



**HF05-0002 GSG 6 F M-SMP 050**

**Contacting PCBs GSG**

**NEW**

|                           |               |
|---------------------------|---------------|
| <b>Centers (mm/mil)</b>   | 5,00 / 197    |
| <b>Current (Circular)</b> | 0,5 A         |
| <b>Current (Internal)</b> | 0,1 A         |
| <b>Impedance [Z]</b>      | 50 Ohm        |
| <b>Frequency</b>          | 6 GHz         |
| <b>Temperature</b>        | -20°C...+80°C |

**Spring Force (cN ±20%)**

|                | <b>Preload</b> | <b>Nominal</b> |
|----------------|----------------|----------------|
| Total          | -              | 430            |
| Internal Cont. | -              | -              |
| Pins           |                |                |
| Circular Cont. | 65             | 80             |
| Core           |                |                |
| Circular Cont. | 240            | 270            |

**Travel (mm)**

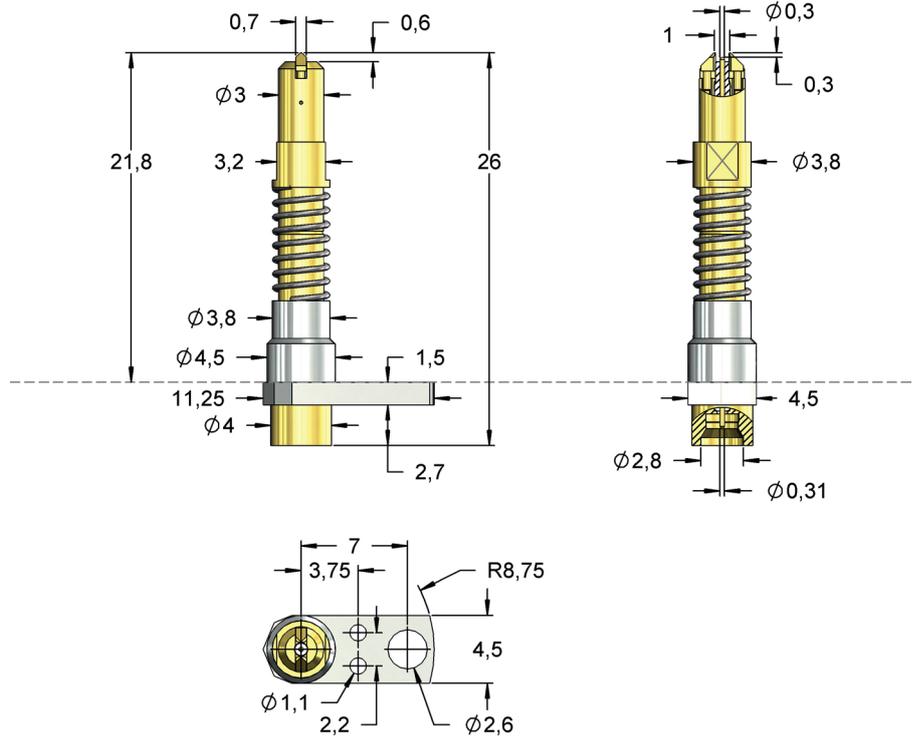
|                     | <b>Nominal</b> | <b>Maximum</b> |
|---------------------|----------------|----------------|
| Circular Cont. Tips | 0,5            | 0,8            |
| Circular Cont. Body | 0,5            | 3,0            |
| Thread              | -              | -              |
| Wrench Size         |                | 3,2            |

**Materials and Plating**

|                |                              |
|----------------|------------------------------|
| Internal Cont. | BeCu, gold plated            |
| Circular Cont. | BeCu, gold plated            |
| Barrel         | Brass, gold plated           |
| Spring Tip     | Stainless steel, gold plated |
| Circular Cont. | Stainless steel, unplated    |



**PCB-GSG in Center 0,5 mm**



This probe has in the ring contact two separately spring-loaded plungers integrated. The asymmetric flange allows mounting of close neighboring probes with different alignment of the ground pins. For ensuring a correct alignment the probe is twist proof mounted in the flange. This probe design does not allow a wobble function of the probe. Cable connection with standard connector Mini SMP female.

