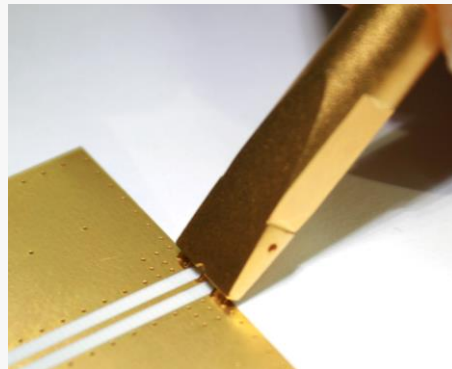


Withwave's T-Probe Kit is including all T-probe types for 20 & 40 GHz.

This coaxial probe that offers one signal pin on center and several fixed pitch ground contact with low inductance. This probe provides excellent electrical performance for applications having test point with adjacent grounds. This probe have various **pitch range of 0.8, 1.5, 2.5 mm** from signal to ground contacts and is produced by precision manufacturing process. It is available for signal probing test in these applications such as RF module signal insertion/output measurement, high speed digital & high freq. circuit board analysis.



■ Features

- DC to 20 GHz (3.5 mm type) & 40 GHz bandwidth (2.92 mm type)
- Low insertion (<0.5 dB) and return loss (>10 dB)
- GSG, GS configuration (0.8/1.5/2.5 mm pitch range)

■ Advantage

- Easy for signal probing test without any soldering process on circuit board
- Compliant pogo pins allows probing of non-planar structures, walls of module & other obstructions
- Robust pins with repeatability provide longer probing life time and reduce pin damage

■ Applications

- RF & Microwave module signal insertion, detection & output measurement
- High frequency circuit board electrical performance analysis
- High speed digital circuit analysis
- Signal integrity probing & Device characterization

■ Contents Information

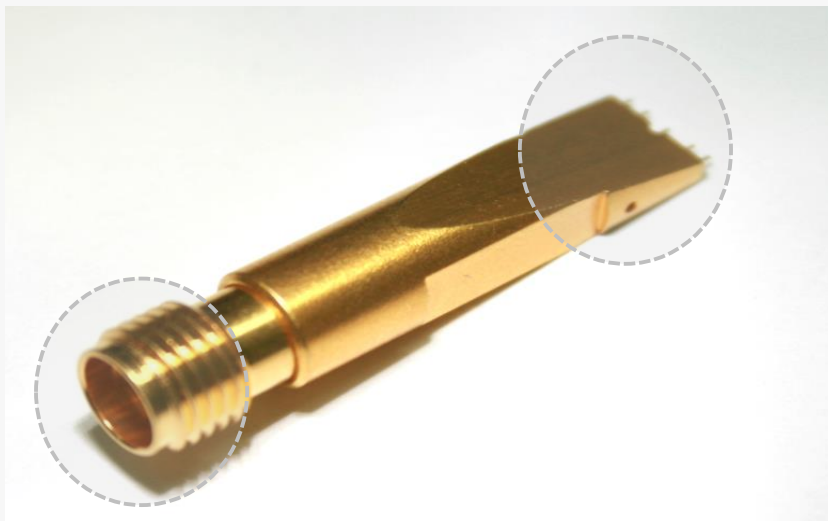


| Index | Description | Part No: PU-01 |
|-------|---|------------------|
| 1 | T-Probe (20 GHz), GS type, pitch : 0.8 mm/3.5 mm type | PU-04S-01 (2 EA) |
| 2 | T-Probe (20 GHz), GS type, pitch : 1.5 & 2.5 mm/3.5 mm type | PU-04S-02 (2 EA) |
| 3 | T-Probe (20 GHz), GSG type, pitch : 0.8 mm / 3.5 mm type | PU-04G-01 (2 EA) |
| 4 | T-Probe (20 GHz), GSG type, pitch : 1.5 & 2.5 mm/3.5 mm type | PU-04G-02 (2 EA) |
| 5 | T-Probe (40 GHz), GS type, pitch : 0.8 mm/2.92 mm type | PU-03S-01 (2 EA) |
| 6 | T-Probe (40 GHz), GS type, pitch : 1.5 & 2.5 mm/2.92 mm type | PU-03S-02 (2 EA) |
| 7 | T-Probe (40 GHz), GSG type, pitch : 0.8 mm / 2.92 mm type | PU-03G-01 (2 EA) |
| 8 | T-Probe (40 GHz), GSG type, pitch : 1.5 & 2.5 mm/2.92 mm type | PU-03G-02 (2 EA) |

