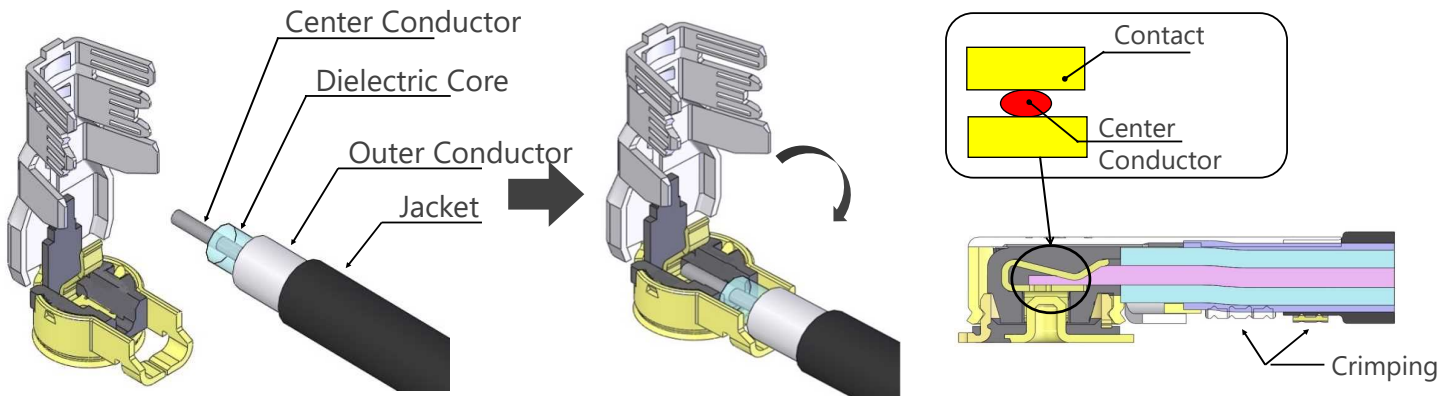




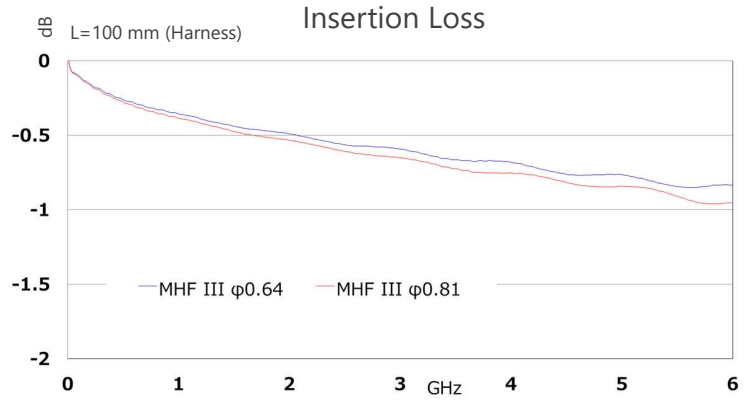
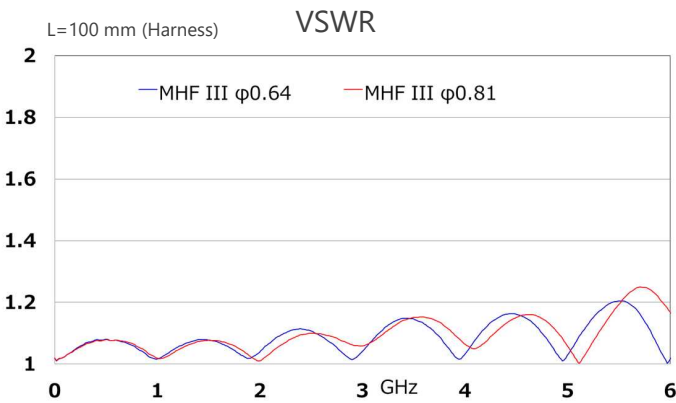
- ✓ Solderless micro-coaxial termination with "i-Fit<sup>®</sup>" technology.
- ✓ Small form factor with big performance through 6 GHz.
- ✓ MHF<sup>®</sup> III plug available micro-coax O.D. (AWG) : 0.81 mm (36), 0.64 mm (36).

