



All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters [and inches]. Unless otherwise specified, dimensions have a tolerance of ± 0.13 [± 0.005] and angles have a tolerance of $\pm 2^\circ$. Figures and illustrations are for identification only and are not drawn to scale.

1. INTRODUCTION

This specification covers the requirements for application of AMPMODU Header Assemblies with ACTION PIN Contacts on 2.54 mm [.100 in.] centerline spacing.

When corresponding with TE Connectivity Personnel, use the terminology provided in this specification to facilitate your inquiries for information. Basic terms and features of this product are provided in Figure 1.

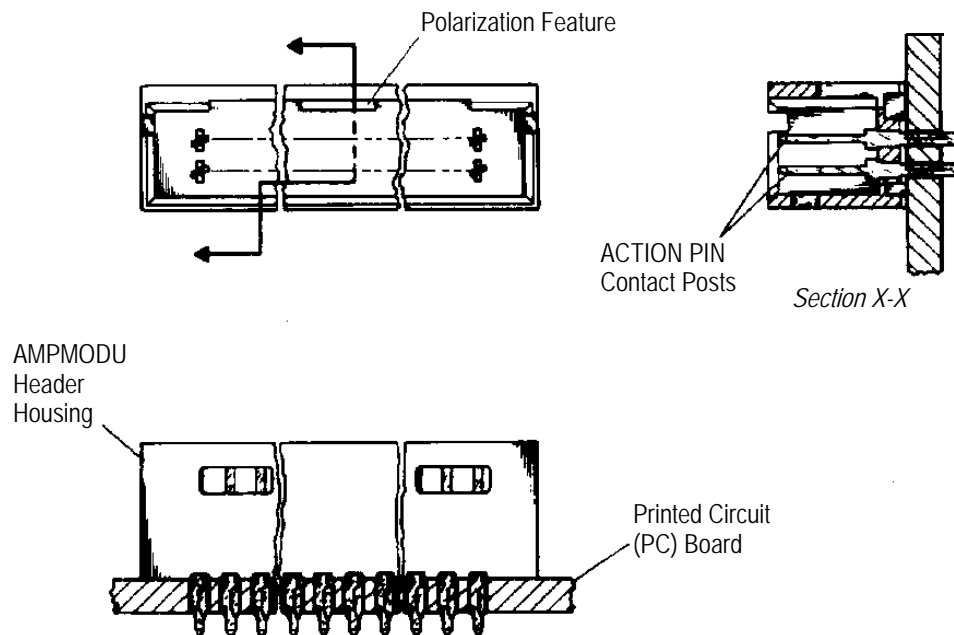


Figure 1

2. REFERENCE MATERIAL

2.1. Revision Summary

- Updated document to corporate requirements
- New logo

2.2. Customer Assistance

Reference Product Base Part Number 102557 and Product Code 5236 are representative of AMPMODU Header Assemblies with ACTION PIN Contacts. Use of these numbers will identify the product line and expedite your inquiries through a service network established to help you obtain product and tooling information. Such information can be obtained through a local Representative or, after purchase, by calling PRODUCT INFORMATION at the number at the bottom of this page.

2.3. Drawings

Customer Drawings for product part numbers are available from the service network. If there is a conflict between the information contained in the Customer Drawings and this specification or with any other technical documentation supplied, call PRODUCT INFORMATION at the number at the bottom of this page.

2.4. Instructional Material

Instruction Sheets (408-series) provide product assembly instructions or tooling setup and operation procedures. Documents available that pertain to this product are: Instruction Sheet 408-9054 which covers insertion tooling for Double Row Header Assemblies; and Instruction Sheet 408-9143 which covers insertion tooling for Single Row Header Assemblies.

2.5. Specifications

Product Specification 108-25032 outlines performance requirements.

3. REQUIREMENTS

3.1. Safety

Do not stack product shipping containers so high that the containers buckle or deform.

3.2. Storage

A. Ultraviolet Light

Prolonged exposure to ultraviolet light may deteriorate the chemical composition used in the header assemblies.

B. Shelf Life

The header assemblies should remain in the shipping containers until ready for use to prevent deformation to the contacts. The header assemblies should be used on a first in, first out basis to avoid storage contamination that could adversely affect performance.

C. Chemical Exposure

Do not store jack assemblies near any chemical listed below as they may cause stress corrosion cracking in the contacts.