■ Specification

| Scope | Items | Specification |
|------------|----------------|---|
| Electrical | Freq. range | DC to 20 GHz (3.5 mm Connector) DC to 40 GHz (2.92 mm Connector) |
| | Insertion loss | < 0.5 dB |
| | Return loss | > 10 dB |
| Mechanical | Connector type | 3.5 mm(F) / 2.92 mm(F) |
| | Probe pitch | 0.8/1.5/2.5 mm (from signal to ground) |
| | Pin type | Pogo Structure |

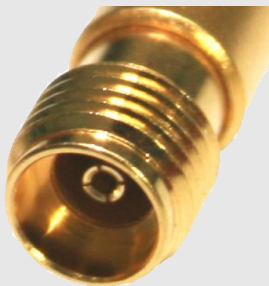
* RoHS Compliant



Pogo Pin

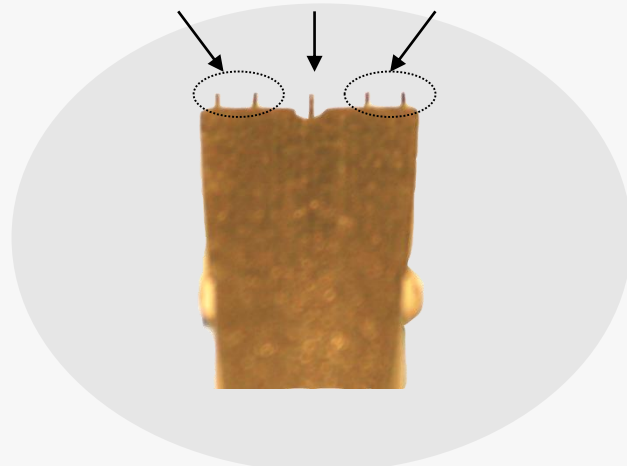


Crown type



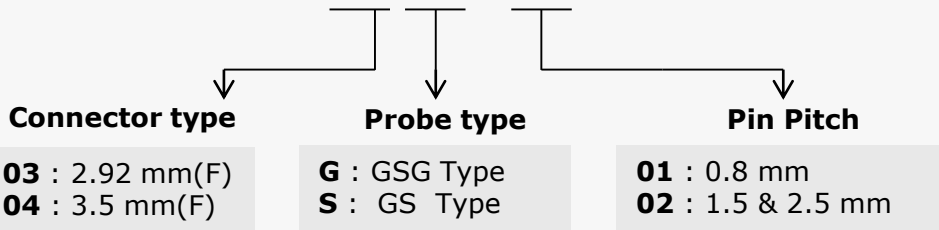
Interface : 3.5 mm type (DC to 20 GHz)
2.92 mm type (DC to 40 GHz)

Ground **Signal** **Ground**



■ **Ordering Information**

PU-03G-01



▪ **GSG Type (pitch : 0.8/ 1.5, 2.5)**

| Part No. | PU-03G-01 PU-04G-01 | PU-03G-02 PU-04G-02 |
|------------|------------------------|------------------------|
| Pitch (mm) | 0.8 | 1.5 & 2.5 |
| Structure | | |

▪ **GS Type (pitch : 0.8/ 1.5, 2.5)**

| Part No. | PU-03S-01 PU-04S-01 | PU-03S-02 PU-04S-02 |
|------------|------------------------|------------------------|
| Pitch (mm) | 0.8 | 1.5 & 2.5 |
| Structure | | |

Test results

GSG Type (pitch : 0.8 mm)

Part No : PU-04G-01



- Substrate : RO4350B (10 mil)
- Microstrip type

Freq. range: 10 MHz~ 20 GHz



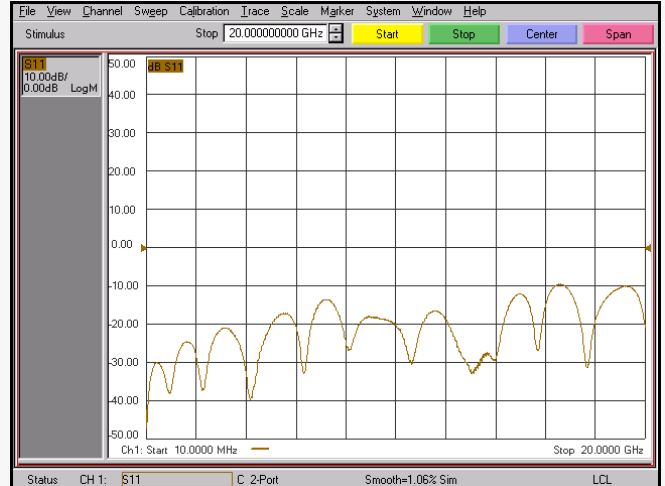
GSG Type (pitch : 1.5 mm & 2.5 mm)

