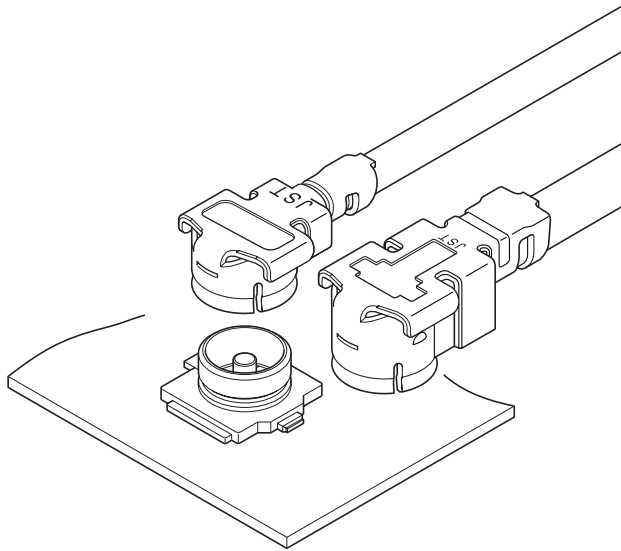


# AYU1 CONNECTOR

## 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.

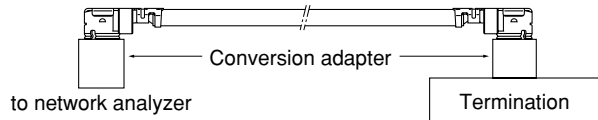
- Insertion loss (dB/m)

	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.

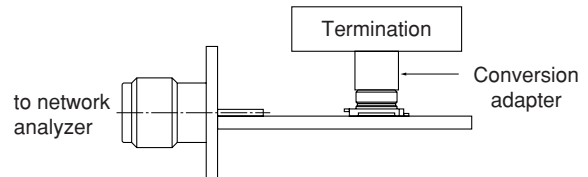
#### [Harness]

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



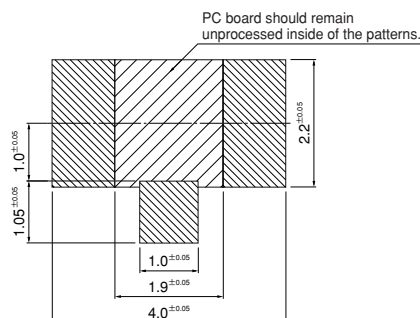
#### [Base]

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
- \* RoHS compliant products are published.
- \* 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-XXXXY-000V (LF)</b>
φ 1.13 (Double shielded, TA)	<b>AYU1-1S13-SYYYY-ZZZV (LF)</b>	<b>AYU1-1S13-XXXXY-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], wire color: white  
Model No.: AYU1-1S21-S0800-213W(LF)

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

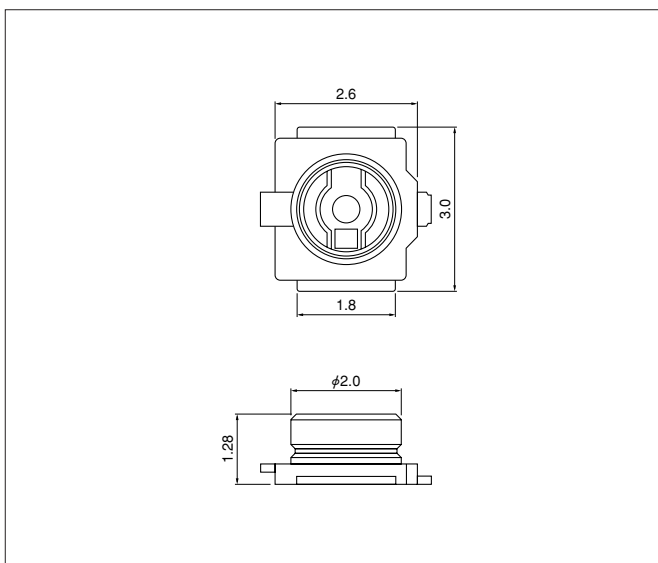
### Harness overall length standard tolerance