**RADIO FREQUENCY PERFORMANCE**

| <b>Typical insertion loss</b> | <b>DC up to 3 GHz</b> | <b>3 GHz up to 6 GHz</b> |
|-------------------------------|-----------------------|--------------------------|
| Maximum                       | 0,6 dB                | 1,0 dB                   |
| <b>Typical return loss</b>    | <b>DC up to 3 GHz</b> | <b>3 GHz up to 6 GHz</b> |
| Minimum                       | 14 dB                 | 14 dB                    |

This table shows the reference values in the middle and at the end of the recommended frequency.

| <b>Order Code</b> | <b>Description</b>          | <b>Sensepin</b> | <b>Tip Style</b> | <b>Ø A</b> | <b>Ø B</b> | <b>C</b> | <b>H</b> | <b>L</b> | <b>Version</b> |
|-------------------|-----------------------------|-----------------|------------------|------------|------------|----------|----------|----------|----------------|
| HF05-0002         | HF05-0002 GSG 6 F M-SMP 050 |                 | 11               | 0,30       | 3,00       | -0,30    | 23,30    | 28,00    | -              |



# Mounting of the new RF series

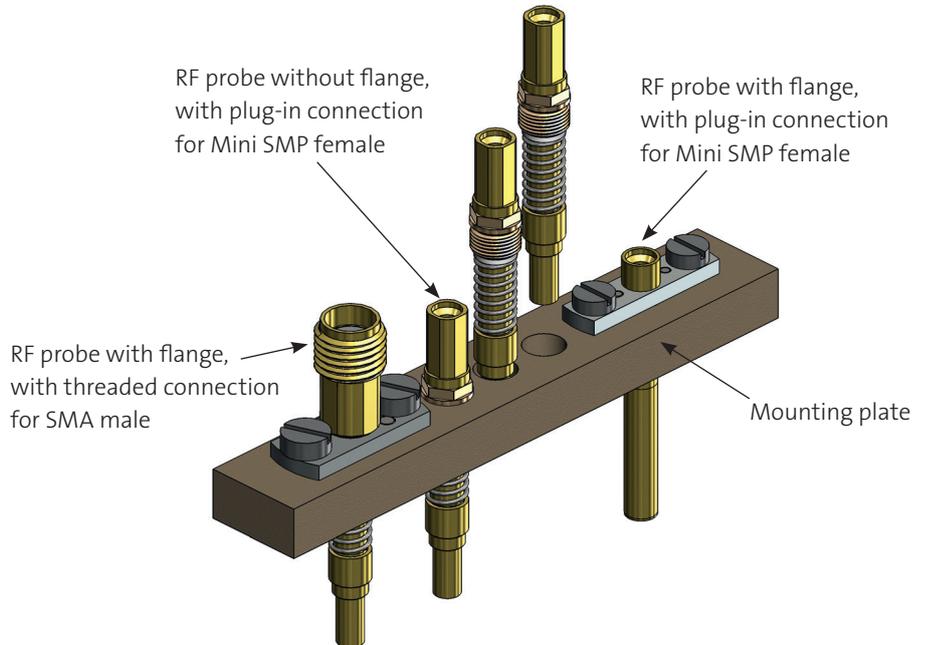
## Mounting Options

For the new RF probe series HF66 and HF05 different mounting options are possible.

Some probes can be threaded directly into the mounting plate.

Some versions have a flange that is screwed to the mounting plate, this version allows a simple adjusting and contacting of the DUT. The drill hole for mounting needs to have a sufficient diameter to allow a movement of the probe.

## Mounting example 1



## Mounting with Flange

For mounting RF probes with flange drill holes for the centering pins, threaded holes for the fixing screws as well as guiding holes for the probe are needed. These need to correspond with the pattern of the flange.

At first, the RF probe is inserted into the guiding hole and brought into the correct position with the alignment pins.

Afterwards the RF probe can be fixed with the screws.

The last step is the connection of the probe with a suitable connection cable. We recommend coaxial cables with low attenuation and low stiffness, because the cables move with the end of the probe when the probe is compressed and they need to allow a certain movement of the probes.

## Mounting example 2

