

## ASMGAXxxXC113S11

I-PEX MHF® 4L to IP67 SMA-Female Front Mount Bulkhead Pigtail Cable Assembly



### Key Features

- Connector 1: I-PEX MHF® 4L
- Connector 2: IP67 SMA Female Bulkhead
- 1.13mm Coaxial Cable
- Impedance: 50Ω
- Lengths: 100 mm / Customisation Available
- Suggested Working Frequency: DC to 6GHz

### Typical Applications

- I-PEX MHF® 4L micro coaxial connector, ideal for a small form factor, high-frequency performance.
- IP67 SMA Female Bulkhead Rear Mount connector for secure rear-side installation.
- Cellular Modules, Wi-Fi/Bluetooth Devices, Drones/Robotics, Medical Devices and Wearable Devices.

### Environmental Specifications

- Operating Temperature: -40 to +90 °C
- RoHS and REACH compliant

I-PEX MHF® 5L	SMAF Frontmount	1.13 Coax	100 MM Length	200 MM Length
BLE Bluetooth	ZB Zigbee	Wi-Fi 5 / 6 / 7	LoRa Wireless	5G New Radio
4G LTE	ISM DC to 6G	GNSS	IP 67	

### Ordering Details:

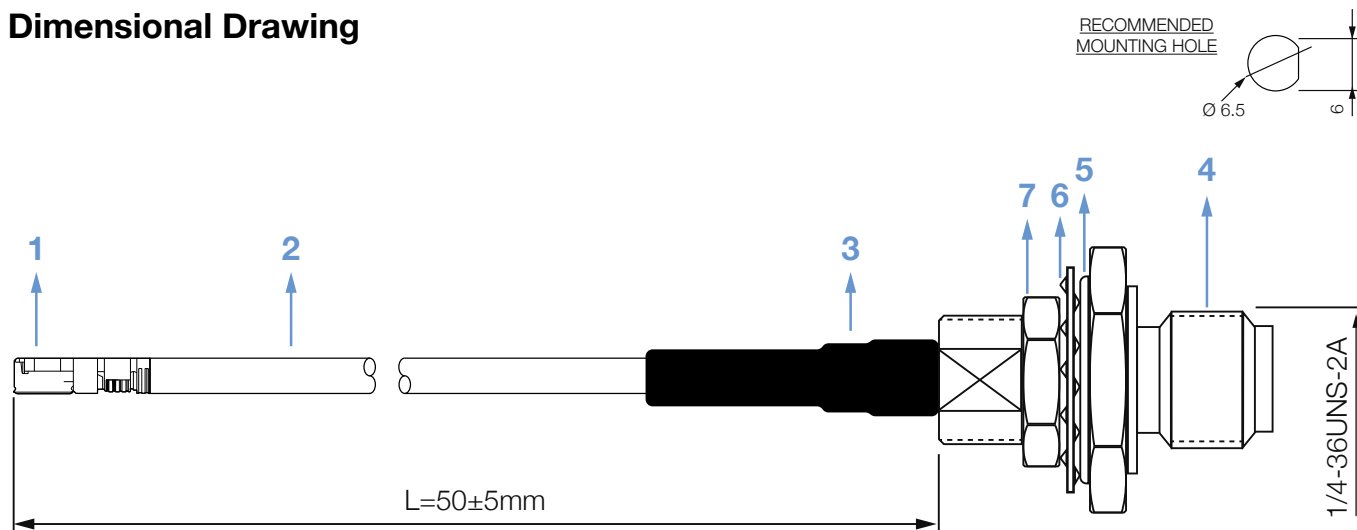
Part Number	Description
ASMGAX003XC113S11	I-PEX MHF® 4L to SMA Female Bulkhead Front Mount 30 mm 1.13 mm Cable
ASMGAX005XC113S11	I-PEX MHF® 4L to SMA Female Bulkhead Front Mount 50 mm 1.13 mm Cable
ASMGAX0075XC113S11	I-PEX MHF® 4L to SMA Female Bulkhead Front Mount 75 mm 1.13 mm Cable
ASMGAX010XC113S11	I-PEX MHF® 4L to SMA Female Bulkhead Front Mount 100 mm 1.13 mm Cable
ASMGAX0125XC113S11	I-PEX MHF® 4L to SMA Female Bulkhead Front Mount 125 mm 1.13 mm Cable
ASMGAX015XC113S11	I-PEX MHF® 4L to SMA Female Bulkhead Front Mount 150 mm 1.13 mm Cable

**Customisation Available:** We also offer customisation of cable lengths to meet your specific requirements. Whether you need a shorter or longer cable, we can tailor the solution to fit your exact needs - [siretta@sales.com](mailto:siretta@sales.com)

