



## Radio-frequency contacting

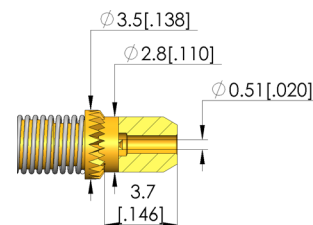
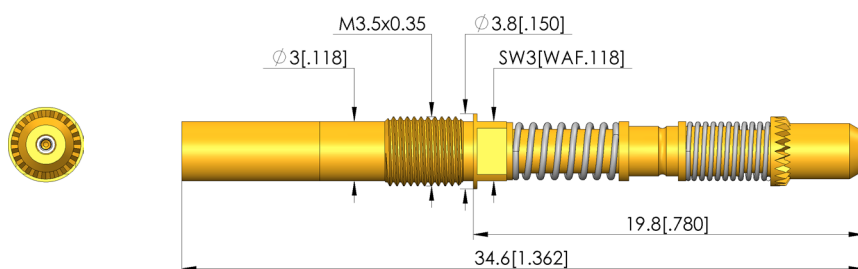
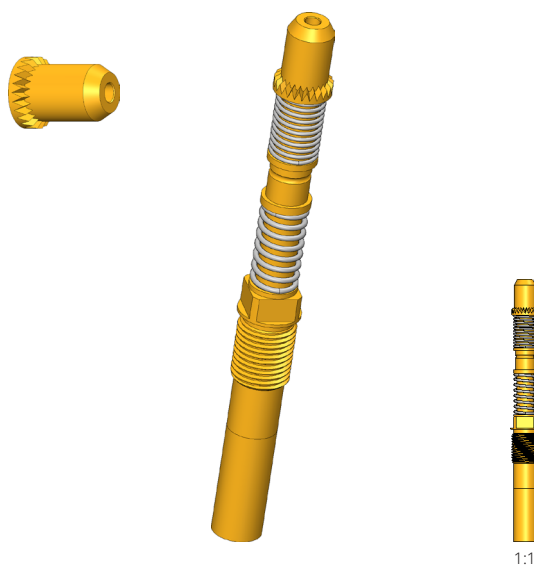
### For contacting of FAKRA-Mini (HFM)

INGUN SELECTION

- For testing FAKRA-mini connectors e.g. HFM (Rosenberger) or Mate-AX (TE Connectivity)
- Used mainly in future technologies for the automotive market (e.g. autonomous driving)
- Radio-frequency test probes for best radio frequency performance and data transmission
- Modular design, test probe combination for single, double or quadruple housing can be used or installed in floating mount HAS-807
- Cable interface high-speed SMPM male, connection cable SMPM female

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5G  
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# Radio-frequency probe

## HFS-807 303 051 A 6842 HFM-M

Item HFS-807-0002



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### General data

|                                        |                                    |
|----------------------------------------|------------------------------------|
| Product group:                         | HFS radio-frequency test probes    |
| Series:                                | HFS-807                            |
| Sub-series:                            | HFS-807 M screw-in                 |
| Grid:                                  | 4 mm [157 mil]                     |
| DUT / contact:                         | Mini Coax HFM                      |
| Installation type:                     | Screw-in                           |
| DUT interface gender :                 | M signal conductor male / pin      |
| Floating mount:                        | No                                 |
| Non-rotating:                          | No                                 |
| Continuous plunger:                    | Yes                                |
| Interface of compatible assembly:      | SMPM 50 Ohm                        |
| Compatible assembly interface gender : | F signal conductor female / socket |
| Min. temperature:                      | - 40 °C [- 104 °F]                 |
| Max. temperature:                      | + 80 °C [+ 176 °F]                 |
| RoHS-compliant:                        | RoHS-3;6c                          |

### Outer conductor data

|                                                           |                                              |
|-----------------------------------------------------------|----------------------------------------------|
| Outer conductor tip style:                                | 42 centring for inner side of plug connector |
| Outer conductor tip style diameter:                       | 3.5 mm [.137 in]                             |
| Spring force of entire outer conductor at working stroke: | 5.8 N [20.8 ozf]                             |
| Outer conductor working stroke:                           | 3.2 mm [.125 in]                             |
| Outer conductor maximum stroke:                           | 4.1 mm [.161 in]                             |
| Exchangeable outer conductor:                             | No                                           |
| Outer conductor max. current load capacity:               | 3 A                                          |

