

MH081-MH3RP-MH3RP-0300

MH081-MH3RP-01BJ1-0300

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)

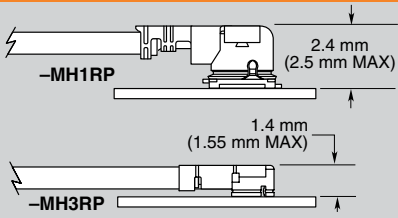
- Additional stripping and tinning options
- Additional end connector combinations
- Overall lengths
- Contact Samtec.

## EXTRACTION TOOLS

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

\* MH081 Series was previously RF081 Series

## APPLICATION



U.F.L and W.F.L 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

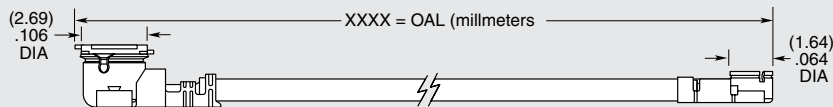
MH081

END 1 CONNECTOR

END 2 CONNECTOR

OVERALL LENGTH

Specify END OPTIONS from chart



-0030 = 1.18" (30 mm)

-0050 = 1.97" (50 mm)

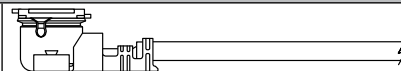
-0100 = 3.94" (100 mm)

-0150 = 5.91" (150 mm)

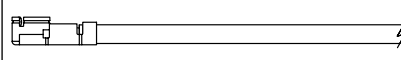
-0300 = 11.81" (300 mm)

## END OPTIONS

-MH1RP = MHF1 Type Plug  
(3.9 μ" (.1 μm) Gold on Center Contact, 1.9 μ" (.05 μm) Gold on Shell)



-MH3RP = MHF3 Type Plug  
(3.9 μ" (.1 μm) Gold on Center Contact, 1.9 μ" (.05 μm) Gold on Shell)



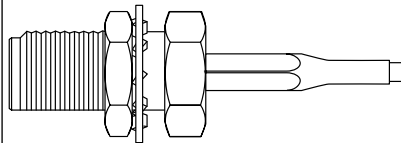
-01BJ1 = SMA Straight Bulkhead Jack

-01BJ2 = SMA Straight Bulkhead Jack, Reversed Polarity

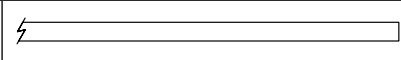
-01SB1 = SMA Straight Jack, Sealed Bulkhead

-01SR1 = SMA Straight Jack, Sealed Bulkhead, Reversed Polarity

(30 μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)



-SING = Single Ended (End 2 callout)



XXXXXX = Stripped & Tinned (End 2 callout)



## 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.

Due to technical progress, all designs, specifications and components are subject to change without notice.

[WWW.SAMTEC.COM](http://WWW.SAMTEC.COM)

All parts within this catalog are built to Samtec's specifications.

Customer specific requirements must be approved by Samtec and identified in a Samtec customer-specific drawing to apply.