

1. Scope of guideline

This document defines the cable assembly process of DF38 series (DF38 - P -0.3SD, DF38 - P -SHL) and Micro coaxial cable(AWG#42-46).

2. Part Number

Item	Application
DF38 - P -0.3SD	Connector Unit
DF38 - P -SHL	Shell

= Pin counts

3. Connector Configuration

This connector (DF38 series) consists of "connector unit" and "shell". After soldering the inner conductor of micro coaxial cable on "connector unit", "shell" is assembled on the "connector unit".

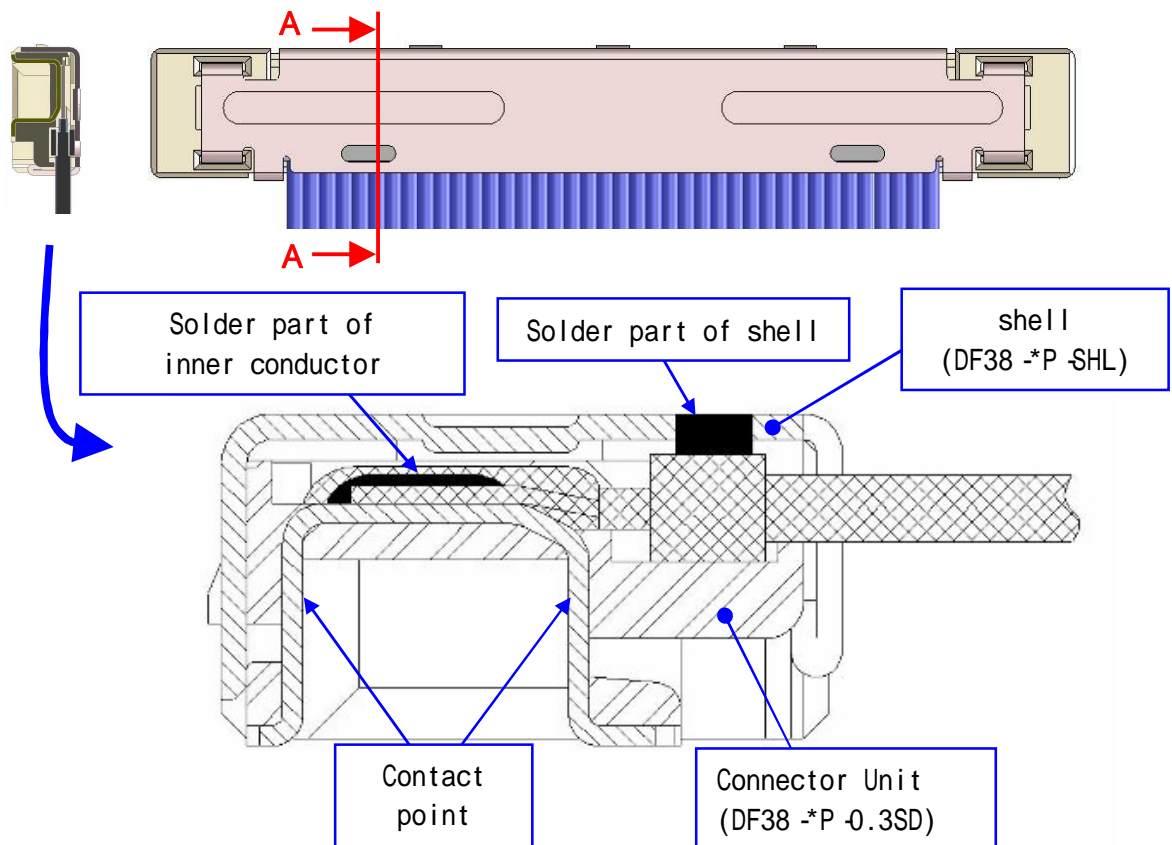



Figure3 -1.Connector diagram

COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
0				
名称 TITLE		 HIROSE ELECTRIC CO.,LTD.		
DF38 Series Assembly Guide Line		APPROVED	TS.SAKATA	07.12.04
		CHECKED	MN.KENJO	07.12.04
		DESIGNED	SZ.ONO	07.12.04
		WRITTEN	TH.YOSHIZAWA	07.12.04
技術指定書	TECHICAL SPECIFICATION	ETAD H0221	0	1 / 8

4. Applicable cable

Before assembly, alignment treatment should be done on the micro coaxial cable as described in following drawing. (Below figure shows an example how to set micro coaxial cable before cutting.)

