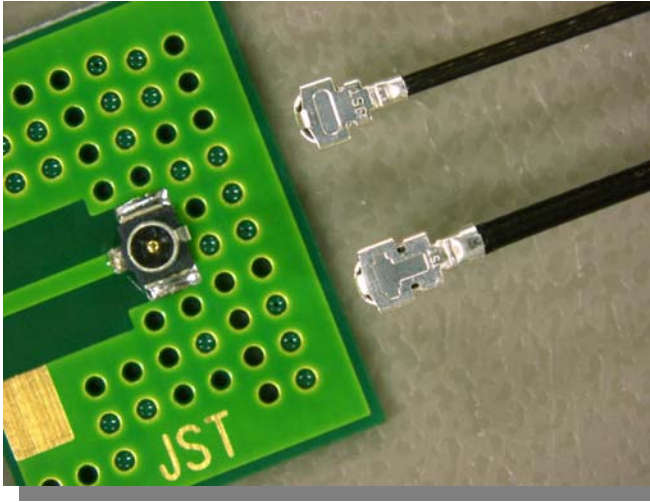


From DC to 12GHz



Applications

UWB, WiMAX, Wireless LAN, Bluetooth, DSRC, Mobile phones, PDA, GPS, Express, etc.

Features

- **This product can correspond to the frequency to 12GHz.**
A steady transmission characteristic up to 12 GHz.
As well as the conventional frequency band.
- **Space saving design.**
Responding to SMT, mounting space of 3.0mm × 3.0mm, low profile of 2.0mm mated height.
- **Insertion and removal of a connector is easy.**
Dedicated tool (Part No. EJ-AYU1) can insert and remove a connector easily.
- **Extra fine high-frequency cable is adopted.**
It corresponds to the cable type [Dia.0.8, Dia.1.13].
- **Product corresponding to RoHS.**

General specification

- The characteristic impedance: 50 Ω
- Frequency range: DC to 12GHz
- V.S.W.R.

| | Cable Type | DC to 3GHz | From 3 to 6GHz | From 6 to 12GHz |
|--------------------|------------------------------|------------|----------------|-----------------|
| Socket (Harnessed) | Dia.0.81 (Single shield SA) | 1.3 以下 | 1.3 以下 | 1.4 以下 |
| | Dia.1.13 (Double shields TA) | 1.3 以下 | 1.4 以下 | 1.4 以下 |
| Base | | 1.3 以下 | 1.4 以下 | 1.5 以下 |

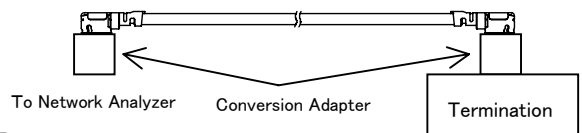
Insertion loss [dB/m]

| | Cable Type | 3GHz | 6GHz | 12GHz |
|--------------------|------------------------------|------|------|-------|
| Socket (Harnessed) | Dia.0.81 (Single shield SA) | 5.8 | 9.4 | 14.9 |
| | Dia.1.13 (Double shields TA) | 2.9 | 4.1 | 6.1 |
| Base | | — | — | — |

※The above V.S.W.R. Standard values were measured using the measurement connection shown below.

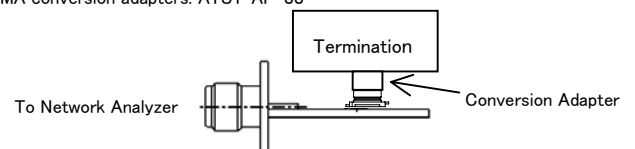
【Socket(Harnessed)】

Socket (Harnessed): Total length 5,000mm. Connector both end harness.
SMA conversion adapters: AYU1-AP-PP



