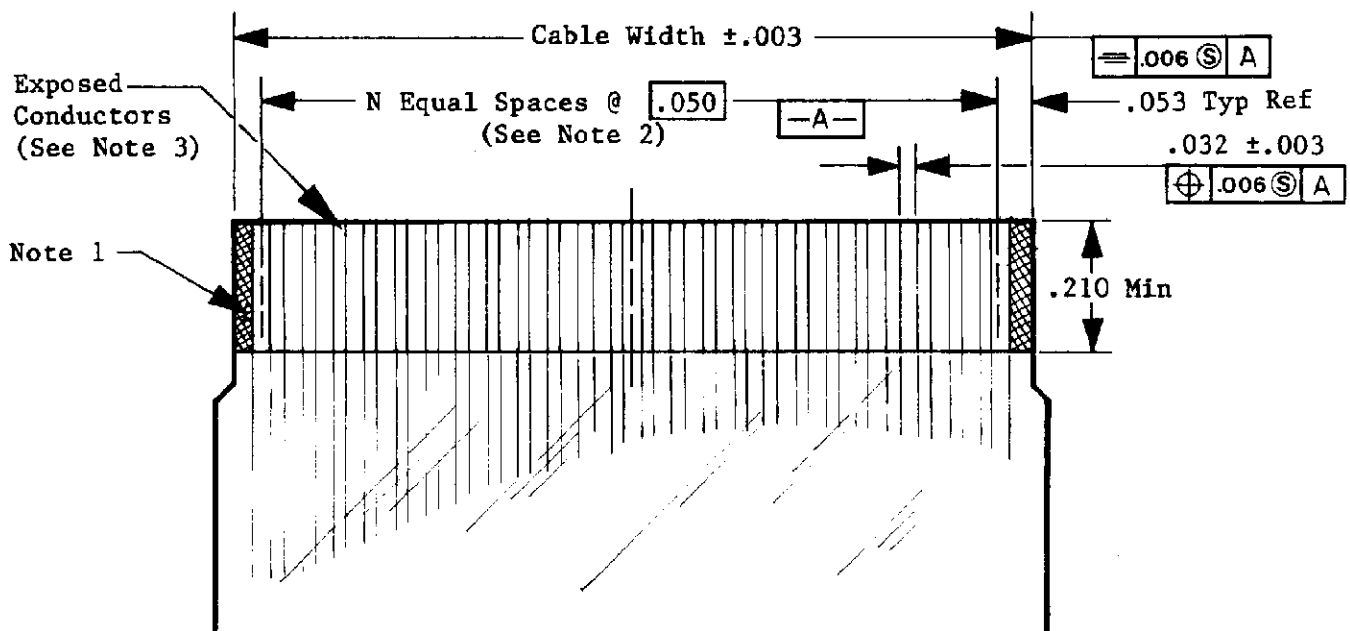
4. REQUIREMENTS

4.1. Flat Conductor Circuitry

A. The connectors are designed to accept flat conductor circuitry meeting the following requirements:

1. Conductor size: $.032 \pm .003$ wide
2. Conductor material: Tin-plated copper or conductive ink
3. Conductor spacing: $.050$ centerline
4. Circuitry thickness: $.004$ to $.012$ in the contact area

B. End of the circuitry shall be prepared as indicated in Figure 2.



Note: Tolerances are non-accumulative.

NOTES:

1. For added strength, flexible etched circuits can be designed to extend copper of outside traces to profile edge as indicated by crosshatched areas.
2. N = Number Of Spaces Between Conductors.
 $N + 1$ = Number Of Contact Positions.
3. Circuitry shall have exposed conductors on one side only. Exposed conductors shall be free of contaminates, films, and residues and must extend to the end of the substrate.

