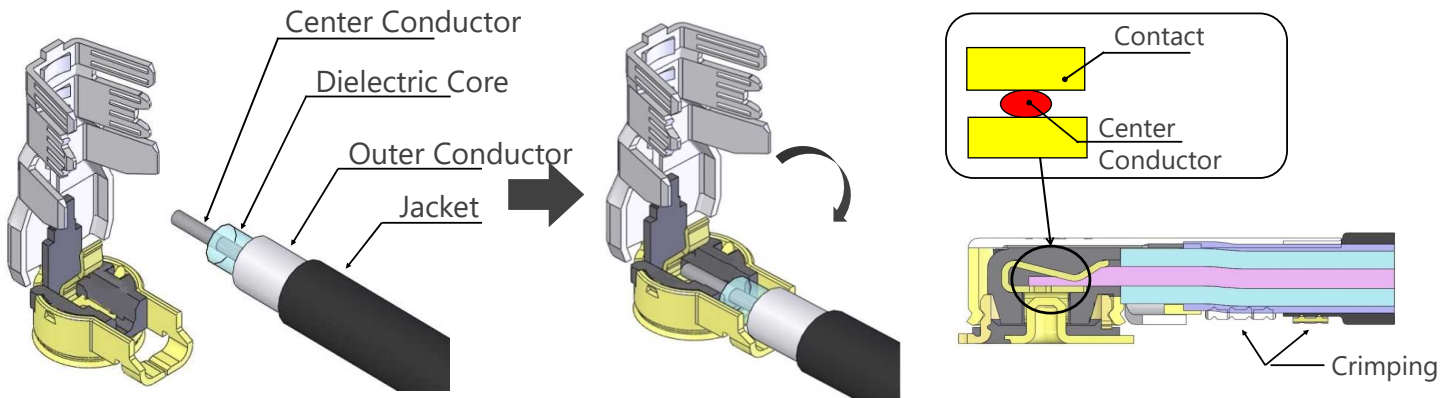




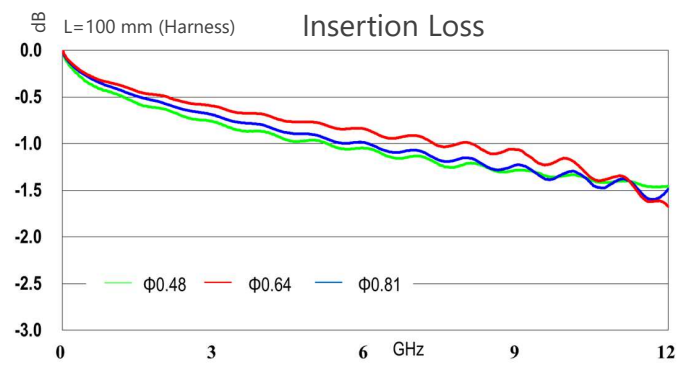
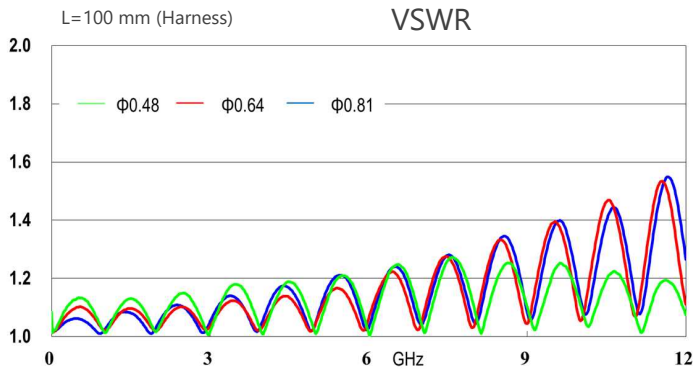
- ✓ Solderless micro-coaxial termination with "i-Fit[®]" technology.
- ✓ Small form factor with big performance through 12 GHz.
- ✓ MHF[®] 5 plug available micro-coax O.D. (AWG) : 0.81 mm (36), 0.64 mm (36), 0.48 mm (38).