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

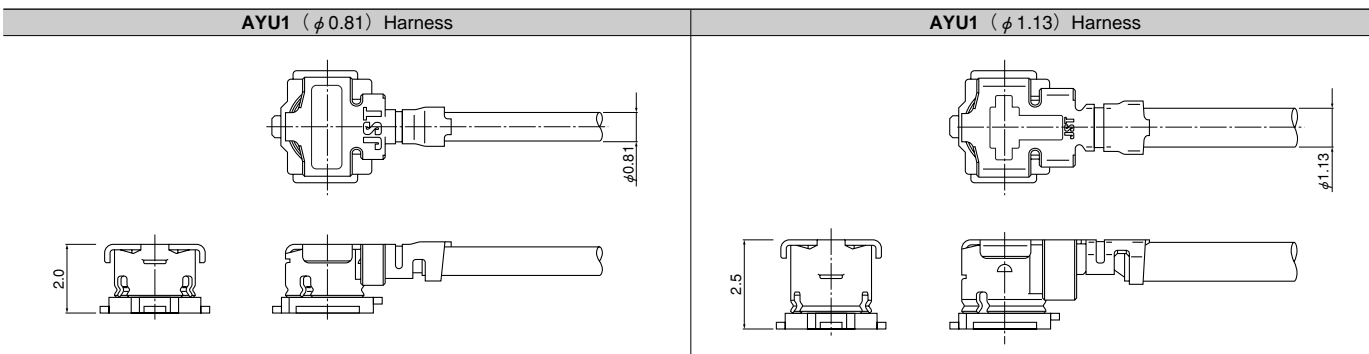
## Base



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

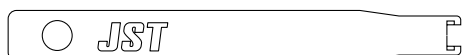
**RoHS compliance**

## Assembly layout

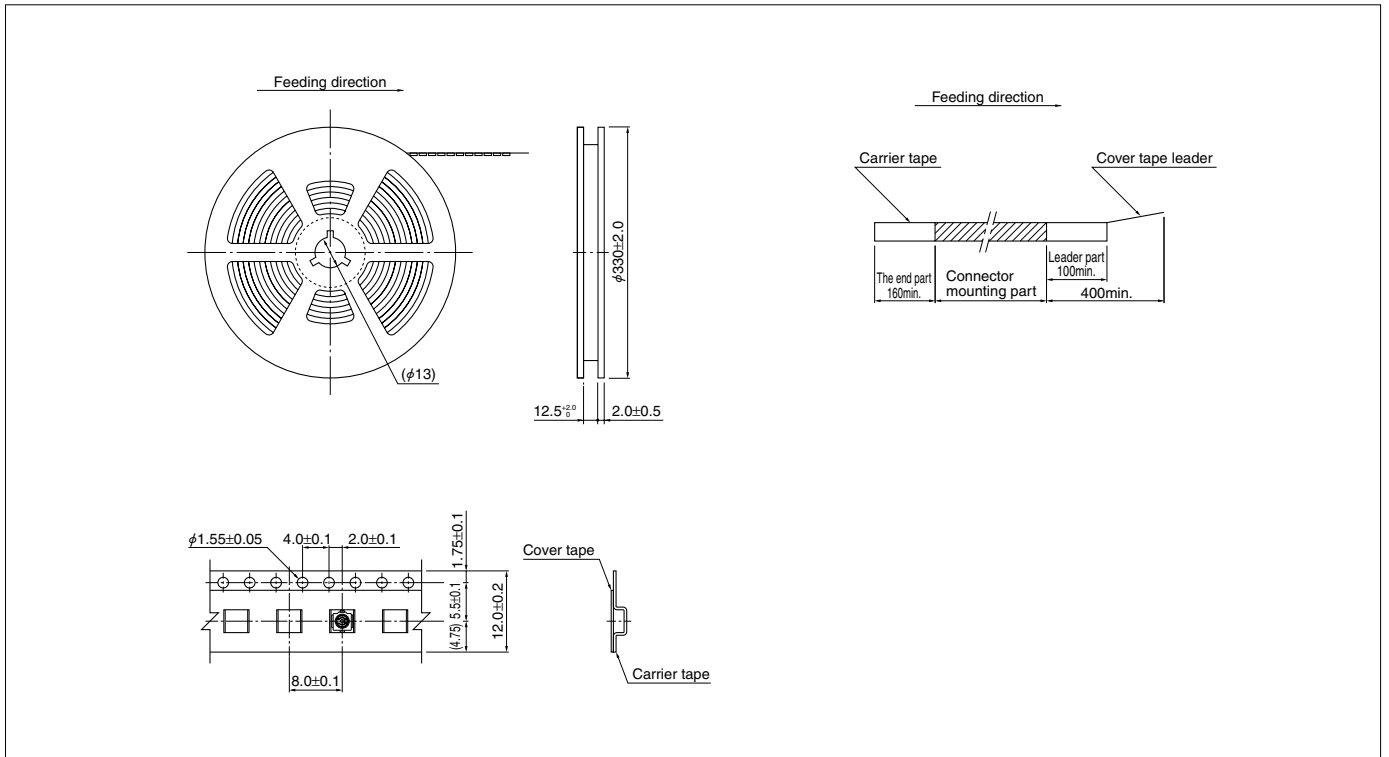


## Insertion and extraction jig

Model No.: EJ-AYU1



## Taping specifications



- Note: 1. Specifications conform to JIS C 0806. The tape width, connector loading recess square hole dimensions, etc. are determined by the number of circuits and external shape of the connector to be loaded.  
 2. Specifications are subject to change without prior notice.