

Dynamic SPRING CLAMP Connectors

i All numerical values are in metric units. Dimensions are in millimeters. Figures and illustrations are for identification only and are not drawn to scale

1. INTRODUCTION

This specification covers the requirements for application of Dynamic SPRING CLAMP Connectors. Applicable wire size and pitch refer Figure 1.

When corresponding with TE Connectivity Personnel, use the terminology provided on this specification to help facilitate your inquiry for information. Basic terms and features of components are provided in Figure 2.

Series	Pitch	Applicable wire	
		Solid/Stranded	Flexible
D4950	7.5	AWG16-10 1.5-4SQ	AWG16-10 1.5-2.5SQ

Figure 1

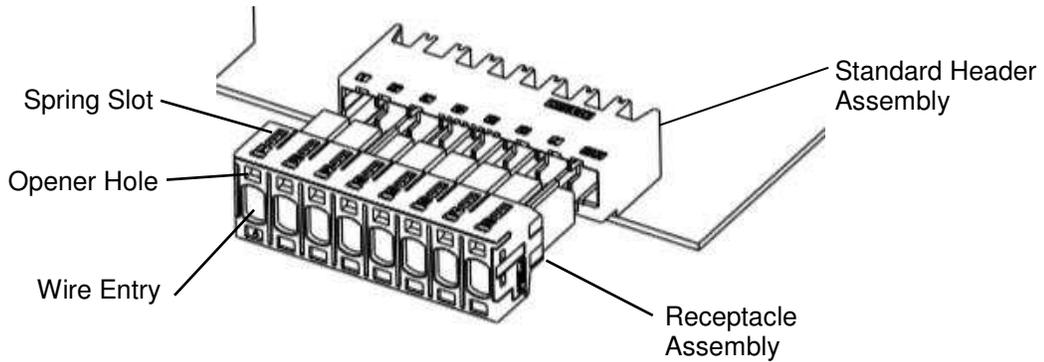


Figure 2(Cont'd)