Maximum height (mm)	1.0	
Outside dimension of receptacle(mm)	2.0 x 2.0	
Applicable wire gauge	O.D. 0.48 mm / AWG 38 O.D. 0.64 mm / AWG 36 O.D. 0.81 mm / AWG 36	
Frequency	DC~12 GHz	
VSWR (L=100 mm)	DC~3 GHz	1.3 max.
	3 GHz~6 GHz	1.5 max.
	6 GHz~9 GHz	1.6 max.
	9 GHz~12 GHz	1.6~1.8 max.
	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 12 GHz



MHF 5 Plug Available Micro-Coax O.D. (AWG): 0.81 mm (36), 0.64 mm (36), 0.48 mm (38)

Coax O.D. (Center Conductor AWG)	Mating Height 1.0 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 5 receptacle

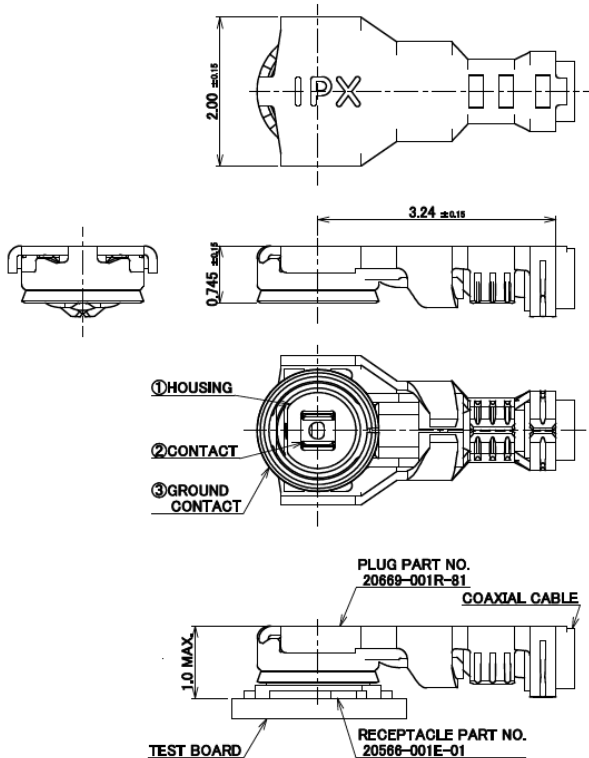
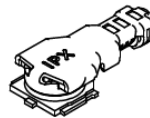
MHF[®] 5

Component Parts Detail

MHF[®] 5 plug Au (0.81,0.64)

Recommended P/N		20669-001R-81
PART NO.	APPLICABLE CABLE	OUTER CONDUCTOR
20669-001R-81	AWG#36 (0.84 O.D.)	SPIRAL SHIELD
	AWG#36 (0.81 O.D.)	SINGLE BRAIDED SHIELD

Offered as harness only.



NOTES

- APPLICABLE CONNECTOR
20566-001E-01
- PERMISSIBLE LOAD OF CABLE AT MATING
- MATING AND UNMATING INSTRUCTION
 - MATING
MATE THE CONNECTOR VERTICALLY AS MUCH AS POSSIBLE, ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE, DO NOT SLANT MATE.
 - UNMATING
 - IN CASE OF UNMATING BY PULLING TOOL (PART NO. 90612-0001)
USE THE PULLING TOOL AS THE FOLLOWING DRAWING, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
 - IN CASE OF UNMATING DIRECTLY BY HAND,
CATCH THE CATCHING AREA OF PLUG, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
- PRECAUTIONS FOR CABLE POSITION
THE PLUG SHALL NOT BE PLACED WITHIN 50 DEGREES ANGLE FROM CENTER OF THE SIGNAL CONTACT. TILT THE PLUG AT LEAST 50 DEGREES FROM THE CENTER OF A SIGNAL CONTACT.