Alkalies	Ammonia	Citrates	Phosphates	Citrates	Sulfur Compounds
Amines	Carbonates	Nitrites	Sulfur Nitrites		Tartrates

3.3. PC Board

A. Thickness

PC boards with 1.57 mm [.062 in.] nominal thickness shall be a minimum dimension of 1.50 mm [.059 in.]. PC boards with 2.36 mm [.093 in.] nominal thickness shall be a minimum dimension of 2.13 mm [.084 in.].

B. PC Board Layout

The layout of the pc board shall be according to the dimensions shown in Figure 2.

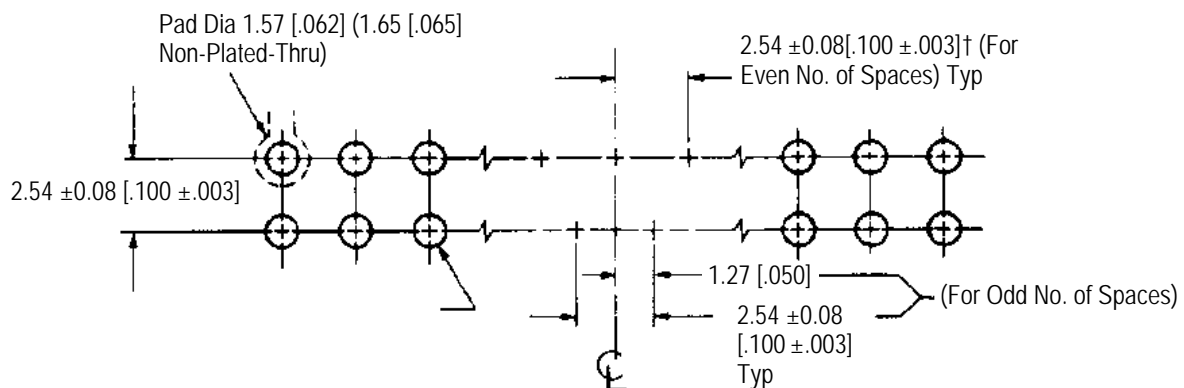


Figure 2 (Cont'd)

HOLE TYPE	"A" DIAMETER‡		
	NOMINAL	AFTER PLATING	AFTER REFLOW
Plated-Thru	1.02 ±0.08 [.040 ±.003]	0.94-1.09 [.037-.043]	0.91-1.09 [.036-.043]
Non-Plated-Thru	1.151 ±0.025 [.0453 ±.001]	---	---

†Tolerance noncumulative. ‡Use 1.15 mm-dia drill.

Figure 2 (End)

C. Plating of Holes

1. Copper plating thickness shall be 0.03 to 0.08 mm [.001 to .003 in.] and shall register 150 (max) hardness (Knoop) when tested.
2. Tin/lead plating thickness shall be a minimum of 0.008 mm [.0003 in.].

3.4. Required Spacing

Required spacing in applications requiring housing removal tool clearance or robotic header assembly placement is shown in Figure 3.

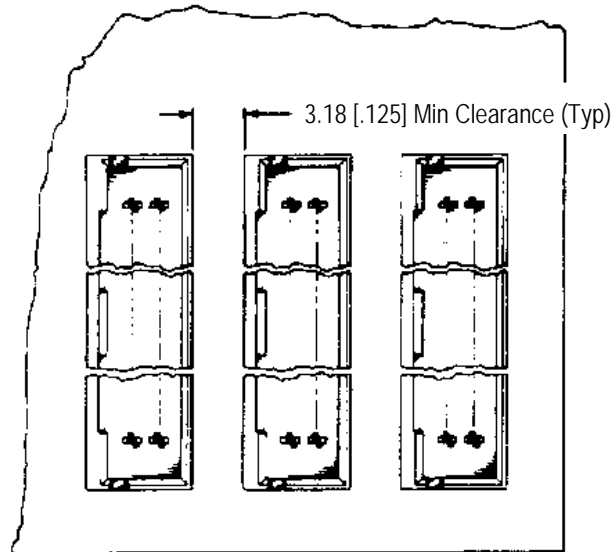


Figure 3

3.5. Seating Force

The force used to seat a standard AMPMODU ACTION PIN Header Assembly shall not exceed 178 N•m [40 lb-in.] per contact.

3.6. Removal Force

The minimum force required to remove an ACTION PIN contact is 44 N [10 lb] for an 2.36 mm [.093 in.] pc board and 22 N [5 lb] for an 1.57 mm [.062 in.] pc board.

3.7. Contact Post Limitations

Contact posts shall not exceed the following rotation limitations when measured after seating of header assembly.