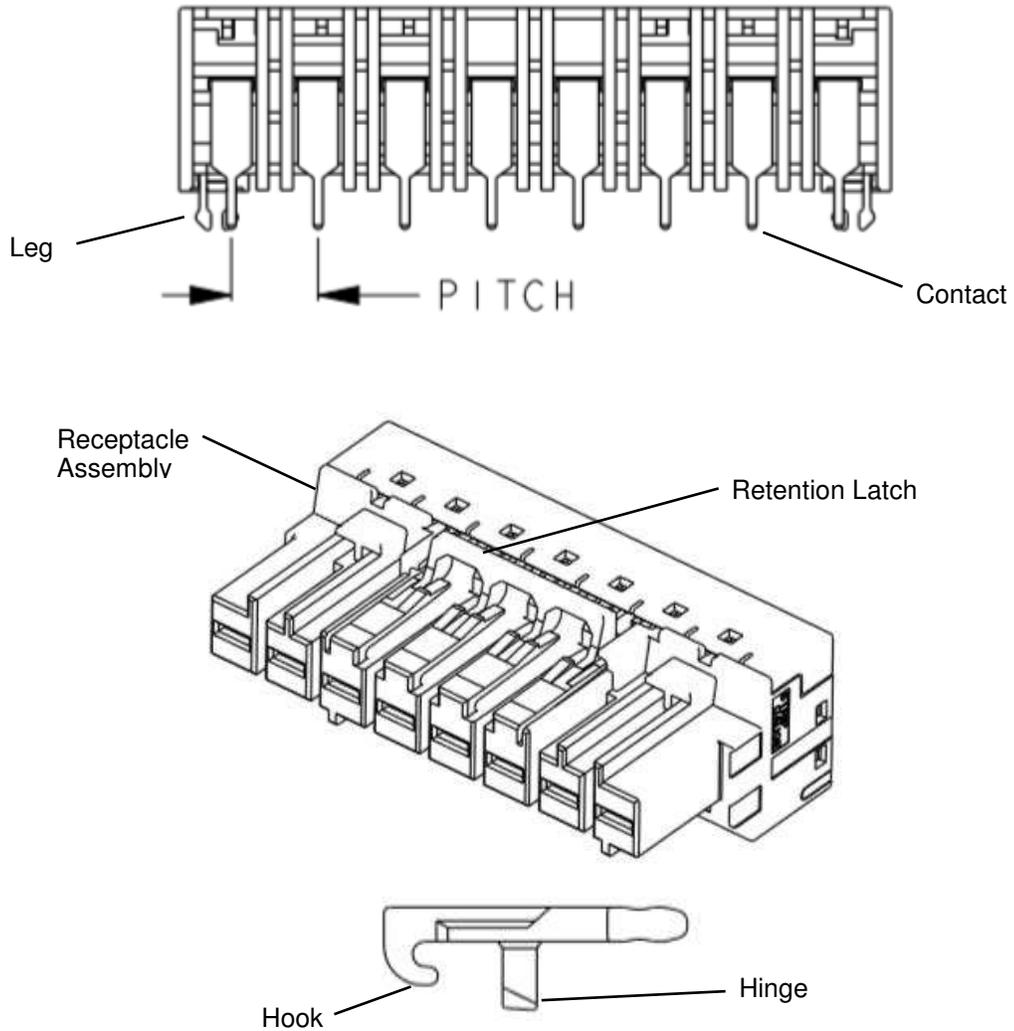


Figure 2(End)

2. REFERENCE MATERIAL

2.1. Customer drawings

Customer Drawings for the connectors are available from the service network. The information contained in Customer Drawings takes priority if there is a conflict with this specification or with any technical documentation supplied by TE connectivity.

2.2. Specifications

Product Specification provides test and performance requirements.

D4950:108-140216

3. REQUIREMENTS

3.1. Storage

A. Ultraviolet Light

Prolonged exposure to ultraviolet light may deteriorate the chemical composition used in the pc board connector material.

B. Shelf Life

To prevent damage to these connectors, they should remain in the container until ready for installation. Also, to prevent possible storage contamination, the connectors should be used on a first in, first out basis.

C. Chemical Exposure

Do not store connectors near any chemical listed below as they may cause stress corrosion cracks in the connector.

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

3.2. Polarization

Design configuration prevents header and receptacle assemblies from being mated incorrectly.

3.3. PC Board Layout

A. Single connector

Use a pc board with a nominal thickness of 1.6mm. Customer drawings provide a complete definition of pc board layout.

3.4. Wire selection, Preparation and Installation

A. Selection

The connectors will accept wires with conductors of the sizes defined in Figure 3.

B. Strip Length

The wire must be stripped to the proper dimension to ensure correct insertion depth in the connector. Excessive conductor will be exposed if the strip length is too long and entrapment of the insulation of improper termination will result if the strip length is too short. See Figure 3 and 4.

C. Applicable Ferrule Size

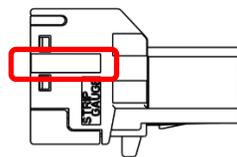
The ferrule size of crimp part that can be inserted to this connector refer to Figure 3 and 4

D. Installation

Opener must be used to open and close the spring. Wire insertion process refer to Figure 5. Wire release process refer to Figure 6.

Series	Pitch	Applicable wire		Applicable Ferrule Size		STRIP LENGTH(mm)	Opener
		Solid/Stranded	Flexible	Crimp Height ①	Crimp Width ②		
D4950	7.5	AWG16-10 1.5-4SQ	AWG16-10 1.5-2.5SQ	2.7MAX	3.3MAX	10.5±0.5	2349891-1