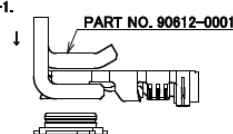
NOTE 2.



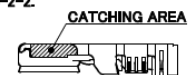
NOTE 3-2-1.



NOTE 3-1.



NOTE 3-2-2.



3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER NI 1.00 μm MIN. CONTACT PART Au 0.05 μm MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER NI 1.00 μm MIN. CONTACT PART Au 0.05 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS

MATING CONDITION

Rev.2

MHF® 5 plug Au (0.81,0.64)

ITEMS	SPECIFICATION
RECOMMENDED APPLICABLE CONNECTOR PART No.	20566-001E-01
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 0.1 ~ 3 GHz, 1.5 MAX. AT 3 ~ 6 GHz
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: Δ R 20 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: Δ R 20 mohm MAX.
INSULATION RESISTANCE	INITIAL: 500 Mohm MIN. / AFTER TEST: 100 Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	200 V AC, 1 MINUTE
DURABILITY	30 CYCLES
UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 4 N MIN. / AFTER TEST: 2 N MIN.
CRIMP STRENGTH	7 N MIN.
PRODUCT SPECIFICATION	PRS-2532
TEST REPORT	TR-18089
INSTRUCTION MANUAL	HIM-16014

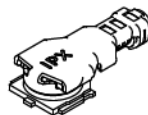
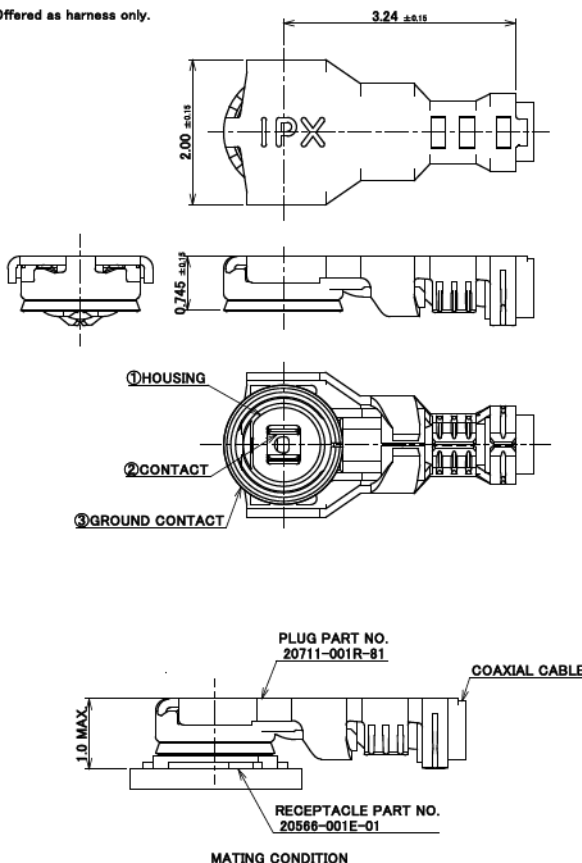
Rev.2

MHF® 5 plug Ni top (0.81,0.64)

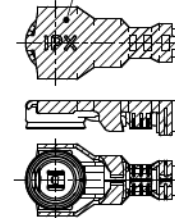
Recommended P/N 20711-001R-81

PART NO.	APPLICABLE CABLE	OUTER CONDUCTOR
20711-001R-81	AWG#36 (0.64 O.D.)	SPIRAL SHIELD
	AWG#36 (0.81 O.D.)	SINGLE BRAIDED SHIELD

Offered as harness only.



HATCHED AREA: NI PLATING AREA



NOTES.

1. APPLICABLE CONNECTOR: 20566-001E-01
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

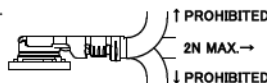
3-2-1. IN CASE OF UNMATING BY PULLING TOOL (PART NO. 90612-0001)

USE THE PULLING TOOL AS THE FOLLOWING DRAWING, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.