Maximum height (mm)	1.6	
Outside dimension of receptacle(mm)	2.0 x 2.0	
Applicable wire gauge	O.D. 0.81 mm / AWG 36 O.D. 0.64 mm / AWG 36	
Frequency	DC~6 GHz	
VSWR (L=100 mm)	DC~3 GHz	1.3 max.
	3 GHz~6 GHz	1.5 max.
	6 GHz~9 GHz	-
	9 GHz~12 GHz	-
	12 GHz~15 GHz	-
Service temp. (Celsius)	-40 degree ~ +90 degree	
Characteristic impedance	50 ohm	
Rated voltage	AC60V	
Contact resistance	20m ohm max.	
Withstand voltage	AC200V/min	
Insulation resistance	500M ohm min./DC100V	

## Solderless Micro-Coaxial Termination with "i-Fit" Technology



## Small Form Factor with Big Performance Through 6 GHz



## MHF III Plug Available Micro-Coaxial O.D. (AWG): 0.81 mm (36), 0.64 mm (36)

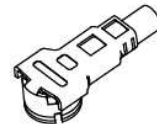
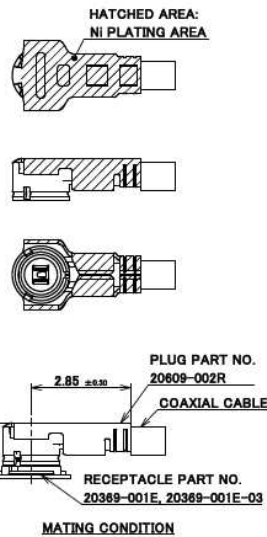
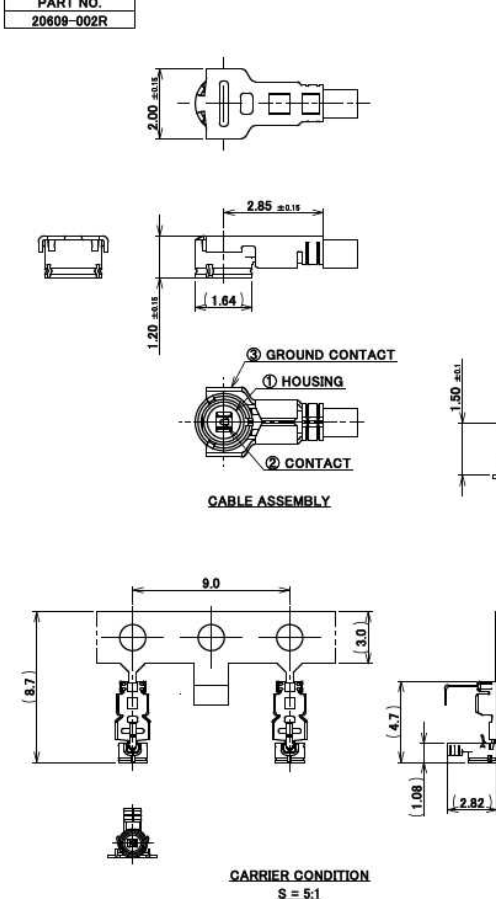
Coax O.D. (Center Conductor AWG)	Mating Height 1.6 mm max.
2.00 mm (26)	
1.80 mm (30)	
1.37 mm (30)	
1.32 mm (32)	
1.13 mm (32)	
0.95 mm (33)	
0.81 mm (33)	
0.81 mm (36)	○
0.64 mm (36)	○
0.48 mm (38)	
Receptacle	MHF III receptacle