* "n" shows pin counts.

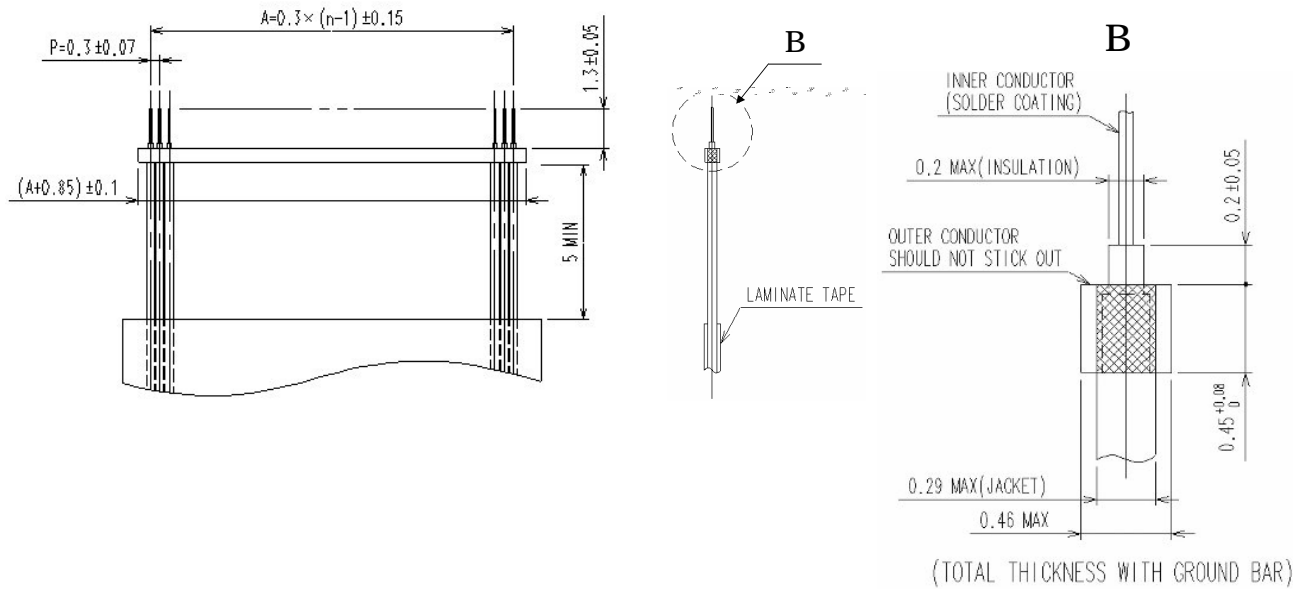


Figure 4-1.cable dimension

[Note] Dimension 0.45(+0.08/ 0)mm is the one after putting ground bar added on.
Outer conductor should not stick out from ground bar.
(Refer to figure 4-2.)
Compliant to Pb-free.

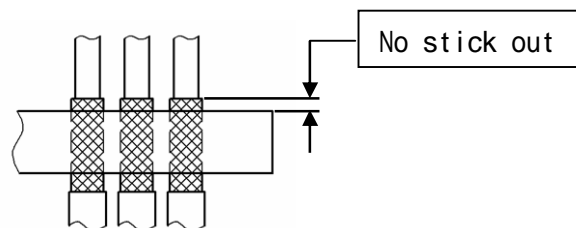


Figure 4-2. Outer conductor sticks out from ground bar

5. Assembly procedure

5-1. Cutting of the inner conductor

Please cut the inner conductor with the length as following drawing.

$$C = 1.3 \pm 0.05 \text{mm}$$

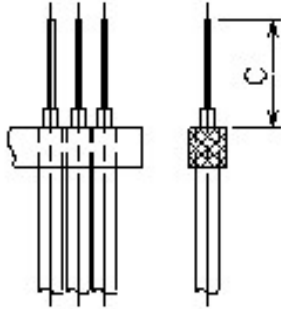


Figure5-1.Dimension of cutting
the extra inner conductor

5-2. Soldering / Cable setting

Please set a wire solder and a cable on connector unit.