Figure 3



Refer to Strip gauge on Receptacle assembly

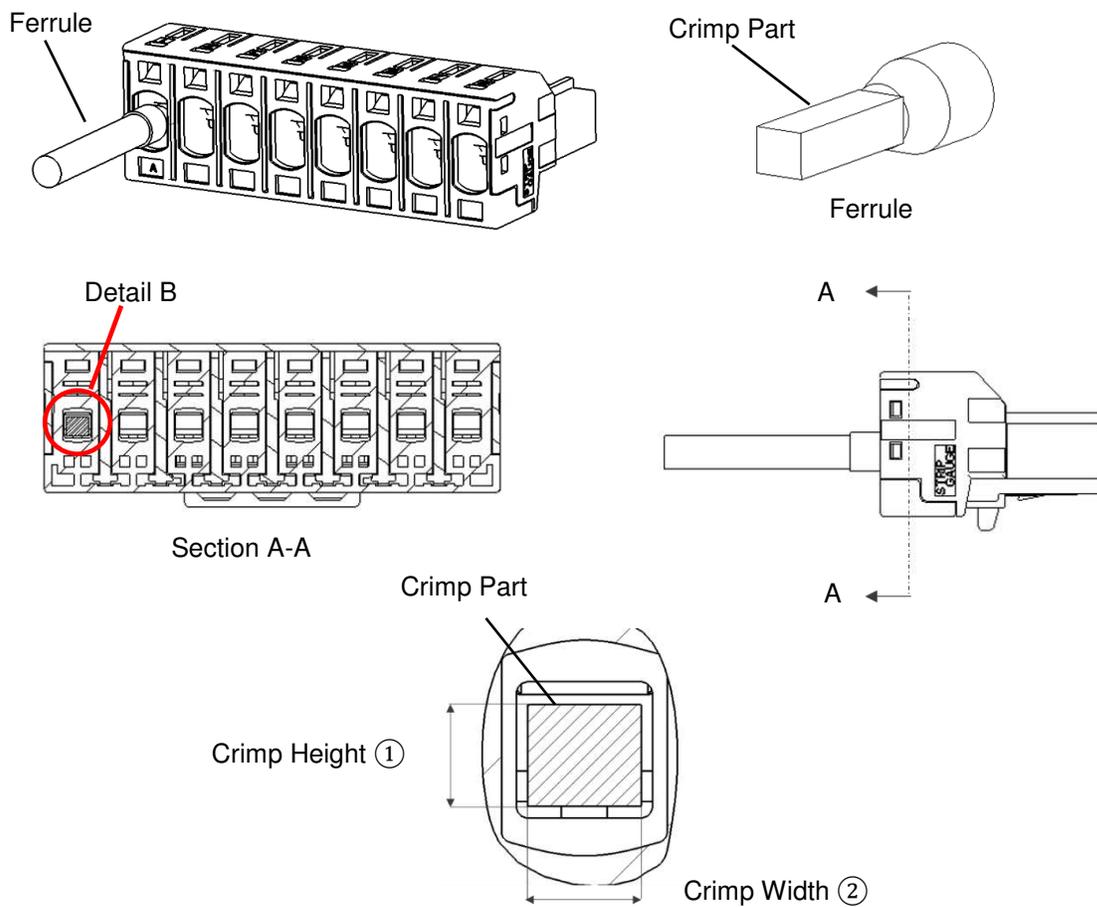


Figure 4

- (1) Set the hook of opener to the opener hole
- (2) Set the hinge of opener to the spring slot
- (3) Push the opener until cable insertion hole opens to the required size.



Do not push strongly after opener stop, there is possibility of damage to Receptacle assembly or Opener

- (4) The wire inserted into the Wire Entry until the wire stop and the insulation is even with the housing at the wire hole opening



Pull back on the wire to be sure it is secure and check there are no wire strands outside the connectors.



Do not operate when mate with Header assembly, there is possibility of damage to Header assembly and the pc board