Fig. 2 Flat Circuitry Preparation

4.2. Recommended printed circuit board hole layout shall be as indicated in Figure 3.

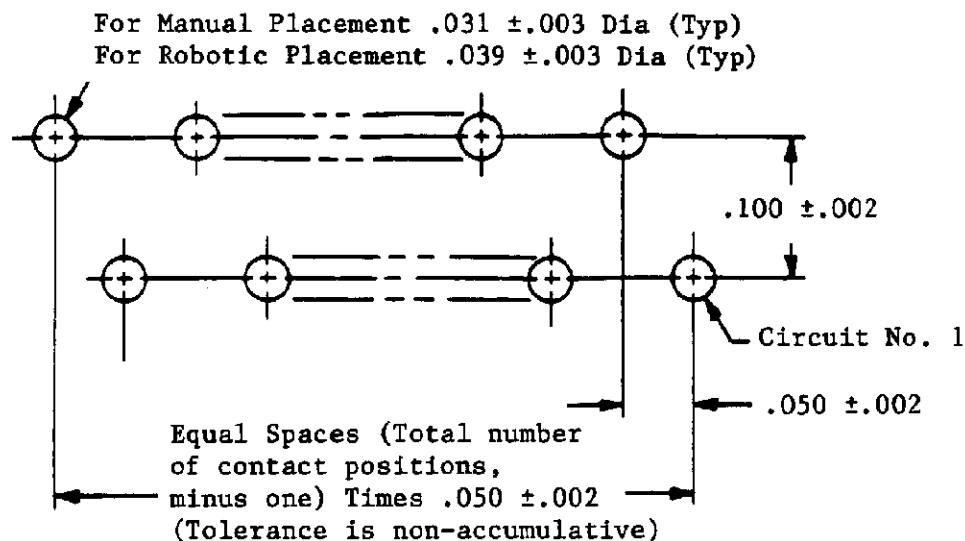


Fig. 3 PC Board Layout

4.3. Seated connectors shall be flush with the surface of the printed circuit board or within the limits specified in Figure 4.

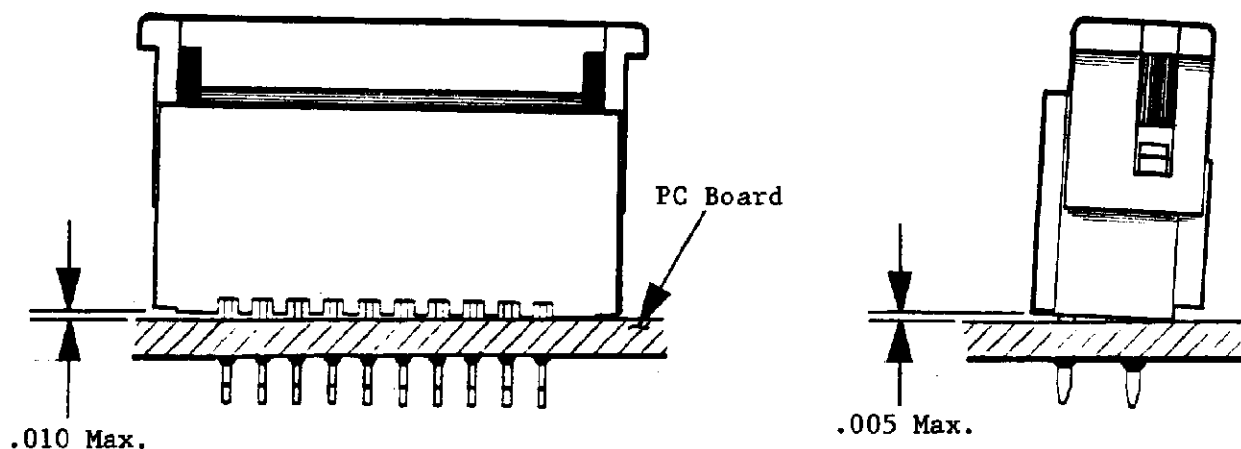


Fig. 4 Connector Alignment

4.4. Install the flexible circuit into the connector as follows:

1. Assemble connector to pc board. With stuffer in open position, insert flex circuit into housing until it bottoms in cavity. The exposed conductors must be oriented as shown in Figure 5.
2. Holding flex circuit in position, check to be sure circuit is centered and has no buckled edges. Apply an even pressure to depress stuffer into housing until it bottoms.
3. To remove flex circuit from connector, hold ends of stuffer with thumb and finger and pull up until stuffer is locked in open position. This releases the grip on the flex circuit for easy removal.

