

# MHF® I (4 pads receptacle)

带有额外第 4 个焊盘的 MHF® I 母座在通过回流焊安装在电路板上时可改善中心对齐，并增加焊料剪切力

**Product Specifications:**

Mated Height (mm max.)	(1) 2.5 (2) 3.0		
Rece. SMT Size (mm)	3.1 x 3.0		
Applicable Frequency	DC ~ 9 GHz		
Characteristic Impedance	50 ohm		
VSWR (L=100 mm)	Connector	PLUG	RECEPTACLE
	DC~3 GHz	1.3 max.	1.3 max.
	3~6 GHz	1.5 max.	1.4 max.
	6~9 GHz	(1) 1.9 max. (2) 1.6 max.	1.8 max.

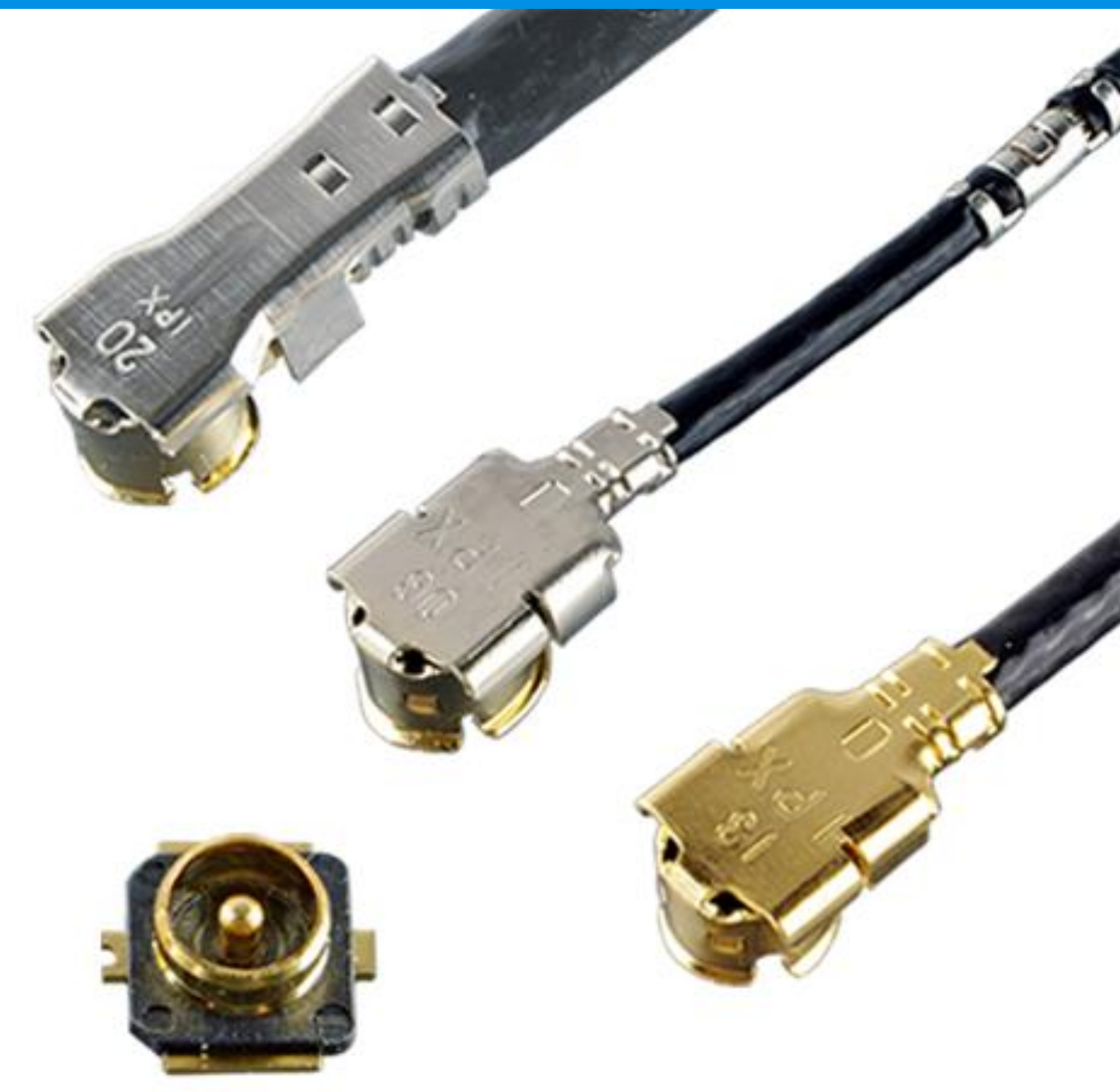
\* Cable size O.D. (1) 1.80 mm, 1.32 mm, 1.13 mm, 0.81 mm, 1.37 mm (2) 2.0 mm

**Applicable Cable Size:**

<b>20278-112R-**, 20670-001R-**</b>
O.D. 1.80 mm / AWG 30
O.D. 1.32 mm, 1.13 mm / AWG 32
O.D. 0.81 mm / AWG 36
<b>20351-112R-37</b>
O.D. 1.37 mm / AWG 30
<b>20767-001R-20</b>
O.D. 2.0 mm / AWG 26

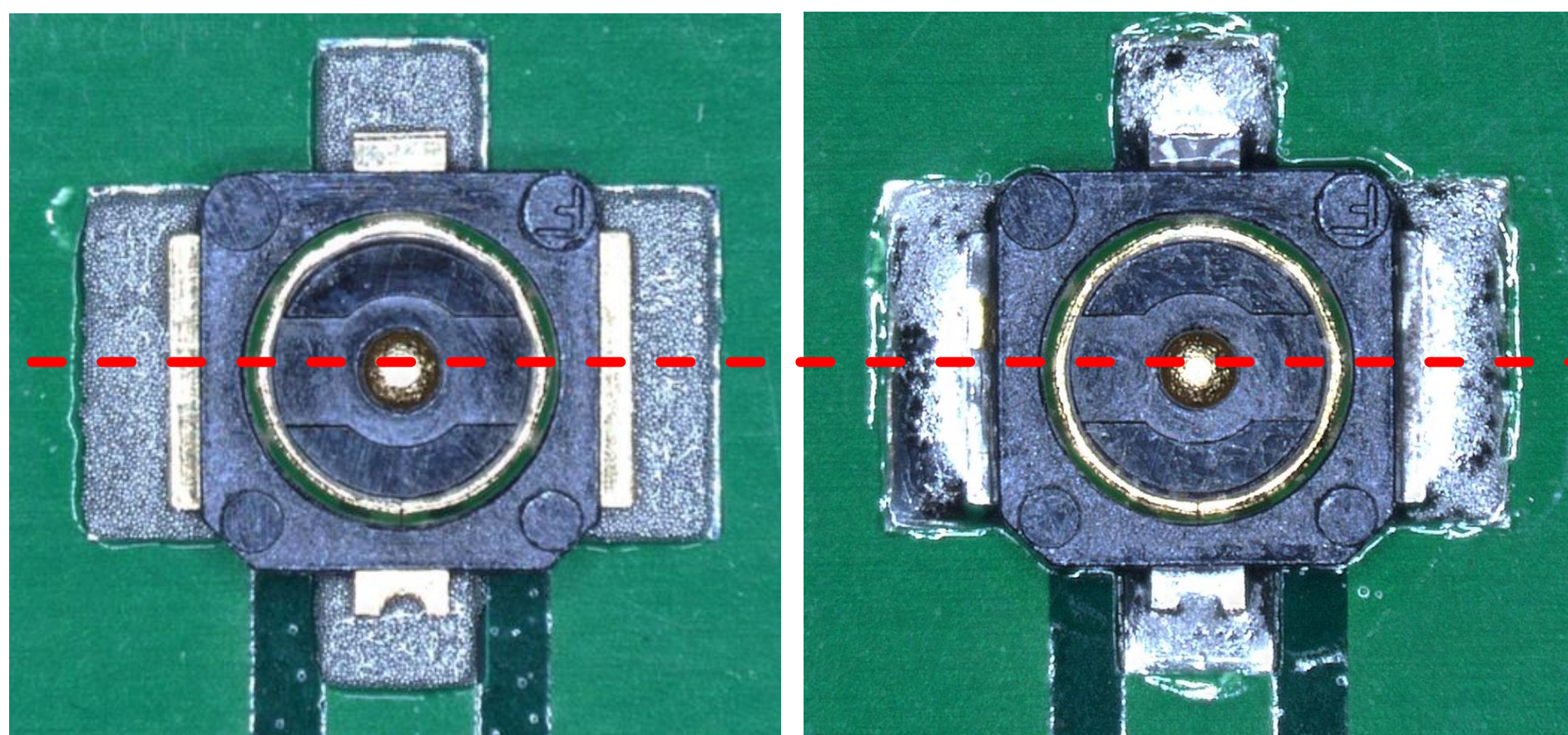
**Applicable Standards (Reference Only):**

5G sub-6, Wi-Fi 6E, LTE/LTE-Advanced, LPWA, Bluetooth, GPS



## 通过增加焊盘改善中心校准

### 4个焊盘的母座



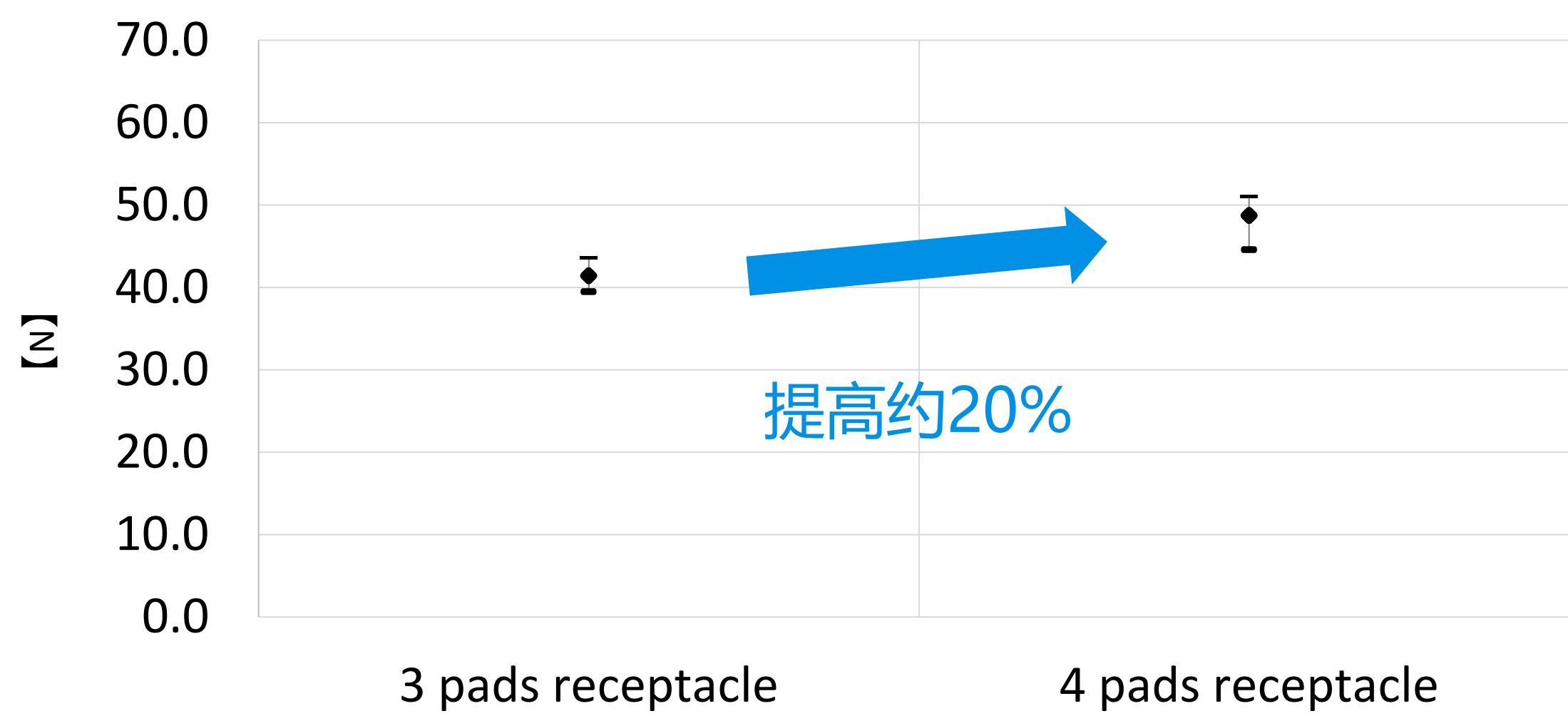
回流焊前

回流焊后

- ✓ 提高实施过程的质量
- ✓ 实现接近理想中的射频电路设计
- ✓ 允许使用射频线束进行精确定位

## 通过增加焊盘提高焊锡剪切力

MHF® I Receptacle Solder Shear Strength

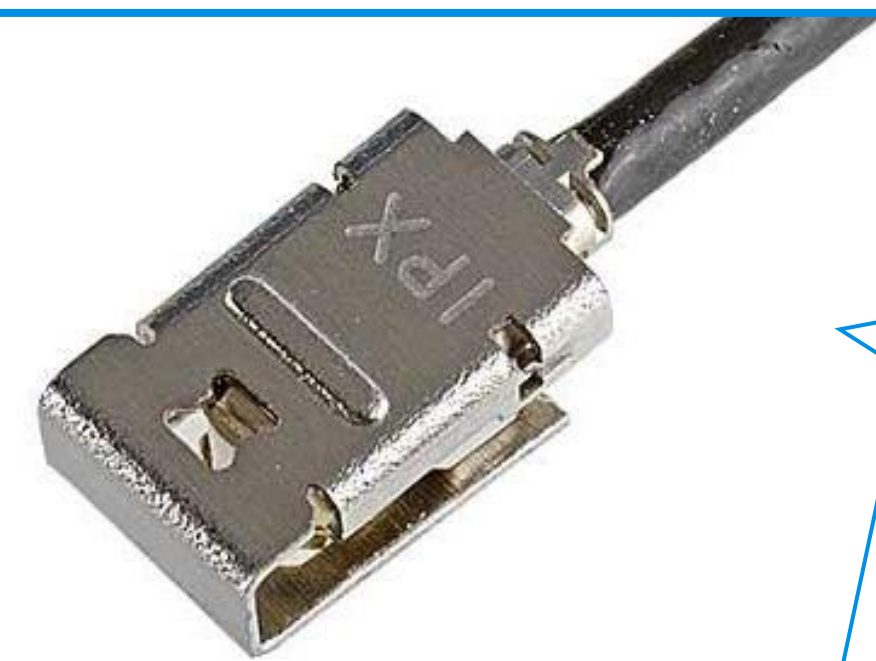


与带锁扣的连接器完美结合  
适用于连续冲击和振动应用!

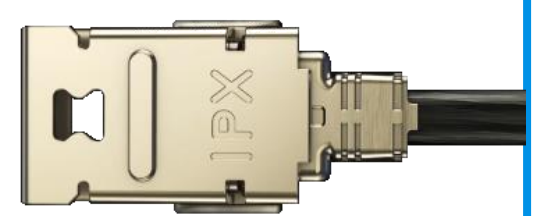
MHF® I  
4个焊盘母座



MHF® I LK  
线束



上锁状态



解锁状态

## 可匹配 MHF® I 系列各种电缆外径和附加机械锁扣选项

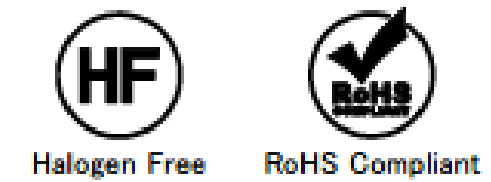
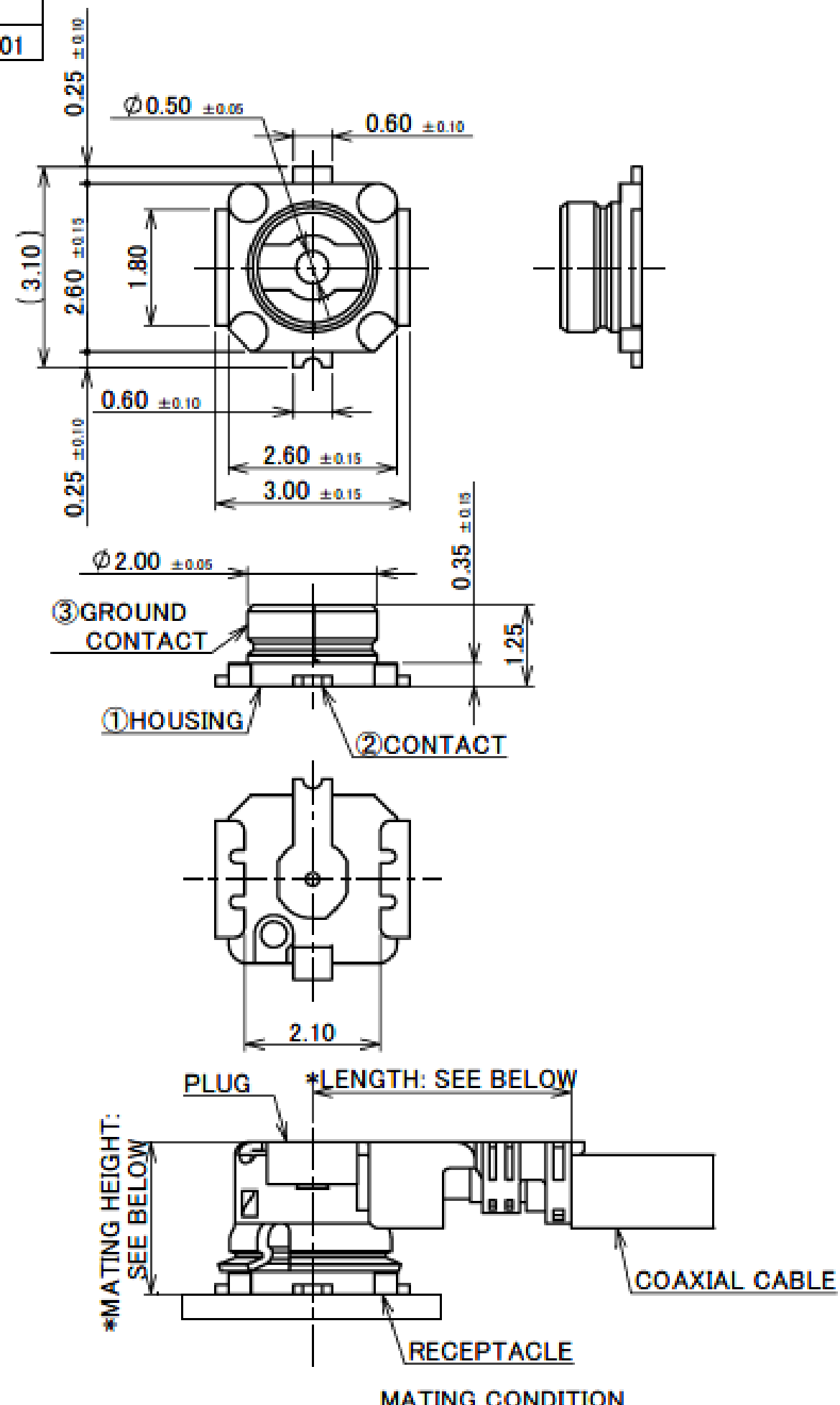
Product name	MHF® I LK	MHF® I	MHF® I
Lock	With Lock	Without Lock	Without Lock
Mating Height	2.9 mm max.	2.5 mm max.	3.0 mm max.
Coax O.D. (Center Conductor AWG)	2.00 mm (AWG#26)		●
	1.80 mm (AWG#30)	●	●
	1.37 mm (AWG#30)	●	●
	1.32 mm (AWG#32)	●	●
	1.13 mm (AWG#32)	●	●
	0.81 mm (AWG#36)	●	●
Receptacle	MHF® I receptacle 20279-001E-** (3 pads) / 20441-001E-01 (4 pads)		



