

1. Scope

This document specifies the cable assembly processes of DF80 series(DF80※-※P-0.5SD, DF80※-※P-SHL) terminated with micro coaxial cable .

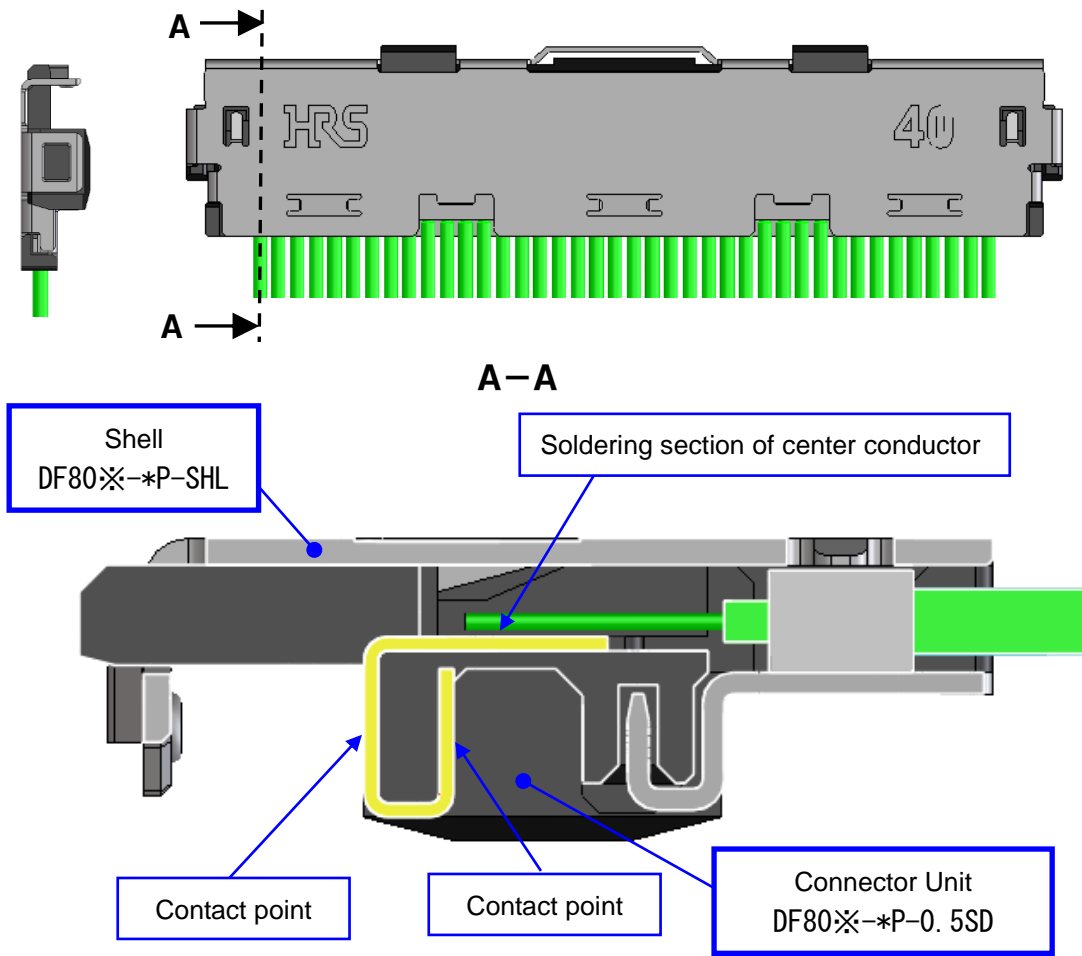
2. Part Number

Item	Description
DF80※-※P-0.5SD	Connector unit
DF80※-※P-SHL	Shell

※: Classification  
\*: Pin counts


3. Required Components

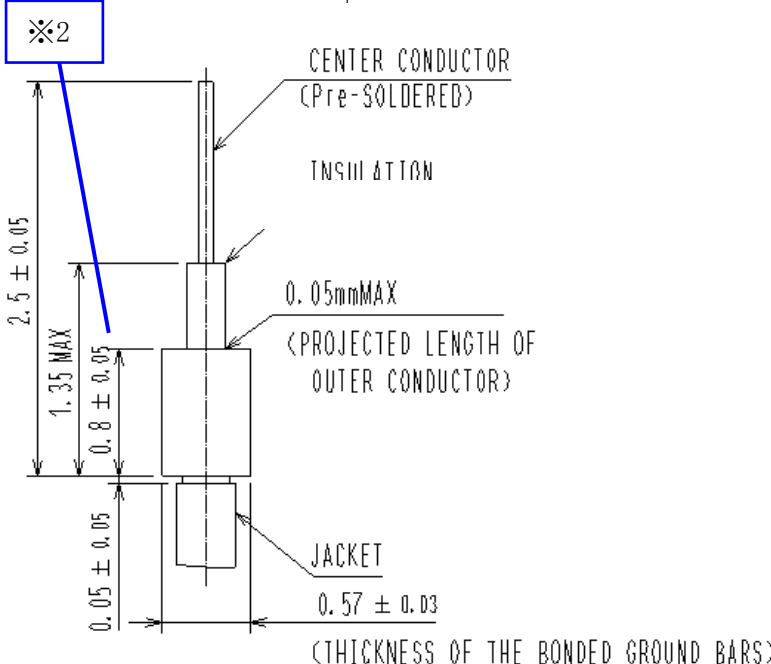
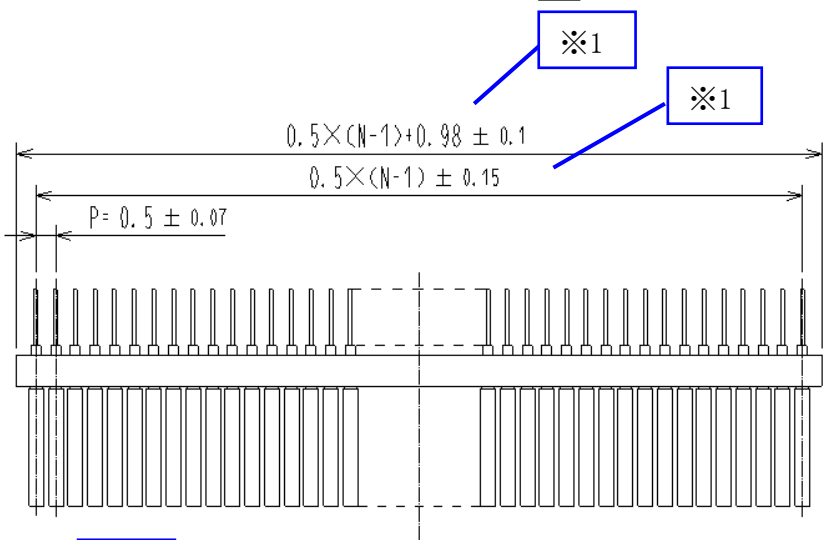
- The connector (DF80 series) consists of a connector unit and a shell.  
The assembly process is as follows;
- Solder the center conductor of micro coaxial cables / discrete cable to the connector unit
  - Assemble the shell to the connector unit



	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△	2	DIS-D-00001218 (B)	DS. YAMAKOSHI	MH. TSUCHIDA	16. 06. 02
名 称    TITLE  DF80 Series Assembly Manual			<b>HRS</b> HIROSE ELECTRIC CO., LTD.		
			APPROVED	TS. SAKATA	12. 07. 20
			CHECKED	TS. SAKATA	12. 07. 20
			DESIGNED	IO. DENPOUYA	12. 07. 20
			WRITTEN	IO. DENPOUYA	12. 07. 20
技 術 指 定 書    TECHICAL SPECIFICATION			ETAD-H0655		△    1 / 9

4. Applicable Cable

Cable preparation as shown below is required prior to the cable assembly: (Figure below shows an example of alignment before cut.) 