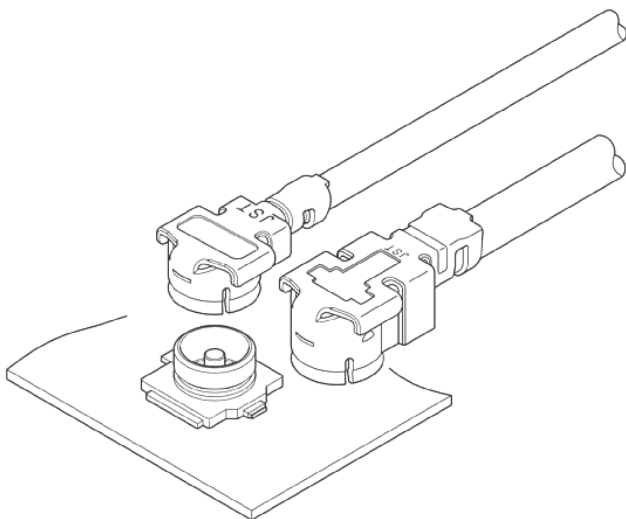
【Base】

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

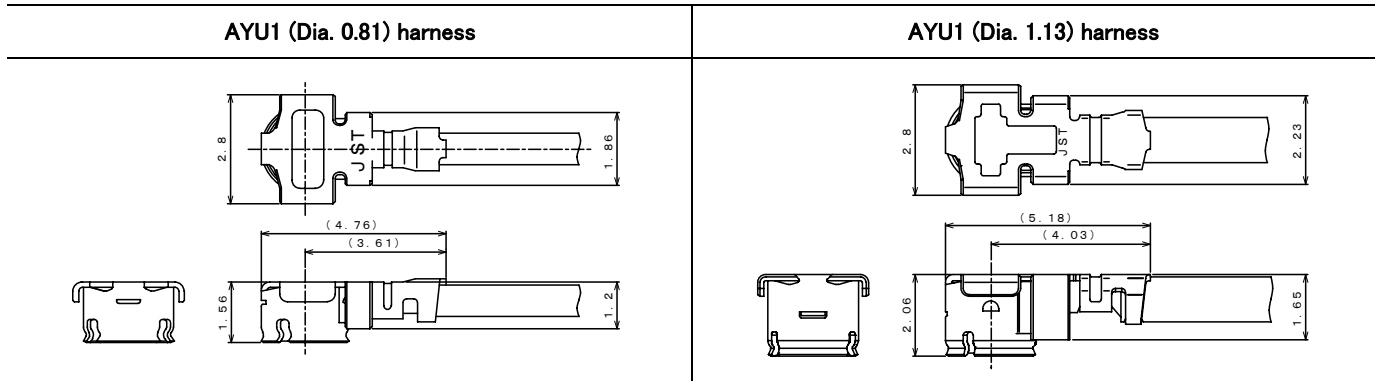


- Operating temperature range: -25°C to +85°C
- Withstanding voltage: 200V AC / 1 minute

※Contact JST for details.



Socket (Harnessed)



Material and finish Contact: Copper alloy. Nickel-undercoated, gold-plated.
 Housing: Thermoplastic resin, UL94V-0
 Shell: Copper alloy. Copper-undercoated, silver-plated.

Specification

| Cable Type (Jacket Diameter, Outer Conductor) | Total length: L | |
|--|-------------------------------|-----------------------------|
| | Part No. (Single end harness) | Part No. (Both end harness) |
| Dia.0.81 (1 layer shield SA) | AYU1-1S21-SYYYY-ZZZV (LF) | AYU1-1S21-XYYYY-000V (LF) |
| Dia.1.13 (double shields TA) | AYU1-1S13-SYYYY-ZZZV (LF) | AYU1-1S13-XYYYY-000V (LF) |

Note1) Outer Conductor SA: Silver plating annealed copper wire. TA: Tin plating annealed copper wire.

Note2) 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)

Example1) Dia.1.13(Double shields TA) cable, both end harness(same direction), total length: 251mm, wire color: Black

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

Example 2) Dia.0.81(Single shield SA) cable, single end harness, total length: 800mm, strip length: (conductor 2.0mm, dielectric1.0mm, insulator1.0mm), wire color: white

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

Contact JST for details about total length and specifics of terminal processing.

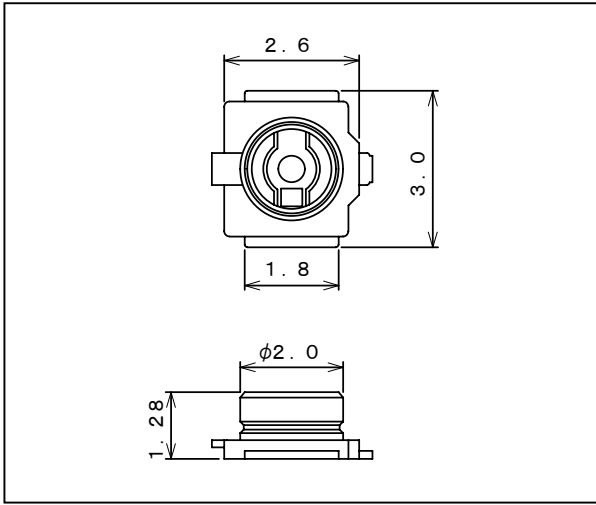
● Total standard tolerance for total length of harness.

