

# 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)

Au plated BeCu (SMA)

### 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:

0-6 GHz

### 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:

PFA

### 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)

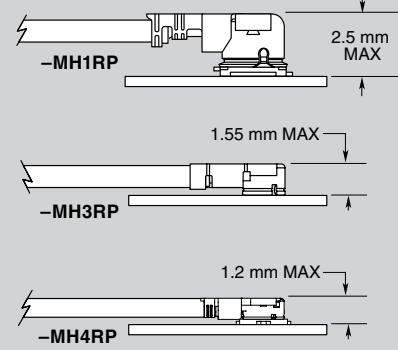
- Additional stripping and tinning options
- Additional end connector combinations
- Overall lengths

Contact Samtec.

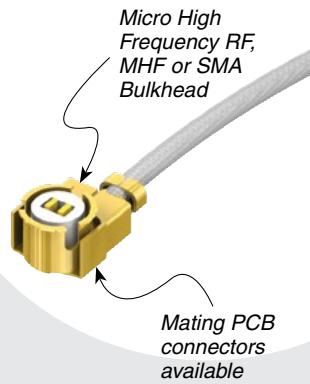
## EXTRACTION TOOLS

- -MH1RP = RSP-122893-01
- -MH3RP = RSP-122893-02
- -MH4RP = RSP-122893-03

## APPLICATION



## U.FL and W.FL Types



## MATING SOLUTIONS

- MH1RP end mates with RSP-122811-01 (Cycles: 30 max.)
- MH3RP end mates with RSP-122811-02
- MH4RP end mates with RSP-122811-03



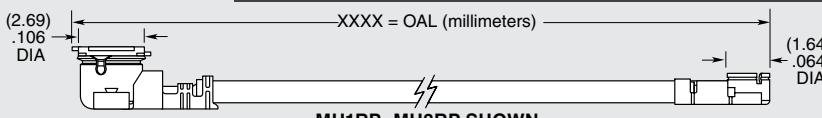
**MH081**

**END 1 CONNECTOR**

**END 2 CONNECTOR**

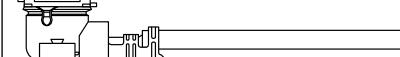
**OVERALL LENGTH**

Specify END OPTIONS from chart

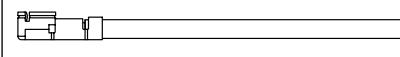


### END OPTIONS

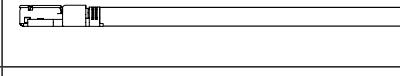
-MH1RP = MHF1 Type Plug  
(3.9 μ" (0.1 μm) Gold on Center Contact, 1.9 μ" (0.05 μm) Gold on Shell)



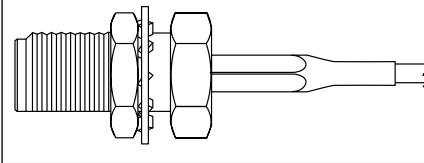
-MH3RP = MHF3 Type Plug  
(3.9 μ" (0.1 μm) Gold on Center Contact, 1.9 μ" (0.05 μm) Gold on Shell)



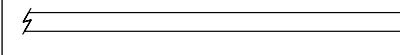
-MH4RP = MHF4 Type Plug  
(10 μ" (0.25 μm) Gold on Center Contact, 1.9 μ" (0.05 μm) Gold on Shell)  
(End 1 MH4RP only available with End 2 MH4RP)



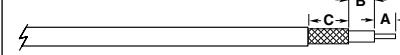
-01BJ1 = SMA Straight Bulkhead Jack  
-01BJ2 = SMA Straight Bulkhead Jack, Reversed Polarity  
-01SB1 = SMA Straight Jack, Sealed Bulkhead  
-01SR1 = SMA Straight Jack, Sealed Bulkhead, Reversed Polarity  
(30 μ" (0.76 μm) Gold on Center Contact, Gold Flash on Shell)



-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**

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.