

DYNAMIC CONNECTOR D5900 SERIES

1. INTRODUCTION

This Instruction Sheet describes the operation method of DYNAMIC CONNECTOR D5900 series. Please refer to product standard 108-140022 for a detailed product performance of the connector.

2. COMPOSITION

DYNAMIC CONNECTOR D5900 is composed of the Receptacle assembly and the Header Connector. The circuit number is marked to the Receptacle assembly for correct installation.

3. RECEPTACLE ASSEMBLY

3.1. Receptacle assembly with spring opener (2260828-1)

- 3.1.1 Insert the hook head of spring opener (2260828-1) into a square hole on the wire insertion side of the receptacle assembly.
- 3.1.2 Push the lever of the spring opener (2260828-1) with thumb at illustrated direction in Fig. 1 until the rib on the opener enters the hole firmly.



*Operate the spring opener with receptacle assembly unmating with header connector, or the header connector and PCB would be damaged.





Fig. 1



3.2. Wire Strip

3.2.1 Applicable wire size: AWG $\#8 \sim \#16(1.3 \sim 8.4 \text{ mm2})$, Strip length: $13.7 \pm 0.5 \text{ mm}$. *Strip length could be confirmed by comparing with strip gauge on 2 sides of receptacle assembly as Fig.2 shows.



- 3.2.2 In case of any undesirable twist, bending or loosening of conductors after stripping, fix the shape of the wires and confirm length with strip gauge before using. *Do not use extremely deformed wire after stipping.
- 3.2.3 Cutting surface of conductor and insulator of processed wires shall be smoothly flat.



Fig.2

3.3. Method of connecting wire with spring opener (2260828-1)

When reconnecting with other wires, only wire of same diameter and stranded condition could be used.

- 3.3.1 Install the spring opener to the receptacle assembly and push the lever of opener at illustrated direction in Fig.3.
- 3.3.2 Insert wire until the end while pushing the lever of opener simultaneously. Do not over push the opener when it touches receptacle assembly.
- 3.3.3 Release the lever of opener and pull the wire slightly to confirm if the cable is fixed by spring.





4. HEADER CONNECTOR

The header connector is PCB installable connector with metal contact assembled. Horizontal type shown in Fig.4 is available. Recommended PCB thickness is 1.6mm~2.4mm±0.1. Before soldering procedure, push the header connector straightly until the retention legs are fixed to the holes on PCB and confirm no gap between connector and PCB.



Good PCB installation



Fig. 4

4.1. Recommended PCB dimensions

Through-hole type PCB is recommended for soldering of D5900 header connector. Recommended PCB dimensions are defined on the customer drawing.

4.2. Flow solder mounting

This product is lead-free compatible product. An appropriate temperature profile is mandatory for the soldering procedure. Please refer to Product Specification 118-140022 for details.

4.3. Soldering procedure by hand

Please refer to Product Specification 118-140022 for details.

5. MATING

In mating procedure, mate the receptacle assembly with header connector completely until hearing the locking sound with clear click feeling.

In unmating procedure, release the lock by pushing the lock down and extract the receptacle assembly out of the header connector.



*Do not extract the receptacle assembly strongly with incomplete lock releasing, or the lock, housing, contact and wire might be damaged.



6. APPLICABLE WIRE

Wires in Table.1 are available for D5900 series connector.

SQ(AWG)	Insulation diameter
1.3(#16)	
2.15(#14)	
3.3(#12)	8mm Max.
5.3(#10)	
8.4(#8)	

Table. 1

7. OTHERS

- 7.1 Wrap the wires as close as possible to the connector side (as shown in Fig.6). Recommended wrapping position in vibration environment is 10 cm max.
- 7.2 After mating with heading connector, do not load excessive tensions to the wire.