# Component Parts Details

## MHF® I Receptacle (4pads/Black color HSG)

Recommended P/N	20441-001E-01
PART No.	20441-001E-01

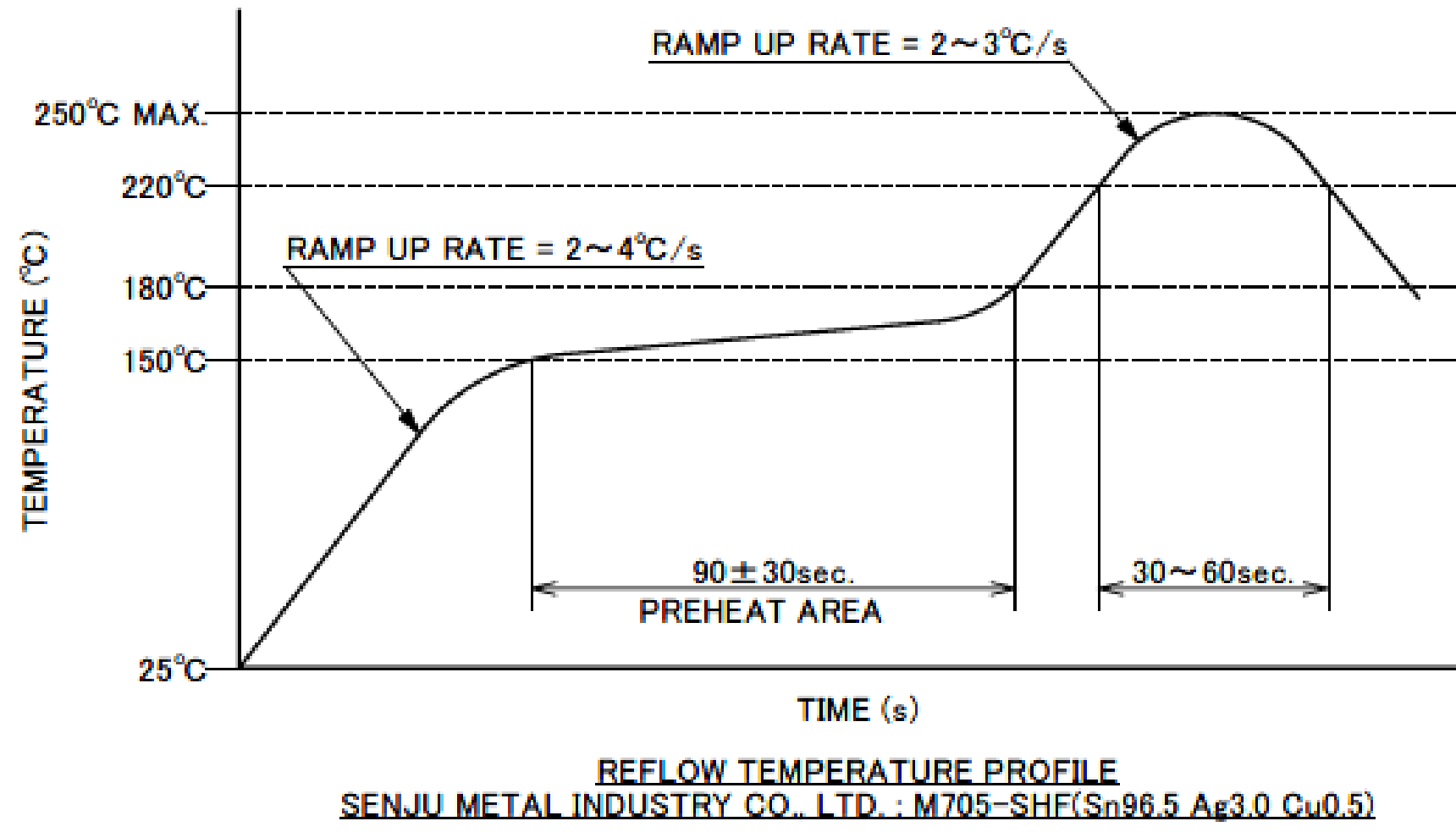
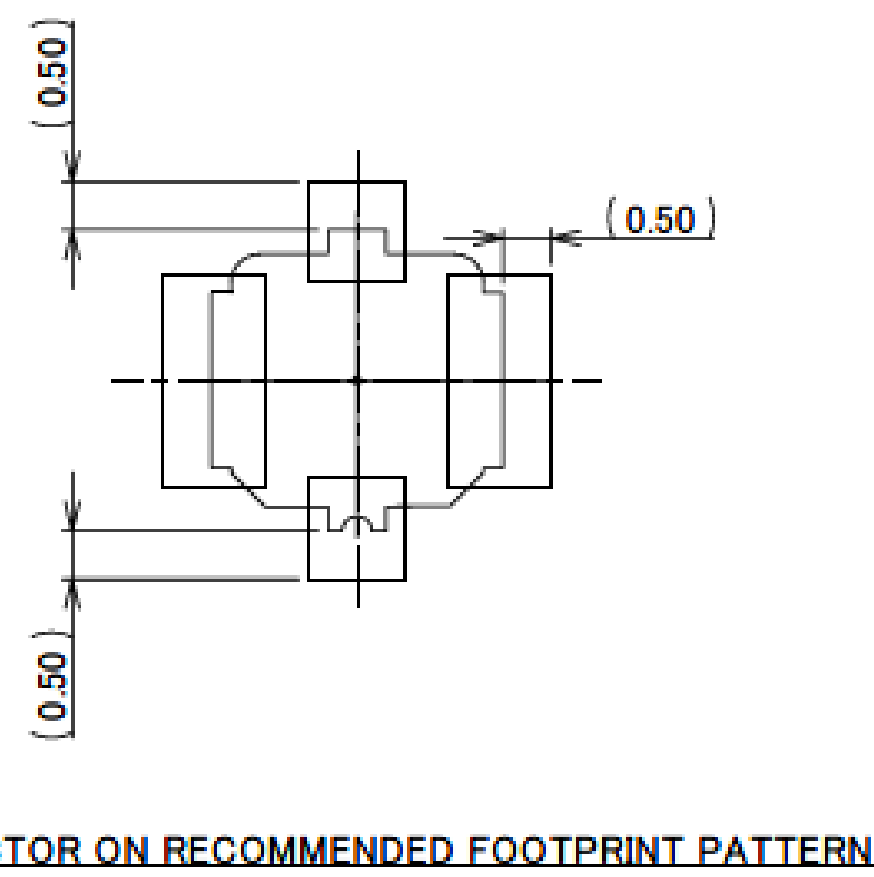
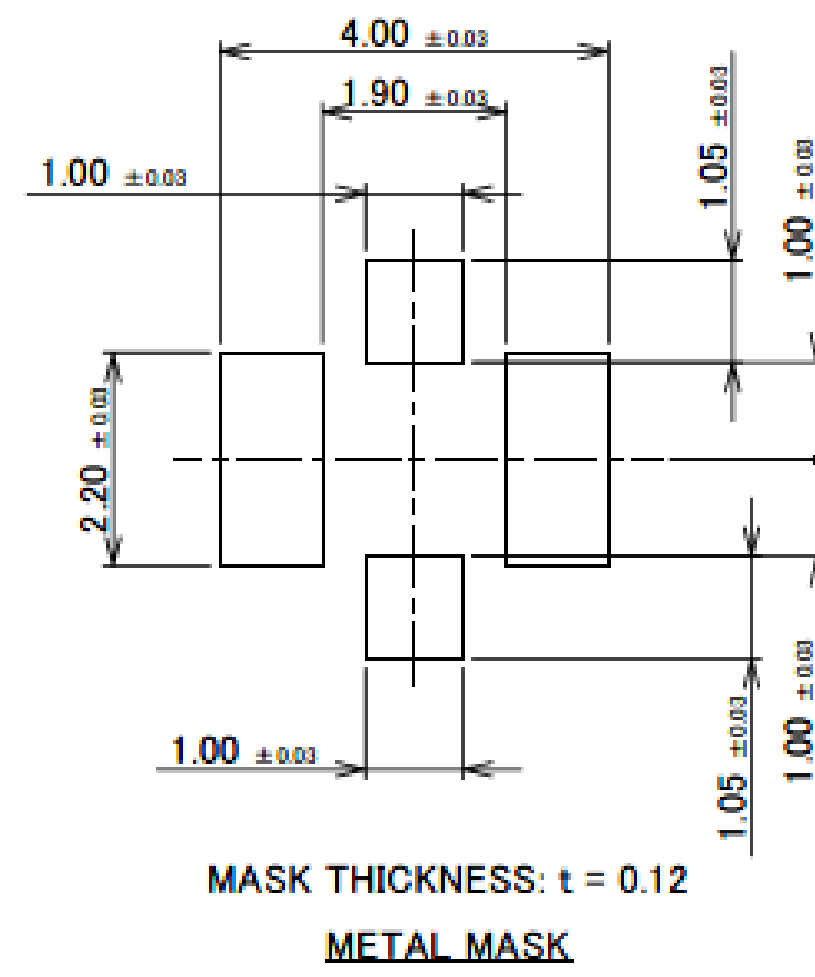
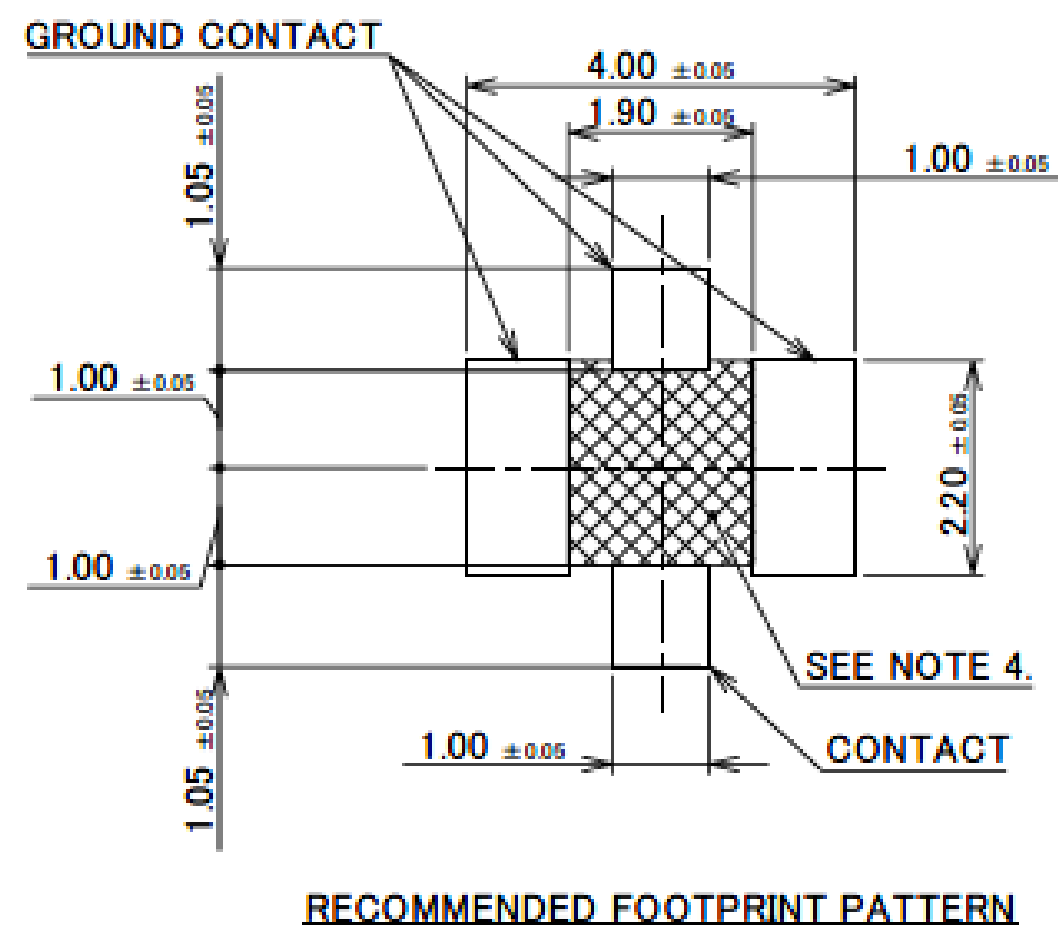


- NOTES.
- APPLICABLE CONNECTOR PART NUMBER:  
MHF I PLUG  
20278-112R-\*\*-\*\*  
20351-1\*\*R-37  
20670-001R-\*\*-\*\*  
20767-001R-20  
MHF II PLUG  
20311-011R-\*\*-\*\*  
20686-001R-08
  - COPLANARITY: 0.1mm MAX.
  - THIS IS "Pb-FREE" CONNECTOR.

NO.	DISCRPTION	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	BRASS	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.10 μm MIN. SOLDERING PART Au 0.03 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK

- \*LENGTH: 4.0 ±0.4 AT PLUG PART NO. 20670-001R-08, 20670-001R-13, 20670-001R-32  
4.7 ±0.4 AT PLUG PART NO. 20670-001R-18, 20670-001R-37  
5.6 AT PLUG PART NO. 20767-001R-20 (REFERENCE DIMENSION)  
3.8 ±0.3 AT PLUG PART NO. 20686-001R-08, 20311-011R-\*\*-\*\*  
\*MATING HEIGHT: 2.5 MAX. AT PLUG PART NO. 20670-001R-\*\*-\*\*  
(2.9 MAX. AT MHF I LK LOCKED CONDITION)  
3.0 MAX. AT PLUG PART NO. 20767-001R-20  
2.0 ±0.1 AT PLUG PART NO. 20686-001R-08, 20311-011R-\*\*-\*\*

# MHF® I Receptacle (4pads/Black color HSG)

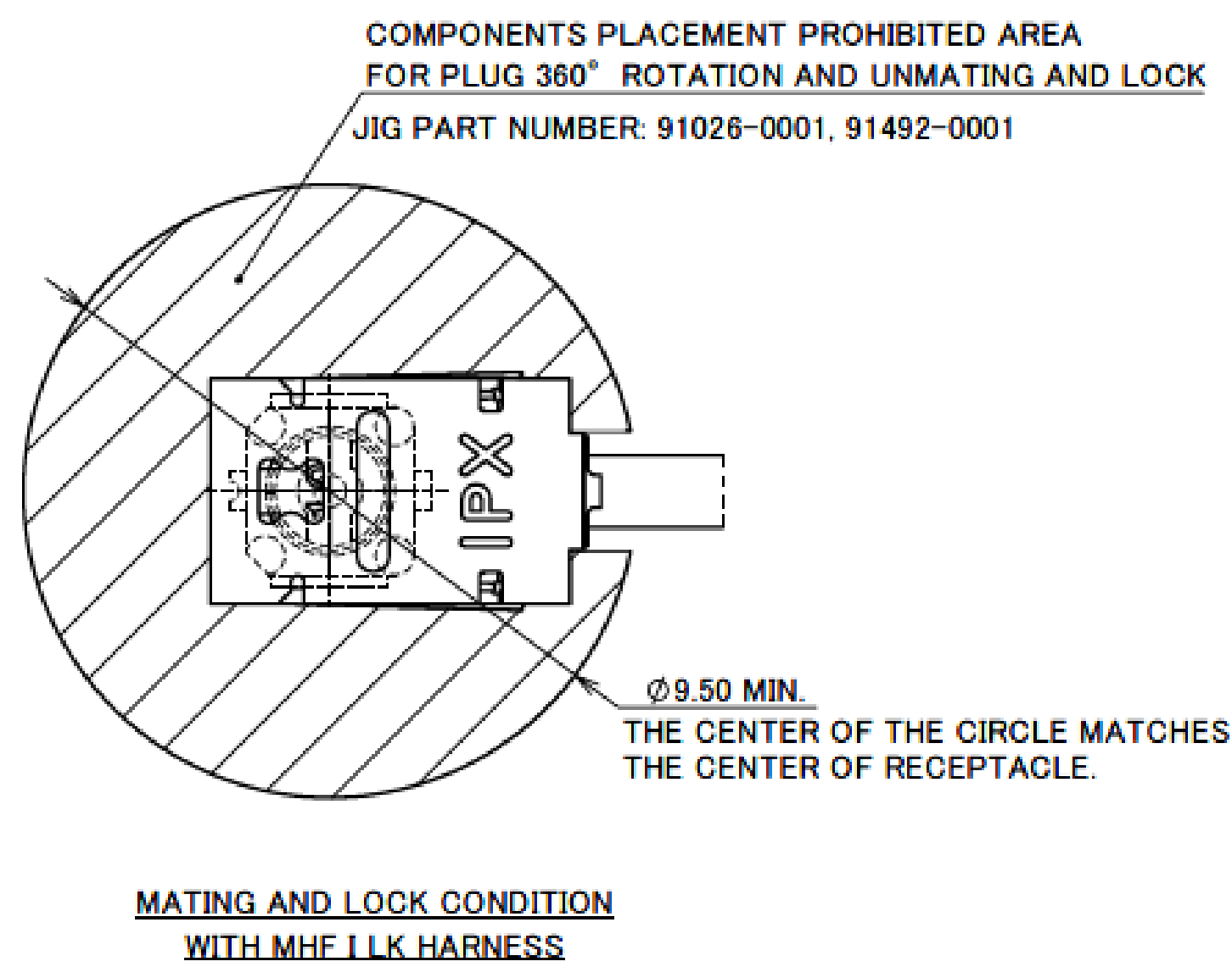


NOTE  
4. NO GROUND, SIGNAL, RESIST IN THIS AREA.

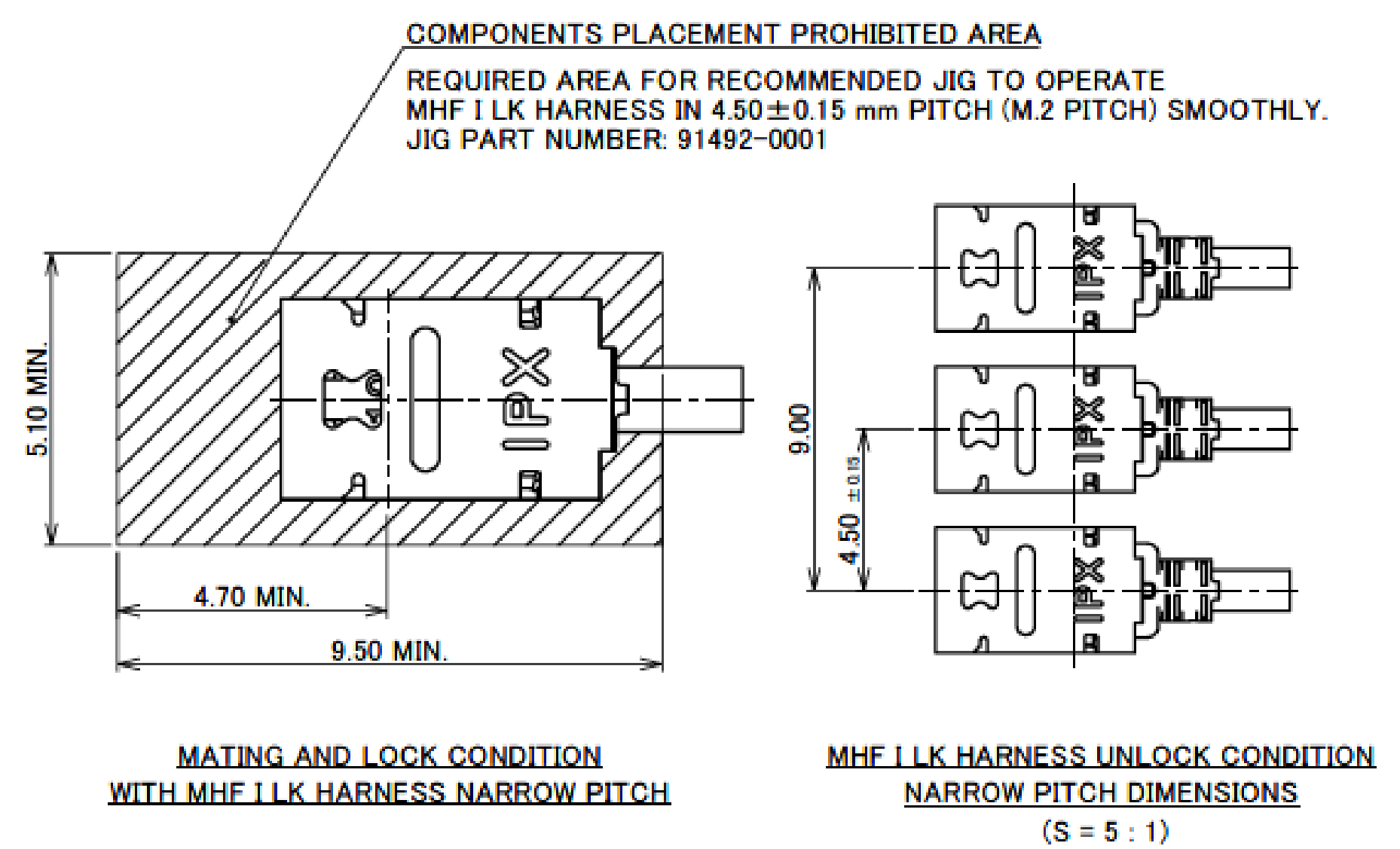
Rev.7

## COMPONENT PLACEMENT PROHIBITED AREA FOR MHF I/II RECEPTACLE MATED WITH MHF I LK HARNESS REQUIRED AREA FOR RECOMMENDED JIG TO OPERATE

### SINGLE CONNECTOR LAYOUT



### MULTIPLE CONNECTORS LAYOUT



Rev.7

# MHF® I Receptacle (4pads/Black color HSG)

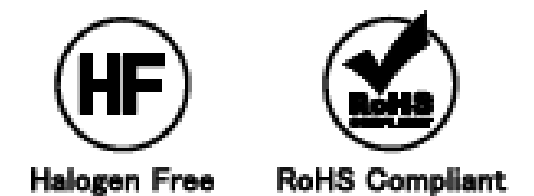
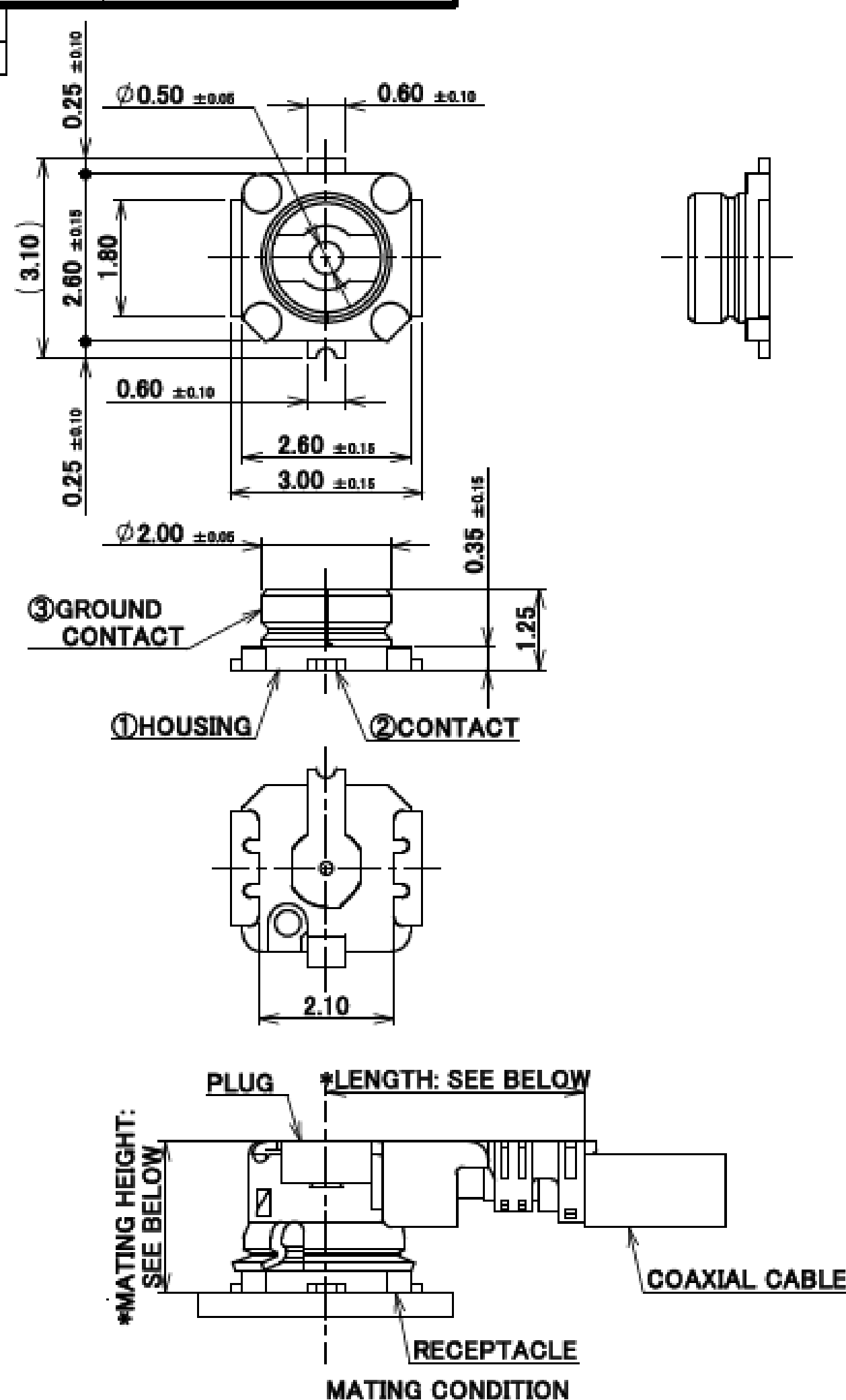
ITEMS	SPECIFICATION				
RECOMMENDED APPLICABLE CONNECTOR PART NO.	20278-001R-**-** (MHF I PLUG 1.80, 1.32, 1.13, 0.81)	20351-001R-**-** (MHF I PLUG 1.37)	20670-001R-**-** (MHF I PLUG Ni TOP 1.80, 1.37, 1.32, 1.13, 0.81)	20767-001R-20 (MHF I PLUG 2.00)	20686-001R-08 (MHF II PLUG Ni TOP 0.81)
RATING VOLTAGE	60 V AC (R.M.S)				
RATING FREQUENCY	DC~9GHz				
OPERATING TEMPERATURE	233~363K (-40°C~+90°C)				
VSWR (MATED WITH SMA ADAPTER PART No.90193-002)	RECEPTACLE: 1.30 MAX. AT 0.1~3 GHz, 1.40 MAX. AT 3~6 GHz, 1.80 MAX. AT 6~9 GHz				
MAIN CONTACT RESISTANCE	INITIAL : 20 mohm MAX. AFTER TEST : 25 mohm MAX.		INITIAL : 20 mohm MAX. AFTER TEST : $\angle$ R 20 mohm MAX.		
GROUND CONTACT RESISTANCE	INITIAL : 10 mohm MAX. AFTER TEST : 15 mohm MAX.		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	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.	
PRODUCT SPECIFICATION	PRS-1676	PRS-1726	PRS-2105	PRS-2490	PRS-2106
TEST REPORT	TR-12044	TR-12096	TR-15059	TR-18041	TR-15060
PACKING STANDARD	300-596				
INSTRUCTION MANUAL	HIM-10002		HIM-17017		HIM-12010
APPEARANCE CRITERIA No.	QLS-A***				