# MHF<sup>®</sup> III

## Component Parts Detail

### MHF<sup>®</sup> III plug Ni top

Recommended P/N	20609-002R
PART NO.	20609-002R



#### NOTES.

1. APPLICABLE CONNECTOR: 20369-001E, 20369-001E-03
2. PERMISSIBLE LOAD OF CABLE AT MATING.
3. MATING AND UNMATING INSTRUCTION

#### 3-1. MATING

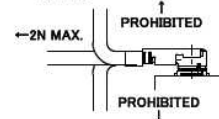
MATE THE CONNECTOR VERTICALLY AS MUCH AS POSSIBLE, ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE. DO NOT SLANT MATE.

#### 3-2. UNMATING

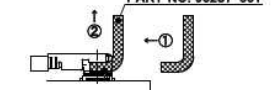
3-2-1. IN CASE OF UNMATING BY PULLING TOOL ( P/N : 90287-001 ), USE THE PULLING TOOL AS THE FOLLOWING DRAWING, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.

3-2-2. IN CASE OF UNMATING DIRECTLY BY HAND, CATCH THE CATCHING AREA OF PLUG, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.

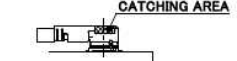
#### NOTE 2



#### NOTE 3-2-1



#### NOTE 3-2-2



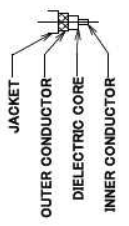
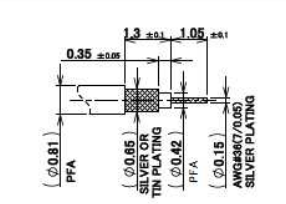
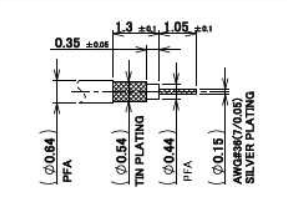
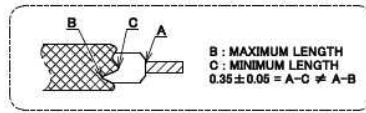
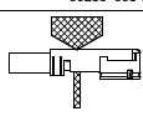
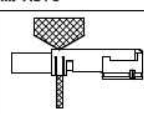
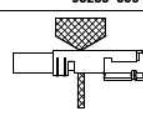
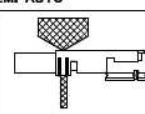
NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 $\mu\text{m}$ MIN. CONTACT PART Au 0.02 $\mu\text{m}$ MIN. (Ni PLATIN AREA) Ni ONLY
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 $\mu\text{m}$ MIN. CONTACT PART Au 0.03 $\mu\text{m}$ MIN.
1	HOUSING	LCP	UL94V-0, WHITE

# MHF® III plug Ni top

ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	20369-001E
RATING VOLTAGE	60 V AC (R.M.S)
RATING FREQUENCY	DC ~ 6 GHz
OPERATING TEMPERATURE	233 ~ 363 K(-40°C ~ +90°C)
VSWR	1.3 MAX. AT DC ~ 3 GHz, 1.5 MAX. AT 3 ~ 6 GHz
MAIN CONTACT RESISTANCE	INITIAL : 20 mohm MAX. / AFTER TEST : $\leq$ 20 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL : 20 mohm MAX. / AFTER TEST : $\leq$ 100 mohm MAX.
INSULATION RESISTANCE	INITIAL : 500 Mohm MIN. / AFTER TEST : 100 Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC 200 V 1 MINUTE
DURABILITY	30 CYCLES
TOTAL UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 4 N MIN. / AFTER: 2 N MIN.
CRIMP STRENGTH	7 N MIN.
PRODUCT SPECIFICATION	PRS-2107
TEST REPORT	TR-15061
PACKING STANDARD	300-340
INSTRUCTION MANUAL	HIM-07002