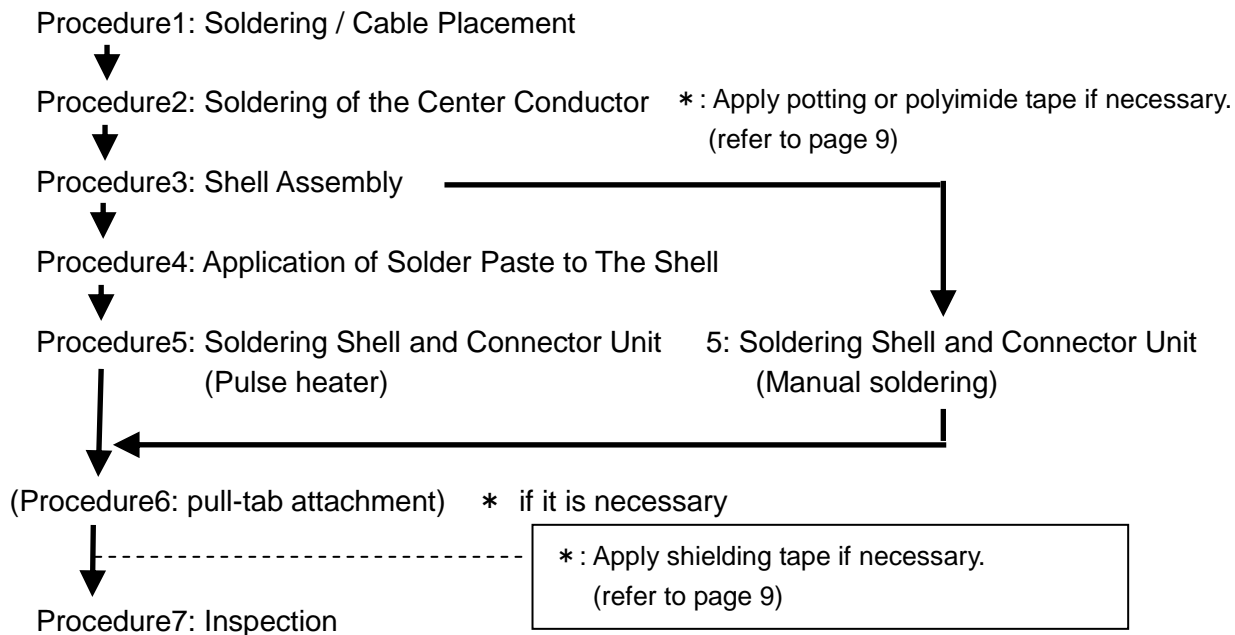


- Note : \*1 N means pin counts.
- Note : \*2 The dimension ( $0.8 \pm 0.05$ ) is the condition after bonding the ground bars.

## 5. Cable Assembly Procedure

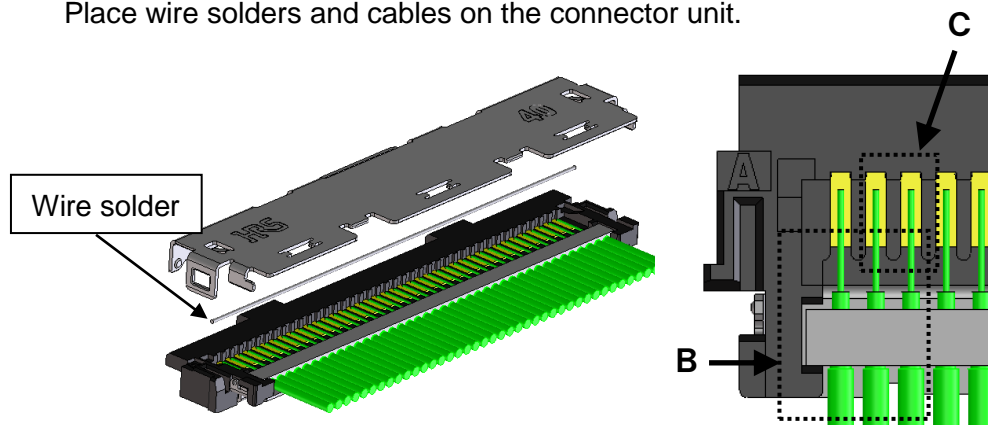
An example of cable assembly process is shown below.

### 5-1. Cable Assembly Procedure



### 5-2. Procedure1: Soldering / Cable Placement

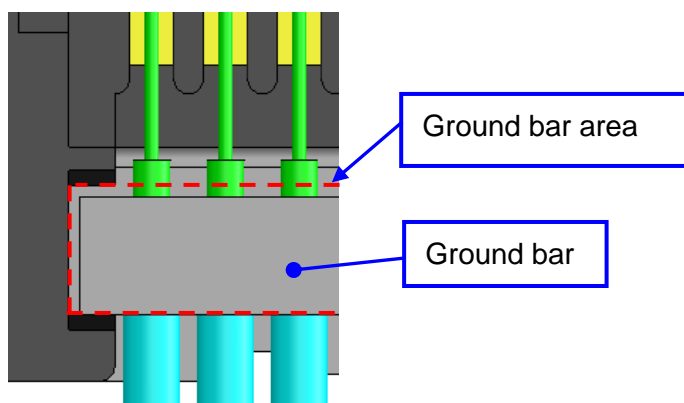
Place wire solders and cables on the connector unit.



Recommended wire solder size :  $\varnothing 0.15$       Length:  $0.5 \times N$ mm (N=Pin counts)

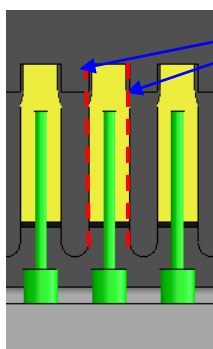
● Note : \* 3 Place a ground bar to be in the area shown below.