Rev.7

# MHF® I Receptacle (4pads/Natural color HSG)

Recommended P/N **20431-001E-01**

PART No.  
**20431-001E-01**



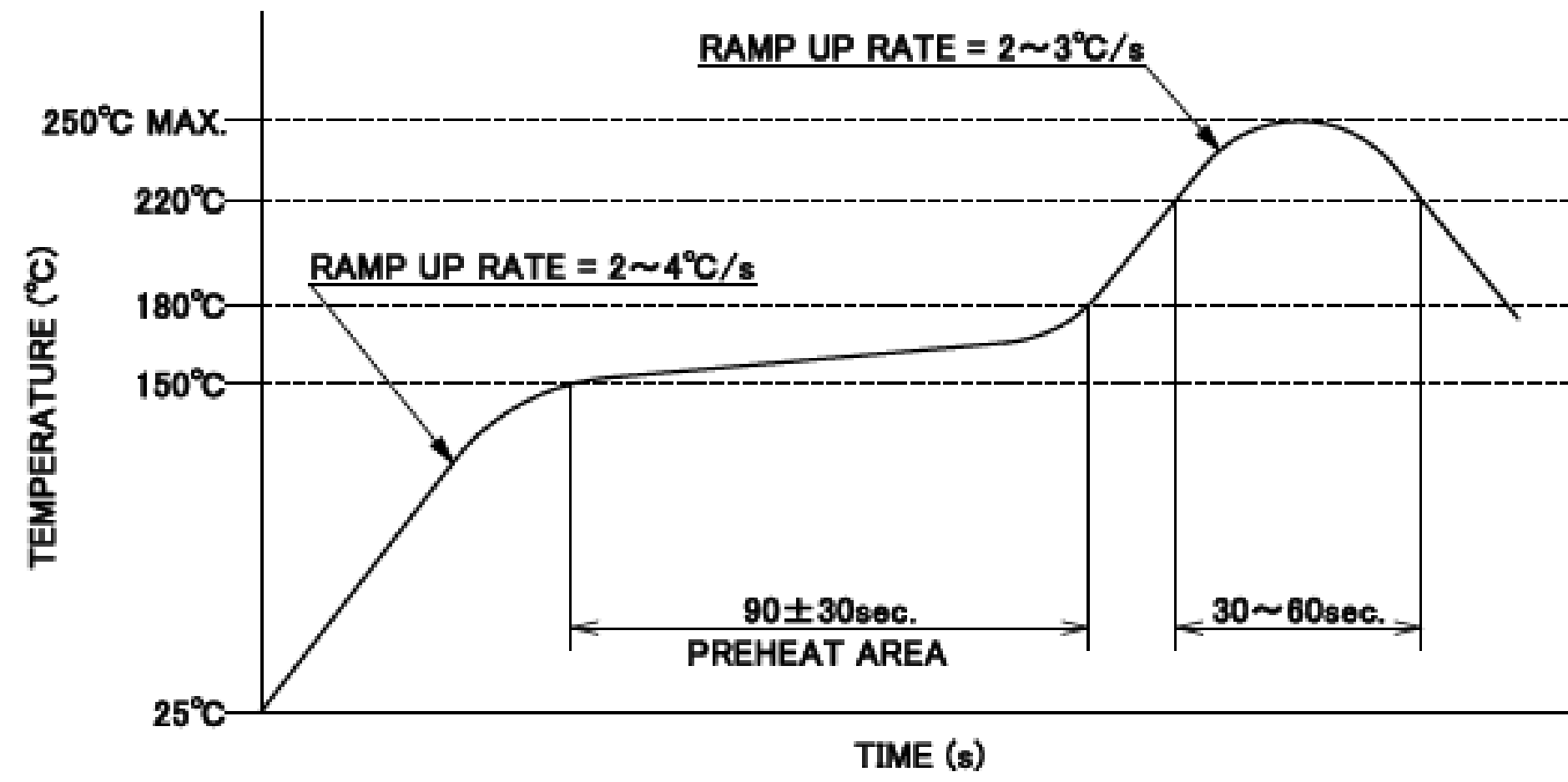
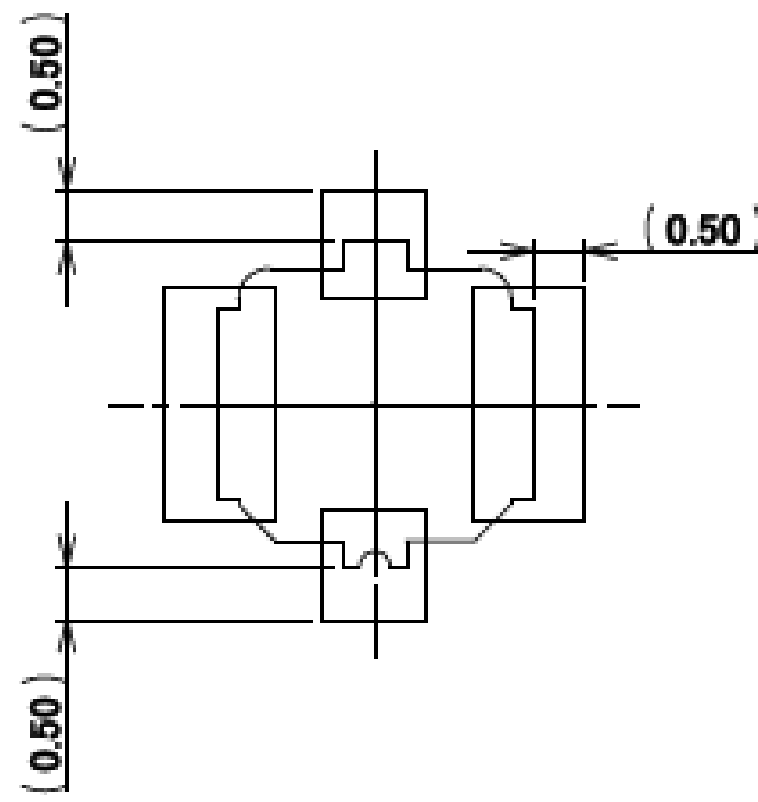
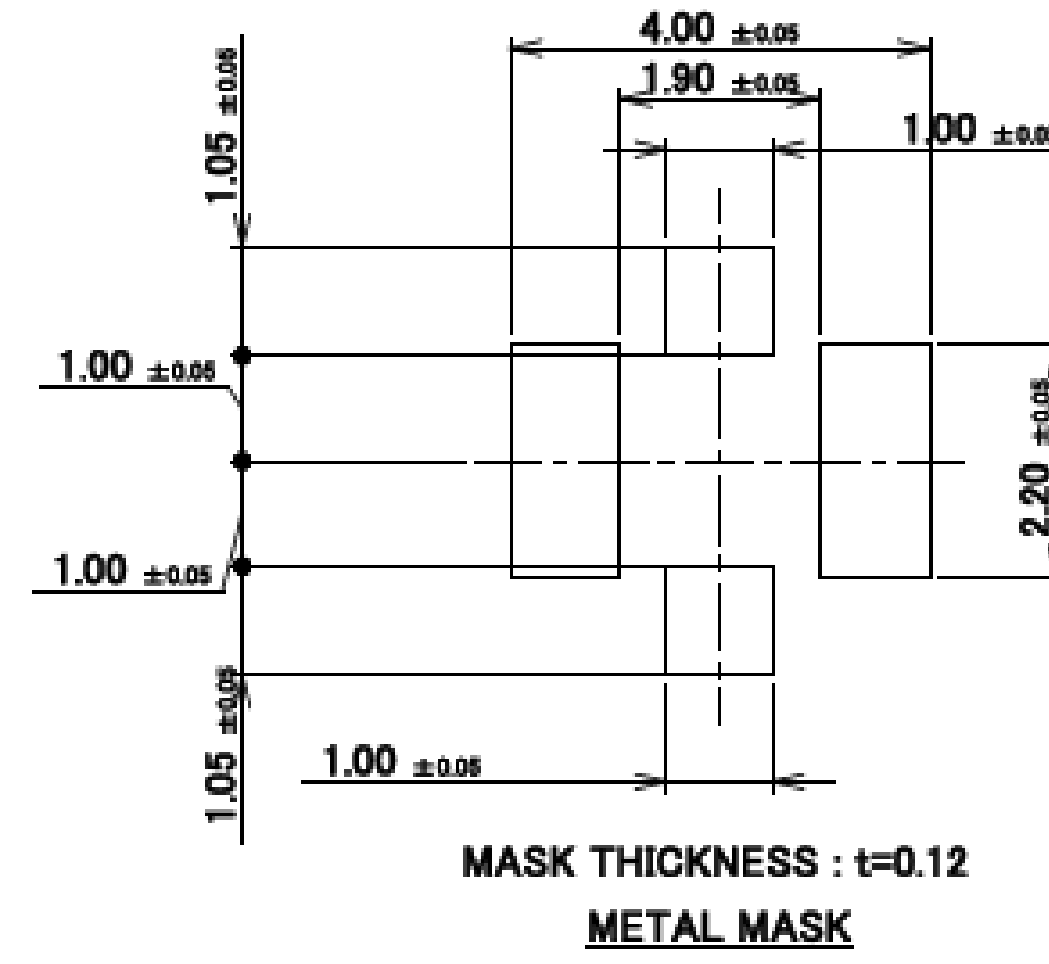
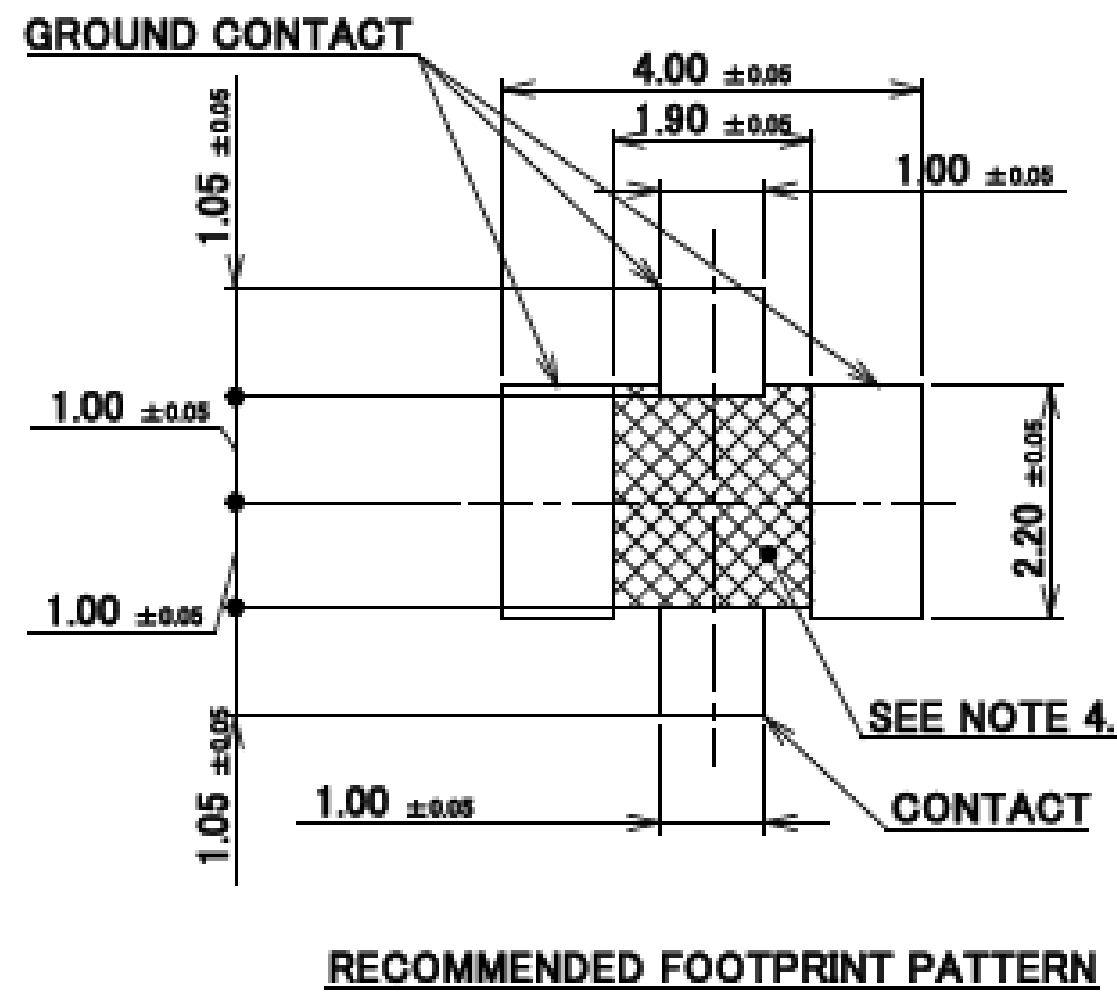
- NOTES.  
1. APPLICABLE CONNECTOR PART NUMBER:  
MHF I PLUG  
20278-112R-\*\*-\*\*  
20351-1\*\*R-37  
20670-001R-\*\*-\*\*  
20767-001R-20  
MHF II PLUG  
20311-011R-\*\*-\*\*  
20686-001R-08  
2. COPLANARITY: 0.1mm MAX.  
3. THIS IS "Pb-FREE" CONNECTOR.

NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 $\mu$ m MIN. CONTACT PART Au 0.03 $\mu$ m MIN. SOLDERING PART Au 0.03 $\mu$ m MIN.
2	CONTACT	BRASS	ALL OVER Ni 1.00 $\mu$ m MIN. CONTACT PART Au 0.10 $\mu$ m MIN. SOLDERING PART Au 0.03 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0, NATURAL

- \*LENGTH: 4.0 ± 0.4 AT PLUG PART NO. 20670-001R-08, 20670-001R-13, 20670-001R-32  
4.7 ± 0.4 AT PLUG PART NO. 20670-001R-18, 20670-001R-37  
5.6 AT PLUG PART NO. 20767-001R-20 (REFERENCE DIMENSION)  
3.8 ± 0.3 AT PLUG PART NO. 20686-001R-08, 20311-011R-\*\*-\*\*  
\*MATING HEIGHT: 2.5 MAX. AT PLUG PART NO. 20670-001R-\*\*-\*\*  
(2.9 MAX. AT MHF I LK LOCKED CONDITION)  
3.0 MAX. AT PLUG PART NO. 20767-001R-20  
2.0 ± 0.1 AT PLUG PART NO. 20686-001R-08, 20311-011R-\*\*-\*\*

Rev.5

# MHF® I Receptacle (4pads/Natural color HSG)

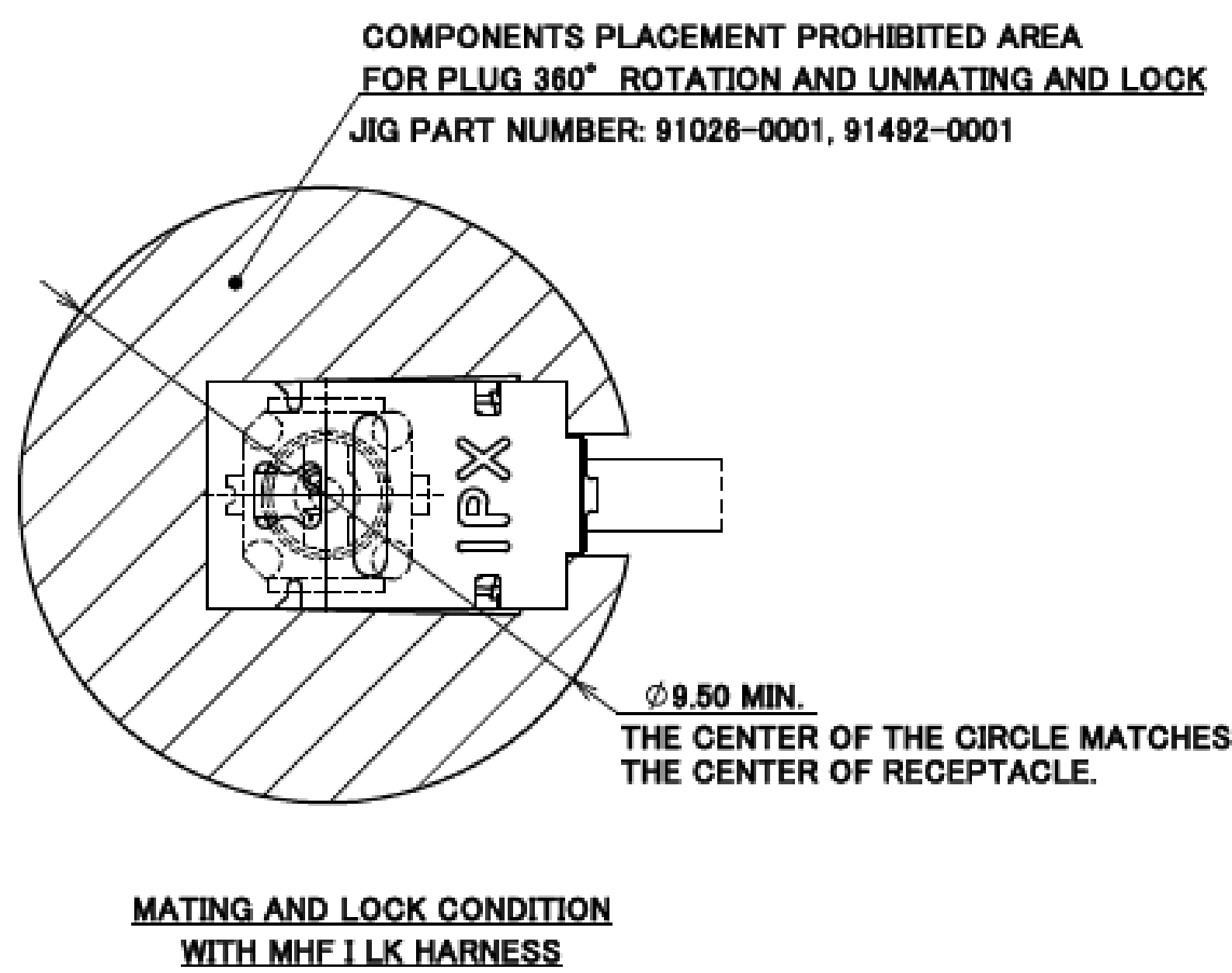


NOTES.  
4. NO GROUND, SIGNAL, RESIST IN THIS AREA.

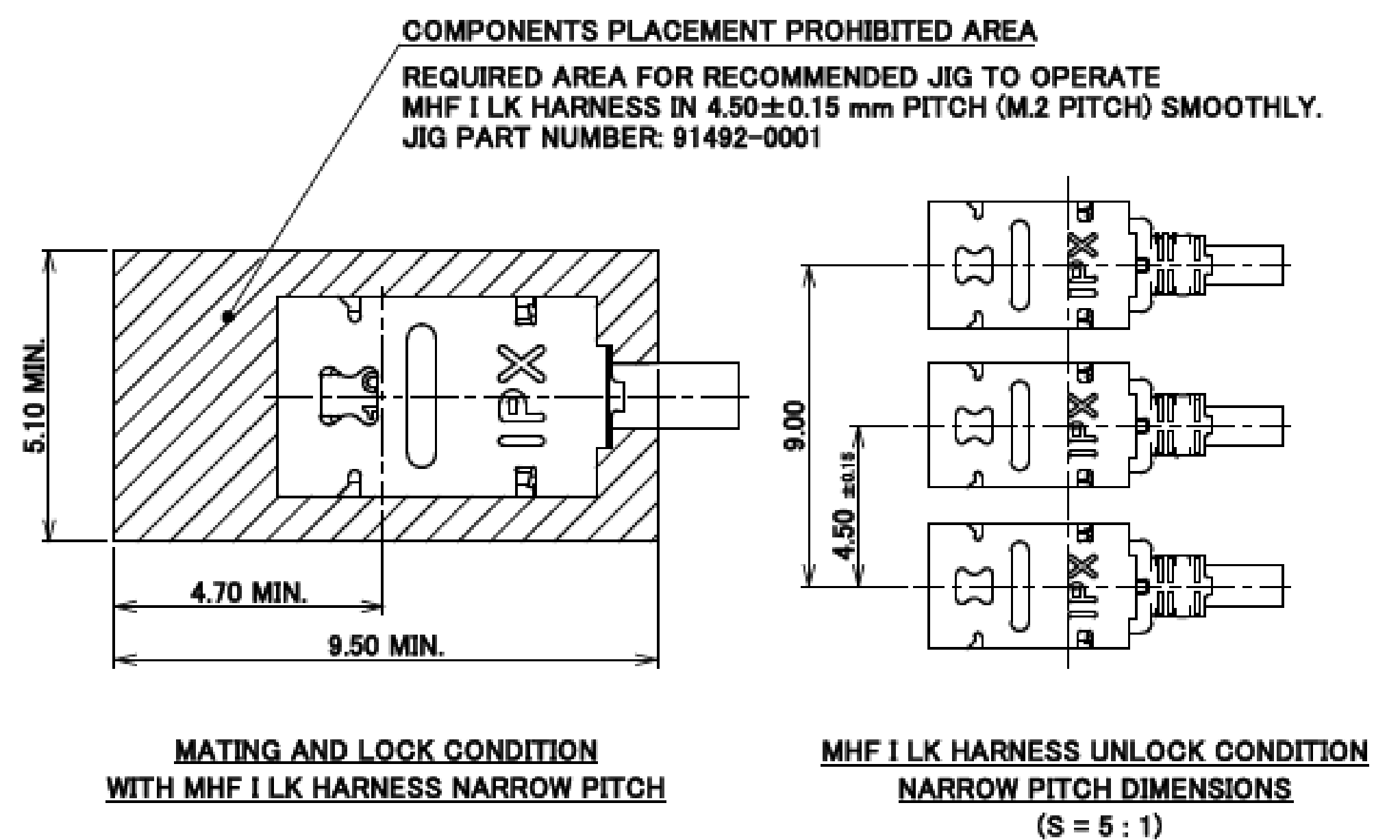
Rev.5

## COMPONENT PLACEMENT PROHIBITED AREA FOR MHF I/II RECEPTACLE MATED WITH MHF I LK HARNESS REQUIRED AREA FOR RECOMMENDED JIG TO OPERATE