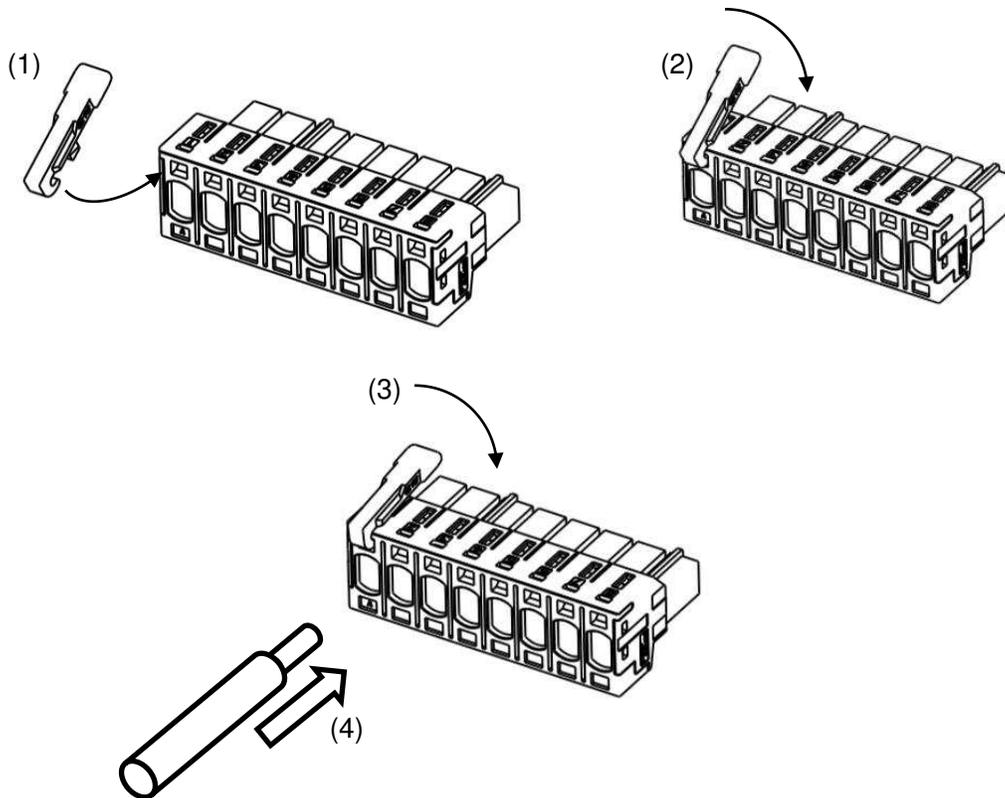


Figure 5

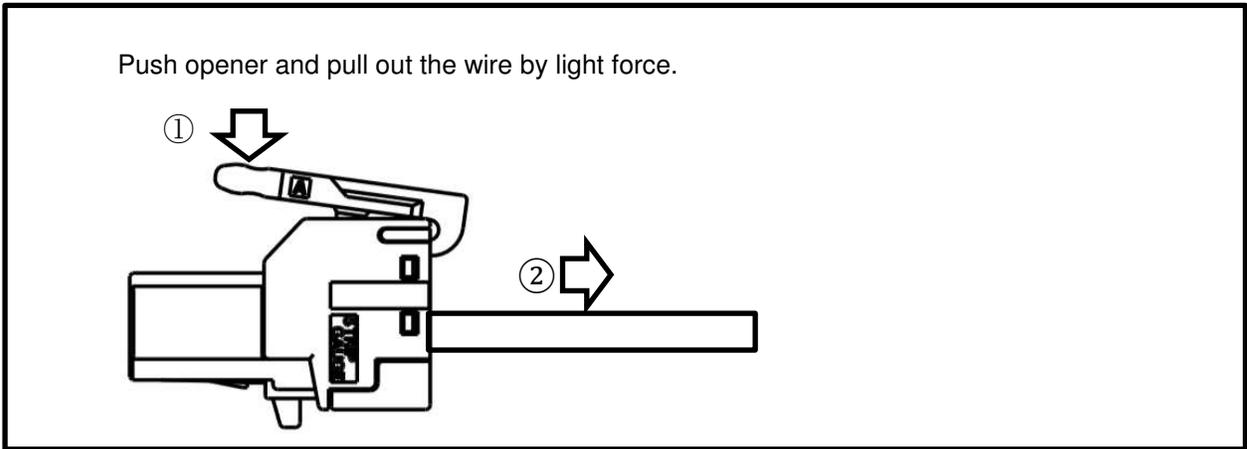


Figure 6

3.5. Soldering

3.5.1. Through-Hole Connectors

A. Process

The through-hole connectors can be soldered using wave soldering or equivalent soldering techniques.

The temperatures and exposure time shall be as specified in Figure 7.

SOLDERING PROCESS	MAXIMUM TEMPERATURE	IMMERSION DURATION
Wave	265±5°C (Wave)	10±1 Seconds
Manual (Soldering Iron)	360±10°C	5±0.5 Seconds Without Pressure

Figure 7

3.6. Repair

Damaged wires can be removed from receptacle connectors and replaced. If connectors are damaged, it cannot be repaired.

3.7. Mating with Header Assembly and Receptacle Assembly

Insert Receptacle Assembly straightly to Header Assembly until click sound is heard.



Do not touch the retention latch when inserting.

3.8. Un-mating with Header Assembly and Receptacle Assembly

Un-mate connector after the retention latch is depressed completely.



