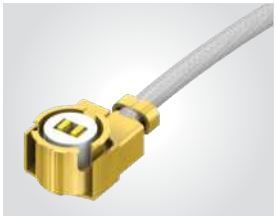
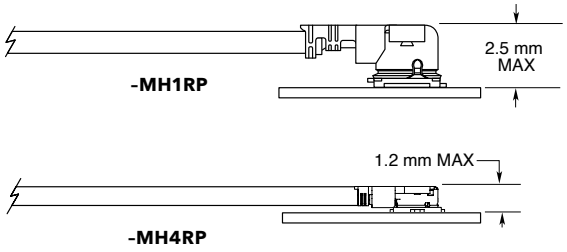
50 Ω MICRO HIGH FREQUENCY RF CABLES TO 6 GHz

MHF® Cable Assemblies
MH081, MH113



SERIES	–	END 1 CONNECTOR	–	END 2 CONNECTOR	–	OVERALL LENGTH
MH081 = 0.81 mm Cable **MH113** = 1.13 mm Cable		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)

APPLICATION



SPECIFICATIONS

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

0.81 mm Cable:
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

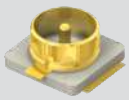
1.13 mm Cable:
Capacitance:
95 pF/meter
Max Attenuation (cable only):
2 dB @ 1 GHz
Conductor Size:
32 AWG, (1.13 mm) .045" dia.
Conductor Material:
Silver Plated Copper
Conductor Resistance:
0.60 Ω/meter max
Insulator Diameter:
(0.66 mm) .026"
Insulator Material:
FEP
Shield Material:
Tinned Copper
Jacket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

EXTRACTION TOOLS

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

MATING SOLUTIONS

MH1RP end mates with RSP-122811-01 (Cycles: 30 max.)

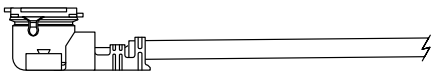
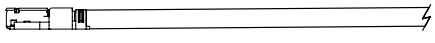
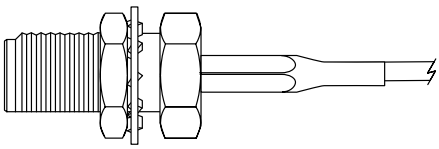
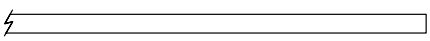


MH4RP end mates with RSP-122811-03



MHF® is a registered trademark of I-PEX® Inc.

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)	
–MH4RP = MHF4 Type Plug (10 µ" (0.25 µm) Gold on Center Contact, 1.9 µ" (0.05 µm) Gold on Shell) (MH4RP is not available with MH1RP & MH3RP) (MH081 only)	
–01BJ1 = SMA Straight Bulkhead Jack (MH081 only) **–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.

Unless otherwise approved in writing by Samtec, all parts and components are designed and built according to Samtec's specifications which are subject to change without notice.