### SINGLE CONNECTOR LAYOUT



### MULTIPLE CONNECTORS LAYOUT



Rev.5

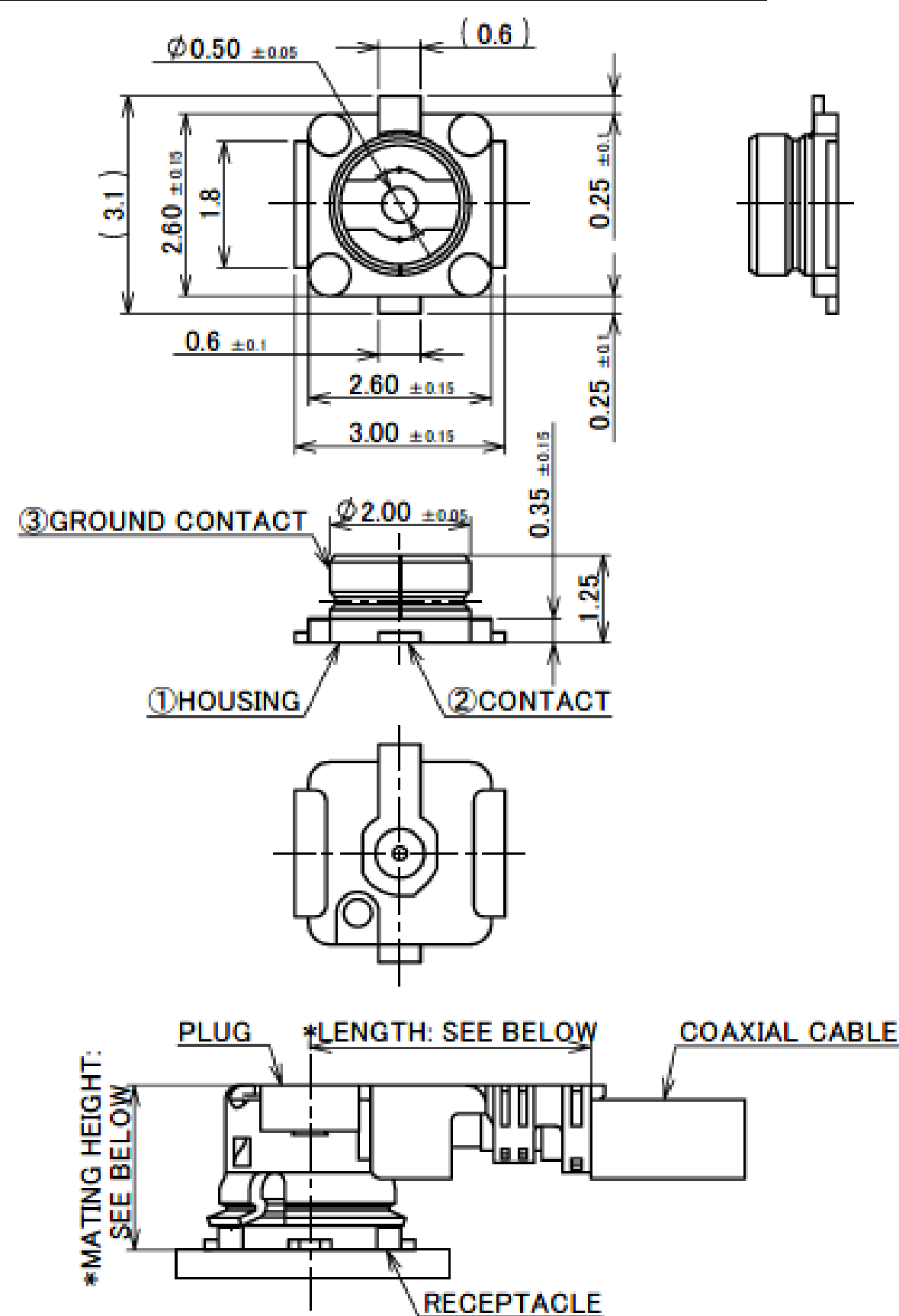
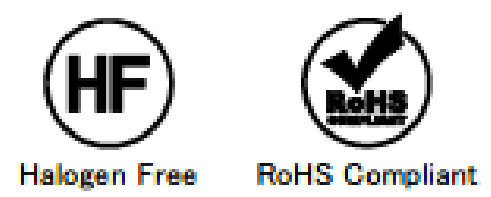
# MHF® I Receptacle (4pads/Natural color HSG)

ITEMS	SPECIFICATION				
	20278-001R-**-** (MHF I PLUG 1.80, 1.32, 1.13, 0.81)	20351-001R-**-** (MHF I PLUG 1.37)	20670-001R-**-** (MHF I PLUG Ni TOP 1.80, 1.37, 1.32, 1.13, 0.81)	20767-001R-20 (MHF I PLUG 2.00)	20686-001R-08 (MHF II PLUG Ni TOP 0.81)
RECOMMENDED APPLICABLE CONNECTOR PART NO.					
RATING VOLTAGE	60 V AC (R.M.S)				
RATING FREQUENCY	DC~9GHz				
OPERATING TEMPERATURE	233~363K (-40°C~+90°C)				
VSWR (MATED WITH SMA ADAPTER PART No.90193-002)	RECEPTACLE: 1.3 MAX AT 0.1~3 GHz, 1.4 MAX AT 3~6 GHz, 1.8 MAX. AT 6~9 GHz				
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. AFTER TEST: 25 mohm MAX.		INITIAL: 20 mohm MAX. AFTER TEST: $\angle$ R 20 mohm MAX.		
GROUND CONTACT RESISTANCE	INITIAL: 10 mohm MAX. AFTER TEST: 15 mohm MAX.		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	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.
PRODUCT SPECIFICATION	PRS-1676	PRS-1726	PRS-2105	PRS-2490	PRS-2106
TEST REPORT	TR-12044	TR-12096	TR-15059	TR-18041	TR-15080
PACKING STANDARD	PST-17011				
INSTRUCTION MANUAL	HIM-10002		HIM-17017		HIM-12010
APPEARANCE CRITERIA No.	QLS-A***				

Rev.5

# MHF® I Receptacle (3pads)

Recommended P/N	20279-001E-03	
PART NO.	PACKING REEL	QUANTITY IN 1 REEL
20279-001E-01	PLASTIC REEL	2,500
	CORRUGATED PAPER REEL	2,500
20279-001E-03	PLASTIC REEL	5,000
20279-001E-05	PLASTIC REEL	10,000



- NOTES
- APPLICABLE CONNECTOR PART NO.  
MHF I PLUG  
20278-11\*R-\*\*-\*\*  
20351-\*\*\*R-37  
20631-\*\*\*R-\*\*-\*\*  
20670-001R-\*\*-\*\*  
20767-001R-20  
MHF II PLUG  
20311-011R-\*\*-\*\*  
20686-001R-08
  - COPLANARITY: 0.1mm MAX.
  - THIS IS "Pb-FREE" CONNECTOR.

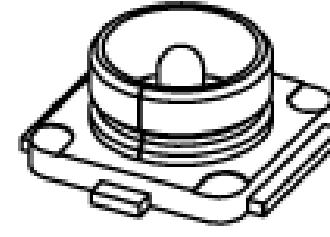
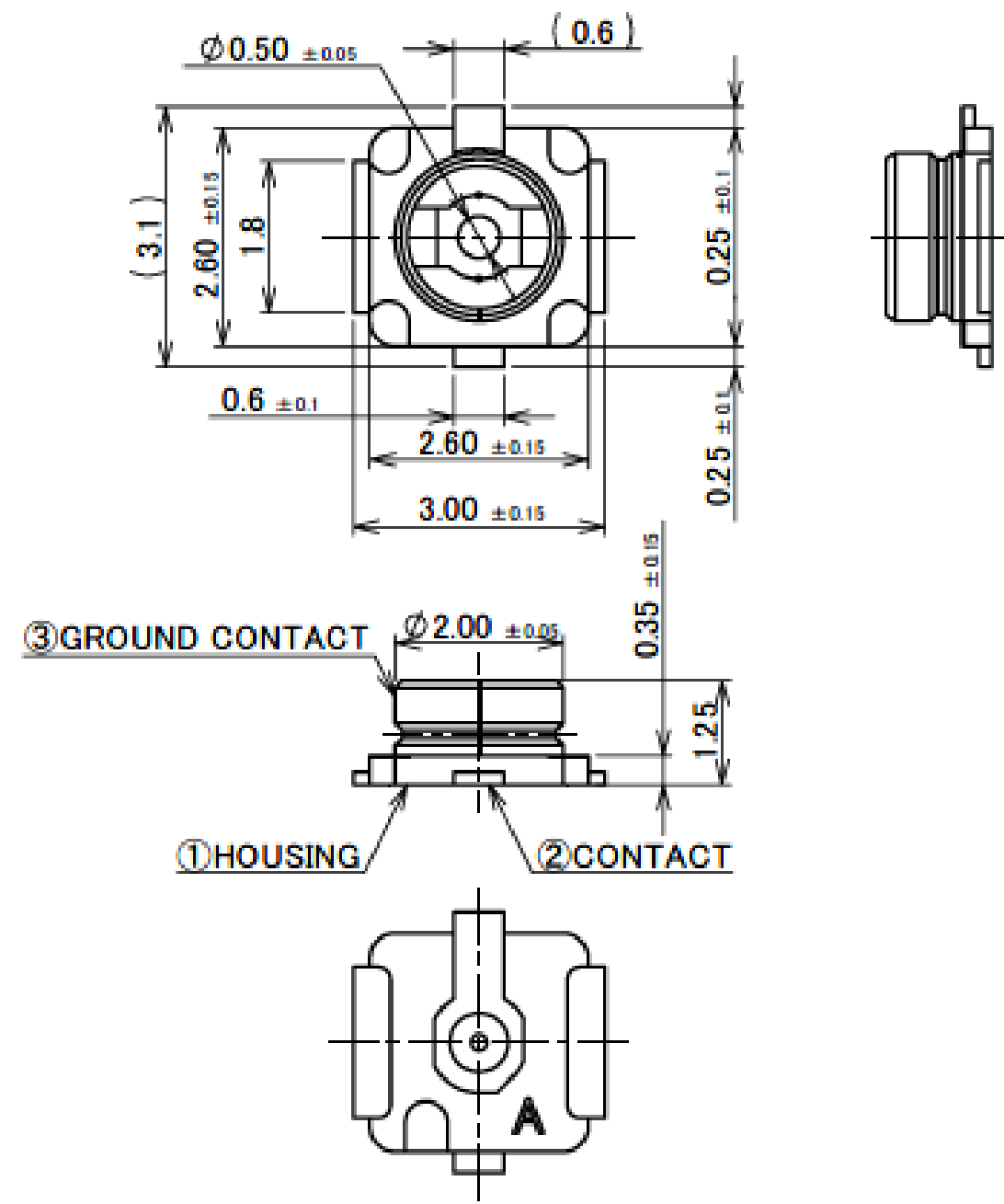
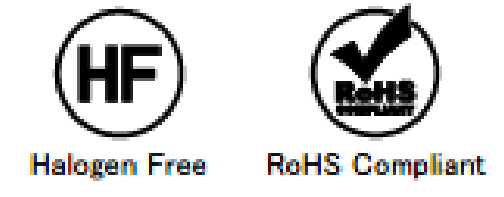
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 $\mu$ m MIN. CONTACT PART Au 0.05 $\mu$ m MIN. SOLDERING PART Au 0.05 $\mu$ m MIN.
2	CONTACT	BRASS	ALL OVER Ni 1.00 $\mu$ m MIN. CONTACT PART Au 0.10 $\mu$ m MIN. SOLDERING PART Au 0.03 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0, WHITE

- \*LENGTH: 4.0 $\pm$ 0.4 AT PLUG PART NO. 20670-001R-08, 20670-001R-13, 20670-001R-32  
4.7 $\pm$ 0.4 AT PLUG PART NO. 20670-001R-18, 20670-001R-37  
5.6 AT PLUG PART NO. 20767-001R-20 (REFERENCE DIMENSION)  
3.8 $\pm$ 0.3 AT PLUG PART NO. 20686-001R-08, 20311-011R-\*\*-\*\*
- \*MATING HEIGHT: 2.5 MAX. AT PLUG PART NO. 20670-001R-\*\*-\*\*  
(2.9 MAX. AT MHF I LK LOCKED CONDITION)  
3.0 MAX. AT PLUG PART NO. 20767-001R-20  
2.0 $\pm$ 0.1 AT PLUG PART NO. 20686-001R-08, 20311-011R-\*\*-\*\*
- MATING CONDITION

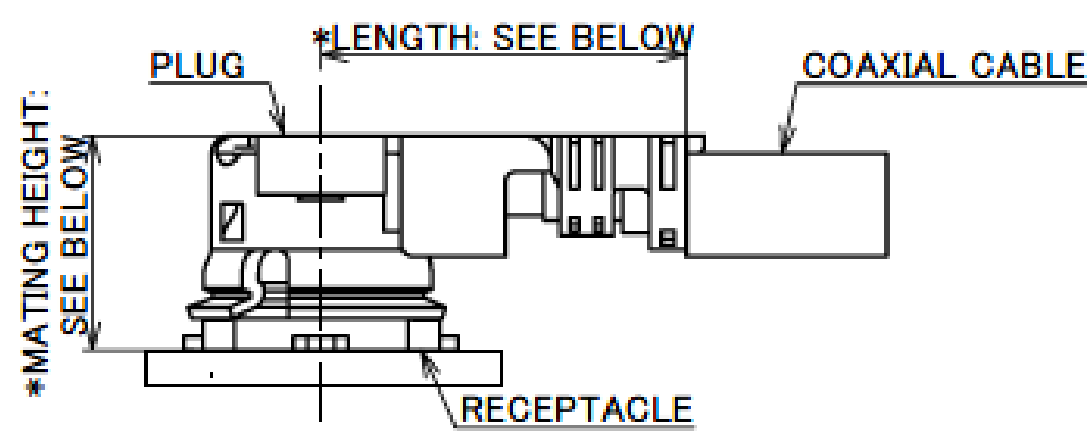
Rev.32

# MHF® I Receptacle (3pads)

Recommended P/N	20279-001E-03	
PART NO.	PACKING REEL	QUANTITY IN 1 REEL
20279-001E-06	PLASTIC REEL	10,000



- NOTES
- APPLICABLE CONNECTOR PART NO.  
MHF I PLUG  
20278-11R-\*\*-\*\*  
20351-\*\*\*R-37  
20631-\*\*\*R-\*\*-\*\*  
20670-001R-\*\*-\*\*  
20767-001R-20  
MHF II PLUG  
20311-011R-\*\*-\*\*  
20686-001R-08
  - COPLANARITY: 0.1mm MAX.
  - THIS IS "Pb-FREE" CONNECTOR.

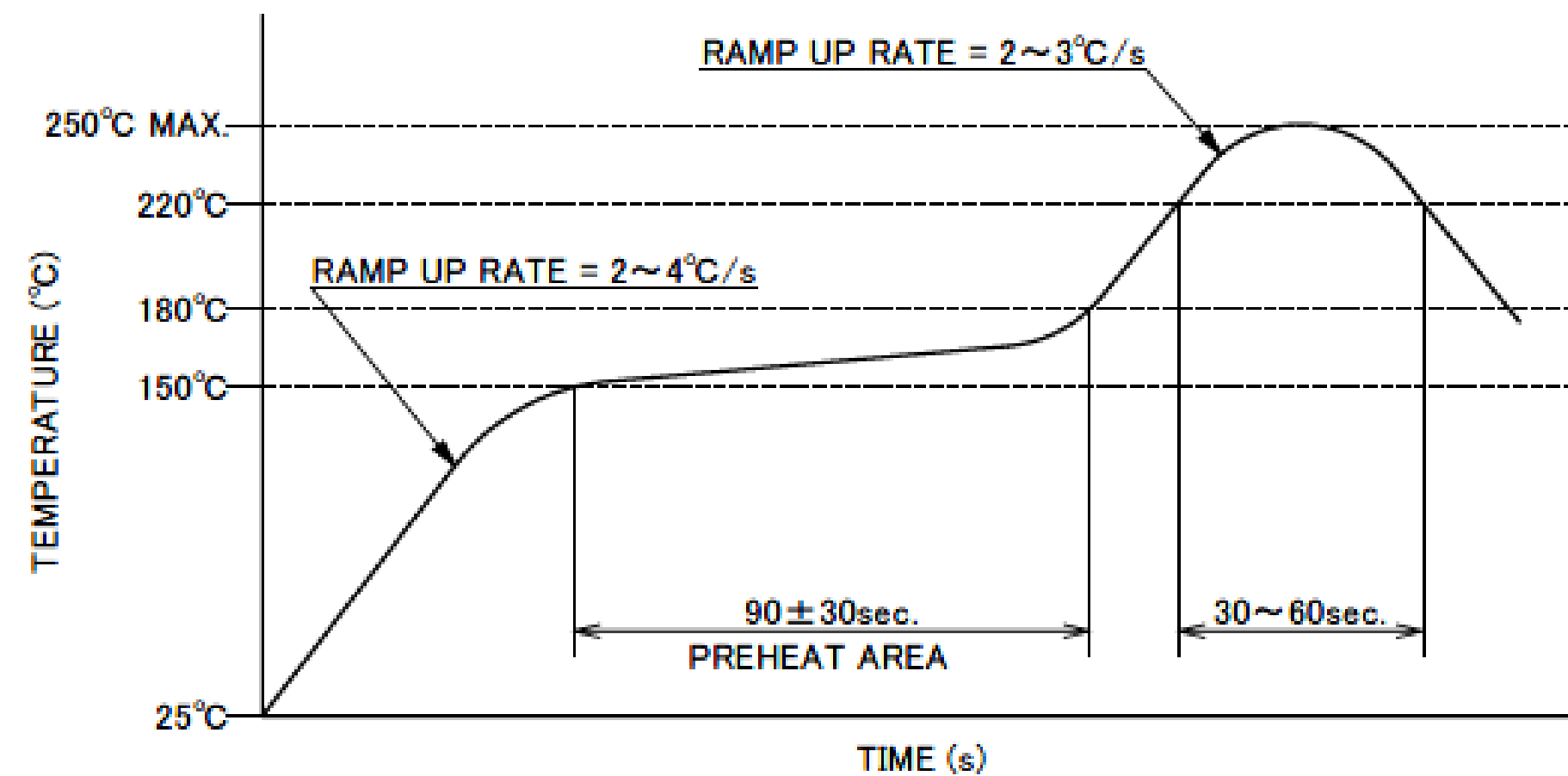
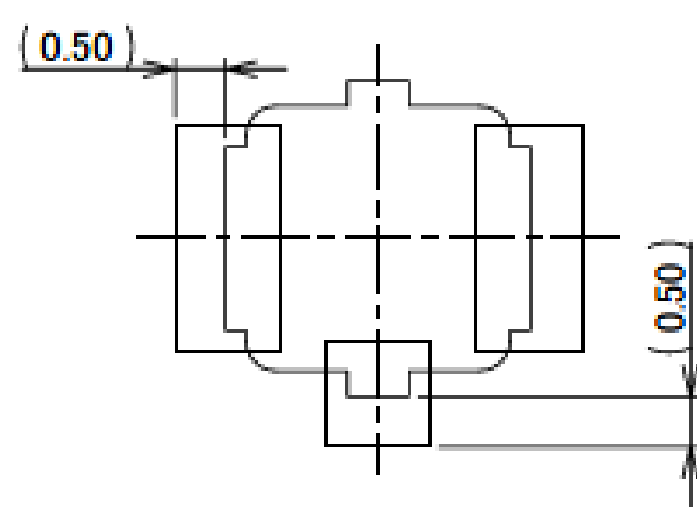
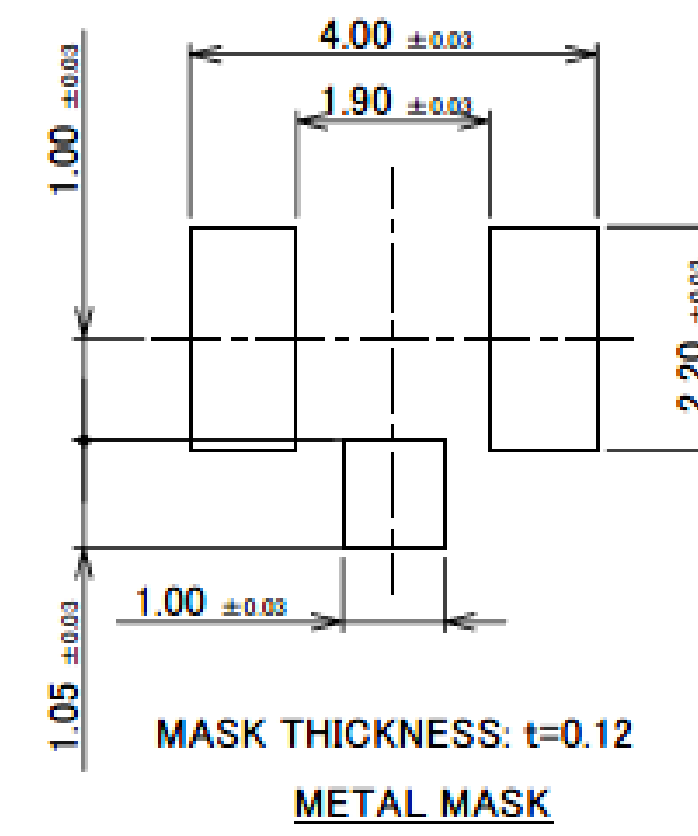
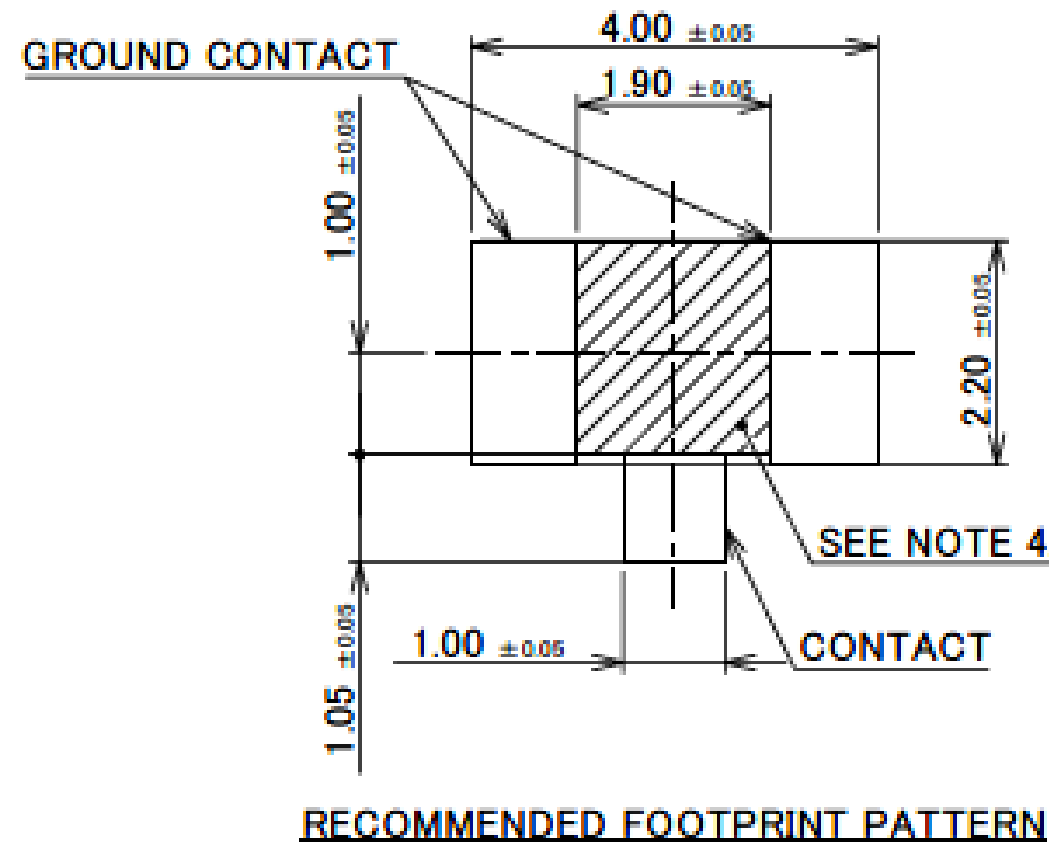


