



## Overview

Amphenol RF offers 50 ohm tamper-resistant ultraminiature cable assemblies featuring the I-PEX MHF® I LK locking connector on one end. These pre-configured assemblies are available in multiple configurations designed on ultra flexible 1.13 mm micro-coax cable with compact SMA, RP-SMA, TNC and RP-TNC connectors with waterproof IP67-rated options. Many configurations of this assembly support higher frequency applications such as WiFi 6E.

MHF® I LK connectors are compatible with the AMC and industry-standard micro-miniature connectors. They feature a patented locking system which makes them well-suited for applications that experience continuous shock and vibration. The combination of ultraminiature and subminiature connectors on micro-coax cable allows them to be utilized in designs that require a versatile, space conscious solution.

## Features and Benefits

- Waterproof IP67 options available
- Reliable electrical performance up to 6 GHz
- Patented locking system
- Ideal for continuous shock and vibration applications
- Tamper resistant design

## Applications

- Drones
- GPS
- Ruggedized Mobile Devices
- Industrial Automation
- Robots
- RFID
- Asset Tracking

## Ordering Information

### MHF® I Locking Plug to SMA Jack Cable Assemblies on 1.13 mm

| Part Number     | Description                                                               |
|-----------------|---------------------------------------------------------------------------|
| 095-902-582-XXX | MHF® I LK Right-Angle Plug to SMA Straight Front Mount Bulkhead Jack      |
| 095-902-583-XXX | MHF® I LK Right-Angle Plug to SMA Straight Rear Mount Bulkhead Jack       |
| 095-902-584-XXX | MHF® I LK Right-Angle Plug to IP67 SMA Straight Front Mount Bulkhead Jack |
| 095-902-585-XXX | MHF® I LK Right-Angle Plug to IP67 SMA Straight Rear Mount Bulkhead Jack  |

### MHF® I Locking Plug to RP-SMA Jack Cable Assemblies on 1.13 mm

| Part Number     | Description                                                                  |
|-----------------|------------------------------------------------------------------------------|
| 095-902-586-XXX | MHF® I LK Right-Angle Plug to IP67 RP-SMA Straight Front Mount Bulkhead Jack |
| 095-902-587-XXX | MHF® I LK Right-Angle Plug to IP67 RP-SMA Straight Rear Mount Bulkhead Jack  |
| 095-902-588-XXX | MHF® I LK Right-Angle Plug to RP-SMA Straight Front Mount Bulkhead Jack      |

### MHF® I Locking Plug to TNC Jack Cable Assemblies on 1.13 mm

| Part Number     | Description                                                               |
|-----------------|---------------------------------------------------------------------------|
| 095-850-309-XXX | MHF® I LK Right-Angle Plug to TNC Straight Rear Mount Bulkhead Jack       |
| 095-850-310-XXX | MHF® I LK Right-Angle Plug to IP67 TNC Straight Rear Mount Bulkhead Jack  |
| 095-850-311-XXX | MHF® I LK Right-Angle Plug to IP67 TNC Straight Front Mount Bulkhead Jack |

### MHF® I Locking Plug to RP-TNC Jack Cable Assemblies on 1.13 mm

| Part Number     | Description                                                                  |
|-----------------|------------------------------------------------------------------------------|
| 095-850-313-XXX | MHF® I LK Right-Angle Plug to RP-TNC Straight Front Mount Bulkhead Jack      |
| 095-850-314-XXX | MHF® I LK Right-Angle Plug to IP67 RP-TNC Straight Front Mount Bulkhead Jack |
| 095-850-315-XXX | MHF® I LK Right-Angle Plug to IP67 RP-TNC Straight Rear Mount Bulkhead Jack  |

*Note: 'XXX' denotes length code. See component drawing for available lengths.*

## Amphenol RF

Four Old Newtown Road  
Danbury, CT 06810

For more information visit [www.amphenolrf.com](http://www.amphenolrf.com)  
or call 800.627.7100

## Technical Specifications

### Connectors

#### Electrical

|                                 | SMA (RP-SMA)                 | TNC (RP-TNC)                 | MHF® I LK                   |
|---------------------------------|------------------------------|------------------------------|-----------------------------|
| Impedance                       | 50Ω                          | 50Ω                          | 50Ω                         |
| Frequency Range                 | DC - 6 GHz                   | DC - 9 GHz                   | DC - 9 GHz                  |
| Voltage Rating                  | 335 Volts RMS Max Continuous | 500 Volts RMS Max Continuous | 60 Volts RMS Max Continuous |
| Dielectric Withstanding Voltage | 1000 VRMS Max                | 1500 VRMS Max                | 200 VRMS Max                |
| Insulation Resistance           | 5000 MΩ Min                  | 5000 MΩ Min                  | 500 MΩ Min                  |
| Center Contact Resistance       | 3.0 mΩ Min                   | 1.5 mΩ Min                   | 20 mΩ Min                   |
| Outer Contact Resistance        | 2.0 mΩ Min                   | 0.2 mΩ Min                   | 10 mΩ Min                   |

#### Environmental

|                   |                             |                             |                             |
|-------------------|-----------------------------|-----------------------------|-----------------------------|
| Temperature Range | -65°C to +165°C             | -65°C to +165°C             | -40°C to +90°C              |
| RoHS Compliance   | Compliant with Exemption 6C | Compliant with Exemption 6C | Compliant with Exemption 6C |

#### Mechanical

|                    |          |          |                 |
|--------------------|----------|----------|-----------------|
| Mating Cycles      | 500 Min  | 500 Min  | 30 Min          |
| Coupling Mechanism | Threaded | Threaded | Push-On Locking |

#### Materials

|           |                               |                      |                                                      |
|-----------|-------------------------------|----------------------|------------------------------------------------------|
| Body      | Brass, Gold-Plated            | Brass, Nickel-Plated | Phosphor Bronze, Selectively Plated Gold Over Nickel |
| Contact   | Beryllium Copper, Gold-Plated | Brass, Gold-Plated   | Phosphor Bronze, Selectively Plated Gold Over Nickel |
| Insulator | PTFE                          | PTFE                 | PBT                                                  |

*Note: Technical specifications are typical and may vary by specific part number. Please see component drawing.*

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