

25JUL019 Rev. A

## D2950 FIELD INSTALLABLE SPRING CLAMP CONNECTOR

1. Introduction

This Instruction Sheet describes the handling method of the D2950 field installable spring clamp connector (Receptacle Assembly and Header Assembly). Please refer to following Product Specification for a detailed product performance.

D2950 FIELD INSTLLABLE SPRING CLAMP CONNECTOR Product Specification: 108-140221

2. Composition

Dynamic D2950 is composed of the Receptacle Assembly and the Header Assembly. The circuit symbol is marked to the Assemblies. Connect cable correctly after symbol confirmation. Refer to Fig1 for composition









- 3. Instruction of cable connection and extraction
- 3-1 Cable Strip

(1) Use applicable size cable (Fig2). And strip the cable to  $8\pm0.5$  mm. (Fig3)

②If there is twist, bend or feazing. Please correct them. After correcting, check strip length. If there is excessive deformation, do not use the cable.

③Check the cut surface of conductor and insulation are flat.

AWG	Area of conductor [mm <sup>2</sup> ]
AWG22	0.32
AWG20	0.52
AWG18	0.82
AWG16	1.3
AWG14	2.1

%Insulation Diameter 3.8mm Max.Fig. 2 Applicable Cable



Fig. 3 Strip Length



3-2 Instruction for cable connection (Fig.4)

1 Set the hook of opener(2347681-1) to the opener hole.

②Set the hinge of opener(2347681-1) to the spring slot.

③Push the opener(2347681-1) until cable insertion hole opens to the required size.

Do not push strongly, there is possibility of damage to opener (2347681-1) and Receptacle Assembly.

\*About 30N is enough for AWG14 cable.

④Insert the cable to cable insertion hole. (Fig.4)

1) Cable insulation Diameter < 2.4mm

The cable should be inserted until aligning cable insulation and end of guiding taper straight line.

2) Cable insulation Diameter  $\geq$  2.4mm

The cable should be inserted until cable insulation contact the guiding taper.



Fig.4 cable connection (Cont.)





Fig.4 cable connection (End)

3-3 Confirmation for cable connection (Fig.5)

Pull the cable softly and confirm that cable does not come off. (Do not pull strongly)



Fig.5 Confirmation

3-4 Cable extraction (Fig.6)

Push the opener until cable guide hole opens to the required size. Extract the cable.



Fig.6 Extract cable



### 4. Header Assembly

The Header Assembly is PCB mount Horizontal type.

### 4-1 Recommended PCB

Through hole type PCB is recommended. Refer to Drawing for layout and thickness.

### 4-2 Mount Header Assembly to PCB

Insert straight until the Header Assembly is fixed to PCB by retention leg. (Fig.7) Confirm that there is no float and not tilt. (Fig.8)



# Fig.7 Mount to PCB



Fig.8 Bad example



#### 4-3 Flow solder mounting

This product is lead free correspondence. Please set to appropriate temperature profile. Refer to Product Specification: 108-140221.

4-4 Soldering by hand work

This product is lead free correspondence. Please set to appropriate temperature. Refer to Product Specification: 108-140221

#### 5. Mating Receptacle Assembly and Header Assembly (Fig.9)

Insert Receptacle Assembly straightly to Header Assembly until click sound is heard. \*Do not touch the lock lever when inserting.



Fig.9 Mating

Unmating Receptacle Assembly and Header Assembly (Fig.10)
 Unmate connector after lock lever is depressed completely.
 If unmating connector without lock lever is depressed completely, there is possibility to damage assemblies, cable and PCB.





- 7. Others
- 7-1 When using in a place with a lot of vibration, fix the position 100 mm from the Receptacle Assembly. (Fig.11)
- 7-2 Avoid mounting to which cable is pulled in excess.
- 7-3 Don't use Opener for D3900 and 3950 (1981045-1). There is possibility of damage the Receptacle Assembly. Opener Part Number for Dynamic D2950: 2347681-1



Fig.11 Fix position of cable