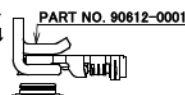
3-2-2. IN CASE OF UNMATING DIRECTLY BY HAND

CATCH THE CATCHING AREA OF PLUG, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.

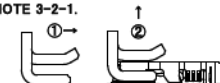
NOTE 2.



NOTE 3-1.



NOTE 3-2-1.



NOTE 3-2-2.



NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. CONTACT PART Au 0.02 μ m MIN. [NI PLATING AREA] Ni ONLY
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. CONTACT PART Au 0.03 μ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK

Rev.3

MHF[®] 5 plug Ni top (0.81,0.64)

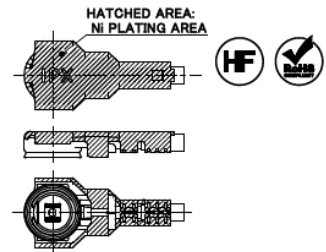
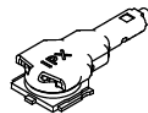
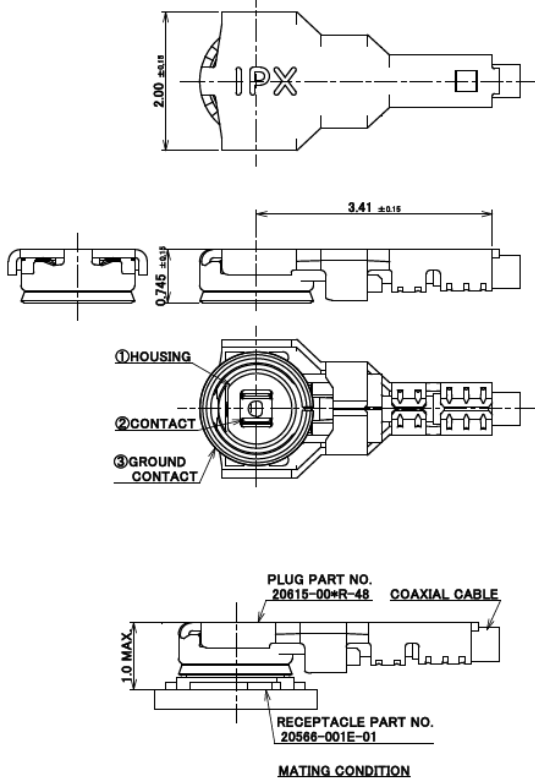
ITEMS	SPECIFICATION	
APPLICABLE CABLE	AWG#36 (0.81 O.D.) *RECOMMENDED	AWG#36 (0.64 O.D.)
RECOMMENDED APPLICABLE CONNECTOR PART No.	20566-001E-01	
RATING VOLTAGE	60 V AC (R.M.S)	
RATING FREQUENCY	DC~6 GHz	
OPERATING TEMPERATURE	233~363 K (-40°C~+90°C)	
VSWR	1.3 MAX. AT DC~3 GHz, 1.5 MAX. AT 3~6 GHz	
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: Δ R 20 mohm MAX.	
GROUND CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: Δ R 100 mohm MAX.	
INSULATION RESISTANCE	INITIAL: 500 Mohm MIN. / AFTER TEST: 100 Mohm MIN.	
DIELECTRIC WITHSTANDING VOLTAGE	200 V AC, 1 MINUTE	
DURABILITY	30 CYCLES	
UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 4 N MIN. / AFTER TEST: 2 N MIN.	
CRIMP STRENGTH	7 N MIN.	
PRODUCT SPECIFICATION	PRS-2108	PRS-2109
TEST REPORT	TR-15062	TR-15063
INSTRUCTION MANUAL	HIM-16013	

Rev.3

MHF[®] 5 PLUG Ni top (0.48)

Recommended P/N	20615-002R-48		
PART No.	PLATING	APPLICABLE CABLE	OUTER CONDUCTOR
20615-001R-48	ALL Au	AWG#38 (0.48 O.D.)	SPIRAL SHIELD
20615-002R-48	SELECTIVE Ni		

Offered as harness only.