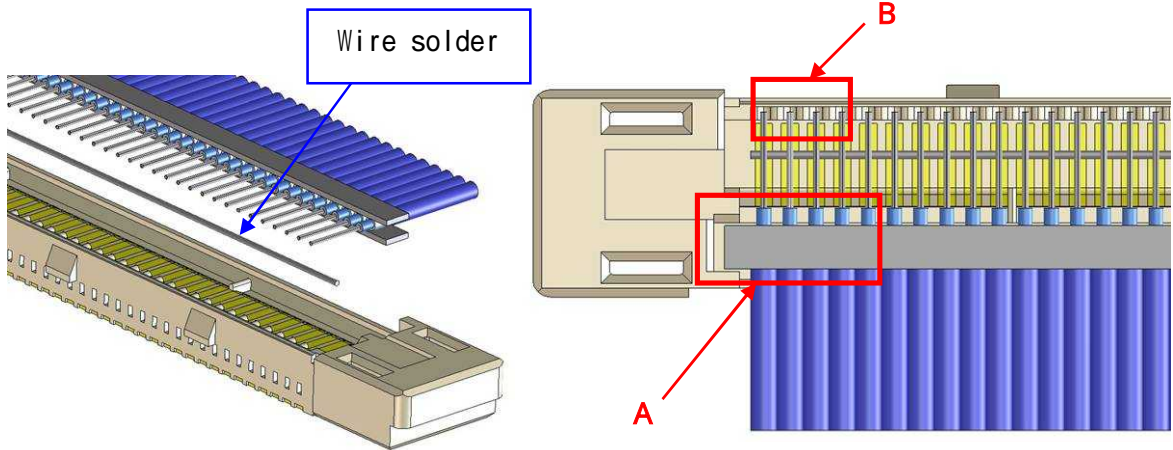


Figure5-2. wire solder / cable on connector unit

[Recommended solder size] Diameter: 0.1mm, Length: $N \times 0.3\text{mm}$ (N= Pin counts)

[Note 1] Please align the center of ground bar and the center line of ground bar hole (of the connector unit).