Part No : PU-04G-02



- Substrate : RO4350B (10 mil)
- Microstrip type

Freq. range: 10 MHz~ 20 GHz



■ **Test results**

GS Type (pitch : 0.8 mm)

Part No : PU-04S-01



- Substrate : R04350B (10 mil)
- Microstrip type

Freq. range: 10 MHz~ 20 GHz



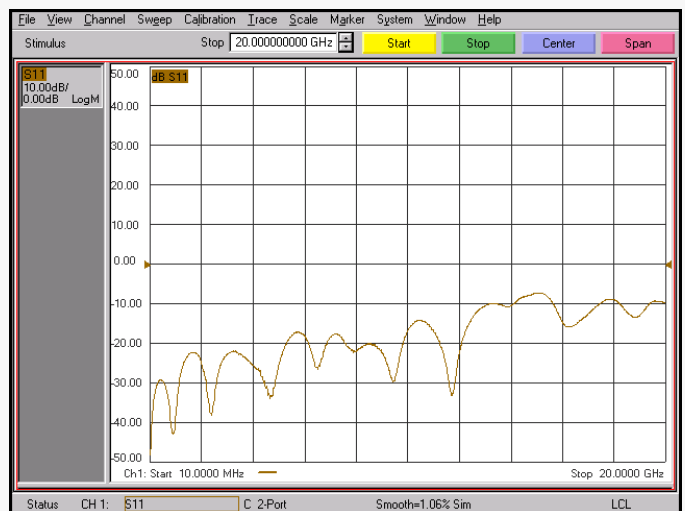
GS Type (pitch : 1.5 & 2.5 mm)

Part No : PU-04S-02



- Substrate : R04350B (10 mil)
- Microstrip type

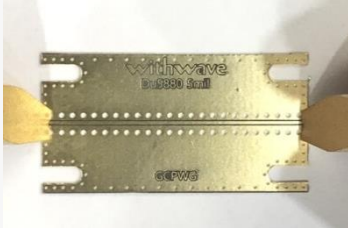
Freq. range: 10 MHz~ 20 GHz



■ **Test results**

GSG Type (pitch : 0.8 mm)

Part No : PU-03G-01



- Substrate : Duroid 5880 (5 mil)
- GCPWG type

Freq. range: 10 MHz~ 40 GHz



GSG Type (pitch : 0.8 mm)

Part No : PU-03G-01



- Substrate : Duroid 5880 (5 mil)
- Top Ground Microstrip

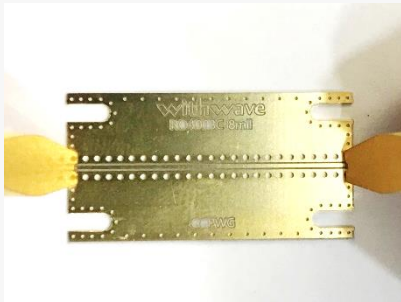
Freq. range: 10 MHz~ 40 GHz



■ Test results

GSG Type (pitch : 0.8 mm)

Part No : PU-03G-01



- Substrate : RO4350B (10 mil)
- GCPWG type

Freq. range: 10 MHz~ 40 GHz



■ **Test results**

GSG Type (pitch : 1.5 mm & 2.5 mm)

Part No : PU-03G-02



- **Substrate : Duroid 5880 (5 mil)**
- **GCPWG type**

Freq. range: 10 MHz~ 40 GHz



Freq. range: 10 MHz~ 40 GHz

GSG Type (pitch : 1.5 mm & 2.5 mm)

