1. Scope

This document defines the cable assembly procedure of ZX20 series, Micro USB plug of horizontal thru-hole type.

2. Applicable connector

ZX20 consists of a connector unit and a shield plate C.

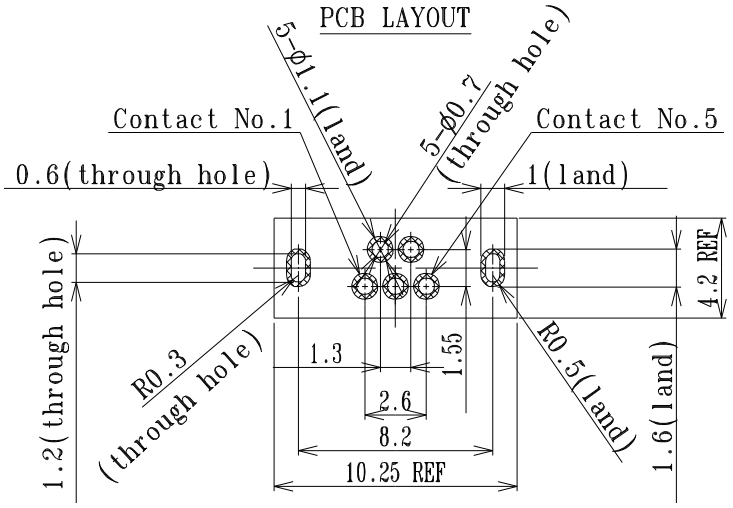
< Micro USB B plug >	
< Connector unit >	
HRS P/N	ZX20-B-5S-UNIT
HRS code	CL242-0012-8
< Shield plate C >	
HRS P/N	ZX20-B-SLDC
HRS code	CL242-0022-1

3. Applicable cable

Please use USB2.0 cable whose external diameter is 3.9 mm or less and whose signal line is AWG #28 or less.

4. Applicable PCB

Please use PCB on which characteristic impedance between pin #2 and #3 meets USB 2.0 standard. Please refer below for the recommended footprint.



5. Cable assembly procedure

Please refer to the following pages.

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
3		DIS-E-00019015(B)	KH. KUZUMAKI	KZ. KAI	20250702

名 称 TITLE

ZX20 cable assembly procedure

HIROSE ELECTRIC CO., LTD.

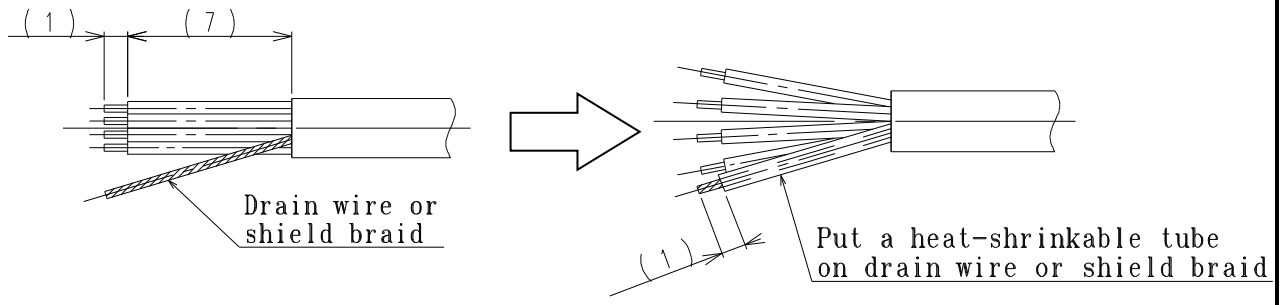
APPROVED	AO. SUZUKI	20070731
CHECKED	KN. ICHIKAWA	20070731
DESIGNED	TS. SAKAIZAWA	20070712
WRITTEN	TS. SAKAIZAWA	20070712

技 術 指 定 書 TECHICAL SPECIFICATION | ETAD-E2727 | 3 | 1 / 5

5-1. Cable terminal treatment

5-1-1. Cut the cable to a specific length with additional 17 mm.
This 17 mm will be covered inside the overmolding.

5-1-2. Implement terminal treatment as shown below.