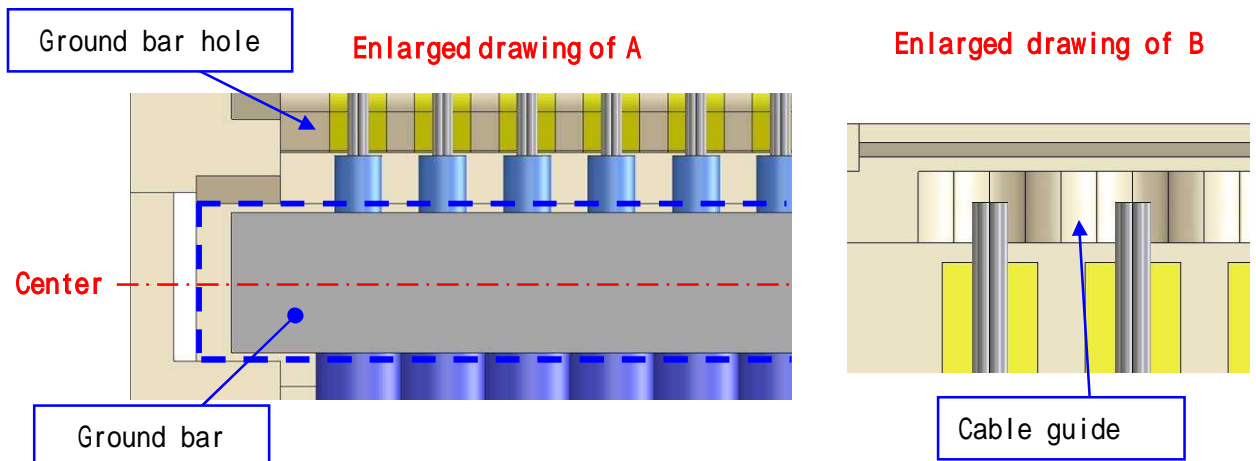


Figure5-3.Attention of cable setting

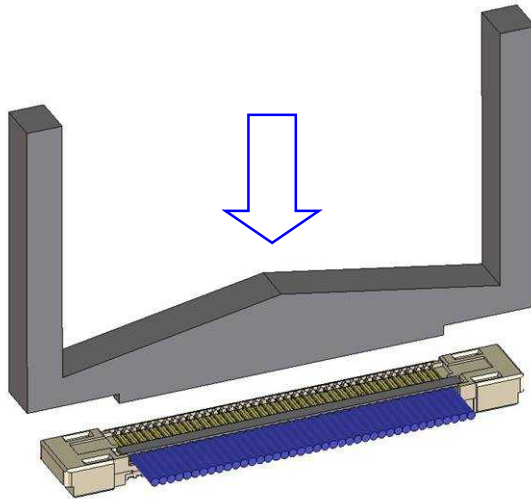
5-3. Soldering of inner Conductor

Please solder the inner conductor by pulse heater at once.

Please refer to the drawing as follows for the dimension of heater chip and fixator.

Item	Application
DF38 -*P/S0 -AD -A	Inner conductor soldering Jig

* : Pin counts



Soldering condition

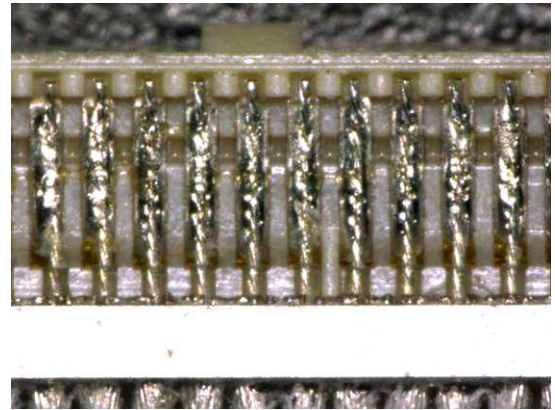


Figure5-4.Soldering of inner conductor