- \*LENGTH:  $4.0 \pm 0.4$  AT PLUG PART NO. 20670-001R-08, 20670-001R-13, 20670-001R-32  
 $4.7 \pm 0.4$  AT PLUG PART NO. 20670-001R-18, 20670-001R-37  
 $5.6$  AT PLUG PART NO. 20767-001R-20 (REFERENCE DIMENSION)  
 $3.8 \pm 0.3$  AT PLUG PART NO. 20686-001R-08, 20311-011R-\*\*-\*\*
- \*MATING HEIGHT: 2.5 MAX. AT PLUG PART NO. 20670-001R-\*\*-\*\*  
(2.9 MAX. AT MHF I LK LOCKED CONDITION)  
3.0 MAX. AT PLUG PART NO. 20767-001R-20  
 $2.0 \pm 0.1$  AT PLUG PART NO. 20686-001R-08, 20311-011R-\*\*-\*\*

**MATING CONDITION**

NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 $\mu$ m MIN. CONTACT PART Au 0.05 $\mu$ m MIN. SOLDERING PART Au 0.05 $\mu$ m MIN.
2	CONTACT	BRASS	ALL OVER Ni 1.00 $\mu$ m MIN. CONTACT PART Au 0.10 $\mu$ m MIN. SOLDERING PART Au 0.03 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0, WHITE

Rev.32



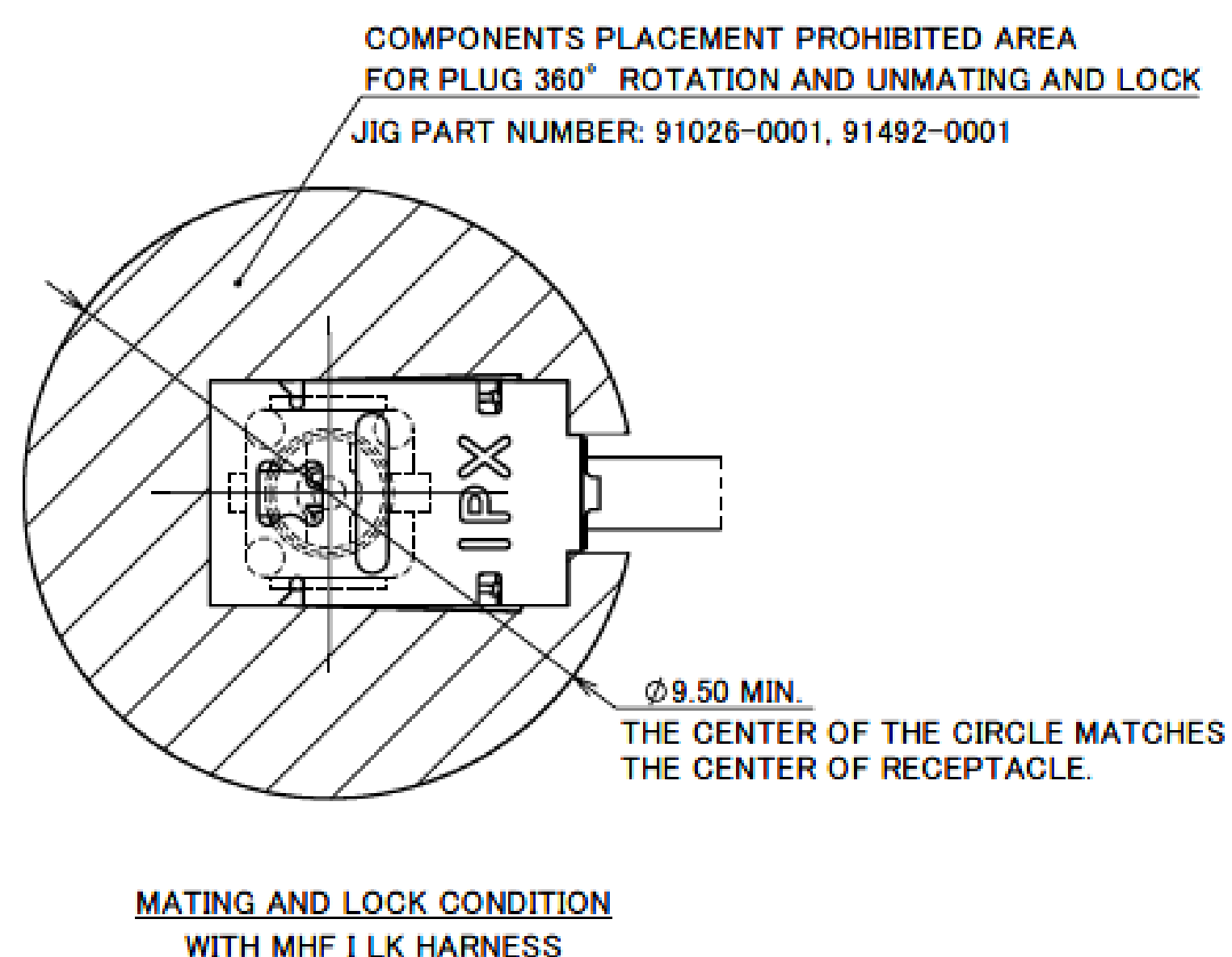
- NOTES
- NO GROUND, SIGNAL, AND RESIST IN THIS AREA.

Rev.32

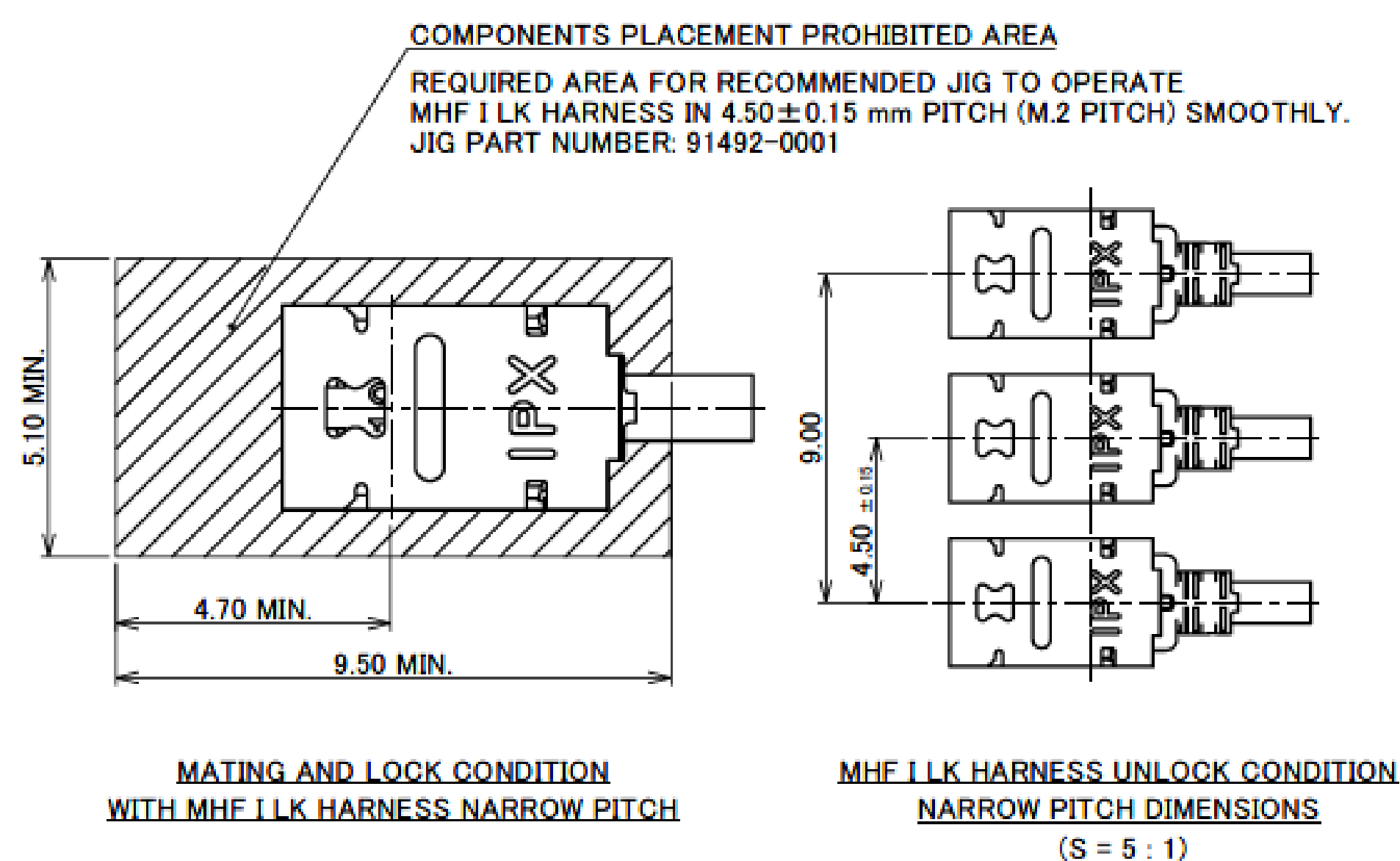
# MHF® I Receptacle (3pads)

## COMPONENT PLACEMENT PROHIBITED AREA FOR MHF I/II RECEPTACLE MATED WITH MHF I LK HARNESS REQUIRED AREA FOR RECOMMENDED JIG TO OPERATE

SINGLE CONNECTOR LAYOUT



MULTIPLE CONNECTORS LAYOUT



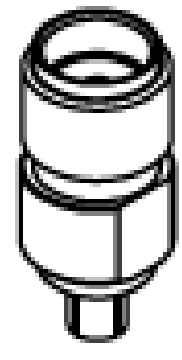
Rev.32

ITEMS	SPECIFICATION				
RECOMMENDED APPLICABLE CONNECTOR PART NO.	20278-001R-** (MHF I PLUG 1.80, 1.32, 1.13, 0.81)	20351-001R-** (MHF I PLUG 1.37)	20670-001R-** (MHF I PLUG Ni TOP 1.80, 1.37, 1.32, 1.13, 0.81)	20767-001R-20 (MHF I PLUG 2.00)	20686-001R-08 (MHF II PLUG Ni TOP 0.81)
RATING VOLTAGE	60 V AC (R.M.S)				
RATING FREQUENCY	DC~9GHz				
OPERATING TEMPERATURE	233~363K (-40°C~+90°C)				
VSWR (MATED WITH SMA ADAPTER PART No.90193-002)	RECEPTACLE: 1.30 MAX. AT 0.1~3 GHz, 1.40 MAX. AT 3~6 GHz, 1.80 MAX. AT 6~9 GHz				
MAIN CONTACT RESISTANCE	INITIAL : 20 mohm MAX. AFTER TEST : 25 mohm MAX.		INITIAL : 20 mohm MAX. AFTER TEST : ∠R 20 mohm MAX.		
GROUND CONTACT RESISTANCE	INITIAL : 10 mohm MAX. AFTER TEST : 15 mohm MAX.		INITIAL : 20 mohm MAX. AFTER TEST : ∠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.
PRODUCT SPECIFICATION	PRS-1676	PRS-1726	PRS-2105	PRS-2490	PRS-2106
TEST REPORT	TR-12044	TR-12096	TR-15059	TR-18041	TR-15060
PACKING STANDARD	20279-001E-01: 300-232 (CORRUGATED PAPER REEL) PST-12002 (ANTI-STATIC PLASTIC REEL) 20279-001E-03: 300-850 20279-001E-05: PST-13040 20279-001E-06: PST-13040				
INSTRUCTION MANUAL	HIM-10002		HIM-17017		HIM-12010
APPEARANCE CRITERIA No.	QLS-A***				

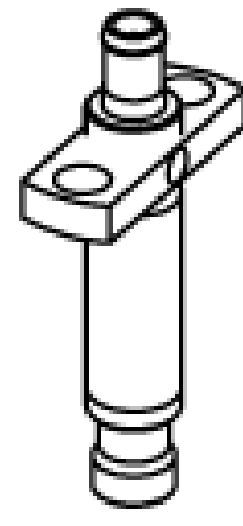
※UNLESS OTHERWISE SPECIFIED, 20279-001E-01 WILL BE DELIVERED IN CORRUGATED PAPER REELS.  
CONTACT YOUR I-PEX SALES IF YOU WISH FOR PLASTIC REELS.



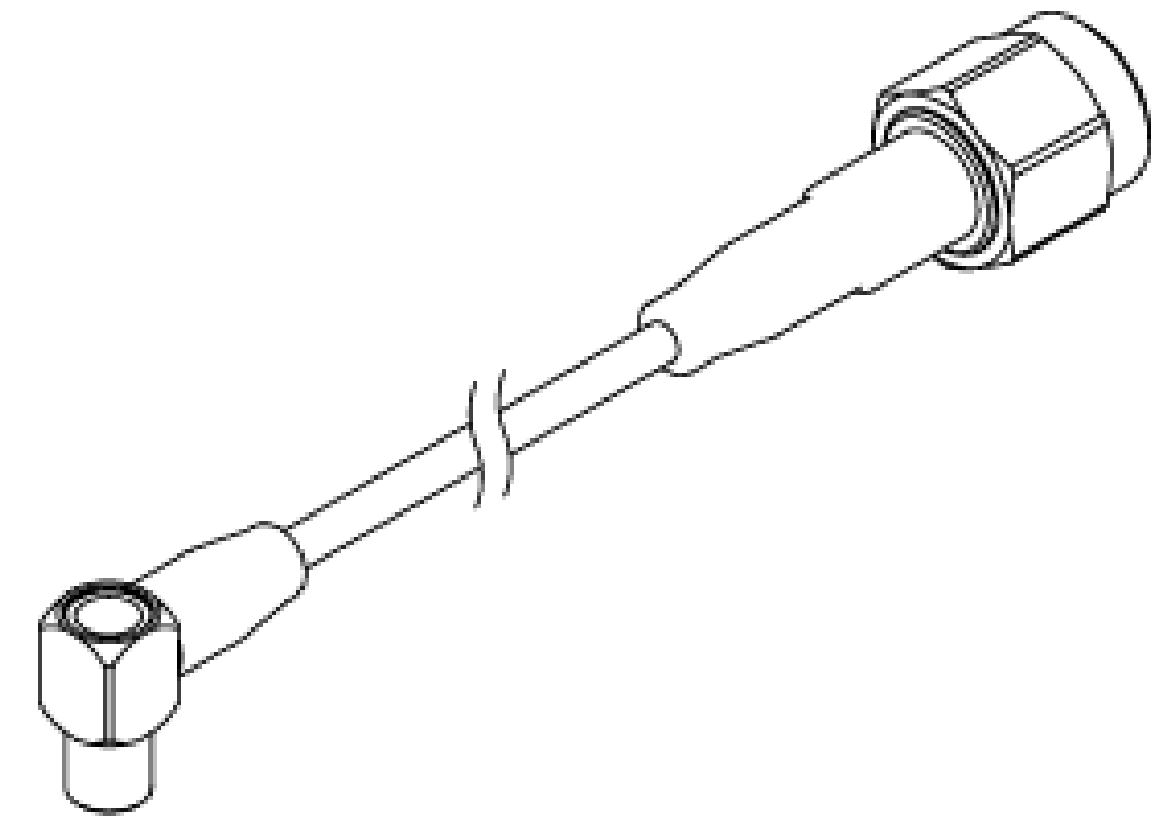
# Accessories for MHF® I Receptacle



**MHF I SMA ADAPTER**  
PART NO. 90193-002



**MHF I RECEPTACLE HIGH CYCLE N45 C ADAPTER**  
PART NO. 90575-0001



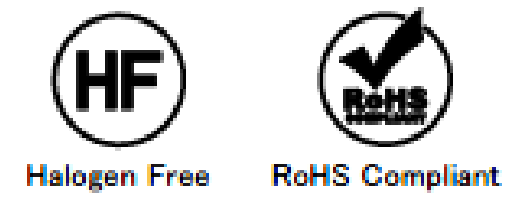
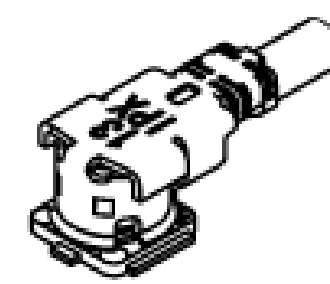
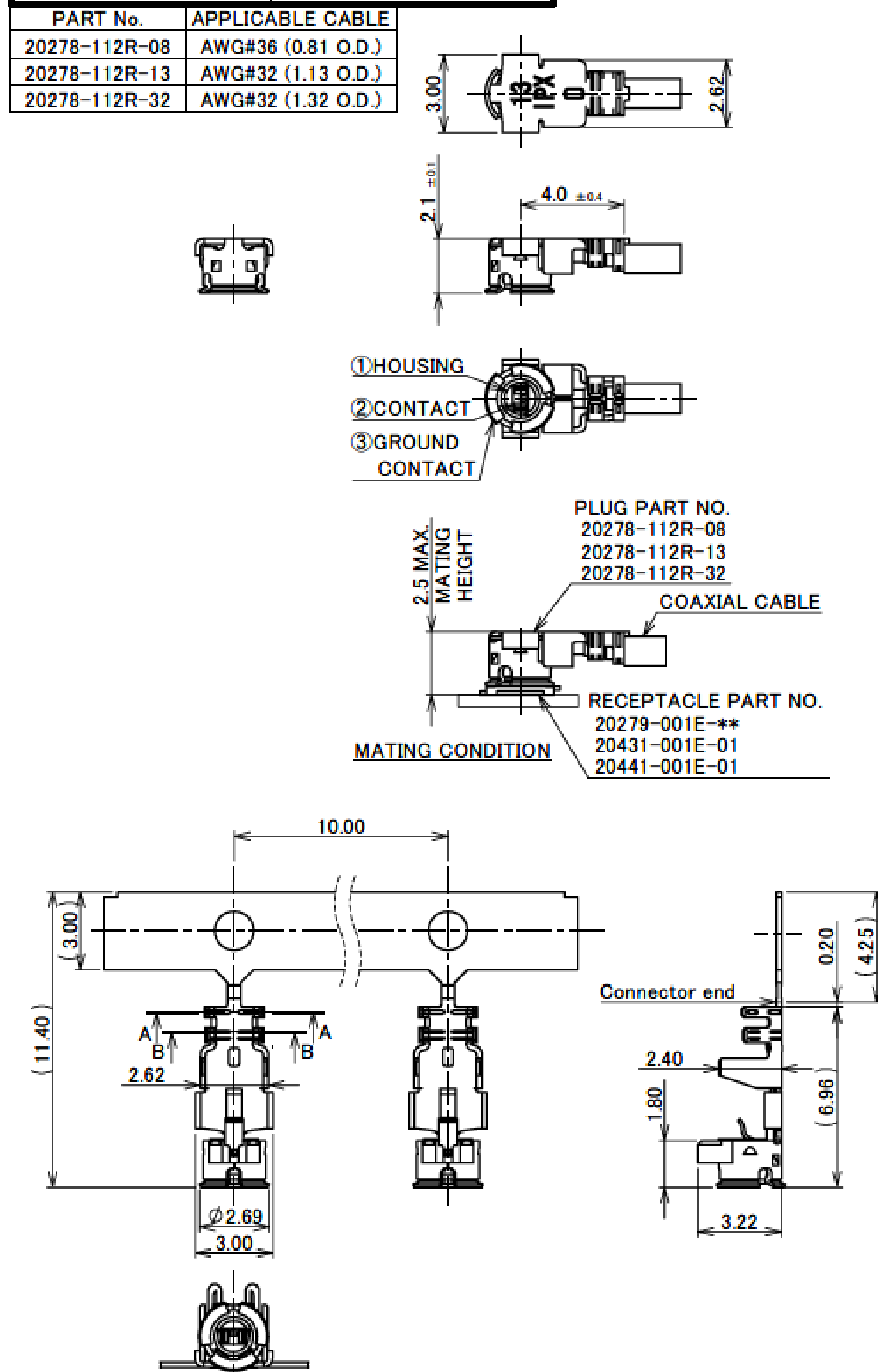
**MHF SERIES N45 C TO SMA ADAPTER CABLE**  
PART NO. 90577-\*\*\*\*

\* 90575-0001 AND 90577-\*\*\*\* SHOULD BE USED TOGETHER.

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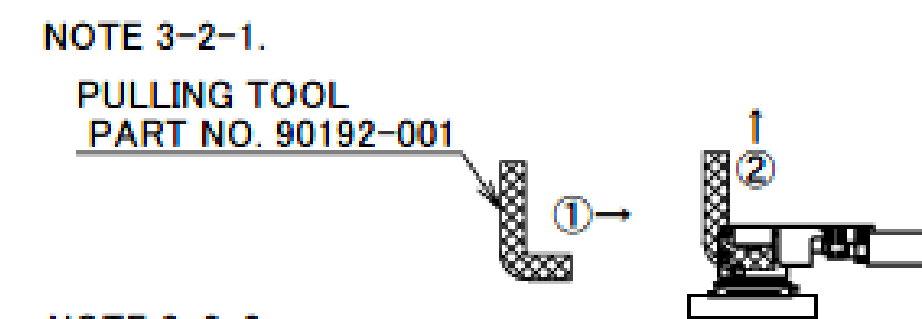
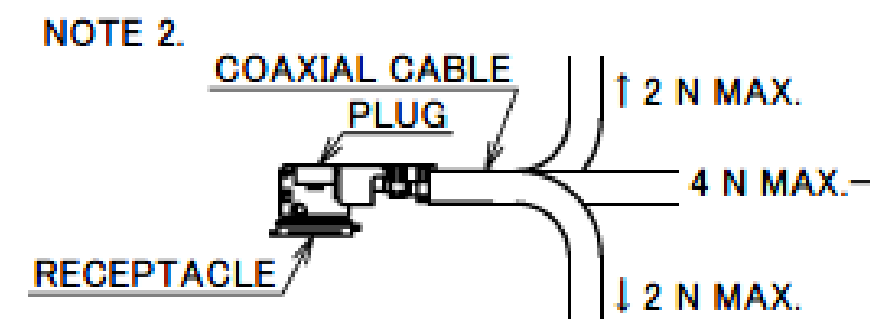
## MHF® I plug Au (0.81,1.13,1.32,1.80)

Recommended P/N	20278-112R-**
PART No.	APPLICABLE CABLE
20278-112R-08	AWG#36 (0.81 O.D.)
20278-112R-13	AWG#32 (1.13 O.D.)
20278-112R-32	AWG#32 (1.32 O.D.)