## ASMGxxxXC113S11

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### Dimensional Drawing



### Electrical Data

- 100% continuity, short circuit test.
- Impedance: 50  $\Omega$

### General Tolerances

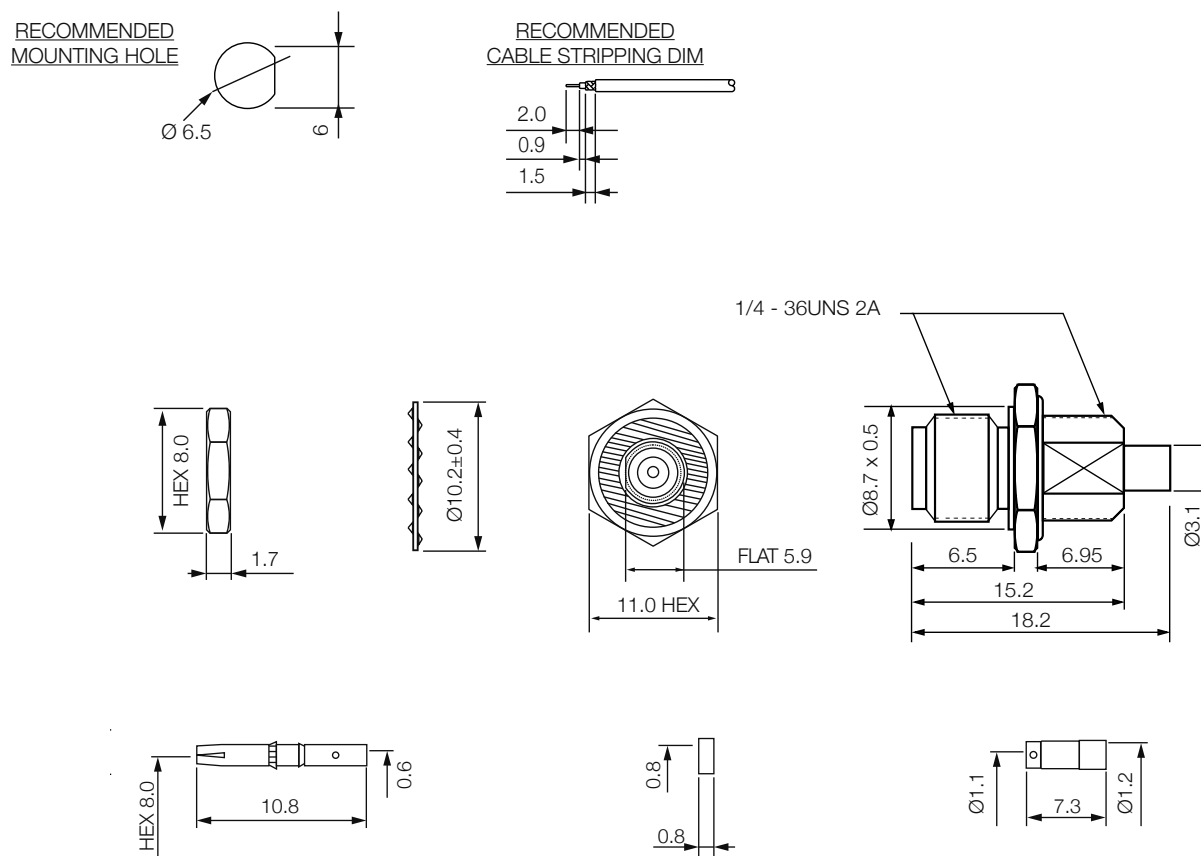
- Connector:  $\pm 2$
- Strip:  $\pm 0.3$

No.	Description	Quantity
1	I-PEX MHF® 4L Plug	1
2	1.13 Coaxial Cable (Gray)	1
3	Heat Shrink (Black)	1
4	SMA Straight Bulkhead Jack (Front Mount) with O-ring	1
5	O-ring	1
6	Washer	1
7	Nut	1