[Heat resistant condition for soldering]

(Method): Max270 degree within 5 seconds / Over 200 within 30 seconds

(Requirement): No mold melting

[Note]

Please make it sure that the front edge of the inner conductor will not uplifted as described in the drawing as follows (in order to prevent the shortage after shell assembly).

Be careful not to let the front edge uplifted.

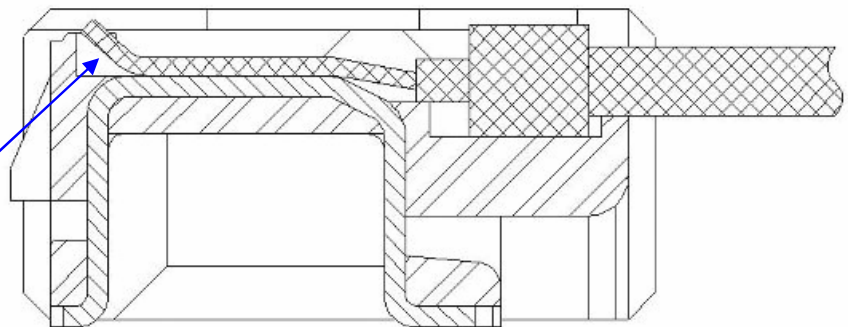
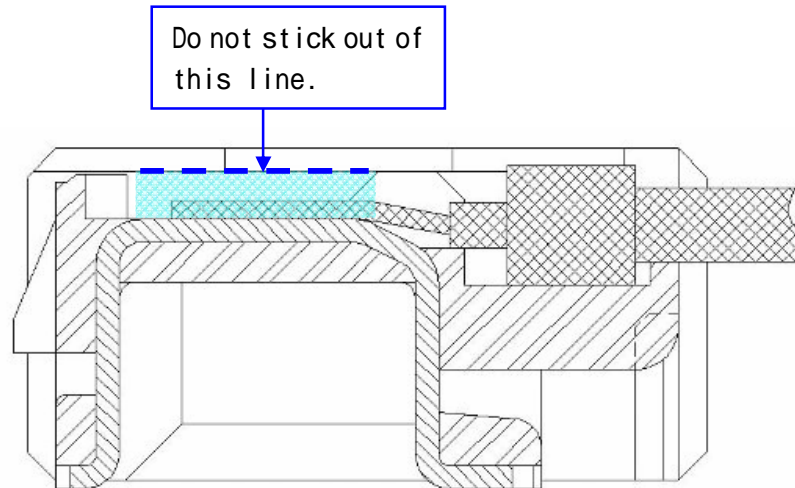