### NOTES

- APPLICABLE CONNECTOR:  
20279-001E-\*\*, 20431-001E-01, 20441-001E-01
- PERMISSIBLE LOAD OF CABLE AT MATING
- SUGGESTIONS FOR MATING & UNMATING OPERATION.
  - MATING  
PLEASE MATE THE CONNECTOR STRAIGHTLY TO VERTICAL DIRECTION AS MUCH AS POSSIBLE. ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE. AS EXCESSIVE SLANT ANGLE MATING MAY BREAK THE CONNECTOR. PLEASE DON'T DO IT.
  - UNMATING
    - IN CASE OF UNMATING BY PULLING TOOL  
PLEASE USE THE PULLING TOOL AS THE FOLLOWING DRAWING. AND PLEASE PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
    - IN CASE OF UNMATING DIRECTLY BY HAND  
PLEASE CATCH THE CATCHING AREA OF PLUG, AND PLEASE PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
  - CRIMP OVER STANDARDS OF OUTER CONDUCTOR  
STANDARDS: LESS THAN 10% FROM TOTAL NUMBERS OF OUTER CONDUCTOR.  
(NUMBERS OF OUTER CONDUCTOR'S CRIMP OVER FROM OUTER CONDUCTOR'S BARREL)
- CAUTION ABOUT HEAT SHRINKAGE TUBES  
PLEASE BE CAREFUL NOT TO MELT HOUSING WHEN USING HEAT SHRINKAGE TUBES. IT WILL BECOME CAUSE OPEN CIRCUIT.
- THIS IS "Pb-FREE" CONNECTOR.

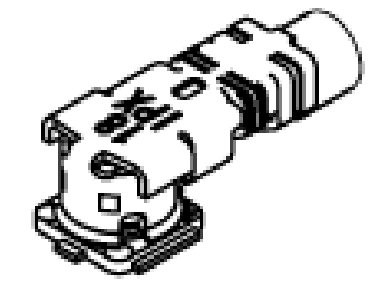
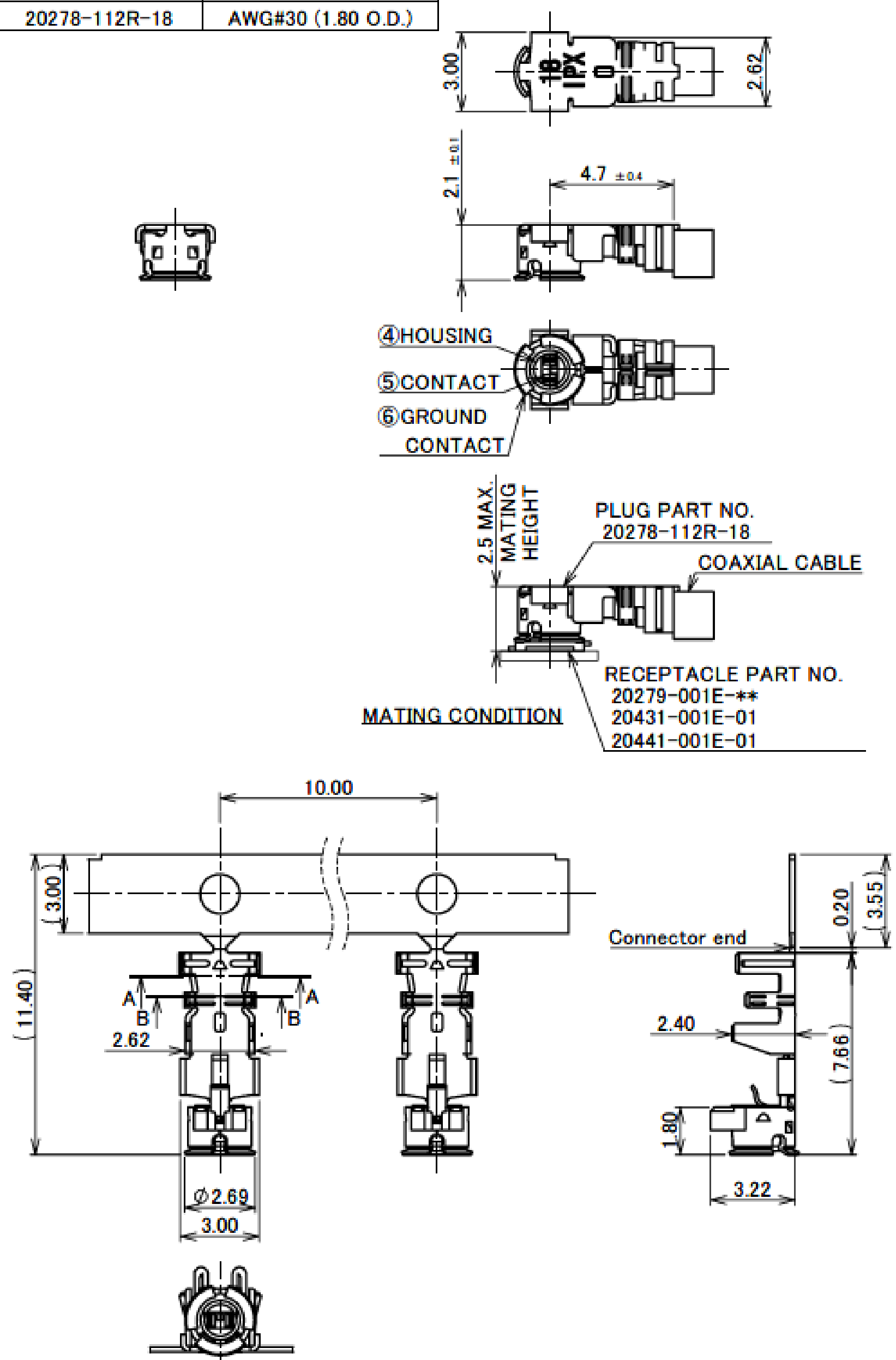


NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.05 μm MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.10 μm MIN.
1	HOUSING	PBT	UL94V-0, 20278-112R-08: WHITE 20278-112R-13, -32: BLACK

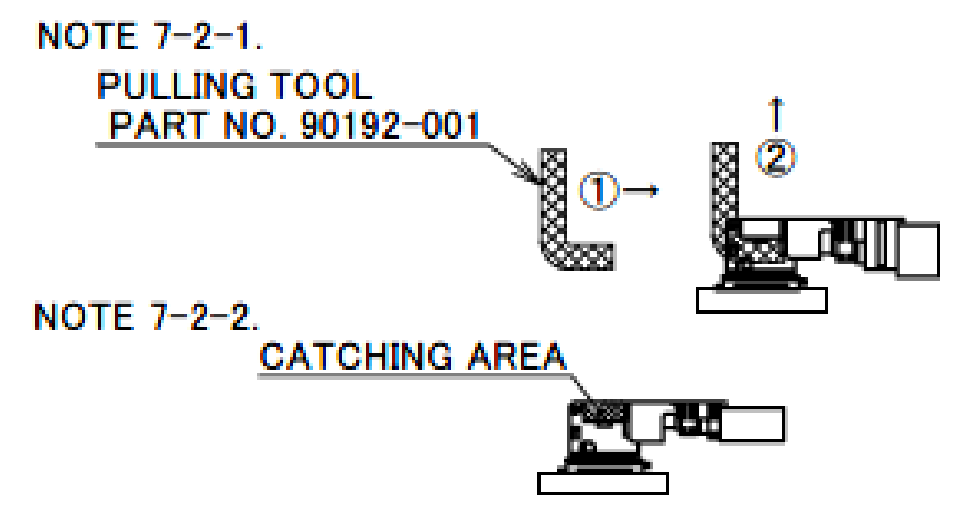
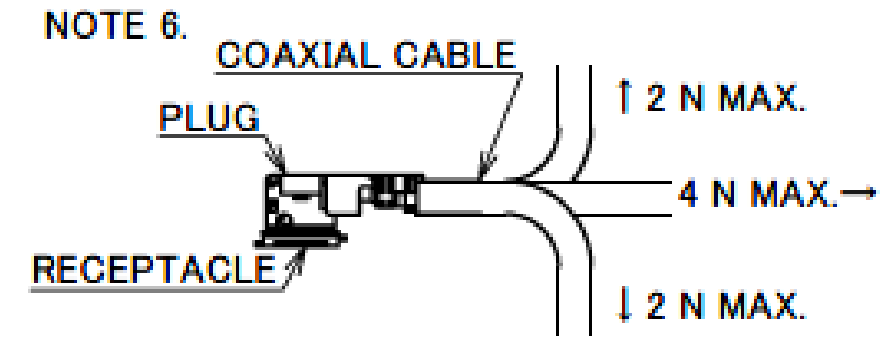
Rev.32

# MHF® I plug Au (0.81,1.13,1.32,1.80)

Recommended P/N		20278-112R-**-**
PART No.	APPLICABLE CABLE	
20278-112R-18	AWG#30 (1.80 O.D.)	



- NOTES
- APPLICABLE CONNECTOR:  
20279-001E-\*\*-\*\*, 20431-001E-01, 20441-001E-01
  - PERMISSIBLE LOAD OF CABLE AT MATING
  - SUGGESTIONS FOR MATING & UNMATING OPERATION.
  - MATING  
PLEASE MATE THE CONNECTOR STRAIGHTLY TO VERTICAL DIRECTION AS MUCH AS POSSIBLE. ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE. AS EXCESSIVE SLANT ANGLE MATING MAY BREAK THE CONNECTOR, PLEASE DON'T DO IT.
  - UNMATING
  - UNMATING BY PULLING TOOL  
PLEASE USE THE PULLING TOOL AS THE FOLLOWING DRAWING, AND PLEASE PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
  - UNMATING DIRECTLY BY HAND  
PLEASE CATCH THE CATCHING AREA OF PLUG, AND PLEASE PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
  - CRIMP OVER STANDARDS OF OUTER CONDUCTOR  
STANDARDS: LESS THAN 10% FROM TOTAL NUMBERS OF OUTER CONDUCTOR.  
(NUMBERS OF OUTER CONDUCTOR'S CRIMP OVER FROM OUTER CONDUCTOR'S BARREL)
  - CAUTION ABOUT HEAT SHRINKAGE TUBES  
PLEASE BE CAREFUL NOT TO MELT HOUSING WHEN USING HEAT SHRINKAGE TUBES. IT WILL BECOME CAUSE OPEN CIRCUIT.
  - THIS IS "Pb-FREE" CONNECTOR.



6	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.05 μm MIN.
5	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.10 μm MIN.
4	HOUSING	PBT	UL94V-0, WHITE

Rev.32

Recommended P/N		20278-112R-**-**
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PART NO.	20278-112R-08	20278-112R-13	20278-112R-32	20278-112R-18	CABLE CUT LENGTH
APPLICABLE CABLE NOMINAL DIMENSION	 2.09 ±0.1 1.25 ±0.1 1.16 ±0.1 AWG #36(7/0.05) φ0.40 NOMINAL (φ0.65) φ0.81 NOMINAL *SEE NOTE 9.	 2.09 ±0.1 1.25 ±0.1 1.16 ±0.1 AWG #32(7/0.08) φ0.68 NOMINAL (φ0.93) φ1.13 NOMINAL	 2.09 ±0.1 1.25 ±0.1 1.16 ±0.1 AWG #32(7/0.08) φ0.66 NOMINAL (φ1.12) φ1.32 NOMINAL	 2.09 ±0.1 1.25 ±0.1 1.16 ±0.1 AWG #30(7/0.102) φ0.84 NOMINAL (φ1.35) φ1.80 NOMINAL	
INNER CONDUCTOR SILVER PLATING					
DIELECTRIC CORE					
OUTER CONDUCTOR SILVER OR TIN PLATING					
JACKET					
BRAIDED SHIELD OF OUTER CONDUCTOR	SINGLE	SINGLE	DOUBLE	SINGLE	
PART NO. OF SEMI AUTO TERMINATION MACHINE	90213-008C	90213-013C	90213-032C	90232-018	
SECT. B-B	 1.68 1.12 1.48	 2.24 1.48	 2.29 1.58	 2.71 1.90	
SECT. A-A	 1.72 1.19	 2.28 1.55	 2.37 1.71	 3.10 2.26	
CRIMP HEIGHT	CH-1	1.34~1.40	1.34~1.40	1.34~1.40	1.34~1.40
	CH-2	0.76~0.84	1.06~1.14	1.20~1.30	1.41~1.49
	CH-3	0.85~0.97	1.15~1.35	1.26~1.46	1.70~1.80
					CRIMP HEIGHT BLADE MICROMETER CH-1  0.40 i-Fit® PART CH-2  0.40 CH-3  0.40 OUTER CONDUCTOR PART JACKET PART

NOTE 9. DO NOT USE SOLDER COATED EITHER INNER OR OUTER CONDUCTOR CABLE.

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Contact your sales representative for more detailed information. [www.i-pex.com](http://www.i-pex.com)

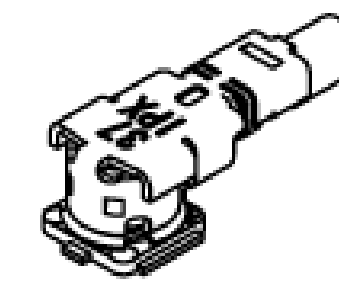
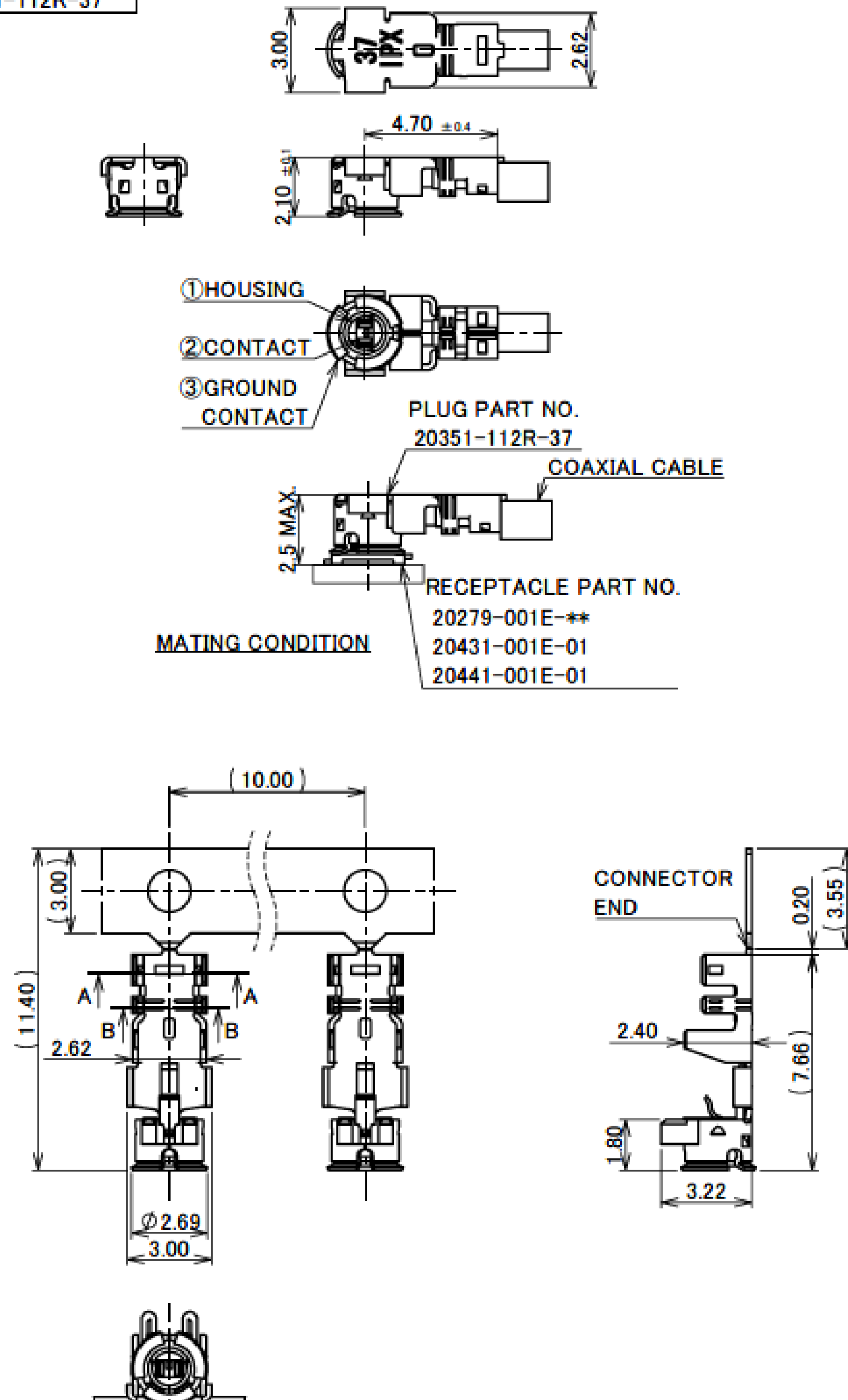
# MHF® I plug Au (0.81,1.13,1.32,1.80)

ITEMS	SPECIFICATION	
RECOMMENDED APPLICABLE CONNECTOR PART No.	20279-001E-**	20441-001E-01
RATING VOLTAGE	60 V AC (R.M.S)	
RATING FREQUENCY	DC~9GHz	
OPERATING TEMPERATURE	233~363 K (-40°C~+90°C)	
VSWR (MATED WITH SMA ADAPTER PART No.90193-001)	1.30 MAX. AT 0.1~3 GHz, 1.50 MAX. AT 3~6 GHz, 1.90 MAX. AT 6~9 GHz (0.81 O.D. / 1.13 O.D. / 1.80 O.D.) 1.30 MAX. AT 0.1~3 GHz, 1.50 MAX. AT 3~6 GHz, 1.60 MAX. AT 6~9 GHz (1.32 O.D.)	
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: 25 mohm MAX.	
GROUND CONTACT RESISTANCE	INITIAL: 10 mohm MAX. / AFTER TEST: 15 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)	5 N MIN. / 3 N MIN.	
CRIMP STRENGTH	20278-112R-08, 20278-112R-13, 20278-112R-32: 10 N MIN. 20278-112R-18: 15 N MIN.	
PRODUCT SPECIFICATION	PRS-1676	
TEST REPORT	TR-12044	
PACKING STANDARD	300-233	
INSTRUCTION MANUAL	HIM-10002	
APPEARANCE CRITERIA No.	QLS-A***	

Rev.32

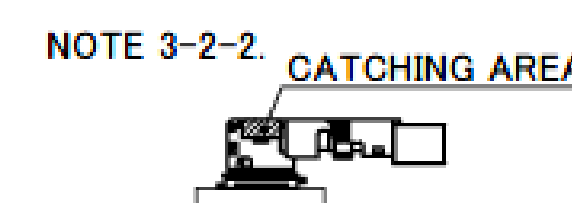
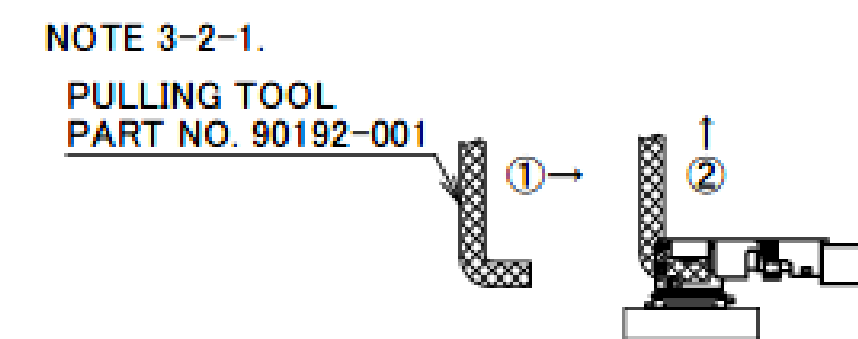
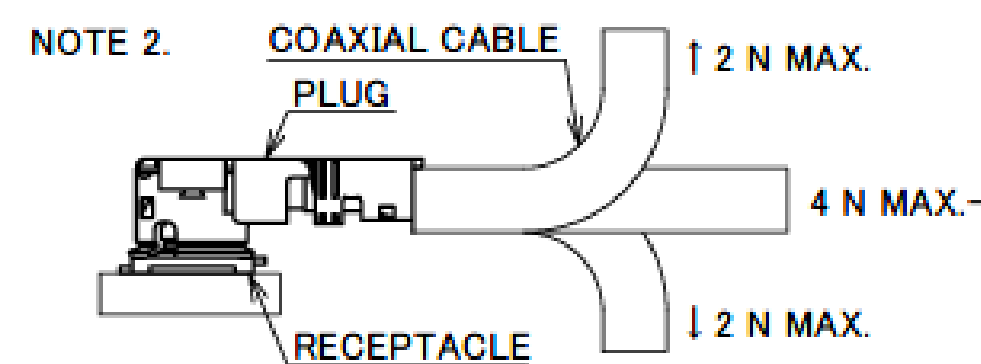
# MHF® I plug Au (1.37)

Recommended P/N	20351-112R-37
PART No.	20351-112R-37



### NOTES

- APPLICABLE CONNECTOR:  
20279-001E-\*\*, 20431-001E-01, 20441-001E-01
- PERMISSIBLE LOAD OF CABLE AT MATING
- SUGGESTIONS FOR MATING & UNMATING OPERATION
  - MATING  
PLEASE MATE THE CONNECTOR STRAIGHTLY TO VERTICAL DIRECTION AS MUCH AS POSSIBLE. ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE. AS EXCESSIVE SLANT ANGLE MATING MAY BREAK THE CONNECTOR, PLEASE DON'T DO IT.
  - UNMATING
    - IN CASE OF UNMATING BY PULLING TOOL  
PLEASE USE THE PULLING TOOL AS THE FOLLOWING DRAWING, AND PLEASE PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
    - IN CASE OF UNMATING DIRECTLY BY HAND  
PLEASE CATCH THE CATCHING AREA OF PLUG, AND PLEASE PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
  - CRIMP OVER STANDARDS OF OUTER CONDUCTOR  
STANDARDS: LESS THAN 10% FROM TOTAL NUMBERS OF OUTER CONDUCTOR.  
(NUMBERS OF OUTER CONDUCTOR'S CRIMP OVER FROM OUTER CONDUCTOR'S BARREL)
  - CAUTION ABOUT HEAT SHRINKAGE TUBES  
PLEASE BE CAREFUL NOT TO MELT HOUSING WHEN USING HEAT SHRINKAGE TUBES. IT WILL BECOME CAUSE OPEN CIRCUIT.
  - TIP OF CONTACT SHOULD BE RECESSED OF HOUSING AFTER CRIMPED ABOUT MATING AREA.
  - THIS IS "Pb-FREE" CONNECTOR.