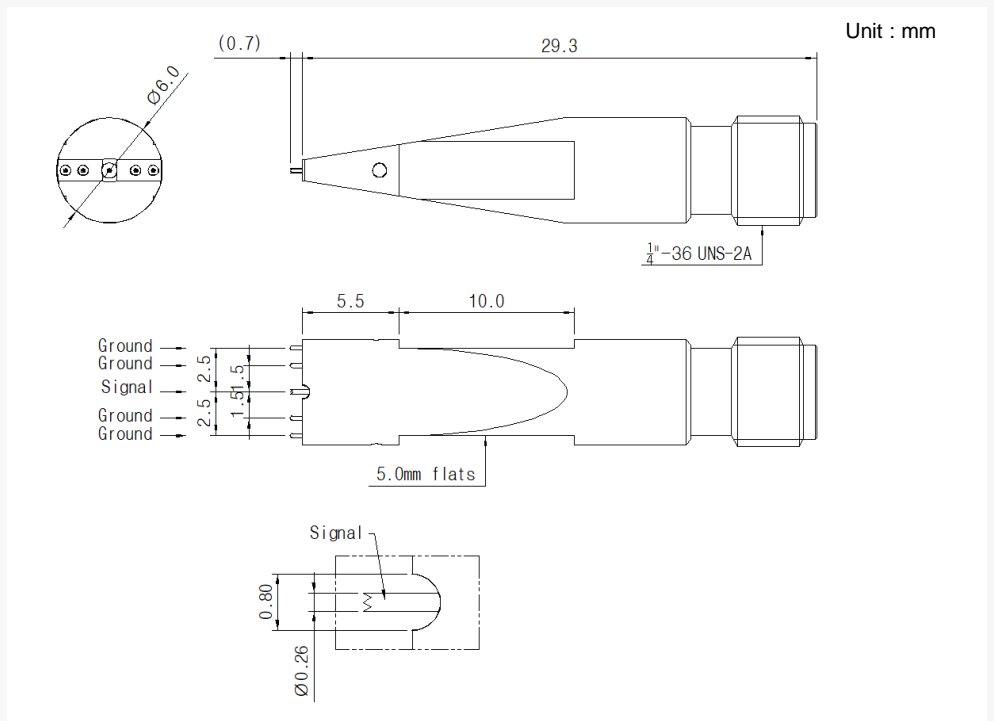
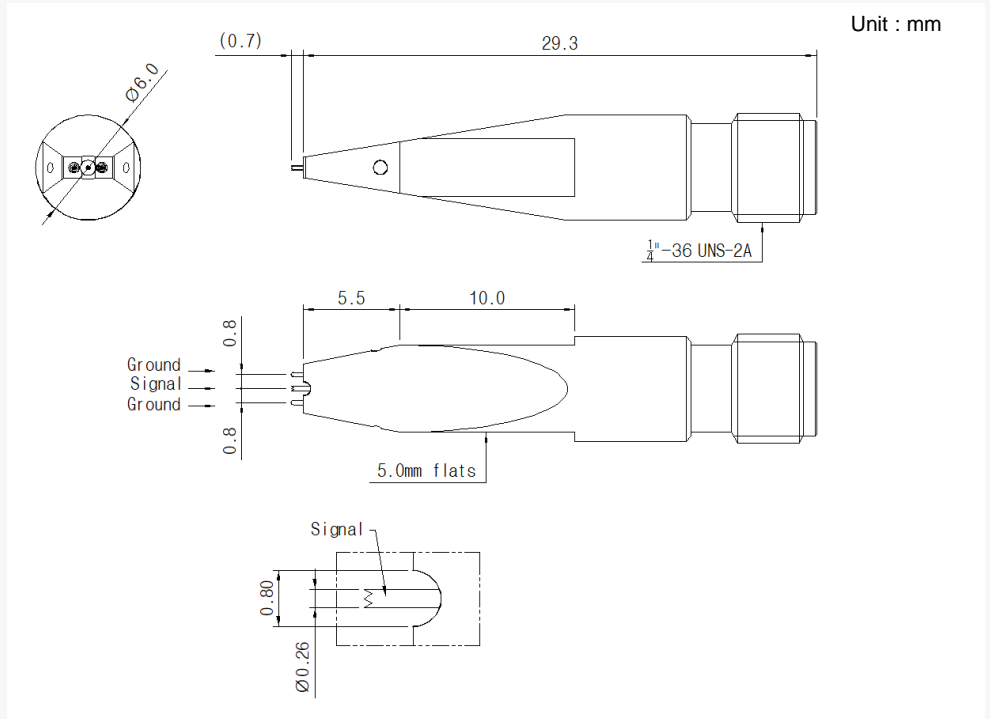
Part No : PU-03G-02



