

**MH081\* SERIES**

# MICRO HIGH FREQUENCY RF CABLES

## SPECIFICATIONS

For complete specifications see [www.samtec.com?MH081](http://www.samtec.com?MH081)

- Outer Contact Material:** Au plated Phosphor Bronze
- Center Contact Material:** Au plated Phosphor Bronze (MHX)
- Insulator Material:** PBT (MHX)  
PTFE (SMA)
- Operating Temperature:** -40 °C to +90 °C
- Voltage Rating:** 170 V max
- Dielectric Withstanding Voltage:** 200 Vrms
- Frequency Range:** 0-3 GHz
- Contact Resistance:** Center Contact: 6 mΩ max  
Outer Contact: 2 mΩ max
- Insulator Resistance:** 5,000 MΩ
- Impedance:** 50 Ω
- RoHS Compliant:** Yes

- 0.81 mm Cable:**
- Impedance:** 50 Ω
- Capacitance:** 100 pF/meter
- Max Attenuation (cable only):** 3.1 dB @ 1 GHz
- Conductor Size:** 36 AWG, (0.81 mm) .032" dia.
- Conductor Material:** Silver Plated Copper
- Conductor Resistance:** 1.40 Ω/meter max
- Insulator Diameter:** (0.4 mm) .016"
- Insulator Material:** FEP
- Shield Material:** Silver Plated Copper
- Jacket Material:** FEP
- Jacket Diameter:** (0.81 mm) .032" dia.
- Bend Radius:** 5.0 mm
- Jacket Temp Rating:** -40 °C to +90 °C
- RoHS Compliant:** Yes

## ALSO AVAILABLE (MOQ Required)

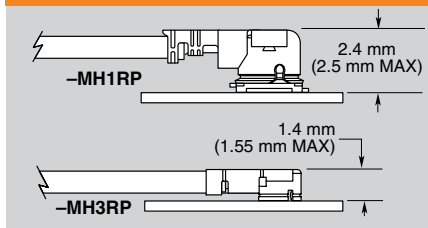
- Additional stripping and tinning options
- Additional end connector combinations
- Overall lengths
- Contact Samtec.

## EXTRACTION TOOLS

- -MH1RP = RSP-122893-01
- -MH3RP = RSP-122893-02

\* MH081 Series was previously RF081 Series

## APPLICATION



U.FL and W.FL Types

Micro High Frequency RF, MHF or SMA Bulkhead

(0.81 mm) .032" Diameter Cable

Mating PCB connectors available

## MATING SOLUTIONS

- Micro RF PCB connectors for Micro High Frequency RFs
- MH1RP end mates with RSP-122811-01 (Cycles: 30 max.)
- MH3RP end mates with RSP-122811-02

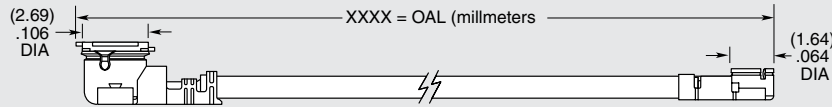
**MH081**

**END 1 CONNECTOR**

**END 2 CONNECTOR**

**OVERALL LENGTH**

Specify END OPTIONS from chart



- 0030** = 1.18" (30 mm)
- 0050** = 1.97" (50 mm)
- 0100** = 3.94" (100 mm)
- 0150** = 5.91" (150 mm)
- 0300** = 11.81" (300 mm)

## END OPTIONS

<b>-MH1RP = MHF1 Type Plug</b> (3.9 μ" (.1 μm) Gold on Center Contact, 1.9 μ" (.05 μm) Gold on Shell)	
<b>-MH3RP = MHF3 Type Plug</b> (3.9 μ" (.1 μm) Gold on Center Contact, 1.9 μ" (.05 μm) Gold on Shell)	
<b>-01BJ1 = SMA Straight Bulkhead Jack</b> <b>-01BJ2 = SMA Straight Bulkhead Jack, Reversed Polarity</b>	
<b>-01SB1 = SMA Straight Jack, Sealed Bulkhead</b> <b>-01SR1 = SMA Straight Jack, Sealed Bulkhead, Reversed Polarity</b>	
<b>-SING = Single Ended (End 2 callout)</b>	
<b>XXXXXX = Stripped &amp; Tinned (End 2 callout)</b>	

## STRIPPED & TINNED (Dimensions in mm)

CALLOUT	A	B	C
-303030	3.0	3.0	3.0
-303040	3.0	3.0	4.0
-403030	4.0	3.0	3.0
-403040	4.0	3.0	4.0
-404040	4.0	4.0	4.0

Both center conductor and braid shield are stripped, only the center conductor is tinned.