| Total length: L (mm) | Standard tolerance (mm) |
|----------------------|-------------------------|
| $35 \leq L \leq 200$ | ± 4 |
| $200 < L \leq 500$ | ± 8 |
| $500 < L \leq 1000$ | ± 12 |
| $1000 <$ | $\pm 1.5\%$ |

※Shortest length L is 35mm

JST AYU1 CONNETOR

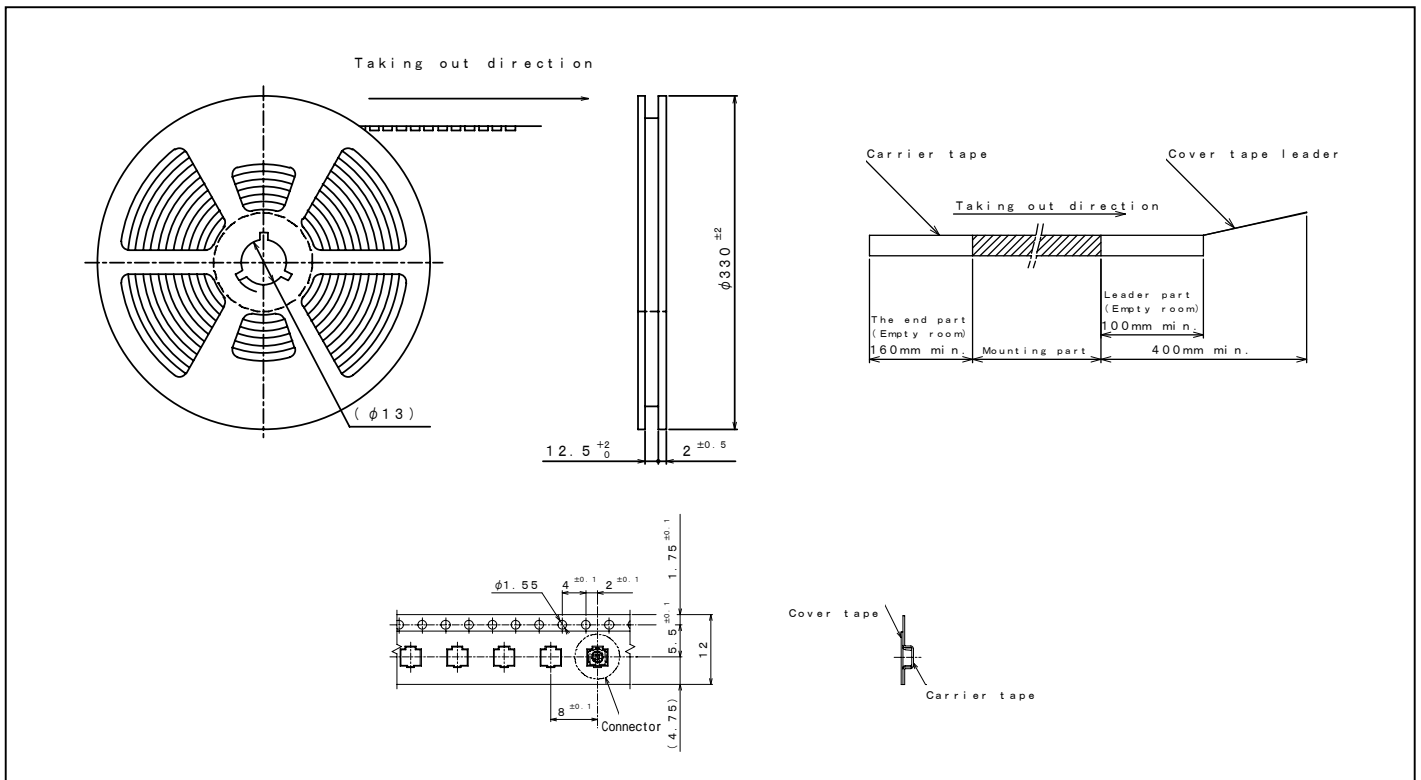
Base



| Part No. | Material and Finish | Q'ty / reel |
|-------------------|---|-------------|
| AYU1-1P-02676-120 | Contact: Copper alloy. Nickel-undercoated, gold-plated. | 5,000 |
| | Housing: Thermoplastic resin, UL94V-0 | |
| | Shell: Copper alloy. Copper-undercoated, silver-plated. | |