- **Substrate : Duroid 5880 (5 mil)**
- **Top Ground Microstrip**

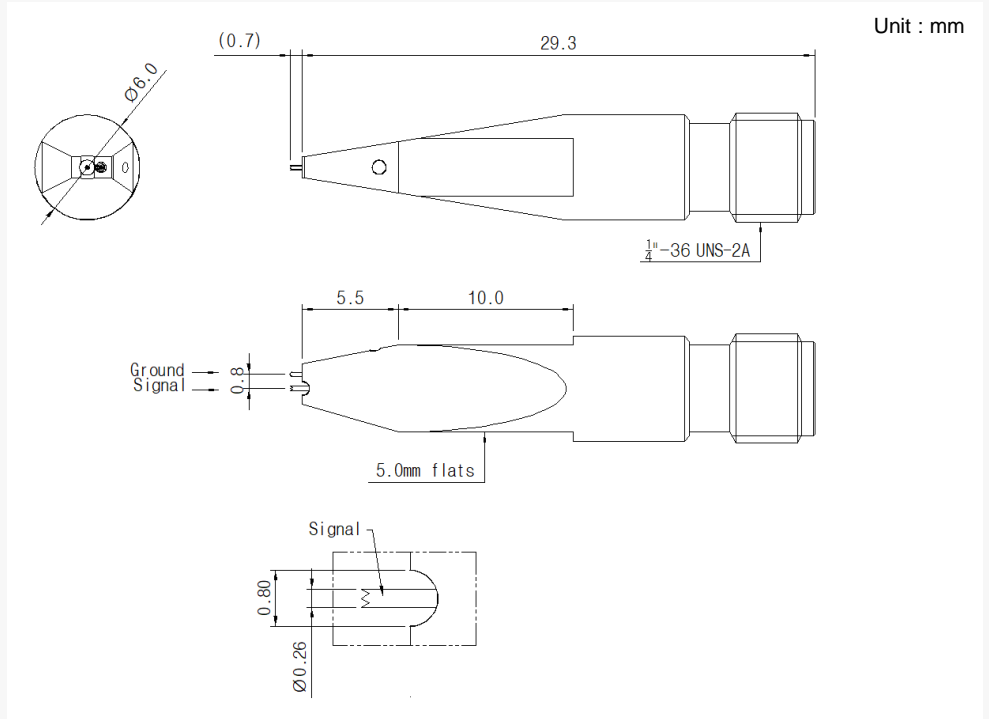


Drawing

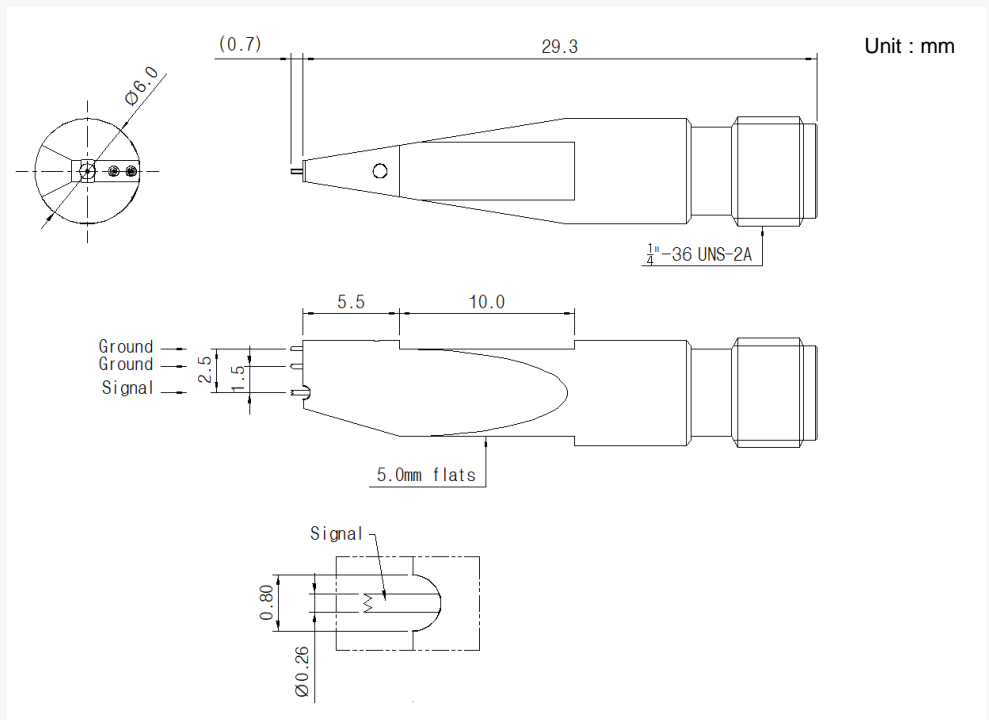


Drawing

Part No : PU-03S-01
PU-04S-01



Part No : PU-03S-02
PU-04S-02



■ **Revision History**

| Revision | Date | Changes |
|----------|------------|---------------------|
| Ver 1.0 | 2019-11-01 | Release T-Probe Kit |