

MH113-MH1RP-MH1RP-0300

MH113-MH1RP-01BJ1-0300

## MH113\* SERIES

# MICRO HIGH FREQUENCY RF CABLES

## SPECIFICATIONS

For complete specifications see [www.samtec.com?MH113](http://www.samtec.com?MH113)

**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:**  
0-3 GHz  
**Contact Resistance:**  
Center Contact: 6 mΩ max  
Outer Contact: 2 mΩ max  
**Insulator Resistance:**  
5,000 MΩ  
**Impedance:** 50 Ω  
**RoHS Compliant:** Yes

**1.13 mm Cable:**  
**Impedance:** 50 Ω  
**Capacitance:**  
95 pF/meter  
**Max Attenuation (cable only):**  
2 dB @ 1 GHz  
**Conductor Size:**  
32 AWG, (1.13 mm) .045" dia.  
**Conductor Material:**  
Silver Plated Copper  
**Conductor Resistance:**  
0.60 Ω/meter max  
**Insulator Diameter:**  
(0.66 mm) .026"  
**Insulator Material:** FEP  
**Shield Material:**  
Tinned Copper  
**Jacket Material:** FEP  
**Jacket Diameter:**  
(1.13 mm) .045" dia  
**Bend Radius:**  
6.8 mm  
**Jacket Temp Rating:**  
-40 °C to +90 °C  
**RoHS Compliant:** Yes

## ALSO AVAILABLE (MOQ Required)

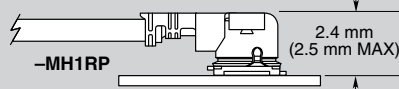
- Additional stripping and tinning options
- Additional end connector combinations
- Overall lengths
- Contact Samtec.

## EXTRACTION TOOL

- -MH1RP = RSP-122893-01

\* MH113 Series was previously RF113 Series

## APPLICATION



Micro High Frequency RF,  
MHF or SMA Bulkhead

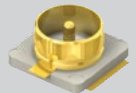
U.FL Type

(1.13 mm) .045"  
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.)



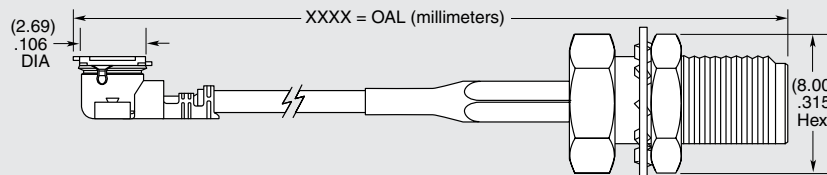
### MH113

### 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)

-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.