## ASMGxxxXC113S11

I-PEX MHF® 4L to IP67 SMA-Female Front Mount Bulkhead Pigtail Cable Assembly

### SMA-F Detailed Drawing

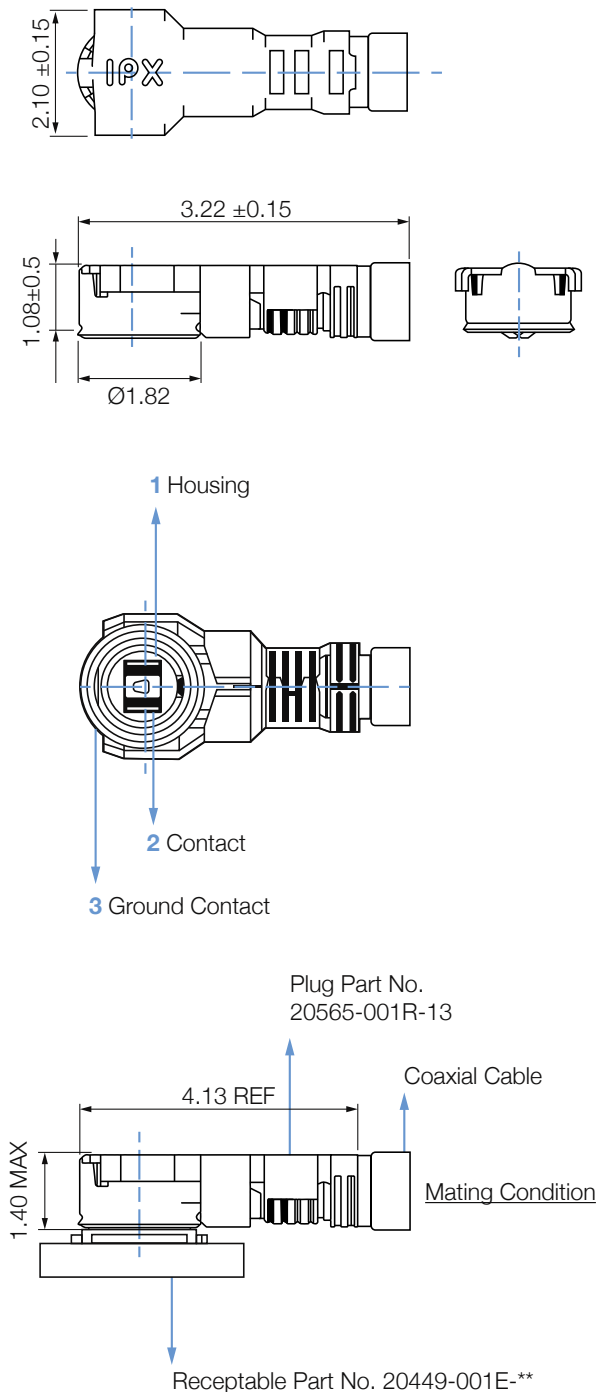


No.	Description	Material	Quantity
1	Body	Brass	1
2	Insulator A	Teflon	1
3	Center Pin	Be.Cu	1
4	Insulator B	Teflon	1
5	Sleeve	Brass	1
6	Washer	Brass	1
7	Nut	Brass	1

## ASMGAXxxXC113S11

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### I-PEX MHF® 4L Detailed Drawing

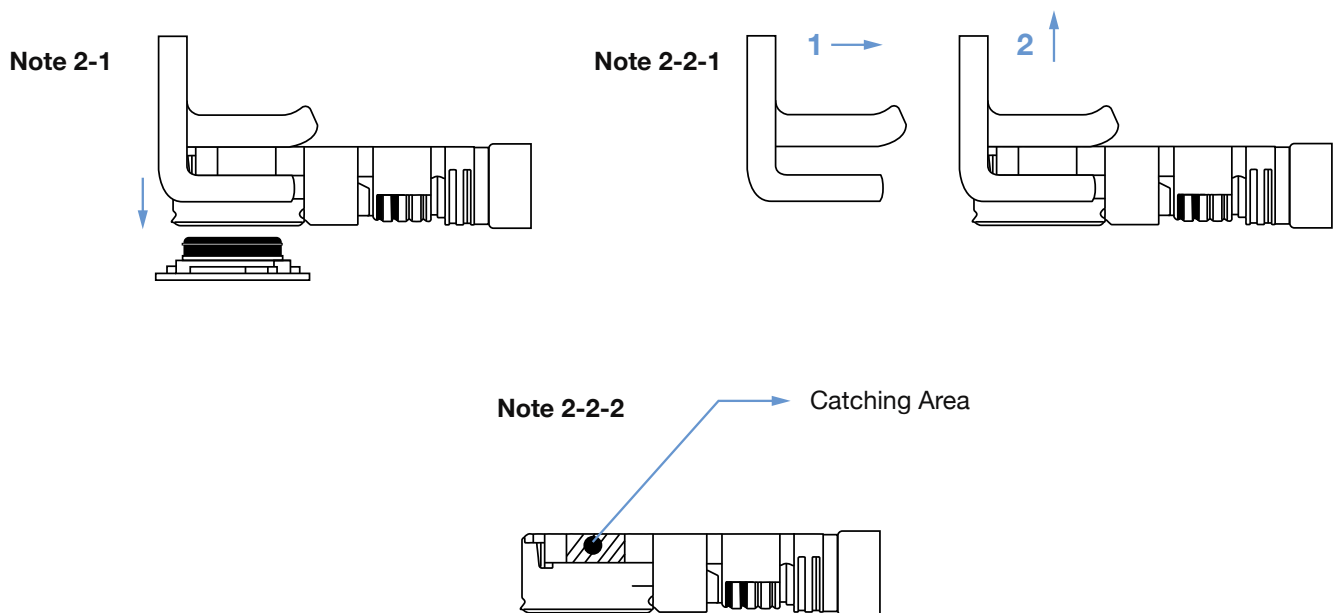


No.	Description	Material	Finish/Remarks
1	Housing	LCP	UL94V-0 Black (GF 30%)
2	Contact	Phosphor Bronze	All over Ni 1.00 µm min. Contact part Au 0.05 µm min.
3	Ground Contact	Phosphor Bronze	All over Ni 1.00 µm min. Contact part Au 0.05 µm min. [Ni plating area] Ni only