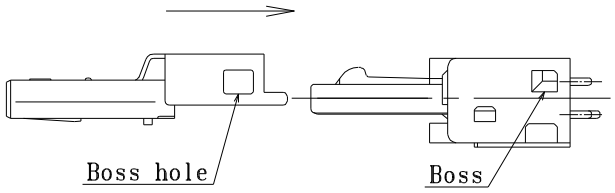


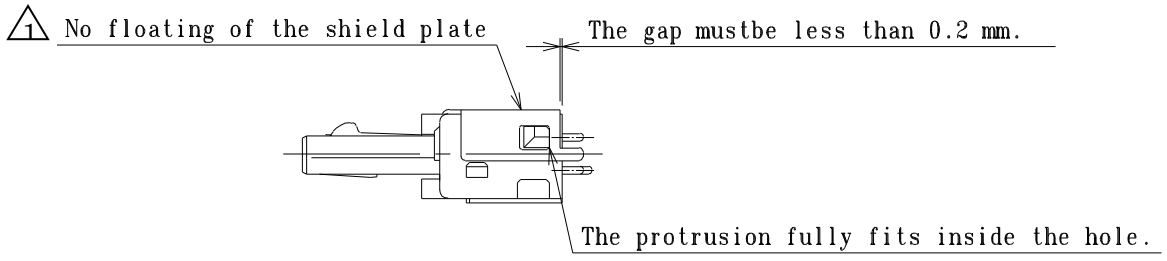
5-1-3. Pre-solder on each of the terminals.

Pre-soldering requirements 1) Temperature of soldering iron : Below 360 deg C 2) Processing time : Less than 1 sec.

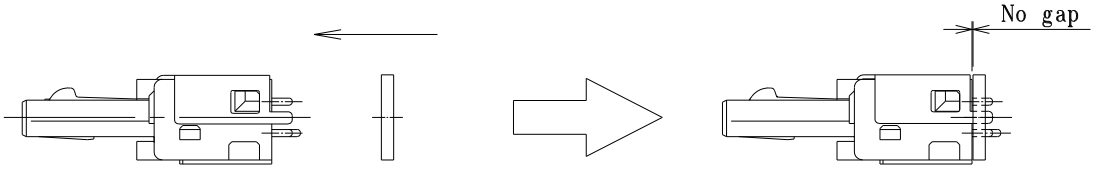
5-2. Assembly

△1 5-2-1. Insert shield plate C into connector unit. Please make sure the protrusion on the unit fully fits inside the hole on the shield plate.



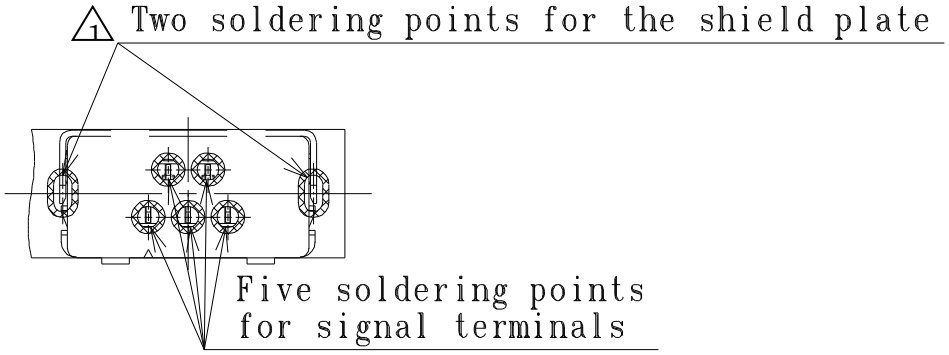


5-2-2. Put a PCB to connector unit with shield plate C.