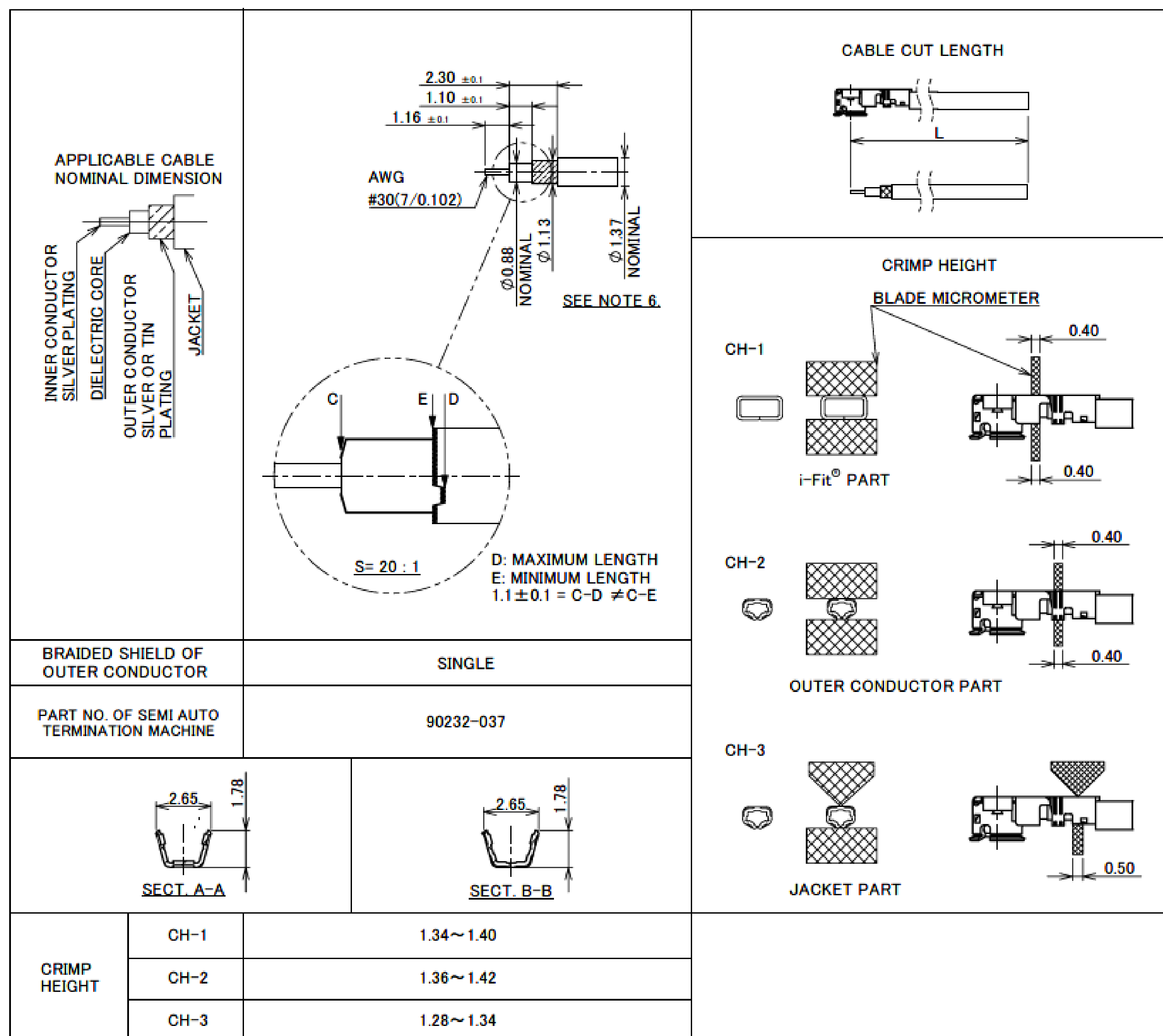


NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.05 μm MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.10 μm MIN.
1	HOUSING	PBT	UL94V-0, WHITE

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# MHF® I plug Au (1.37)



NOTE 6. DO NOT USE SOLDER COATED EITHER INNER OR OUTER CONDUCTOR CABLE.

Rev.20

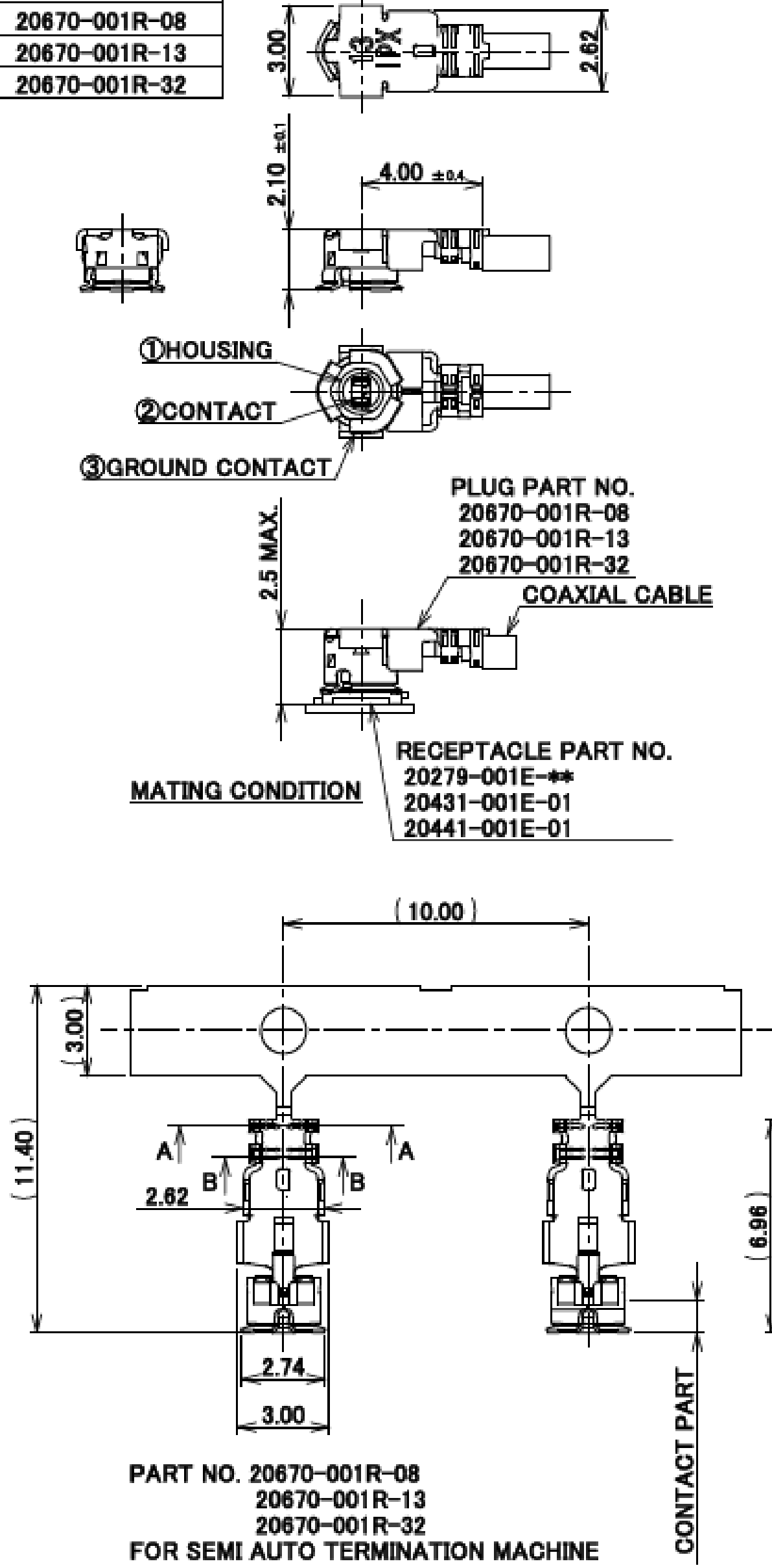
ITEMS	SPECIFICATION	
RECOMMENDED APPLICABLE CONNECTOR PART No.	20279-001E-**-**	20441-001E-01
RATING VOLTAGE	60 V AC (R.M.S)	
RATING FREQUENCY	DC ~ 9GHz	
OPERATING TEMPERATURE	233 ~ 363 K (-40°C ~ +90°C)	
VSWR	1.3 MAX. AT 0.1 ~ 3 GHz, 1.5 MAX. AT 3 ~ 6 GHz, 1.9 MAX. AT 6 ~ 9 GHz	
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: 25 mohm MAX.	
GROUND CONTACT RESISTANCE	INITIAL: 10 mohm MAX. / AFTER TEST: 15 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)	5 N MIN. / 3 N MIN.	
CRIMP STRENGTH	15 N MIN.	
PRODUCT SPECIFICATION	PRS-1726	
TEST REPORT	TR-12096	
PACKING STANDARD	300-233	
INSTRUCTION MANUAL	HIM-10002	
APPEARANCE CRITERIA No.	QLS-A***	

Rev.20

# MHF® I plug Ni top (0.81,1.13,1.32,1.37,1.80)

Recommended P/N 20670-001R-\*\*-\*\*

PART NO.
20670-001R-08
20670-001R-13
20670-001R-32



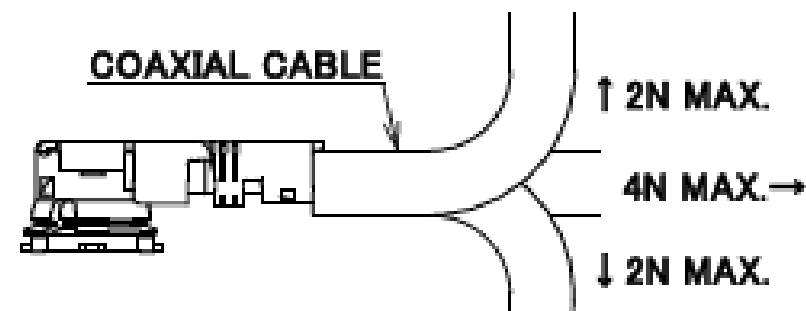
## NOTES

- APPLICABLE CONNECTOR:  
20279-001E-\*\*-\*\*  
20431-001E-01  
20441-001E-01
- PERMISSIBLE LOAD OF CABLE AT MATING
- MATING AND UNMATING INSTRUCTION
- MATING  
MAKE THE CONNECTOR VERTICALLY AS MUCH AS POSSIBLE, ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE.
- UNMATING
- UNMATING BY PULLING TOOL (PART NO. 90192-001): USE THE PULLING TOOL AS THE FOLLOWING DRAWING, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
- UNMATING DIRECTLY BY HAND: CATCH THE CATCHING AREA OF PLUG, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
- CRIMP OVER STANDARDS OF OUTER CONDUCTOR  
STANDARDS: LESS THAN 10% FROM TOTAL NUMBERS OF OUTER CONDUCTOR.  
(NUMBERS OF OUTER CONDUCTOR'S CRIMP OVER FROM OUTER CONDUCTOR'S BARREL)
- CAUTION ABOUT HEAT SHRINKAGE TUBES  
PLEASE BE CAREFUL NOT TO MELT HOUSING WHEN USING HEAT SHRINKAGE TUBES.  
IT WILL CAUSE OPEN CIRCUIT.
- THIS IS "Pb-FREE" CONNECTOR.

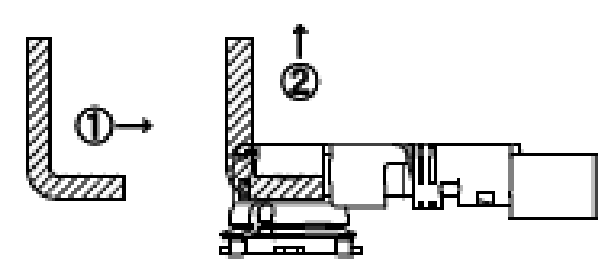
HATCHED AREA: NI PLATING AREA



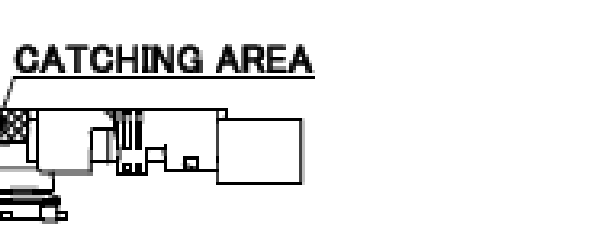
## NOTE 2.



## NOTE 3-2-1.



## NOTE 3-2-2.

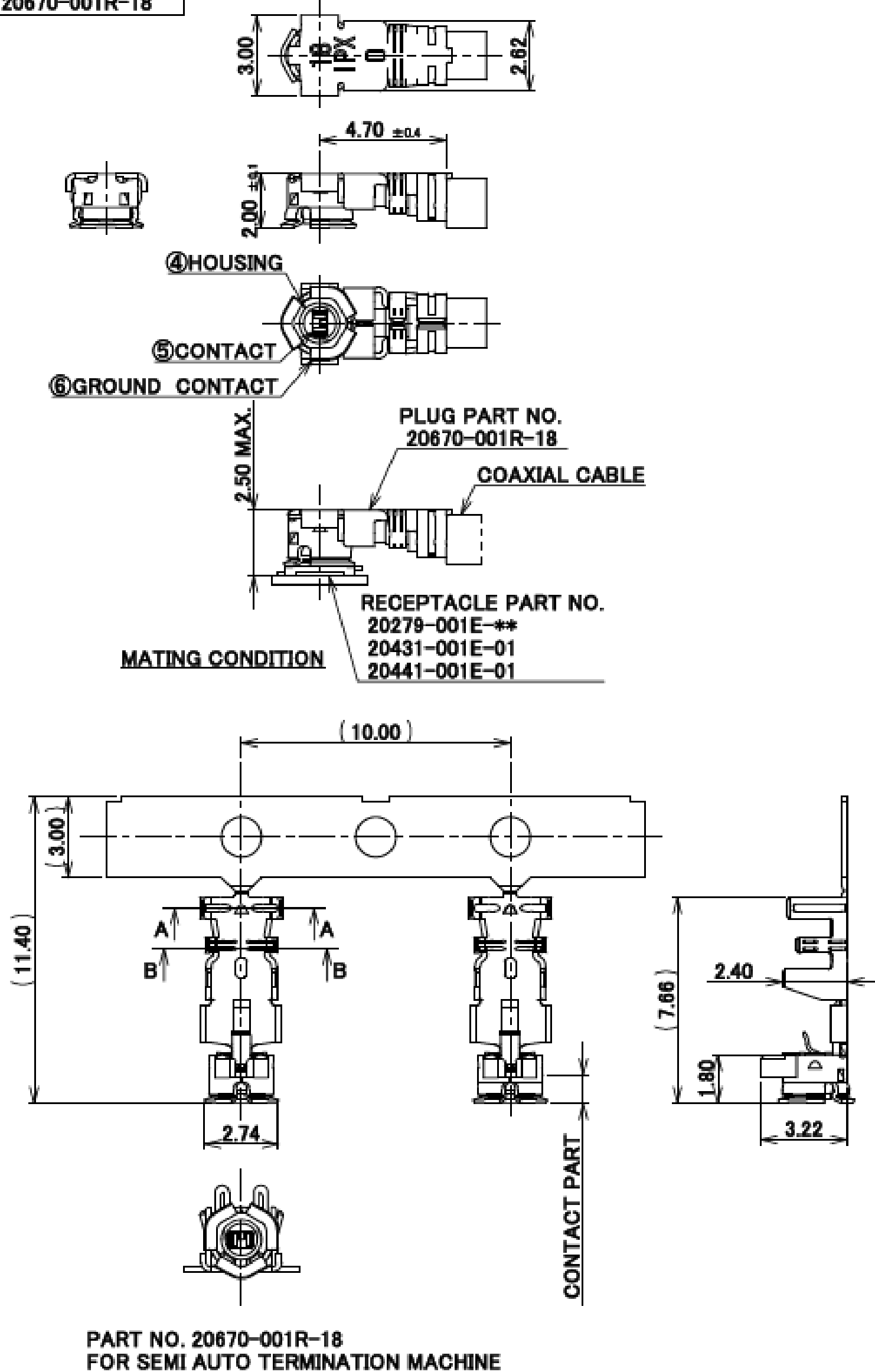


NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.02 μm MIN. [Ni PLATING AREA] Ni ONLY
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.03 μm MIN.
1	HOUSING	PBT	UL94V-0, BLACK

Rev.7

Recommended P/N 20670-001R-\*\*-\*\*

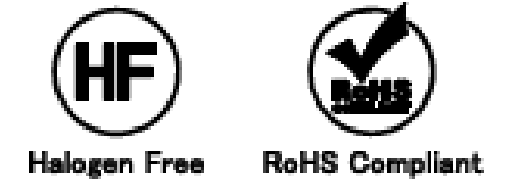
PART No.
20670-001R-18



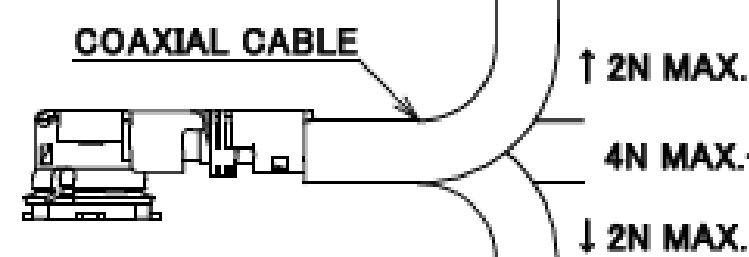
## NOTES

- APPLICABLE CONNECTOR:  
20279-001E-\*\*-\*\*  
20431-001E-01  
20441-001E-01
- PERMISSIBLE LOAD OF CABLE AT MATING
- MATING AND UNMATING INSTRUCTION
- MATING  
MAKE THE CONNECTOR VERTICALLY AS MUCH AS POSSIBLE, ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE.
- UNMATING
- UNMATING BY PULLING TOOL (PART NO. 90192-001): USE THE PULLING TOOL AS THE FOLLOWING DRAWING, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
- UNMATING DIRECTLY BY HAND: CATCH THE CATCHING AREA OF PLUG, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
- CRIMP OVER STANDARDS OF OUTER CONDUCTOR  
STANDARDS: LESS THAN 10% FROM TOTAL NUMBERS OF OUTER CONDUCTOR.  
(NUMBERS OF OUTER CONDUCTOR'S CRIMP OVER FROM OUTER CONDUCTOR'S BARREL)
- CAUTION ABOUT HEAT SHRINKAGE TUBES  
PLEASE BE CAREFUL NOT TO MELT HOUSING WHEN USING HEAT SHRINKAGE TUBES.  
IT WILL CAUSE OPEN CIRCUIT.
- THIS IS "Pb-FREE" CONNECTOR.

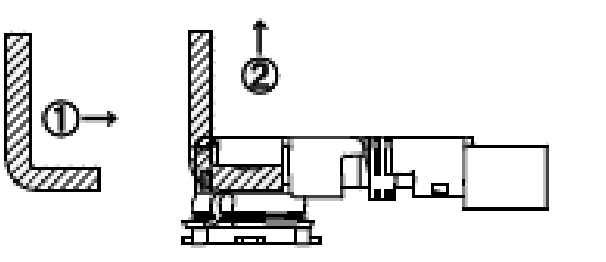
HATCHED AREA: NI PLATING AREA



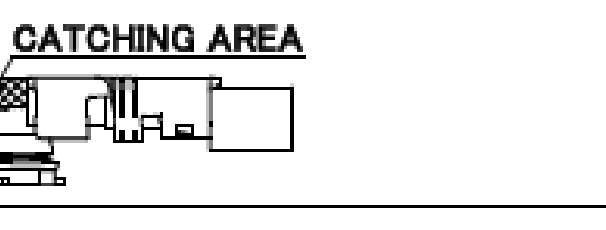
## NOTE 6.