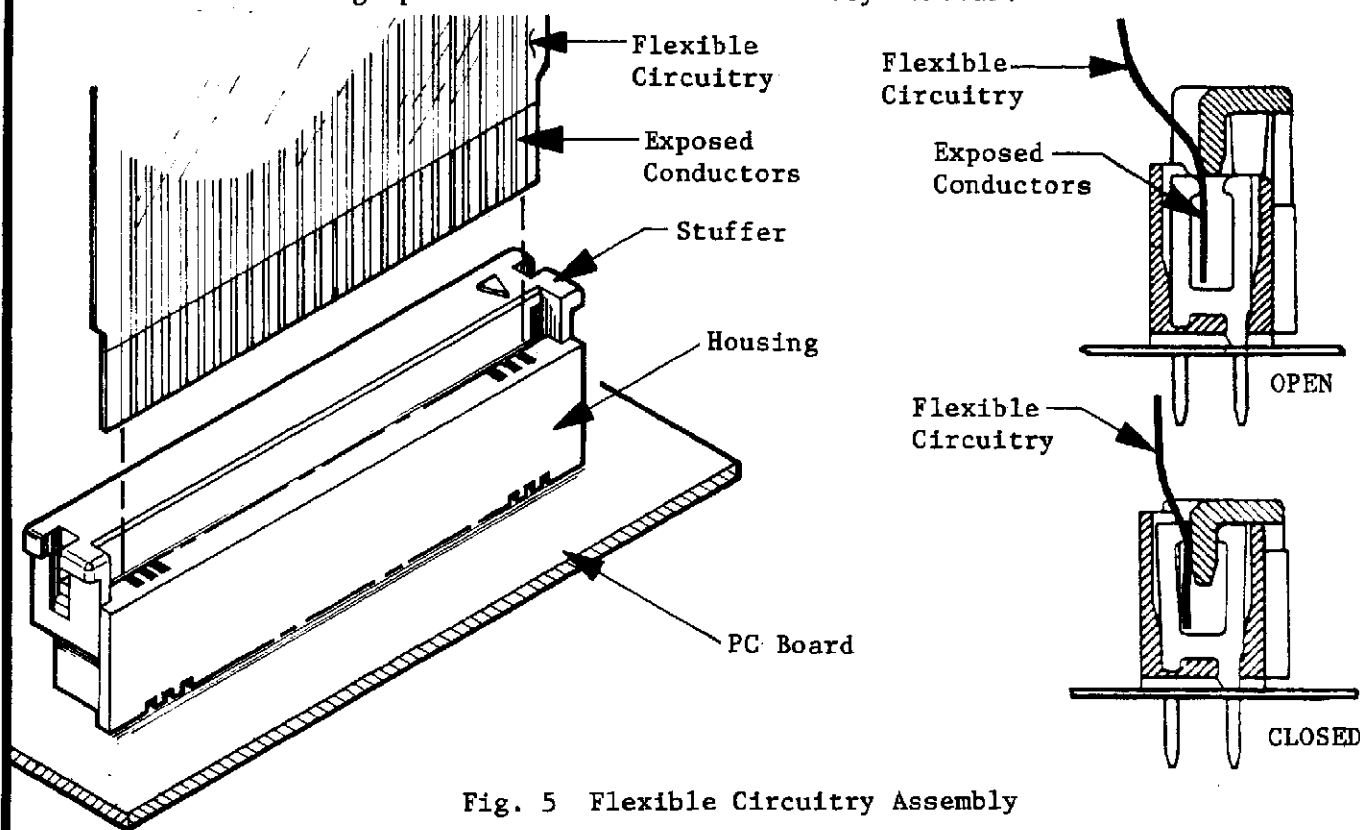


Fig. 5 Flexible Circuitry Assembly

4.5. Cleaning and Soldering shall be according to the following guidelines:

- A. Solder tails shall be fluxed prior to soldering using a medium active rosin or a medium to highly active organic flux. Proper flux selection depends on the type of printed circuit board and any components already mounted. Flux must also be compatible with customer's flow solder line and with manufacturing and safety requirements.
- B. Removal of fluxes, residues, and activators is mandatory. Cleaning procedures are chosen by the customer and depend on the type of flux used on the solder line.
- C. AMP Corporate Bulletin No. 52 is available upon request and can be used as a guide in soldering. This bulletin gives various flux types and characteristics along with commercial designation and flux removal procedures. A checklist is attached to the bulletin to aid in obtaining information pertaining to soldering problems.