Figure5-5.Attention of inner conductor

5.4. UV Potting

To electrically insulate inner conductor from shell, soldering part needs to be coated with UV curable resin.

[Note 1] The UV curable resin should cover the area of inner conductor and soldering. Additionally please do not let the resin stick out from below line.



[Note 2] Please use 3033 made by Three Bond or similar product for UV curable resin. Please follow the recommended condition by UV curable resin manufacturer for the UV irradiating condition.

5-5. Shell assembly

Please assemble the shell into connector unit.

5.5.1 Assemble shell to the housing (Manual task / No jigs are needed) and press-fit in vertical direction (Refer to figure5-7).

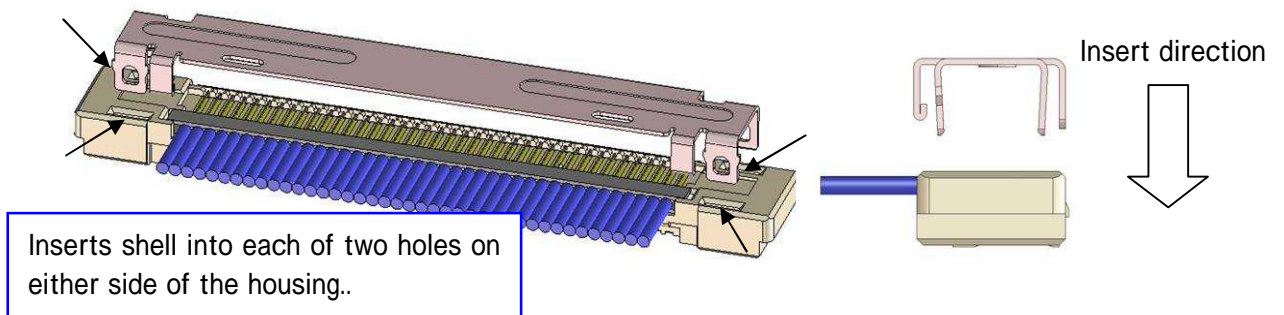


Figure5-7.shell assembly

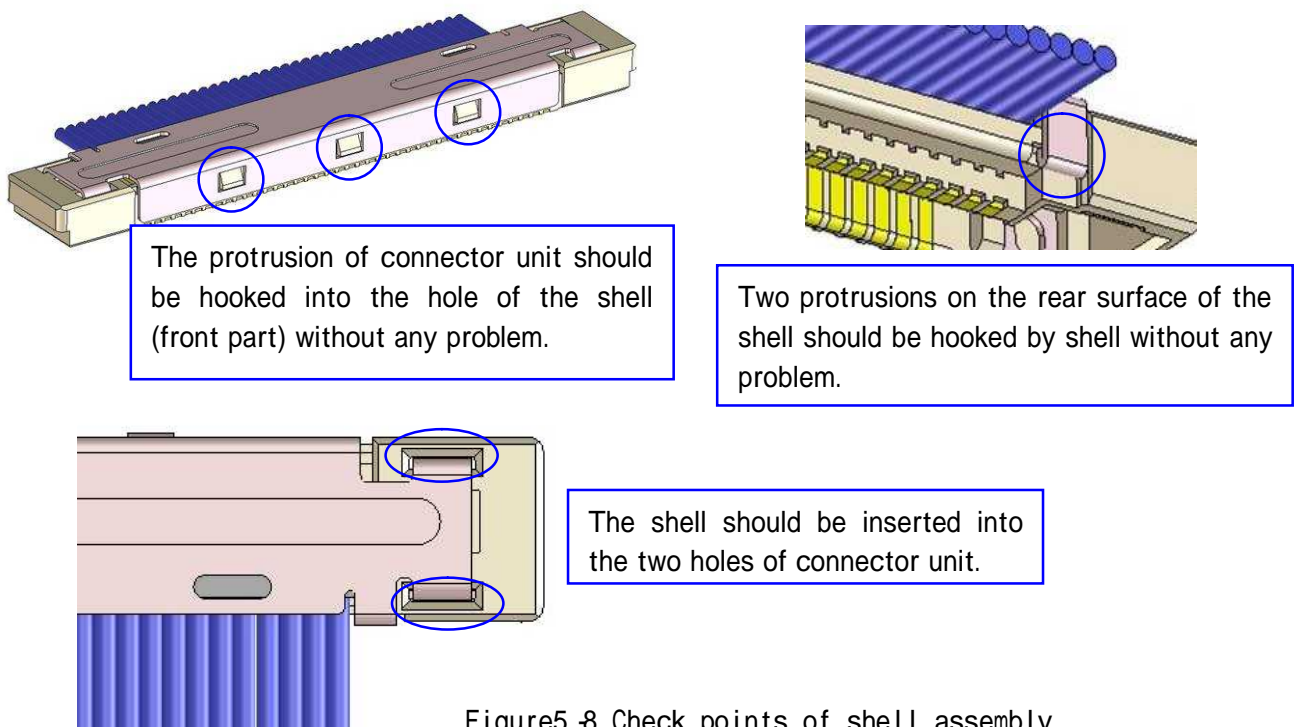


Figure5-8.Check points of shell assembly

5-6. Coating of the shell with soldering paste

Please coat the holes of the shell with soldering paste.