#### Enlarged View of B



- Note : \* 4 Cable assembly with the center conductor extending from the contact width could cause short circuit by solder bridge and/or deterioration of withstanding voltage performance. Carry the withstanding voltage check and make sure that the result satisfies the performance specified by Hirose.

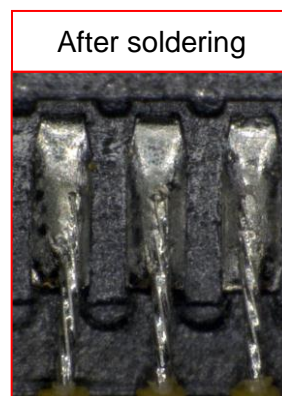
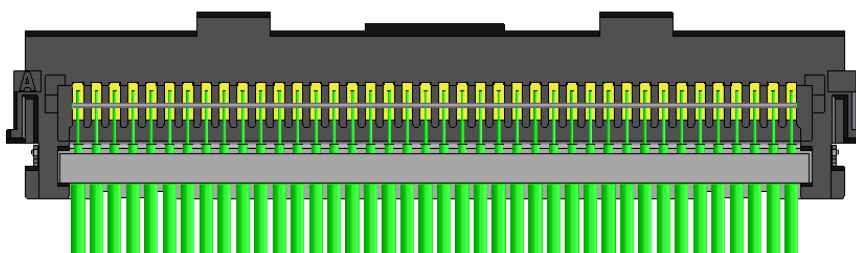
#### Enlarged View of C



Withstanding voltage failure could occur if the center conductor extends from these lines.

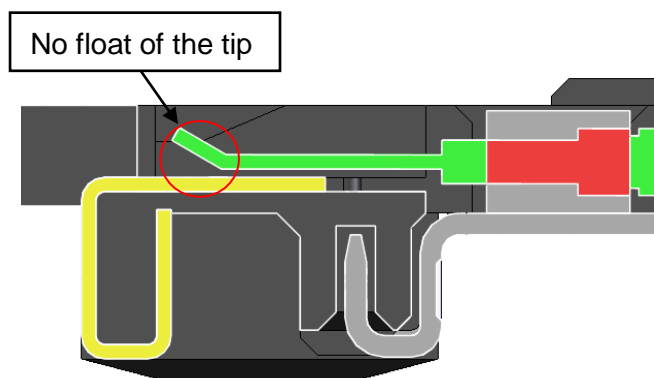
#### 5-3. Procedure2: Soldering of the Center Conductor

Solder all the center conductors at the same time with pulse heater.



- Heat conditions for soldering  
Method: Max 330 degree C up to 3 seconds / over 200 degree C up to 30 seconds  
Requirement: No melting of the insulator

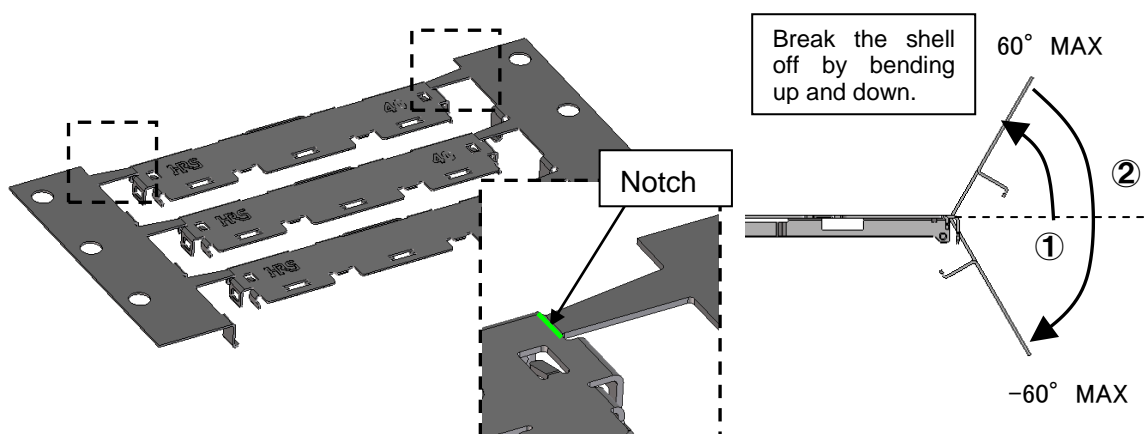
- Note : \* 5 Make sure that the tip of the center conductor will not float as described in the following figure in order to prevent the short circuit after the shell (DF80#-\*P-SHL) assembly.