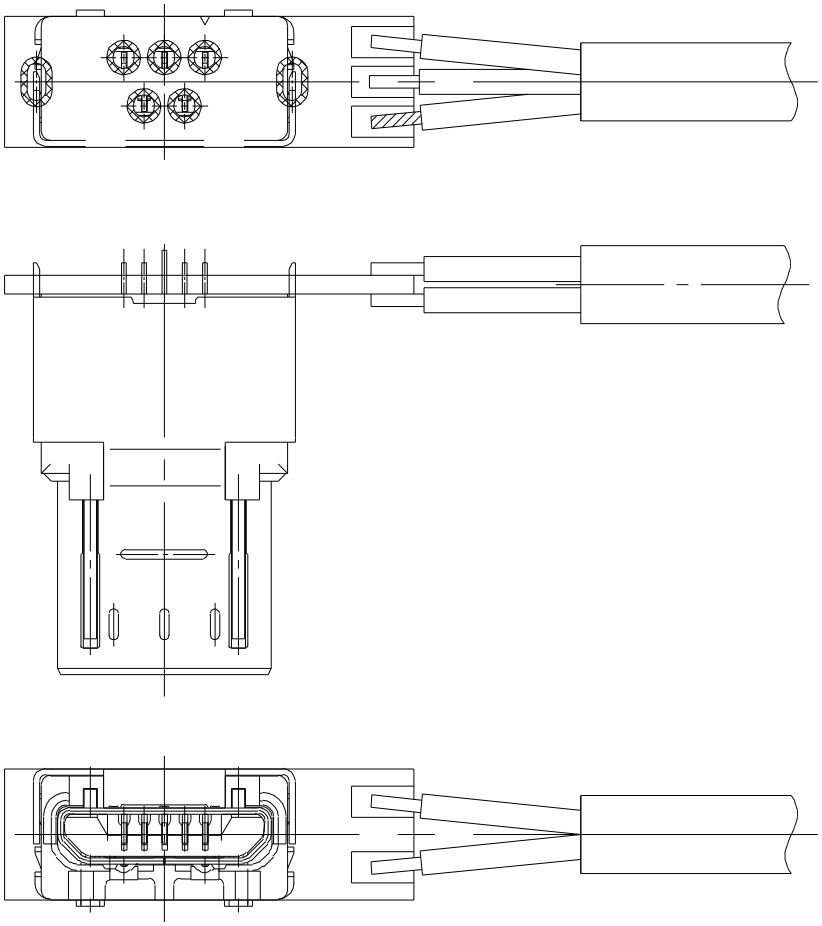
5-3. Soldering

5-3-1. Solder the connector to PCB.
Refer to the drawing below for which portion should be soldered.
Check there is no clearance between connector and PCB, before soldering.



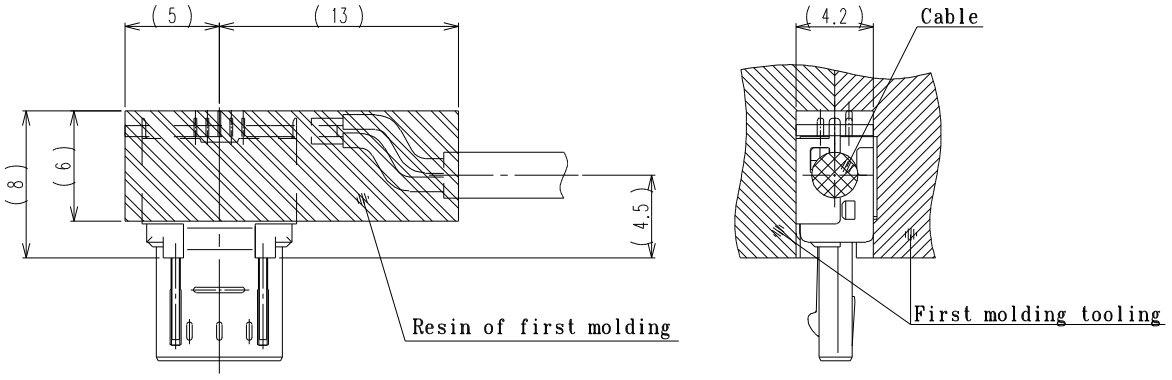
Soldering requirements
1) Temperature of soldering iron : Below 360 deg C
2) Processing time : Less than 1 sec.

⚠1 5-3-2. Solder the cable core to the PCB.
Cable core must be connected with signal terminals based on USB standard.