### Inner conductor data

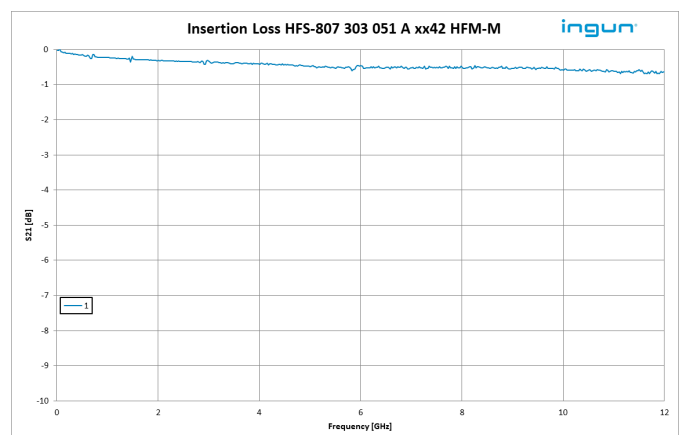
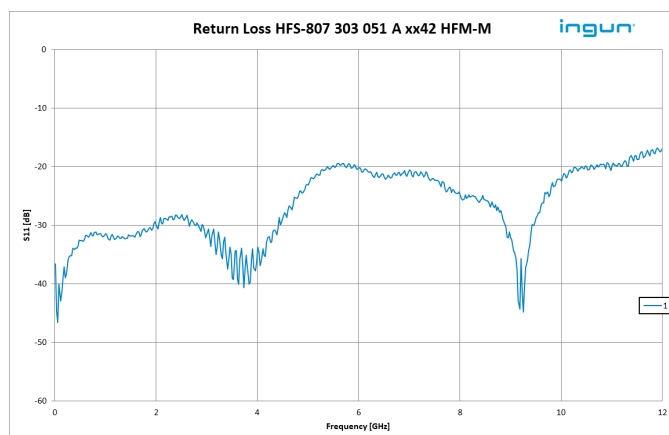
|                                                         |                   |
|---------------------------------------------------------|-------------------|
| Inner conductor tip style:                              | 03 inverse cone   |
| Inner conductor tip style diameter:                     | 0.51 mm [.020 in] |
| Inner conductor tip style material:                     | 3 CuBe            |
| Inner conductor tip style surface:                      | A gold            |
| Number of inner conductors:                             | 1                 |
| Exchangeable inner conductor:                           | No                |
| Inner conductor working stroke:                         | 1 mm [.039 in]    |
| Spring force of each inner conductor at working stroke: | 1 N [3.59 ozf]    |
| Inner conductor maximum stroke:                         | 1.5 mm [.059 in]  |
| Inner conductor max. current load capacity:             | 2 A               |

### Electrical data

|                        |        |
|------------------------|--------|
| Frequency range up to: | 12 GHz |
| Impedance:             | 50 Ohm |

### Mechanical data

|                                         |                                  |
|-----------------------------------------|----------------------------------|
| Total spring force at working stroke:   | 6.8 N [24.4 ozf]                 |
| Total length:                           | 34.6 mm [1.36 in]                |
| Barrel diameter:                        | 3 mm [.118 in]                   |
| Installation height without receptacle: | 19.8 mm [.779 in]                |
| Torque in receptacle:                   | 10 - 20 cNm [.885 - 1.77 lbf-in] |



# Radio-frequency probe HFS-807 303 051 A 6842 HFM-M

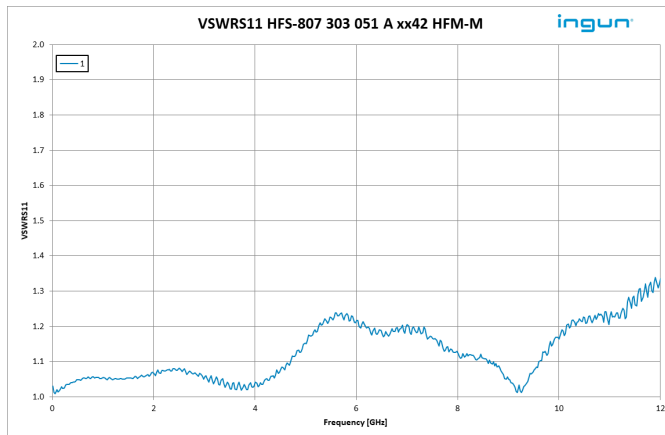
Item HFS-807-0002



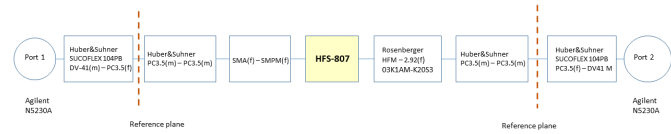
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HFS-807 303 051 A 6842 HFM-M, RF measurement setup



## Hochfrequenz Eigenschaften

| Frequenzbereich | Insertion Loss | Return Loss | VSWR   |
|-----------------|----------------|-------------|--------|
| DC – 3 GHz      | <= -0.3 dB     | >= 28 dB    | < 1.08 |
| 3 – 6 GHz       | <= 0.5 dB      | >= 20 dB    | < 1.24 |
| 6 – 12 GHz      | <= 0.7 dB      | >= 16 dB    | < 1.34 |

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Learn more about  
Test probes



Prices and delivery times on request.  
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