#### 5-4. Procedure3: Shell Assembly

Assemble the shell on the connector unit - No tool is require

- 5-4-1 Break the shell off from the carrier by bending up and down at the notches.  
( $0^{\circ} \Rightarrow 60^{\circ}$  MAX  $\Rightarrow -60^{\circ}$  )

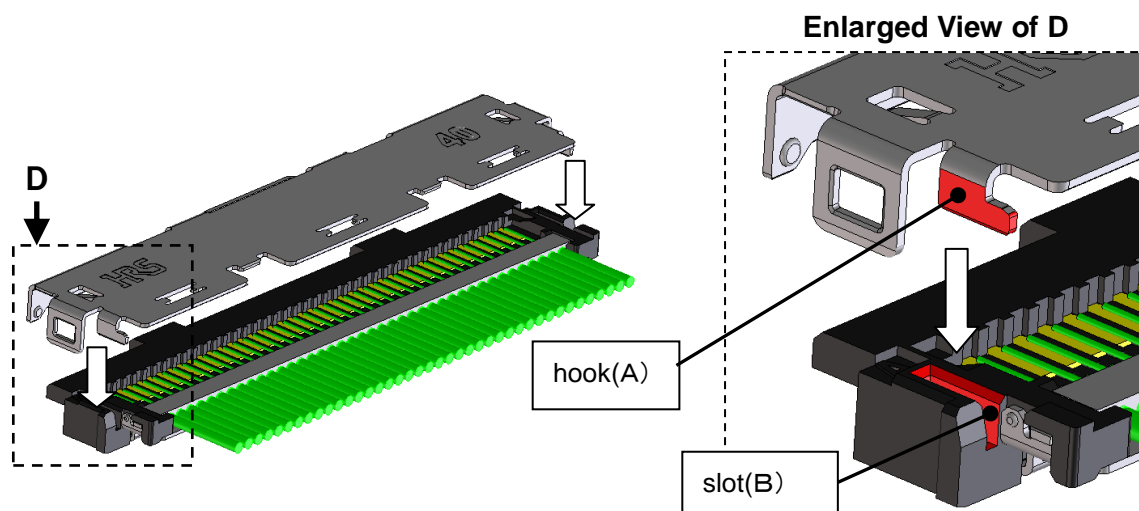



- Note : \* 6

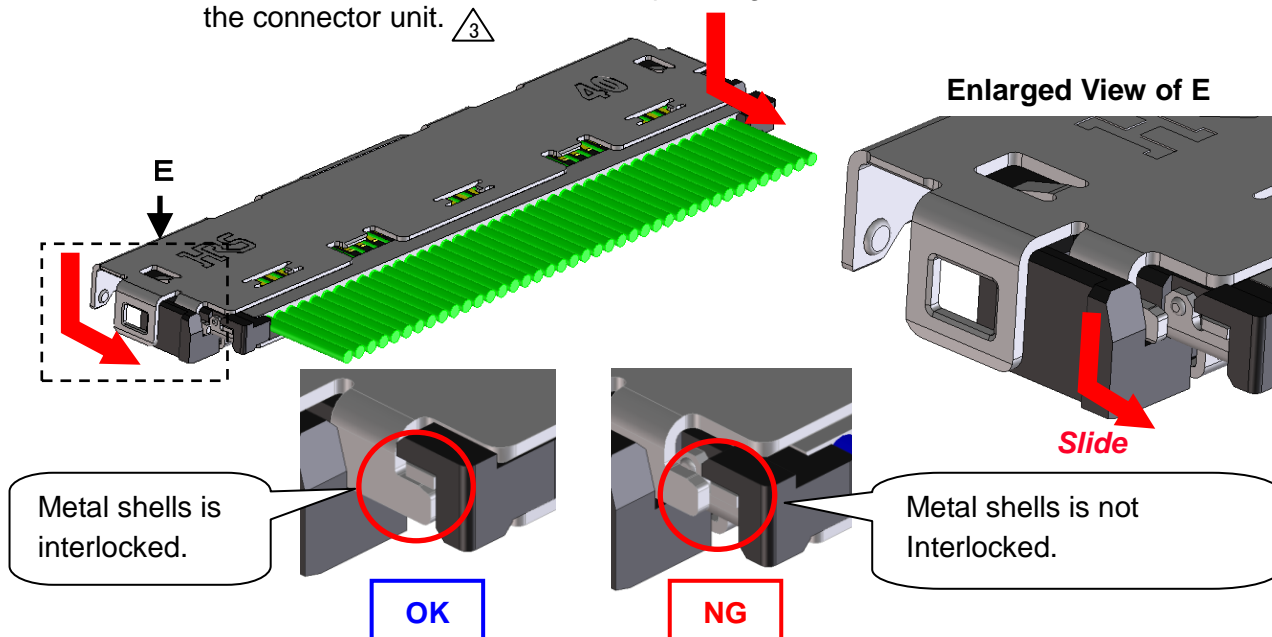
Do not bend over  $60^{\circ}$ , as breaking the notches of the shell by bending over  $60^{\circ}$  could generate burr at the broken edge.