- For mating end of post, limitation is ±2° 0'.
- For wire end of post, limitation is ±5° 0'.
- For all other post areas, limitation is ±10° 0'.

3.8. Template

The customer shall supply an anvil which is slotted or drilled as a template to support the pc board, and which provides clearance for the posts during seating. Suggested design and dimensions are provided in Figure 4.

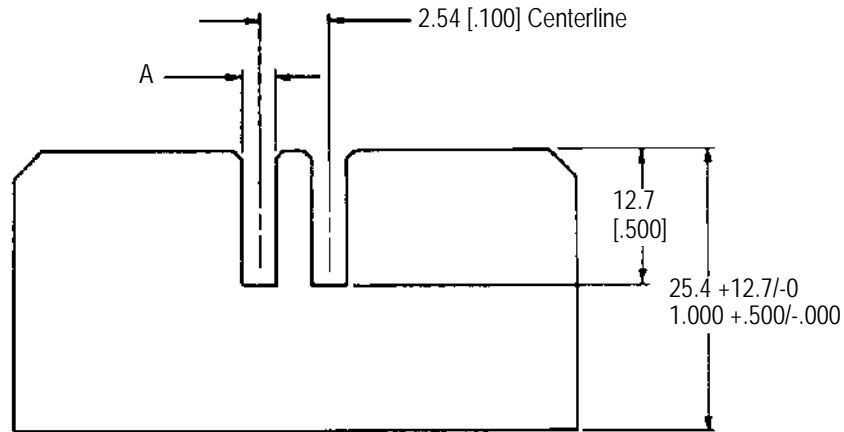
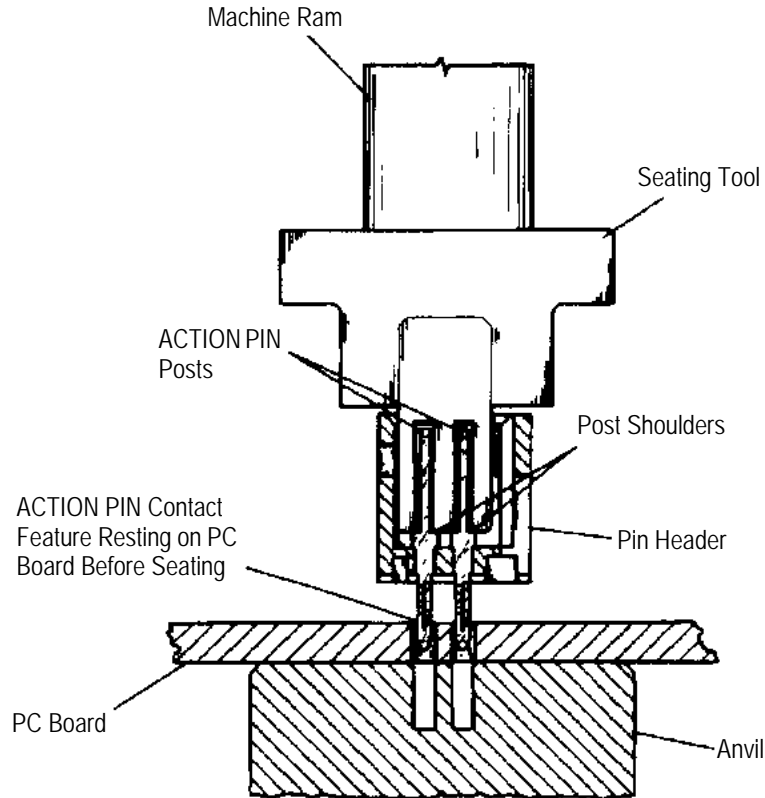


Figure 4

3.9. Seating the Header Assembly

The appropriate seating tool for AMPMODU ACTION PIN Header Assemblies shall be used in conjunction with the anvil when seating pin header assemblies (see Instruction Sheets 408-9054 and 408-9143). Use of the seating tool is shown in Figure 5.



NOTE: All post shoulders must be covered by tooling.

Figure 5

3.10. Seated Assembly

Seated header assembly shall meet the requirements of Figure 6.

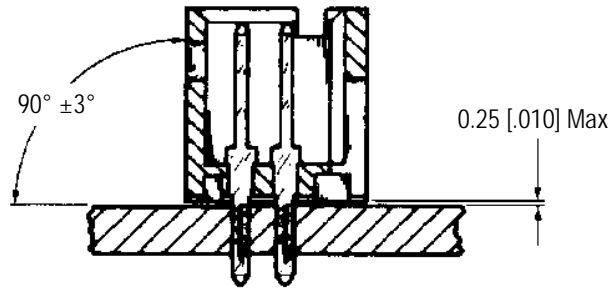


Figure 6

4. QUALIFICATIONS

AMPMODU Header Assemblies with ACTION PIN Contacts are Recognized by Underwriters Laboratories, Inc. in File E28476 and Certified to CSA International in File LR7189.

