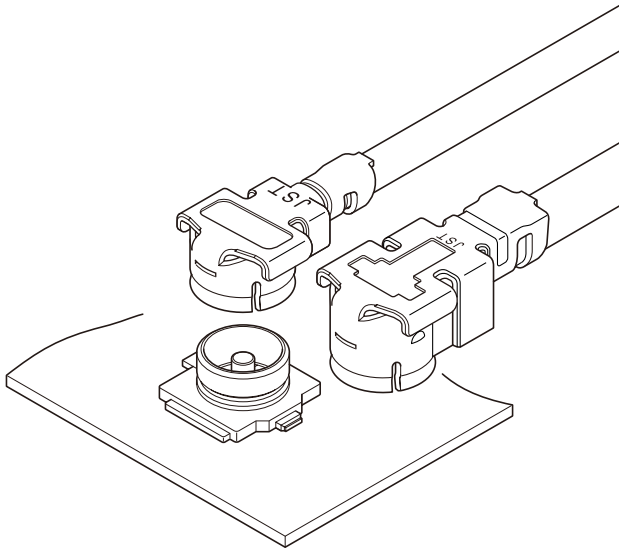


# AYU1 CONNECTOR

Co-axial connector



## Frequency from DC to 12GHz



**This is SMT type, space saving and co-axial connector, corresponding to notebook PC, thinner and lighter telecommunications apparatus, etc.**

**[Application]**  
**UWB, WiMAX, Wireless LAN, Bluetooth, DSRC, Mobile phones, PDA, GPS, Express, etc.**

- This connector can also be applicable the frequency of 12GHz or more.
- Space saving and low profile design
- Easy mating and unmating connector
- Adopting extra fine diameter high frequency cable

## Specifications

- Impedance: 50 Ω
- Frequency range: DC to 12GHz
- Voltage standing wave ratio (V.S.W.R.)

	Cable type	DC to 3GHz	3 to 6GHz	6 to 12GHz
Harness	φ 0.81 (Single shield SA)	1.3max.	1.3max.	1.4max.
	φ 1.13 (Double shields TA)	1.3max.	1.4max.	1.4max.
Base		1.3max.	1.4max.	1.5max.

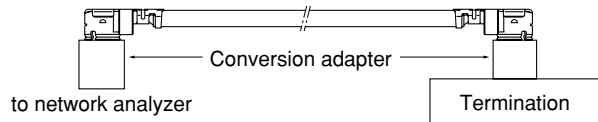
- Insertion loss (dB/m)

	Cable type	3GHz	6GHz	12GHz
Harness	φ 0.81 (Single shield SA)	5.8	9.4	14.9
	φ 1.13 (Double shields TA)	2.9	4.1	6.1
Base		—	—	—

Note: The specified values in above tables were measured by network analyzer as shown in the figure below.

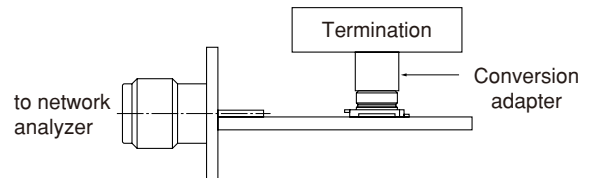
### [Harness]

Harness: Both end harness assembly with harness of 5,000mm  
 SMA conversion adapter: AYU1-AP-PP



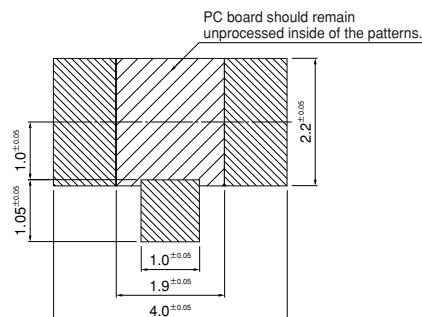
### [Base]

Base: AYU1-1P-02676-120  
 SMA conversion adapter: AYU1-AP-JJ



- Temperature range: - 25°C to + 85°C (including temperature rise in applying electrical current)
- Withstanding voltage: 200V AC/minute
- \* Compliant with RoHS.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

## PC board layout (viewed from component side)



Note: Tolerances are non-cumulative: ±0.05mm for all centers. The dimensions above are our recommendation value.

# AYU1 CONNECTOR

## Socket (Harness assembly)

AYU1 (φ 0.81) Harness	AYU1 (φ 1.13) Harness

### Material and Finish

Contact: Copper alloy, nickel-undercoated, gold-plated  
Housing: Thermoplastic resin, UL94V-0  
Shell: Copper alloy, copper-undercoated, silver-plated

### Harness specifications

Cable type (Specifications for outer diameter and outer conductor)	Overall length L Harness model No. (Single end harness)	Overall length L Harness model No. (Both end harness)
φ 0.81 (Single shielded, SA)	<b>AYU1-1S21-SYYYY-ZZZV (LF)</b>	<b>AYU1-1S21-XYYYY-000V (LF)</b>
φ 1.13 (Double shielded, TA)	<b>AYU1-1S13-SYYYY-ZZZV (LF)</b>	<b>AYU1-1S13-XYYYY-000V (LF)</b>

Note 1) Type of outer conductor SA: Silver-plated annealed copper wire, TA: Tin-plated annealed copper wire

Note 2) The following alphabet and number shall be put in the model No.