In addition, if breaking the shell by bending over  $60^{\circ}$ , please confirm there is no burr.

- 5-4-2. Insert the hook (A) of the shell into the slot (B) of the connector unit.



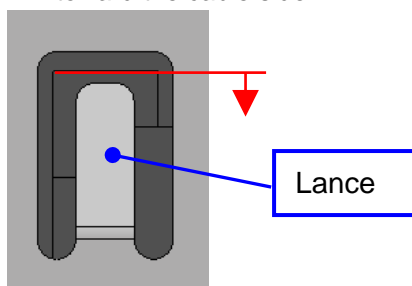
5-4-3. Slide the shell toward cable side as pressing the shell down to the connector unit. 



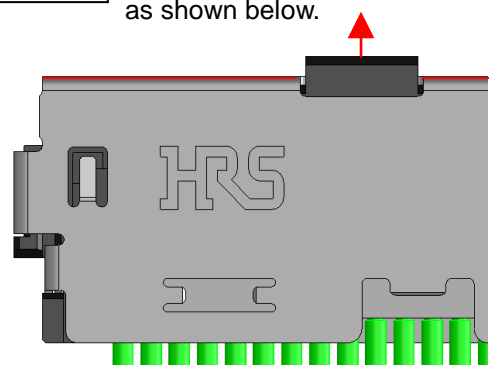
※Note 7

Make sure that the connector unit and the shell properly fit together as shown in below pictures.

**Top View** Make sure that the lance of the shell exceeds the line indicated toward the cable side.

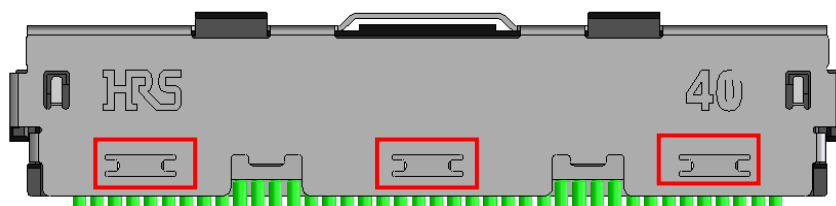


**Top View** Make sure that the connector unit exceeds the line of the shell as shown below.



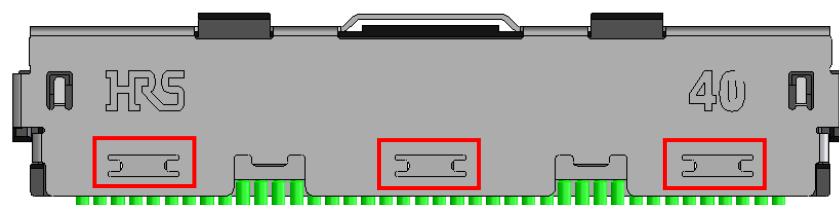
5-5. Procedure5: Application of Solder Paste to The Shell

Coat the opening of the shell with solder paste.(3 positions)



5-6. Procedure 5: Soldering Shell and Connector Unit (Pulse heater)

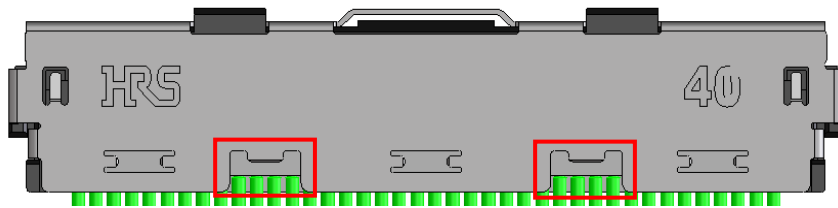
Solder the metal portions of the shell and the connector unit. (3 positions)



After soldering



**5-7. Procedure 5: Soldering Shell and Connector Unit (Manual soldering)**  
Solder the metal portions of the shell and the connector unit. (2 positions)