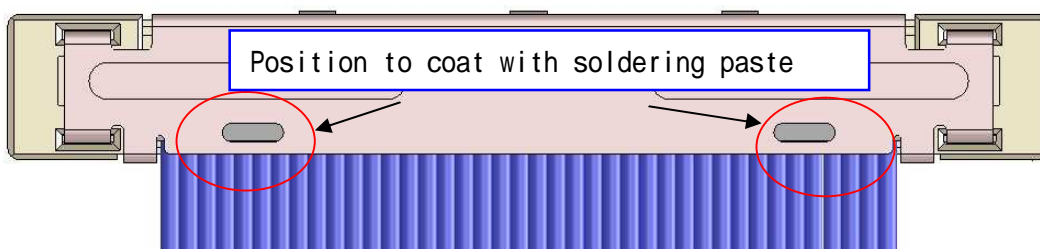


Figure5-9.Points of shell soldering

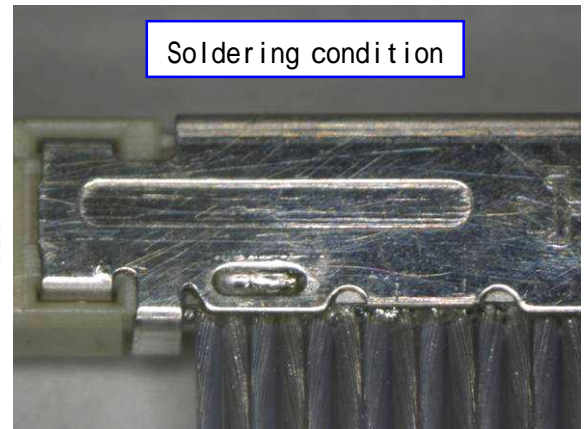
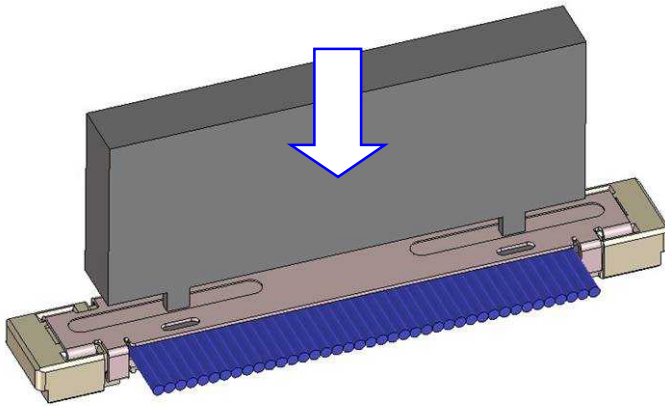
5-7. Soldering of the Shell

Please solder the shell and ground bar at once by pulse heater.

Please refer to the drawing as follows for the dimension of heater chip and fixator.

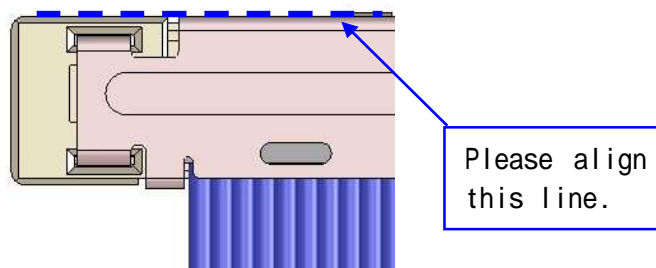
Item	Application
DF38 -*P/S0 AD-B	Shell soldering jig

* : Pin counts



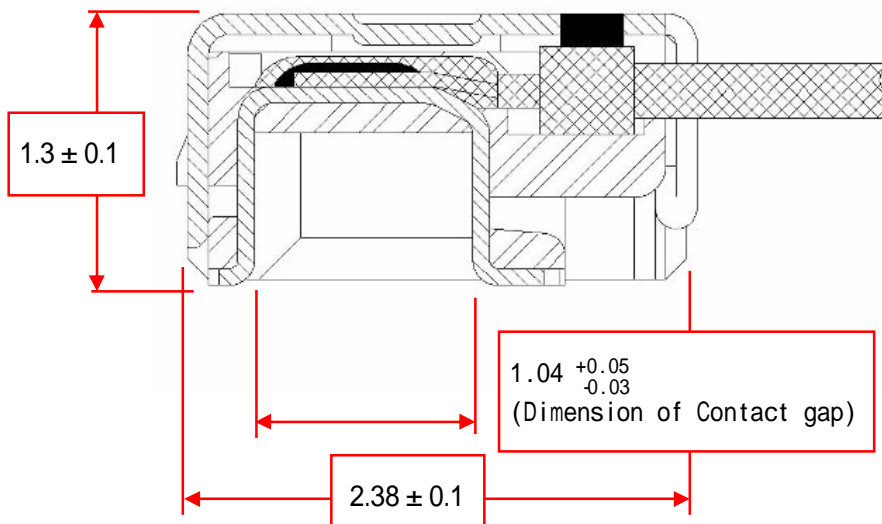
[Note 1] In this connector, soldering of the shell and ground bar insures the attachment of the cable to the connector. Please prevent from the pressure on the cable, and also prevent from mating with the receptacle connector before assembly is completed.

[Note 2] Please make sure to align the edge line of connector unit and shell when soldering.



[Dimension after assembly]

Following is the dimension after assembly is completed.



5-8. Electrical inspection

Receptacle connector for electrical inspection is as follows.

Item	Application
DF38#J -*S 0.3V	Receptacle connector for electrical inspection

* : Pin counts
: Classification

At electrical inspection process, please make sure that there is not any defect such as wire broken, damaged and deformed. Additionally please be careful not to apply force on one specific cable intensively, and not to pull cable out with angled direction.