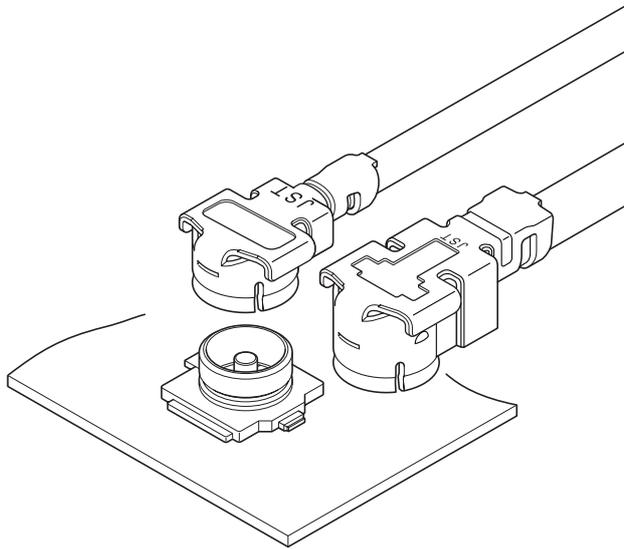


AYU1 CONNECTOR

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 12 GHz 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 12 GHz
- Voltage standing wave ratio (V.S.W.R.)

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

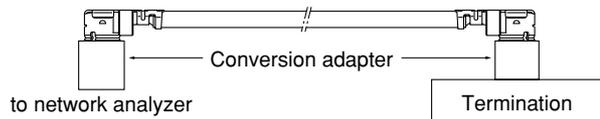
- Insertion loss (dB/m)

	Cable type	3 GHz	6 GHz	12 GHz
Harness	φ 0.81 (Single shield SA)	5.8	9.4	14.9
	φ 1.13 (Single shields TA)	3.4	6.4	7.7
	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.

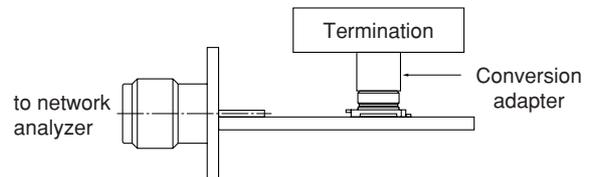
[Harness]

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



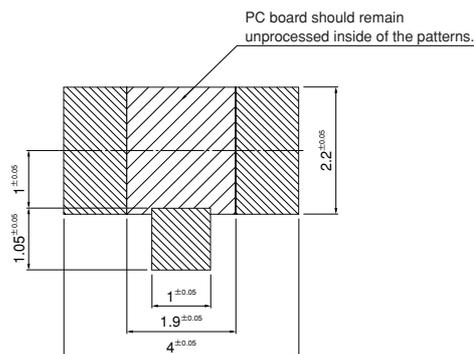
[Base]

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: 200 VAC/minute
- * Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- * Contact JST for details.
- * Compliant with RoHS.

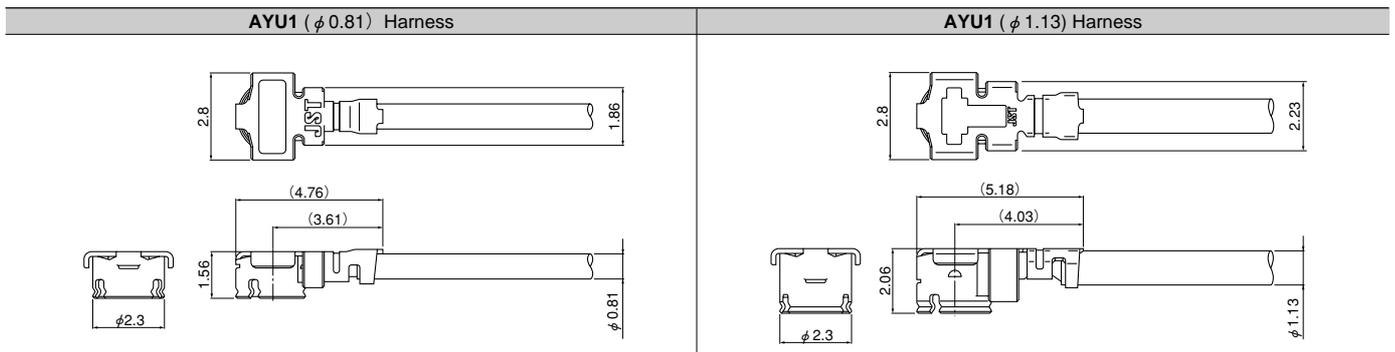
PC board layout



Note: 1. Tolerances are non-cumulative: ±0.05 mm for all centers. The dimensions above are our recommendation value.
 2. The above figure is the figure viewed from the connector mounting side.