5. TOOLING

For low-volume manufacturing, an arbor frame type of manual applicator may be used. For higher-volume manufacturing, semi-automatic machine application is appropriate. Robotic application may also be employed.

6. VISUAL AID

The illustration below shows a typical application of this product. This illustration should be used by production personnel to ensure a correctly applied product. Applications which DO NOT appear correct should be inspected using the information in the preceding pages of this specification and in the instructional material shipped with the product or tooling.

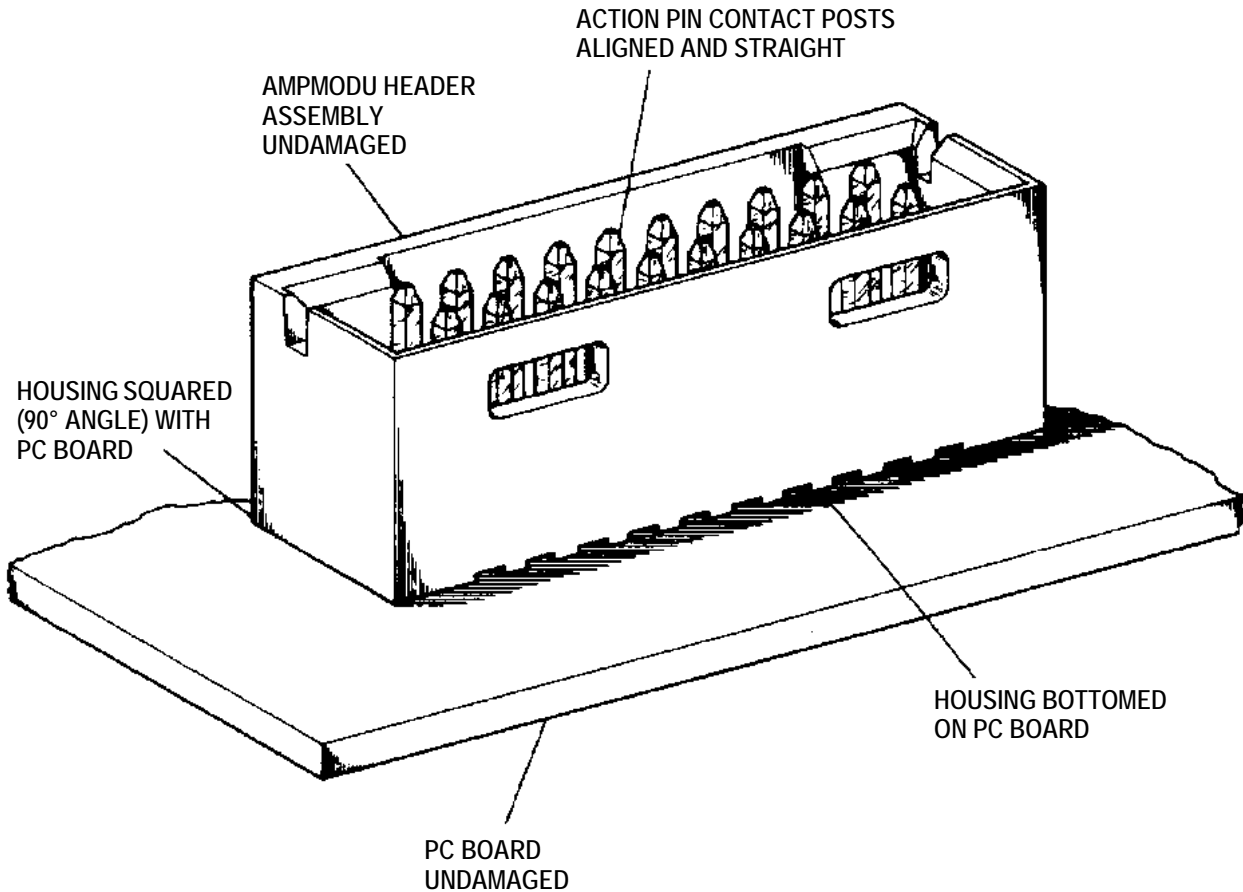


FIGURE 7. VISUAL AID