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# MHF® III plug Ni top

PART NO.	20609-002R			
				
	<p>MUST NOT USE SOLDER COATED INNER CONDUCTOR AND OUTER CONDUCTOR.</p> 			
REQUIREMENTS	CHARACTERISTIC IMPEDANCE : 50 OHM BY TDR METHOD NOMINAL CAPACITANCE (REFERENCE VALUE) : 96pF/m CONDUCTOR RESISTANCE OF INNER CONDUCTOR AT 293 K (REFERENCE VALUE) : 1400 OHM/km INSULATION RESISTANCE : 1000 MEGA-OHM.km MIN. DIELECTRIC WITH STANCE VOLTAGE : OD 0.81 TYPE --- NO BREAKDOWN AT AC 1000 V FOR 1 MIN. OD 0.64 TYPE --- NO BREAKDOWN AT AC 500 V FOR 1 MIN.			
BRAIDED SHIELD OF OUTER CONDUCTOR	SINGLE		SINGLE	
P/N OF SEMI AUTO TERMINATION MACHINE	90283-008 SEMI-AUTO		90283-006 SEMI-AUTO	
CRIMP HEIGHT				
	USE FOR POINT MICROMETER CH-1 (i-Fit® PART) 0.89~0.93		USE FOR POINT MICROMETER CH-2 (JACKET PART) 0.80~0.85	
				
	USE FOR POINT MICROMETER CH-1 (i-Fit® PART) 0.78~0.82		USE FOR POINT MICROMETER CH-2 (JACKET PART) 0.68~0.72	

Rev.1

# Accessories for MHF<sup>®</sup> III plug Ni top



**MHF III SMA ADAPTOR**  
**PART NO. 90285-001**



**MHF III INSPECTION CONNECTOR**  
**PART NO. 90286-001**



**FRONT SIDE**



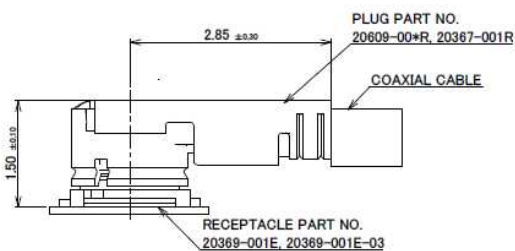
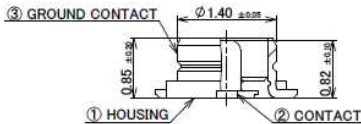
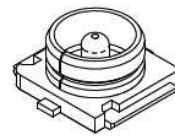
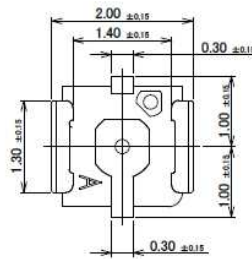
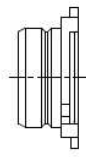
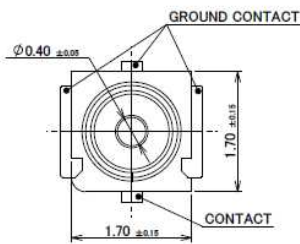
**BACK SIDE**

**MHF III PULLING TOOL**  
**PART NO. 90287-001**

Rev.1

## MHF<sup>®</sup> III Receptacle

Recommended P/N	20369-001E-03	
PART NO.	PACKING REEL	PACKING QUANTITY
20369-001E	CORRUGATED PAPER REEL	5,000/REEL
20369-001E-03	PLASTIC REEL	



**MATING CONDITION**

NOTES.  
1. APPLICABLE CONNECTOR  
20609-00\*R  
20367-001R  
2. COPLANARITY : 0.1MAX.

NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.03 μm MIN. SOLDERING PART Au 0.03 μm MIN.
2	CONTACT A	BRASS	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.1 μm MIN. SOLDERING PART Au 0.1 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK

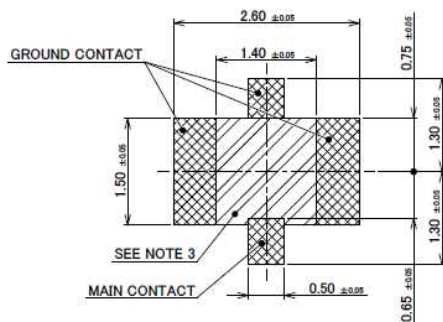
Rev.11

# MHF<sup>®</sup> III Receptacle

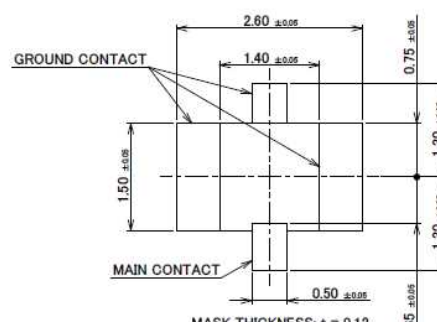
ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	20609-002R
RATING VOLTAGE	60 V AC (R.M.S)
RATING FREQUENCY	DC ~ 6 GHz
OPERATING TEMPERATURE	233 ~ 363 K(-40°C ~ +90°C)
VSWR	1.3 MAX. AT DC ~ 3 GHz, 1.4 MAX. AT 3 ~ 6 GHz
MAIN CONTACT RESISTANCE	INITIAL : 20 mohm MAX. / AFTER TEST : $\angle$ R 20 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL : 20 mohm MAX. / AFTER TEST : $\angle$ R 100 mohm MAX.
INSULATION RESISTANCE	INITIAL : 500 Mohm MIN. / AFTER TEST : 100 Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC 200 V 1 MINUTE
DURABILITY	30 CYCLES
TOTAL UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 4 N MIN. / AFTER: 2 N MIN.
PRODUCT SPECIFICATION	PRS-2107
TEST REPORT	TR-15061
PACKING STANDARD	300-339
INSTRUCTION MANUAL	HIM-07002
APPEARANCE CRITERIA No.	QLS-A***

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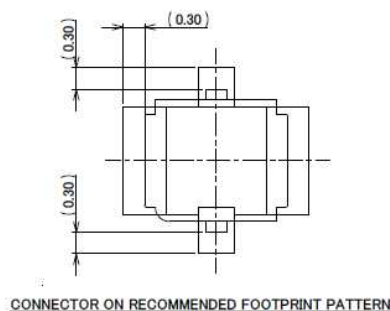
# MHF<sup>®</sup> III Receptacle



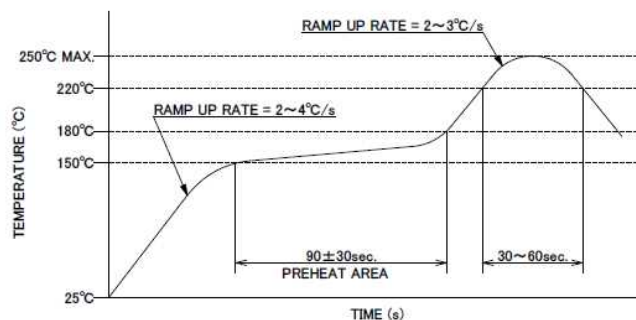
RECOMMENDED FOOTPRINT PATTERN



RECOMMENDED FOOTPRINT PATTERN



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



REFLOW TEMPERATURE PROFILE  
SENJU METAL INDUSTRY CO., LTD. · M705-SHF(Sn96.5 Ag3.0 Cu0.5)

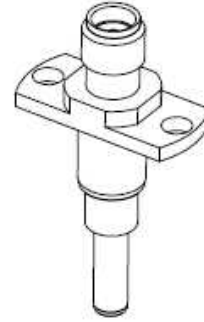
NOTES  
3. PATTERN AND RESISTPROHIBITION AREA

Rev.11

# Accessories for MHF® III Receptacle



MHF III SMA ADAPTER  
PART NO. 90285-002



MHF III SMA ADAPTER HIGH CYCLE TYPE  
PART NO. 90491-001

Rev.11



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