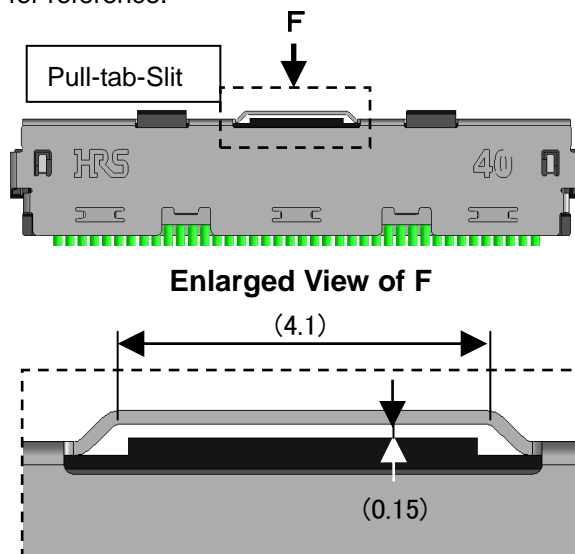
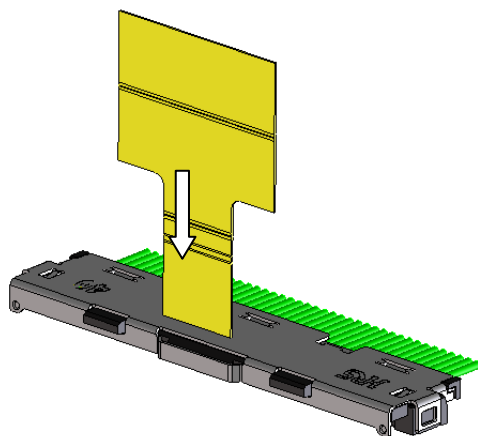
**5-8. (Procedure 6: pull-tab attachment)**

In case a pull-tab is necessary, please follow below procedures.

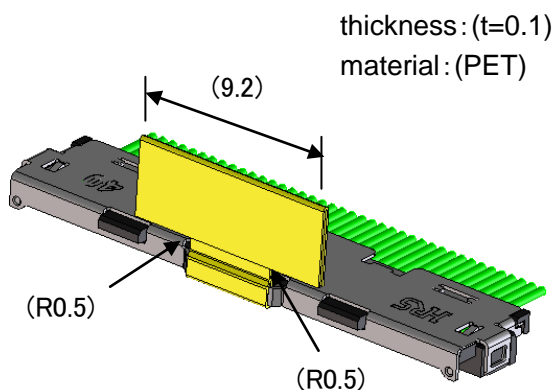
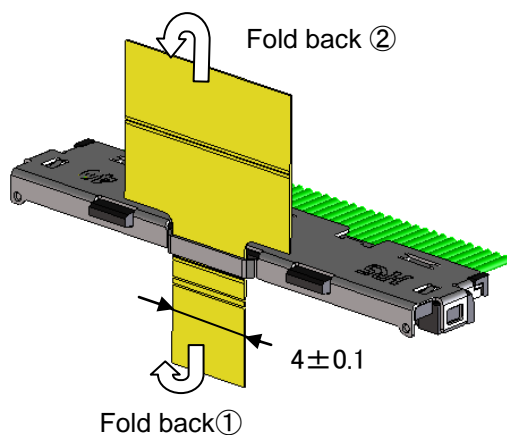
※ The design of the pull-tab is an example.

Dimensions and material written inside ( ) are for reference.

5-8-1. Pass the pull-tab through a pull-tab-Slit on the shell.

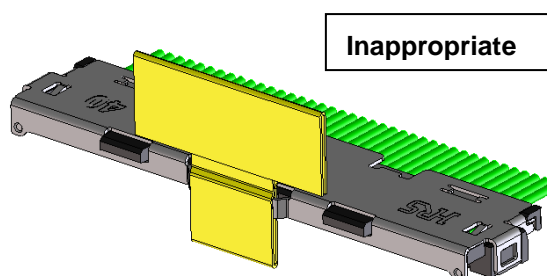
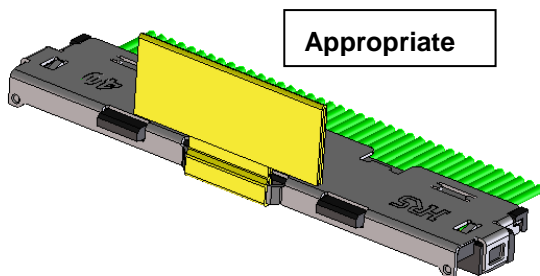


5-8-2. Fold the pull-tab back as indicated with arrows and in the specified order.

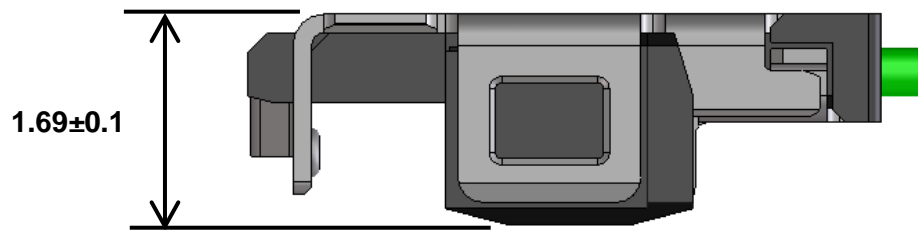


**※Note8**

Excessively loose-fitting pull-tab could be pinched during mating and cause contact failure.