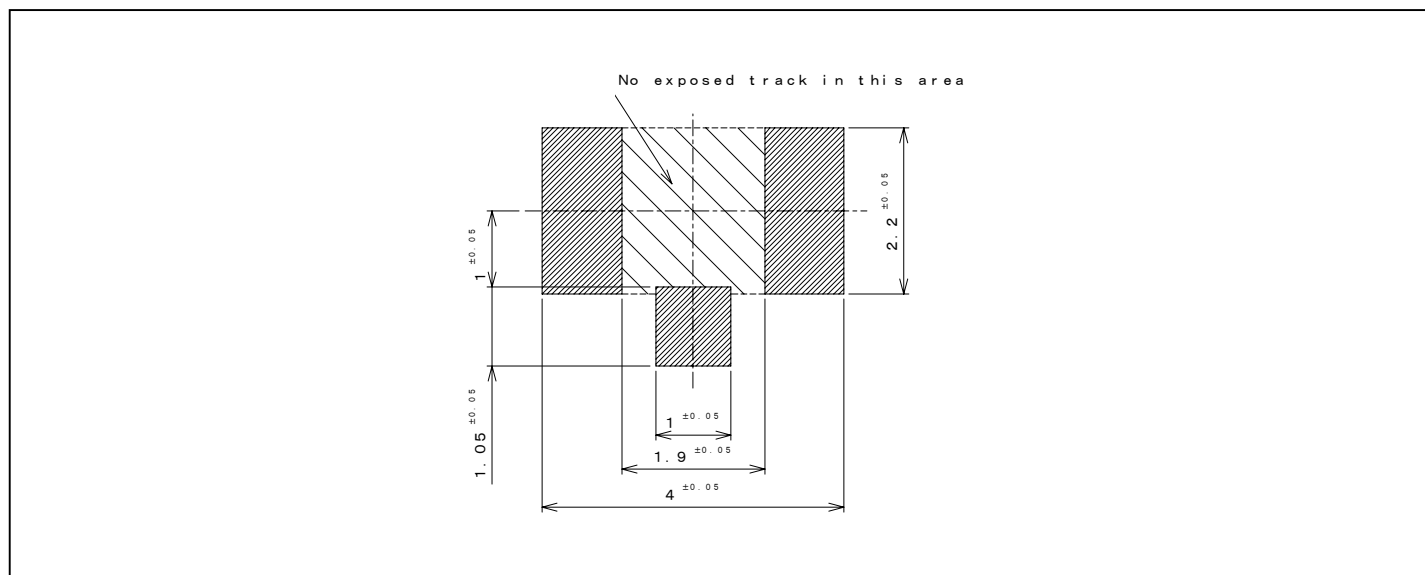
● Product corresponding to RoHS.

Taping Specifications



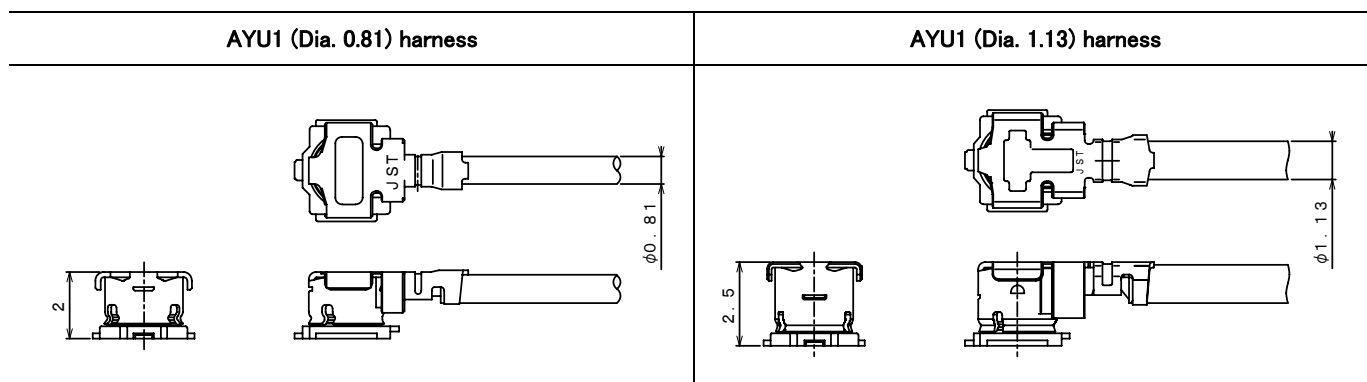
- Specifications conform to JIS C 0806. The tape width, connector loading recess square hole dimensions, etc. are determined by the number of circuits and external shape of the connector to be loaded.
- Specifications are subject to change without prior notice.

PC board layout



Note) Tolerances are non-cumulative; ± 0.05 mm for all centers.
 The dimensions above should serve as a guideline.
 Contact JST for details.

Assembly layout



■ Dedicated tool

Part No.: EJ-AYU1