5-4. Pre-molding (First molding)

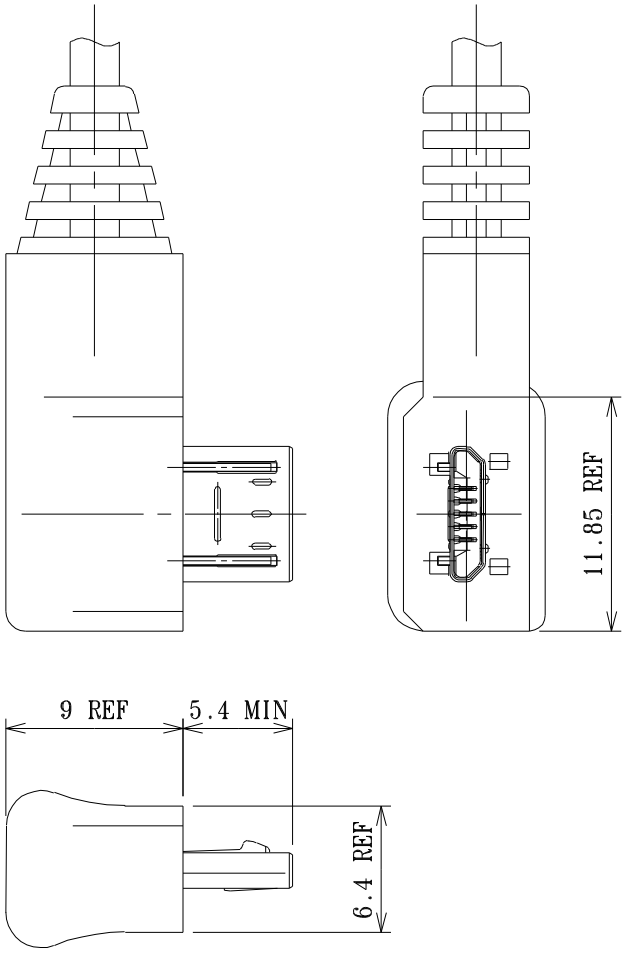
5-4-1. The drawing below describes inner molding.



Make sure that the connector and the cable are fixed tightly during inner molding.

5-5. Final molding (Second molding)

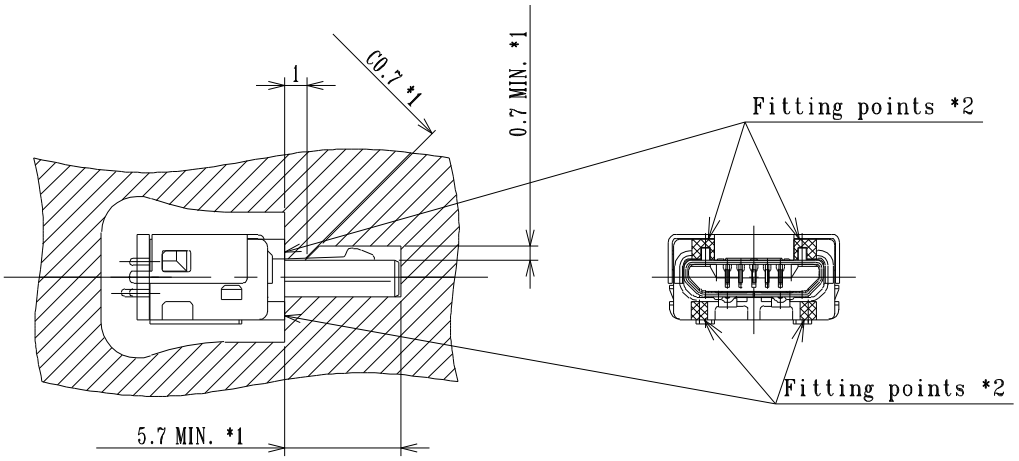
5-5-1. Mold the plug into the shape of your specification.
Drawing below is an example.



⚠1 ***CAUTION***

To avoid resin leakage, 5.7mm minimum dimension is necessary for the mating portion of ZX20 as shown below. *1

Secure the space above the lock spring, and fix the tooling precisely onto the four fitting points, as shown below. Without these steps, the resin would flow into the plug from lock the spring portion. *2



5-5-2. Check the dimensions around mating portion as shown below after final molding.

The tolerance is +/- 0.05 unless specified.

The dimensions of Micro USB spec in USB 2.0 standard are shown below.