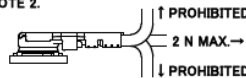


SELECTIVE NI TYPE (PART NO. 20615-002R-48)

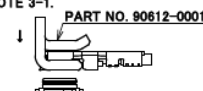
NOTES

- APPLICABLE CONNECTOR: 20566-001E-01
- PERMISSIBLE LOAD OF CABLE AT MATING
- MATING AND UNMATING INSTRUCTION
 - MATING
MATE THE CONNECTOR VERTICALLY AS MUCH AS POSSIBLE, ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE. DO NOT SLANT MATE.
 - UNMATING
3-2-1. IN CASE OF UNMATING BY PULLING TOOL (PART NO. 90612-0001): 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.
- PRECAUTIONS FOR CABLE POSITION
THE PLUG SHALL NOT BE PLACED WITHIN 50 DEGREES ANGLE FROM CENTER OF THE SIGNAL CONTACT. TILT THE PLUG AT LEAST 50 DEGREES FROM THE CENTER OF A SIGNAL CONTACT.

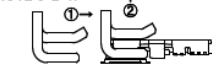
NOTE 2.



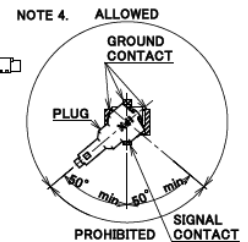
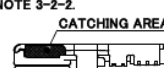
NOTE 3-1.



NOTE 3-2-1.



NOTE 3-2-2.



3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. CONTACT PART Au 0.05 μ m MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. CONTACT PART Au 0.05 μ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS

Rev.4

MHF[®] 5 PLUG Ni top (0.48)

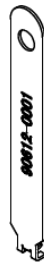
ITEMS	SPECIFICATION	
	20615-001R-48 (ALL Au PLATING TYPE)	20615-002R-48 (SELECTIVE Ni PLATING TYPE)
PLUG PART No.		
RECOMMENDED APPLICABLE CONNECTOR PART No.	20566-001E-01	
RATING VOLTAGE	60 V AC (R.M.S)	
RATING FREQUENCY	DC ~ 6 GHz	
OPERATING TEMPERATURE	233 ~ 363 K (-40°C ~ +90°C)	
VSWR	1.3 MAX. AT 0.1 ~ 3 GHz, 1.5 MAX. AT 3 ~ 6 GHz	
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: Δ R 20 mohm MAX.	
GROUND CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: Δ R 20 mohm MAX.	
INSULATION RESISTANCE	INITIAL: 500 Mohm MIN. / AFTER TEST: 100 Mohm MIN.	
DIELECTRIC WITHSTANDING VOLTAGE	200 V AC, 1 MINUTE	
DURABILITY	30 CYCLES	
UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 4 N MIN. / AFTER TEST: 2 N MIN.	
CRIMP STRENGTH	7 N MIN.	
PRODUCT SPECIFICATION	PRS-1939	PRS-2032
TEST REPORT	TR-14026	TR-15029
INSTRUCTION MANUAL	HIM-13003	