5-8. Procedure7: Finished Dimension  
Finished dimension is shown below.



5-9. Procedure7: Inspection

Check the continuity and the voltage proof to verify that the product satisfies the performance as specified in our specification sheet.

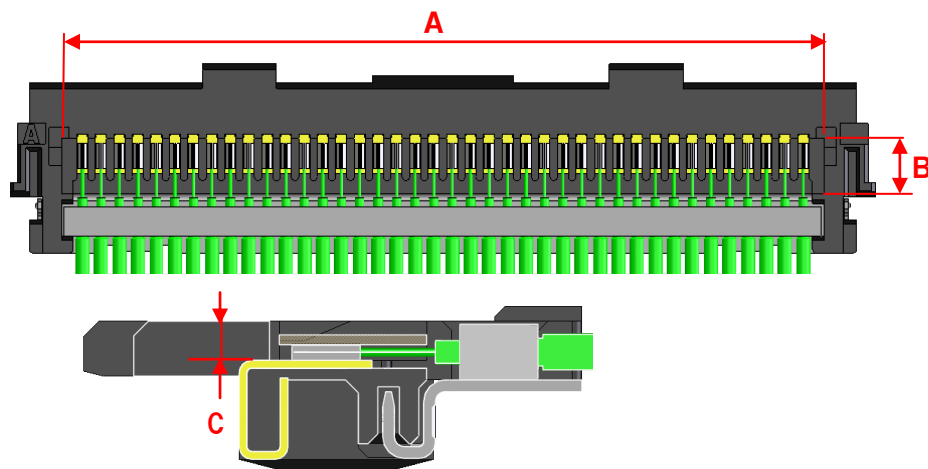
■ SPECIFICATION SHHET ELECTRIC CHARACTERISTICS

INSULATION RESISTANCE	50MΩ MIN
VOLTAGE PROOF	NO FLASHOVER OR BREAKDOWN UNDER AC150 V, FOR 1 MINUTE.



**Area of Resin sealing or polyimide tape attachment**

Resin sealing or polyimide tape attachment is allowed to the area indicated as shown.



Size list

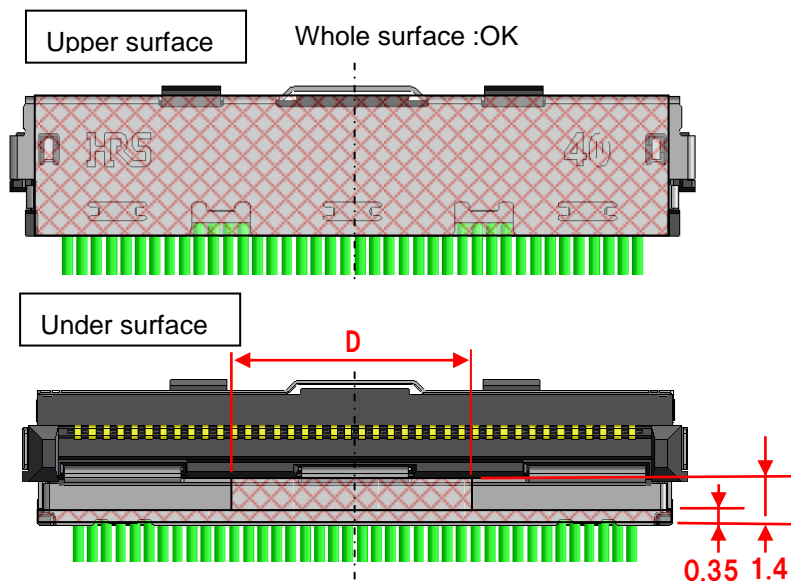
contact	A	B ※1	C ※2
30P	10.5mm	1.45mm	0.4mm
40P	15.5mm		
45P	18.0mm		
50P	20.5mm		

※1: Please contact us for the dimension C of DF80D-\*P-0.5SD with cable alignment guide design, as the dimension is different.

※2: Note that the dimension includes the height of cable conductor and solder fillet, and select the tape to satisfy the dimension.

**Area of shielding tape attachment**

Shielding tape attachment is allowed to the area indicated as shown.



Size list

contact	D
30P	4.0mm
40P	9.0mm
45P	11.5mm
50P	14.0mm