X...alphabet denotes cable end treatment (D: Both end harness/same direction, R: Both end harness/reverse direction)

Y...number denotes harness length

Z...number denotes strip length

V...alphabet denotes color identification (Blank: Black, G: Gray, W: White, B: Blue)

Example 1... φ 1.13mm (double shielded, TA) cable, connector end processing: both end harness (same direction), harness length: 251mm, wire color: black  
Model No.: AYU1-1S13-D0251-000(LF)

Example 2... φ 0.81mm (single shielded, SA) cable, connector end processing: single end harness, harness length: 800mm, strip length: [inner conductor 2.0mm, insulator 1.0mm, outer conductor 3.0mm], cable color: white  
Model No.: AYU1-1S21-S0800-213W(LF)

Note 3) Contact JST for details about overall length and connector end processing.

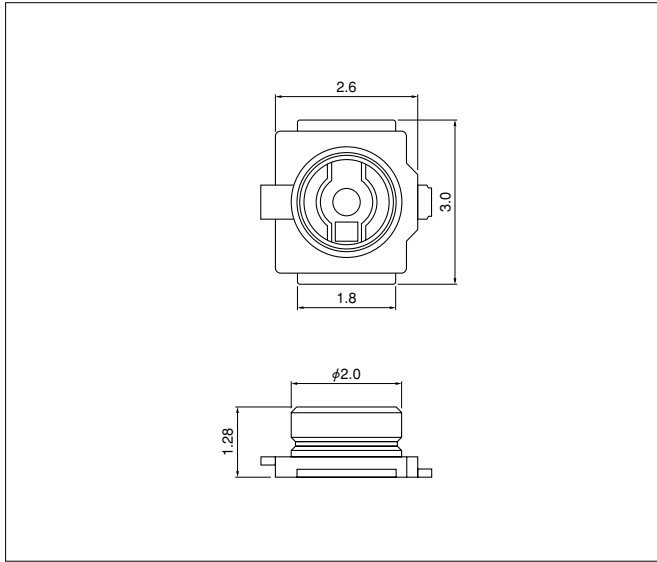
### Harness overall length standard tolerance

Overall length L (mm)	Standard tolerance (mm)
35 ≤ L ≤ 200	±4
200 < L ≤ 500	±8
500 < L ≤ 1000	±12
1000 <	±1.5%

Note: The shortest length L=35mm

# AYU1 CONNECTOR

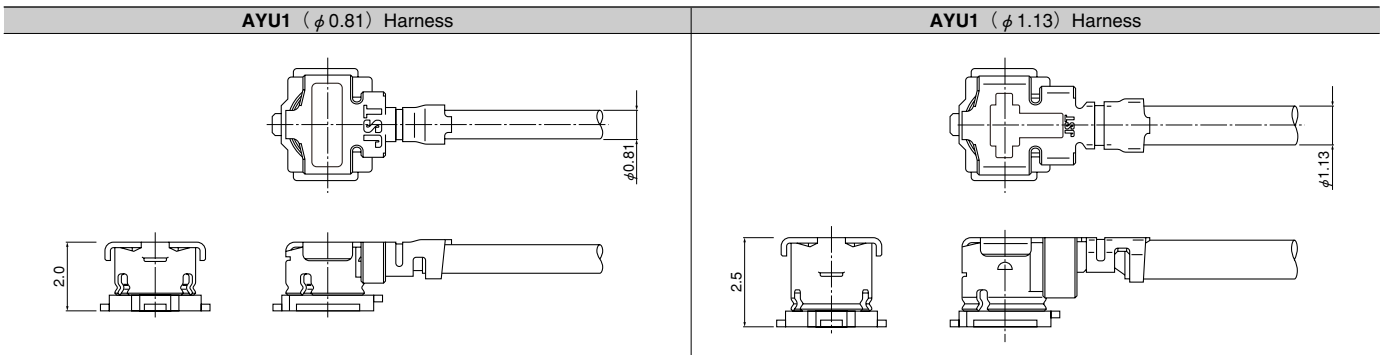
## Base



Model No.	Material and Finish	Qty / reel
AYU1-1P-02676-120	Contact: Copper alloy, nickel-undercoated, selective gold-plated Housing: Heat resisting resin, UL94V-0 Shell: Copper alloy, copper-undercoated, silver-plated	5,000

**RoHS compliance**

## Assembly layout



## Insertion and extraction jig

Model No.: EJ-AYU1