Rev.4

MHF[®] 5 PLUG Ni top



MHF 5 SMA ADAPTOR
PART NO. 90543-0001



FRONT SIDE



BACK SIDE

MHF 5 PUSHING AND PULLING TOOL
PART NO. 90612-0001



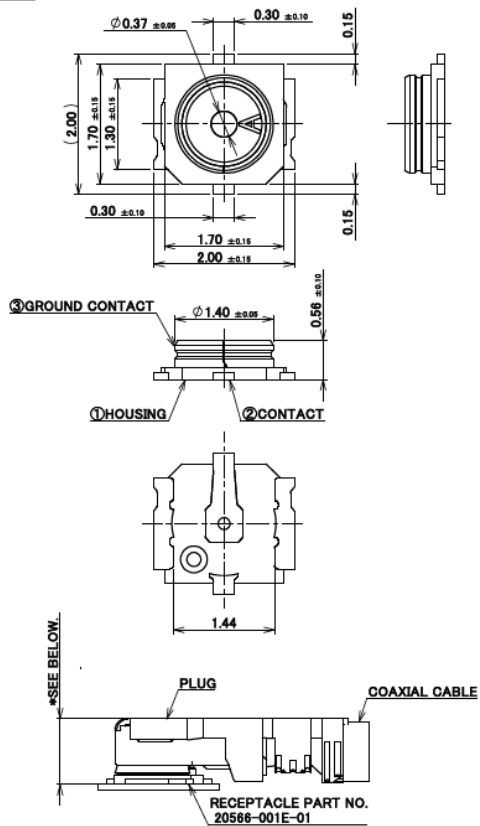
MHF 5 PUSHING TOOL
PART NO. 90624-0001

Rev.3

MHF[®] 5 Receptacle

Recommended P/N 20566-001E-01

PART NO.
20566-001E-01



* 1.3 MAX. AT 20688-001R-13, 20714-001R-81
* 1.0 MAX. AT 20711-001R-81

MATING CONDITION

NOTES

1. APPLICABLE CONNECTOR

20567-001R-81
20615-004R-48
20688-001R-13
20689-001R-81
20711-001R-81
20714-001R-81

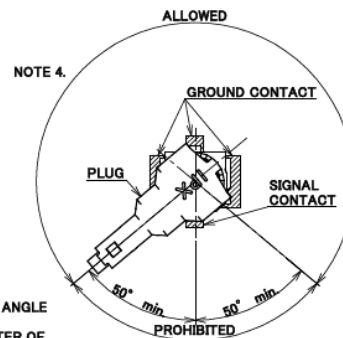
2. COPLANARITY: 0.1mm MAX.

3. THIS IS "Pb-FREE" CONNECTOR.

4. PRECAUTIONS FOR CABLE POSITION

[PART NO. 20567-001R-81, 20615-004R-48]

THE PLUG SHALL NOT BE PLACED WITHIN 50 DEGREES ANGLE FROM CENTER OF THE SIGNAL CONTACT.
TILT THE PLUG AT LEAST 50 DEGREES FROM THE CENTER OF A SIGNAL CONTACT.



NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. CONTACT PART Au 0.01 μ m MIN. UNDER PLATE Pd-Ni 0.02 μ m MIN. SOLDERING PART Au 0.01 μ m MIN. UNDER PLATE Pd-Ni 0.02 μ m MIN.
2	CONTACT	BRASS	ALL OVER Ni 1.00 μ m MIN. CONTACT PART Au 0.1 μ m MIN. SOLDERING PART Au 0.03 μ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK

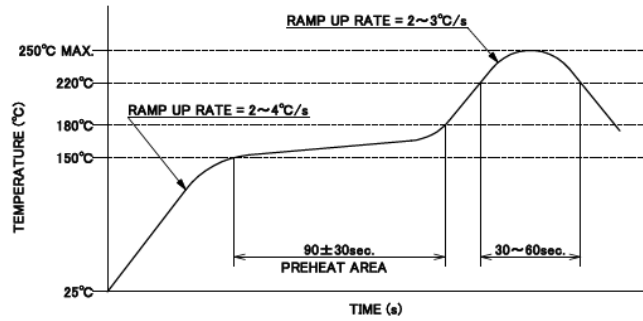
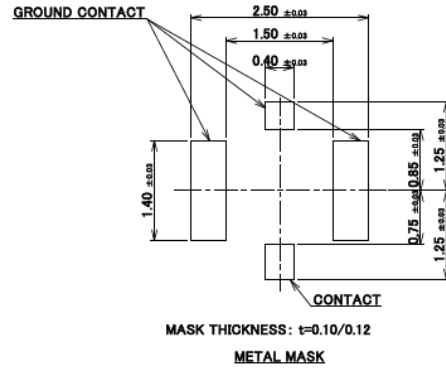
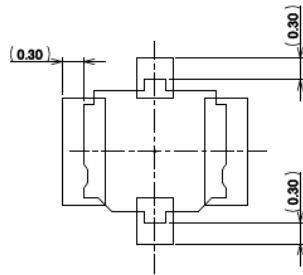
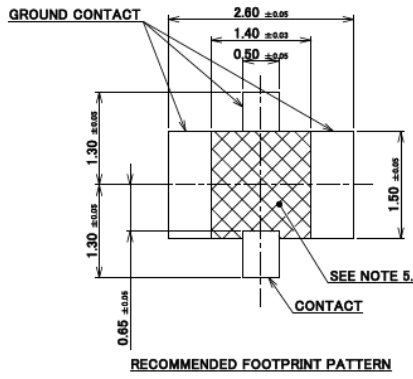
Rev.6