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### I-PEX MHF® 4L Detailed Drawing (Installation)



#### NOTE:

1. Applicable connector: 20566-001E-01
2. Permissible load of cable at mating
3. Mating and unmating instruction

#### 3-1. Mating

Mate the connector vertically as much as possible, adjusting the mating axis of plug and receptacle. Do not slant mate.

#### 3-2. Unmating

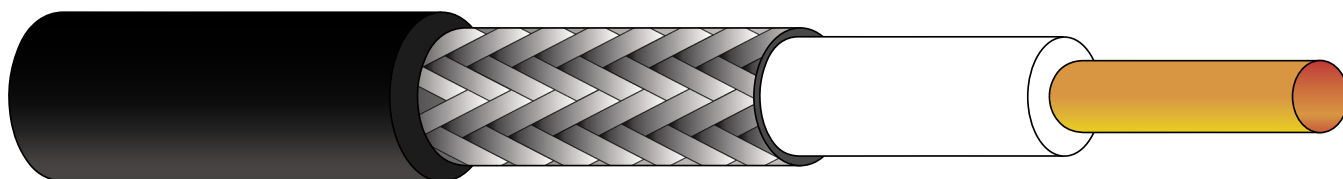
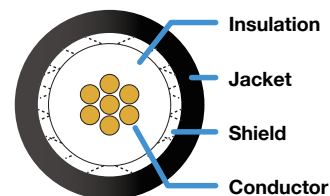
**3-2-1.** In case of unmating by pulling tool (part no. 90612-0001). Use the pulling tool as the following drawing, and pull plug to vertical direction as directly as possible.

**3-2-2.** In case of unmating directly by hand. Catch the catching area of plug, and pull plug to vertical direction as directly as possible.

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### 1.13 Coaxial Cable Specification



Jacket	Braided Shield	Insulation	Conductor
Material FEP	Material Tinned Copper	Material FEP	Material Silver Coated Copper
Colour Grey/Black/Custom	Construction 16 / 4 / 0.050 mm	Average Thickness 0.22 mm	Construction 32AWG (7/0.085 mm)
Average Thickness 0.12 mm	Coverage 90%	Colour Clear	Diameter 0.26 mm
Diameter 1.13±0.1 mm		Diameter 0.70±0.03 mm	

### Electrical Specifications

Impedance:	50 ± 3 Ω
Conductor Resistance:	314 Ω/km 20°C Max
Insulation Resistance:	3000 MΩ-km Min
Capacitance:	96± 3 pF/M
Dielectric Strength:	AC 500 V/Minute
Spark Test:	1 kV
Nom. Vel. of. Prop:	69%
VSWR Test (0~6 GHz):	1.35 Max
VSWR Test (6~8 GHz):	1.45 Max
Flame Test:	VW-1 OK

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### Physical Specifications

Item:	1.13 mm (32AWG)
Rating Temp Voltage:	105°C 30V
Minimum Bend Radius:	5.0 mm
Recognised:	UL 1979
Operating Temperature range:	-40°C ~ +200°C
Storage Temperature range:	-40°C ~ +200°C

### Insulation - Unaged

Tensile Strength:	2500 PSI Min (1.76 Kg / (mm <sup>2</sup> ))
Elongation:	200% Min

### Insulation - Aged

Tensile Strength:	UNAGED Min.75% (232°C×168HRS)
Elongation:	UNAGED Min.75% (232°C×168HRS)

### Jacket - Unaged

Tensile Strength:	2500 PSI Min. ( 1.76 Kg / (mm <sup>2</sup> ))
Elongation:	200% Min

### Jacket - Aged

Tensile Strength:	UNAGED Min.75% (232°C×168HRS)
Elongation:	UNAGED Min.75% (232°C×168HRS)

### Attenuation (across frequency)

Frequency (GHz)	1 GHz	2 GHz	3 GHz	4 GHz	5 GHz	6 GHz	7 GHz	8 GHz
dB/1m	2.20	3.10	3.90	4.50	5.00	5.50	6.10	6.70
dB/ft	0.67	0.95	1.19	1.37	1.52	1.68	1.86	2.04