If un-mating connector without the retention latch is depressed completely, there is possibility to damage assemblies, cable and PCB.

4. VISUAL AID

Figure 8 shows typical application of DYNAMIC PUSH-IN Connectors and calls out the conditions that production personnel should check to ensure a good installation. For dimensional inspection, refer to the details in the preceding pages of this specification.

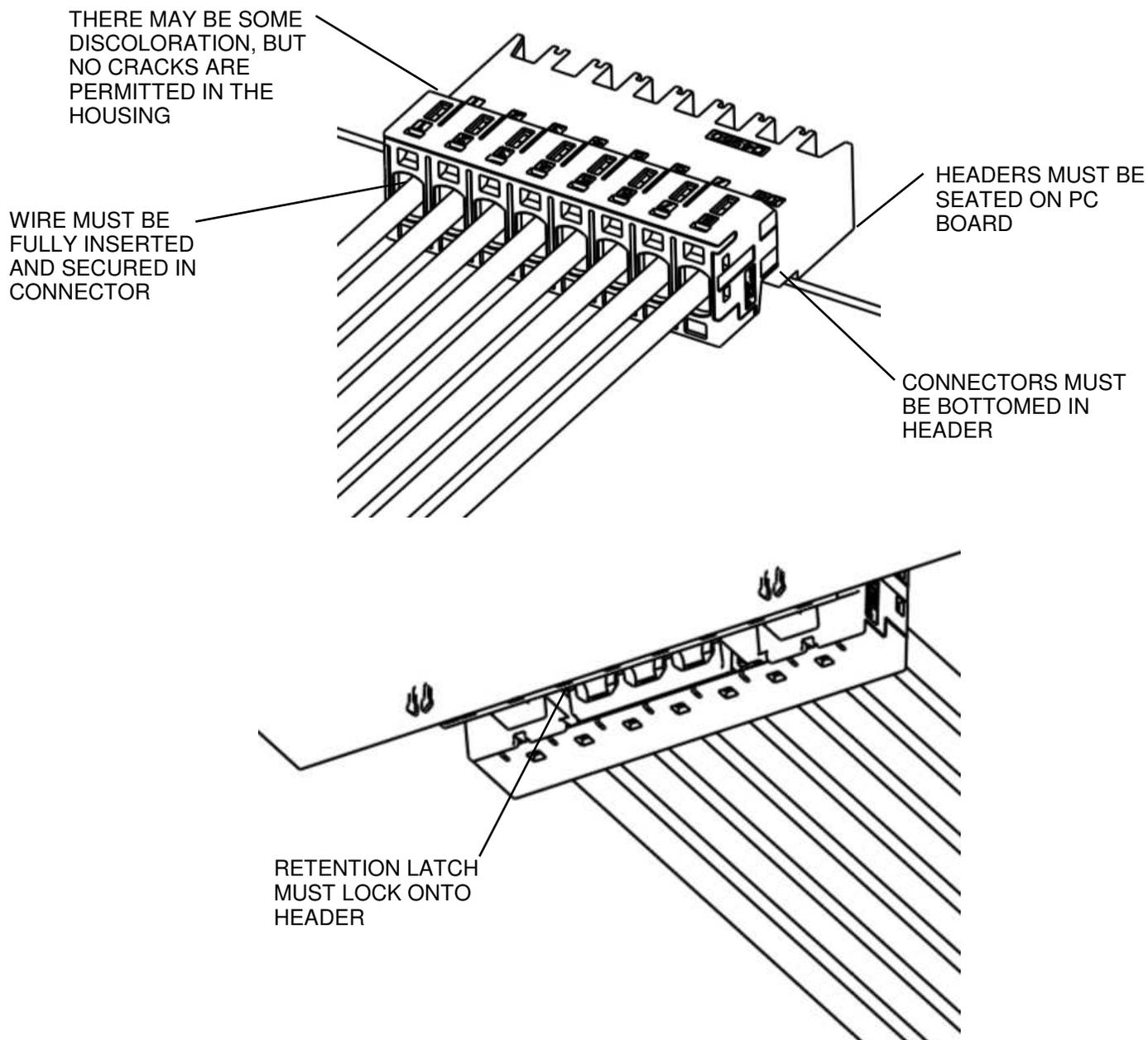


Figure 8