AYU1 CONNECTOR

Socket (Harness assembly)



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	Overall length L
	Harness model No. (Single end harness)	Harness model No. (Both end harness)
φ 0.81 (Single shielded, SA)	AYU1-1S21-SYYYY-ZZZV (LF)	AYU1-1S21-XYYYY-000V (LF)
φ 1.13 (Single shielded, TA)	AYU1-1S1C-SYYYY-ZZZV (LF)	AYU1-1S1C-XYYYY-000V (LF)
φ 1.13 (Double shielded, TA)	AYU1-1S13-SYYYY-ZZZV (LF)	AYU1-1S13-XYYYY-000V (LF)

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 1.13 mm (double shielded, TA) cable, connector end processing: both end harness (same direction), harness length: 251 mm, wire color: black

Model No.: AYU1-1S13-D0251-000(LF)

Example 2... φ 0.81 mm (single shielded, SA) cable, connector end processing: single end harness, harness length: 800 mm,

strip length: [inner conductor 2.0 mm, insulator 1.0 mm, outer conductor 3.0 mm], cable color: white

Model No.: AYU1-1S21-S0800-213W(LF)

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

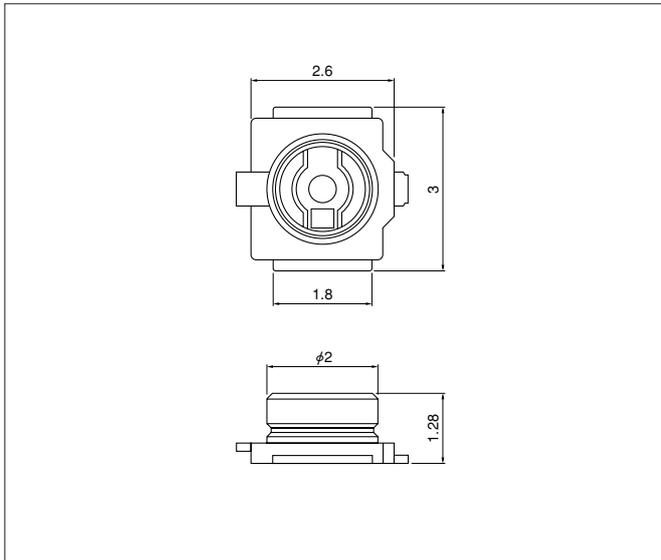
Harness overall length standard tolerance

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=35 mm

AYU1 CONNECTOR

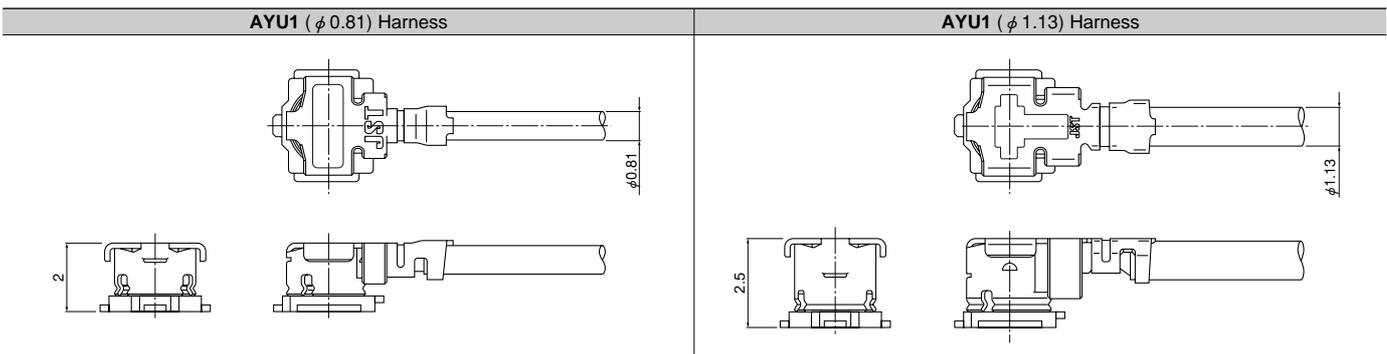
Base



Model No.	Material and Finish	Q'ty/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