MHF[®] 5 Receptacle

ITEMS	SPECIFICATION		
	20688-001R-13	20711-001R-81 (CABLE AWG#36 ϕ 0.81)	20714-001R-81
RECOMMENDED APPLICABLE CONNECTOR PART No.			
RATING VOLTAGE	60 V AC (R.M.S)		
RATING FREQUENCY	DC~12 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, 1.5 MAX. AT 6~12 GHz		
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: Δ R 20 mohm MAX.		
GROUND CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: Δ R 100 mohm MAX.		
INSULATION RESISTANCE	INITIAL: 500 Mohm MIN. / AFTER TEST: 100 Mohm MIN.		
DIELECTRIC WITHSTANDING VOLTAGE	200 V AC, 1 MINUTE		
DURABILITY	30 CYCLES		
UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 5 N MIN. AFTER TEST: 3 N MIN.	INITIAL: 4 N MIN. AFTER TEST: 2 N MIN.	INITIAL: 5 N MIN. AFTER TEST: 3 N MIN.
PRODUCT SPECIFICATION	PRS-2192	PRS-2108	PRS-2236
TEST REPORT	TR-16003	TR-15062	TR-16049
PACKING STANDARD		PST-12036	
INSTRUCTION MANUAL	HIM-16014	HIM-16013	HIM-16014

Rev.6

MHF[®] 5 Receptacle



NOTES.
5. CUT OUT PROHIBITION AREA

Rev.6

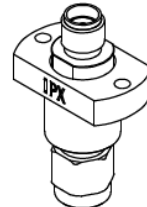
Accessories for MHF[®] 5 Receptacle



SMA ADAPTOR FOR MHF 5 PLUG
PART NO. 90543-0001

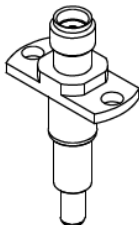


MHF 5 HIGH CYCLE PROBE
PART NO. 90690-0001

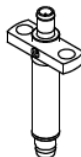


MHF 5 HIGH CYC ADAP BASE UNIT
PART NO. 90684-0001

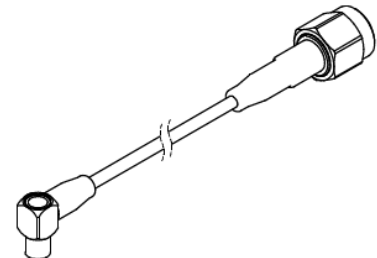
* 90690-0001 AND 90684-0001 SHOULD BE USED TOGETHER.



MHF 5 HIGH CYCLE ADAPTOR
PART NO. 90793-0001



MHF 5 4.5MM HIGH CYCLE TEST PROBE LONG TYPE
PART NO. 90847-0001



4.5MM HIGH CYCLE TEST PROBE CABLE ASS'Y
PART NO. 90577-****

* 90847-0001 AND 90577-**** SHOULD BE USED TOGETHER.

Rev.6



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Contact your sales representative for more detailed information. [i-pex.com]