## NOTE 7-2-1.



## NOTE 7-2-2.



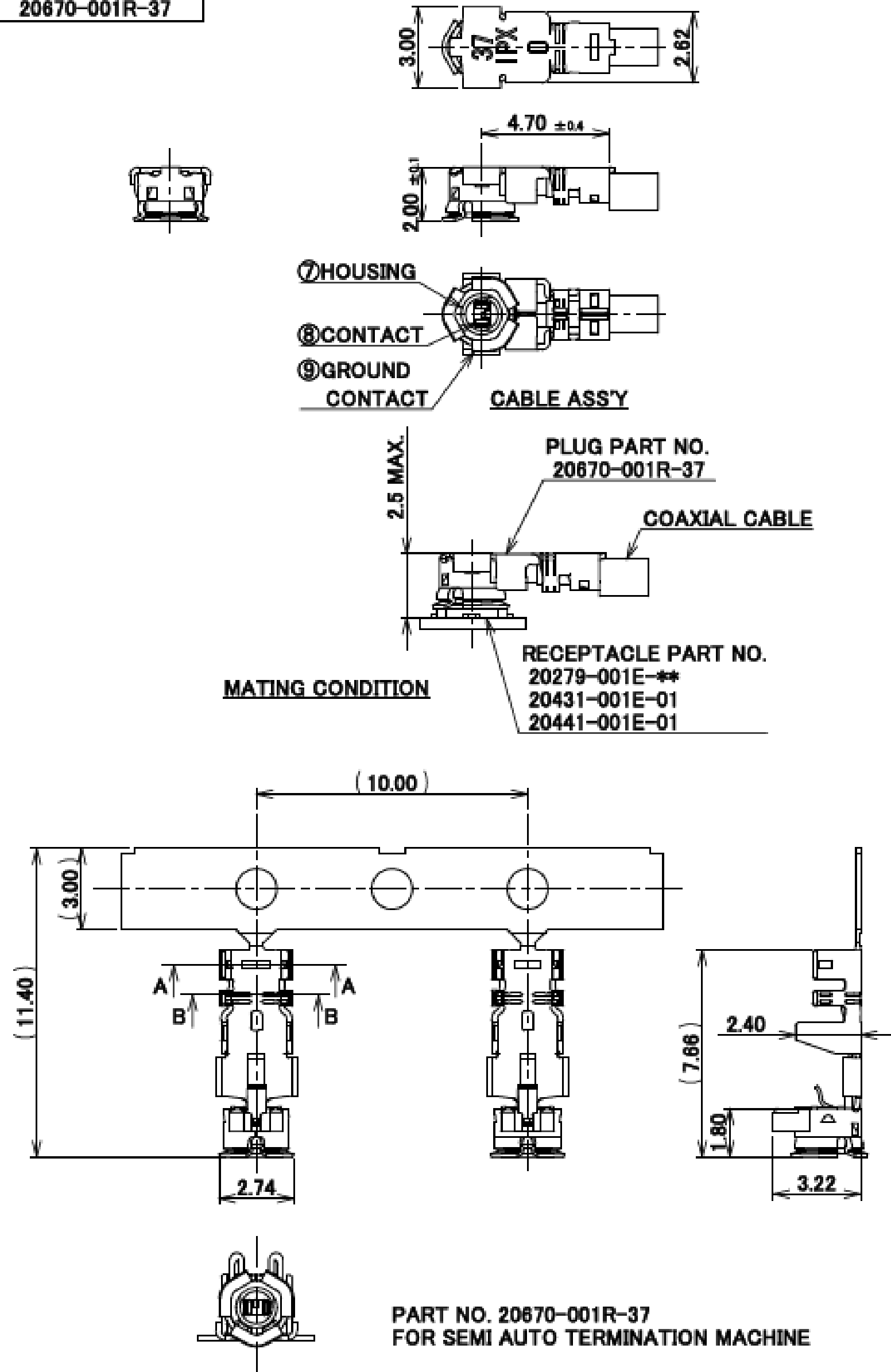
NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
6	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.02 μm MIN. [Ni PLATING AREA] Ni ONLY
5	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.03 μm MIN.
4	HOUSING	PBT	UL94V-0, BLACK

Rev.7

# MHF® I plug Ni top (0.81,1.13,1.32,1.37,1.80)

Recommended P/N 20670-001R-\*\*-\*

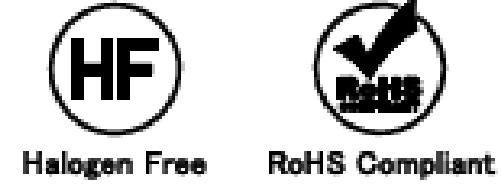
PART No.  
20670-001R-37



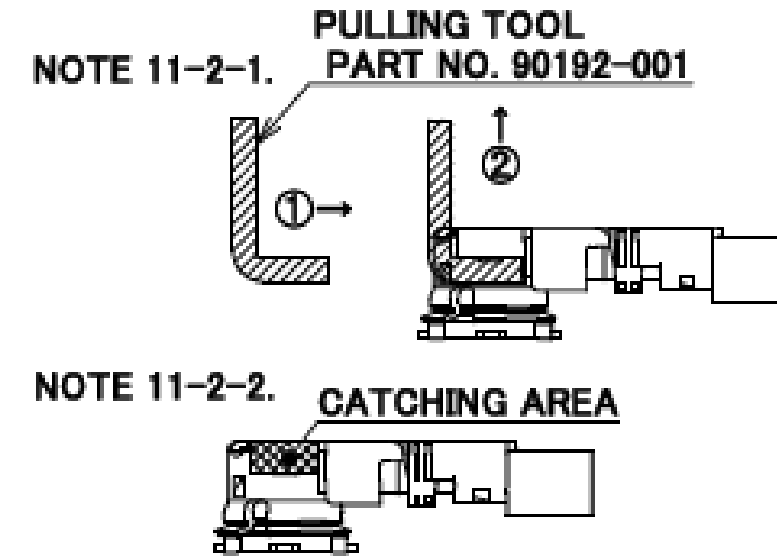
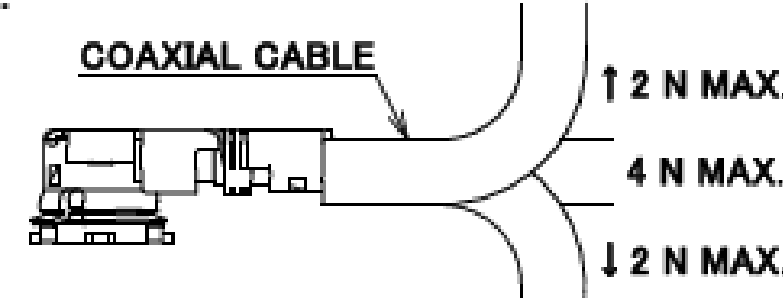
**NOTES**

9. APPLICABLE CONNECTOR:  
20279-001E-\*\*-\*,  
20431-001E-01,  
20441-001E-01
10. PERMISSIBLE LOAD OF CABLE AT MATING
11. MATING AND UNMATING INSTRUCTION
- 11-1. MATING  
MAKE THE CONNECTOR VERTICALLY AS MUCH AS POSSIBLE, ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE.
- 11-2. UNMATING  
11-2-1. IN CASE OF UNMATING BY PULLING TOOL (PART NO. 90192-001): USE THE PULLING TOOL AS THE FOLLOWING DRAWING, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.  
11-2-2. IN CASE OF UNMATING DIRECTLY BY HAND: CATCH THE CATCHING AREA OF PLUG, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
- 11-3. CRIMP OVER STANDARDS OF OUTER CONDUCTOR  
STANDARDS: LESS THAN 10% FROM TOTAL NUMBERS OF OUTER CONDUCTOR.  
(NUMBERS OF OUTER CONDUCTOR'S CRIMP OVER FROM OUTER CONDUCTOR'S BARREL)
- 11-4. CAUTION ABOUT HEAT SHRINKAGE TUBES  
PLEASE BE CAREFUL NOT TO MELT HOUSING WHEN USING HEAT SHRINKAGE TUBES.  
IT WILL CAUSE OPEN CIRCUIT.
12. THIS IS "Pb-FREE" CONNECTOR.

HATCHED AREA: Ni PLATING AREA



**NOTE 10.**



NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
9	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.02 μm MIN. (Ni PLATING AREA) Ni ONLY
8	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.03 μm MIN.
7	HOUSING	PBT	UL94V-0, BLACK

Rev.7

PART NO.	20670-001R-08	20670-001R-13	20670-001R-32	20670-001R-18	CABLE CUT LENGTH
APPLICABLE CABLE NOMINAL DIMENSION	 2.09 ±0.1 1.25 ±0.1 1.16 ±0.1 AWG #36(7/0.05) φ0.40 NOMINAL (φ0.65) φ0.81 NOMINAL *SEE NOTE 14.	 2.09 ±0.1 1.25 ±0.1 1.16 ±0.1 AWG #32(7/0.08) φ0.68 NOMINAL (φ0.93) φ1.13 NOMINAL *SEE NOTE 14.	 2.09 ±0.1 1.25 ±0.1 1.16 ±0.1 AWG #32(7/0.08) φ0.66 NOMINAL (φ1.12) φ1.32 NOMINAL *SEE NOTE 14.	 2.09 ±0.1 1.25 ±0.1 1.16 ±0.1 AWG #30(7/0.102) φ0.84 NOMINAL (φ1.35) φ1.80 NOMINAL *SEE NOTE 14.	
INNER CONDUCTOR SILVER PLATING DIELECTRIC CORE					
BRAIDED SHIELD OF OUTER CONDUCTOR	SINGLE	SINGLE	DOUBLE	SINGLE	CRIMP HEIGHT BLADE MICROMETER CH-1  i-Fit® PART CH-2  OUTER CONDUCTOR PART CH-3  JACKET PART
PART NO. OF SEMI AUTO TERMINATION MACHINE	90213-008C	90213-013C	90213-032C	90232-018	
SECT. B-B	 1.68, 1.12	 2.24, 1.48	 2.29, 1.56	 2.71, 1.90	
SECT. A-A	 1.72, 1.19	 2.28, 1.55	 2.37, 1.71	 3.10, 2.26	
CRIMP HEIGHT					
	CH-1	1.34~1.40	1.34~1.40	1.34~1.40	1.34~1.40
	CH-2	0.76~0.84	1.06~1.14	1.20~1.30	1.41~1.49
	CH-3	0.85~0.97	1.15~1.35	1.26~1.46	1.70~1.80

NOTE  
13. MUST NOT USE SOLDER COATED INNER CONDUCTOR AND OUTER CONDUCTOR.

Rev.7



# MHF® I plug Ni top (0.81,1.13,1.32,1.37,1.80)

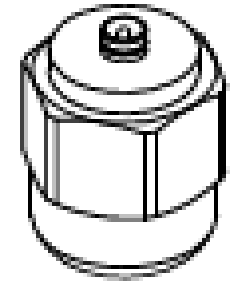
PART NO.		20670-001R-37		CABLE CUT LENGTH	
APPLICABLE CABLE NOMINAL DIMENSION					
INNER CONDUCTOR SILVER PLATING DIELECTRIC CORE		*SEE NOTE 15.		<b>CRIMP HEIGHT</b> <b>BLADE MICROMETER</b>	
BRAIDED SHIELD OF OUTER CONDUCTOR		SINGLE			
PART NO. OF SEMI AUTO TERMINATION MACHINE		90232-037			
SECT. B-B					
SECT. A-A					
CRIMP HEIGHT	CH-1	1.34~1.40			
	CH-2	1.36~1.42			
	CH-3	1.28~1.34			

NOTE  
14. MUST NOT USE SOLDER COATED INNER CONDUCTOR AND OUTER CONDUCTOR.

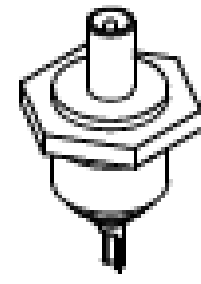
Rev.7

ITEMS	SPECIFICATION
RECOMMENDED APPLICABLE CONNECTOR PART No.	20279-001E-**
RATING VOLTAGE	60 V AC (R.M.S)
RATING FREQUENCY	DC~9GHz
OPERATING TEMPERATURE	233~363 K (-40°C~+90°C)
VSWR (MATED WITH SMA ADAPTER PART No:90193-001)	1.30 MAX. AT 0.1~3 GHz, 1.50 MAX. AT 3~6 GHz, 1.90 MAX. AT 6~9 GHz (0.81 O.D. / 1.13 O.D. / 1.37 O.D. / 1.80 O.D.) 1.30 MAX. AT 0.1~3 GHz, 1.50 MAX. AT 3~6 GHz, 1.60 MAX. AT 6~9 GHz (1.32 O.D.)
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: $\Delta$ R 20 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL: 20mohm MAX. / AFTER TEST: $\Delta$ 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)	5 N MIN. / 3 N MIN.
CRIMP STRENGTH	20670-001R-08, 20670-001R-13, 20670-001R-32: 10 N MIN. 20670-001R-18, 20670-001R-37: 15 N MIN.
PRODUCT SPECIFICATION	PRS-2105
TEST REPORT	TR-15059
PACKING STANDARD	300-233
INSTRUCTION MANUAL	HIM-10002
APPEARANCE CRITERIA No.	QLS-A***

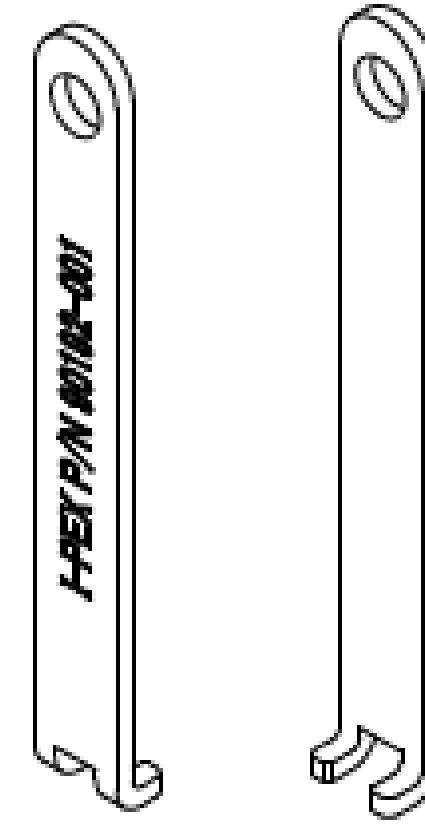
# Accessories for MHF® I plug



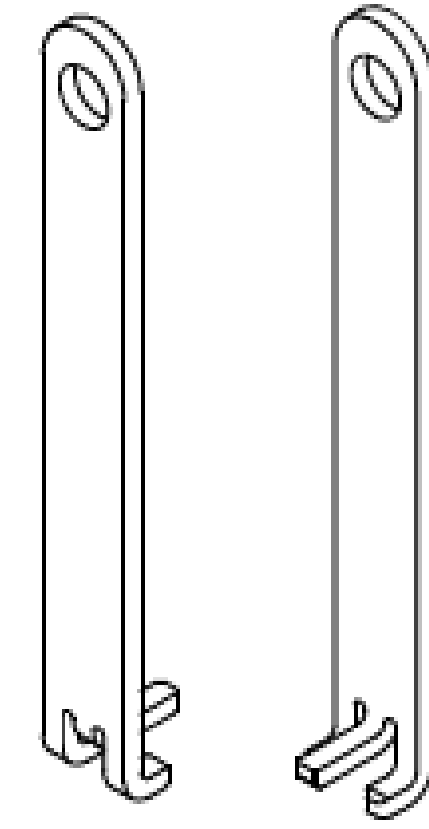
**MHF I/II SMA ADAPTOR**  
PART NO. 90193-001



**MHF I/II PLUG INSPECTION CONNECTOR**  
PART NO. 90194-001



**FRONT SIDE BACK SIDE**  
**MHF I/II PULLING TOOL**  
PART NO. 90192-001

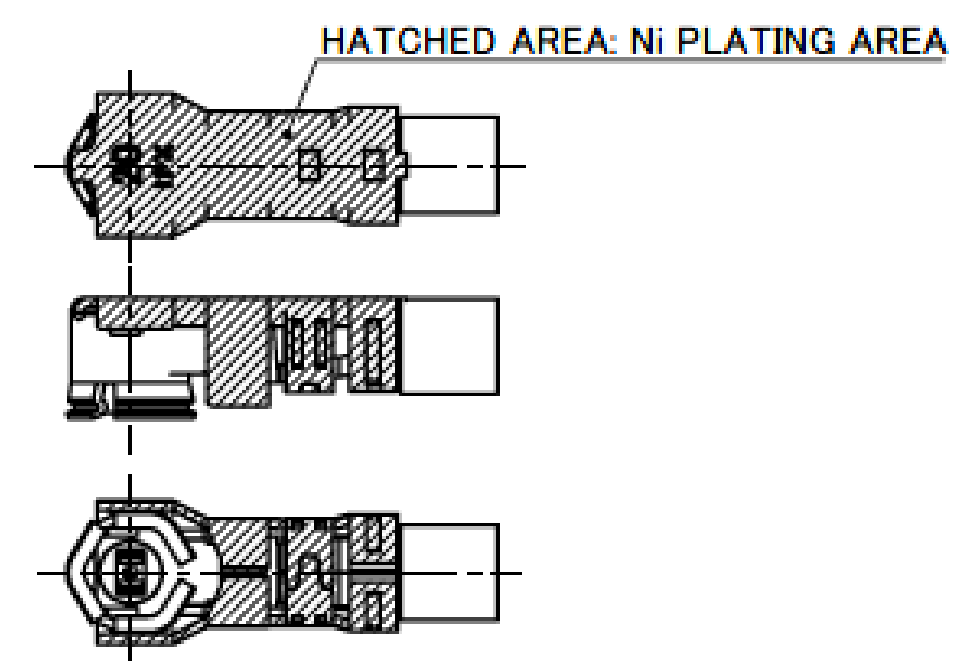
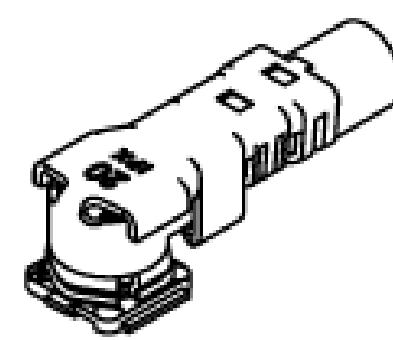
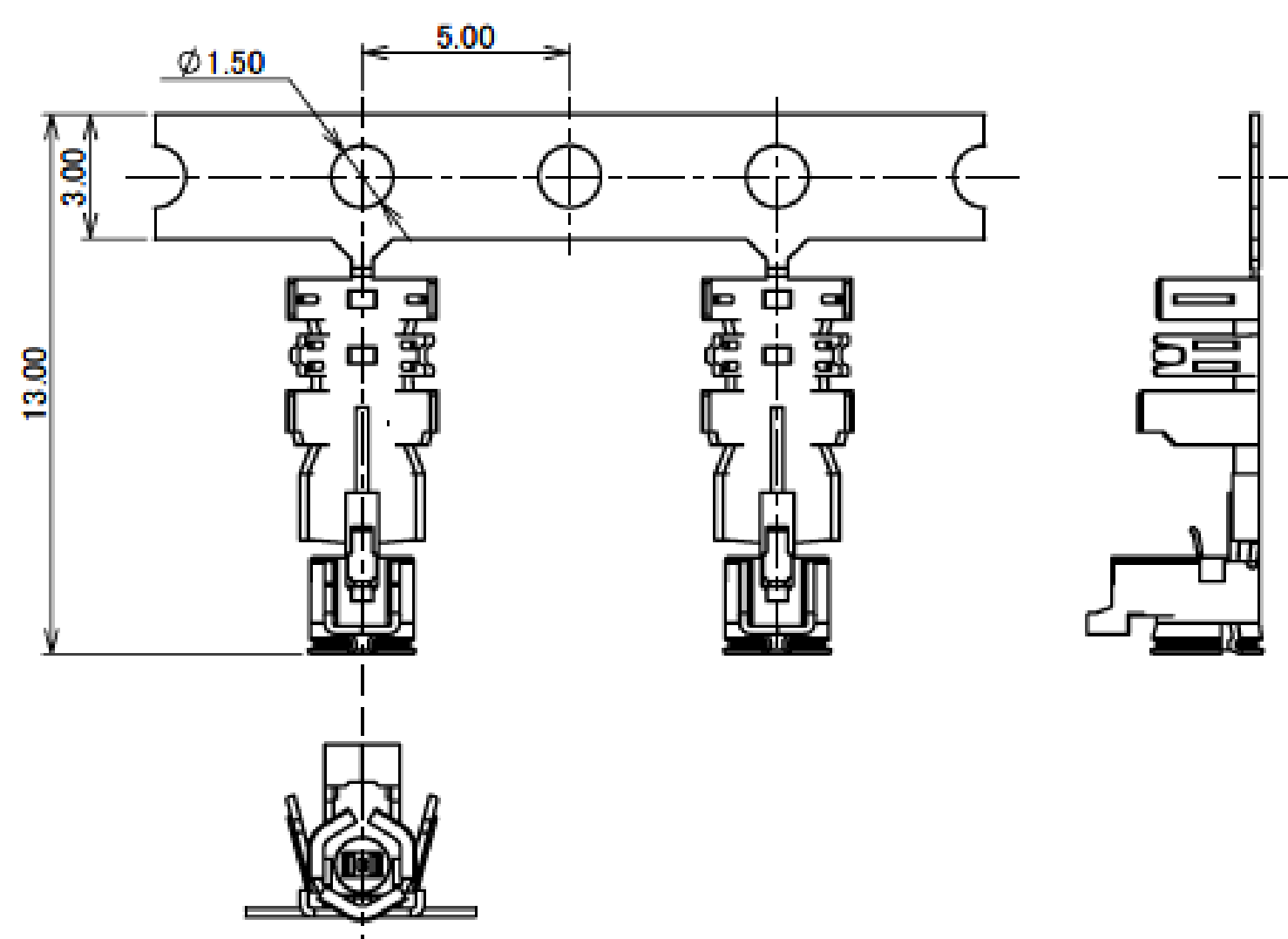
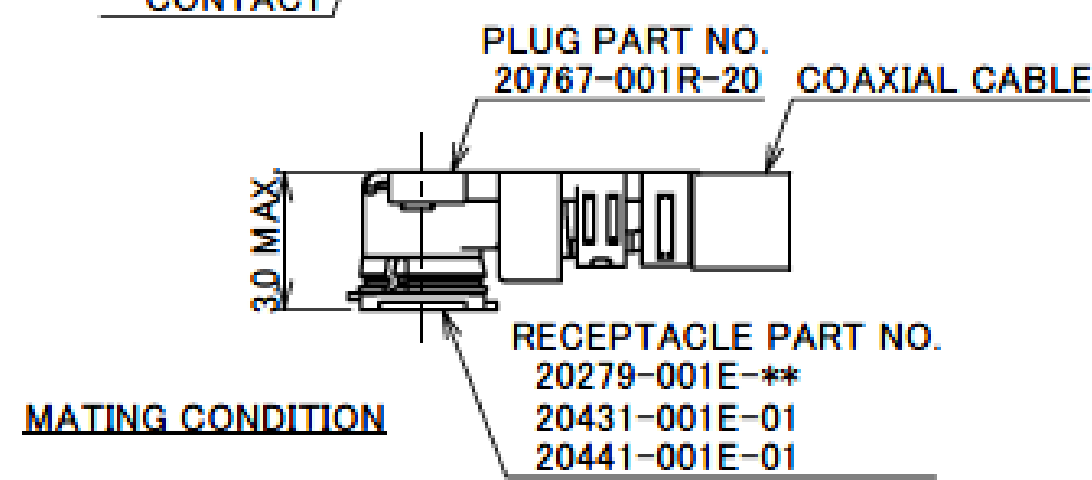
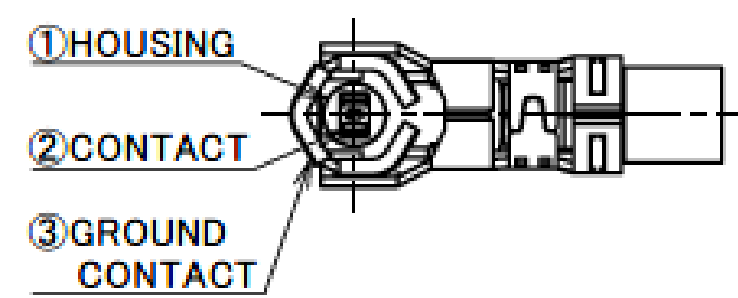
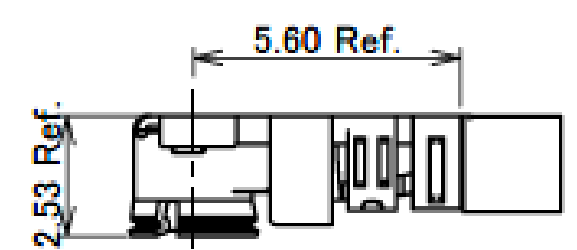
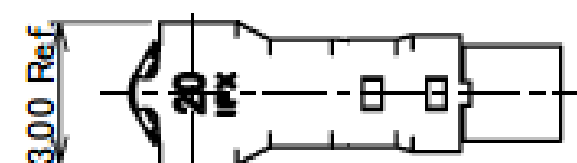


**FRONT SIDE BACK SIDE**  
**MHF I PUSHING AND PULLING TOOL**  
PART NO. 90224-001

Rev.7

## MHF® I plug (2.0 mm Cable O.D.)

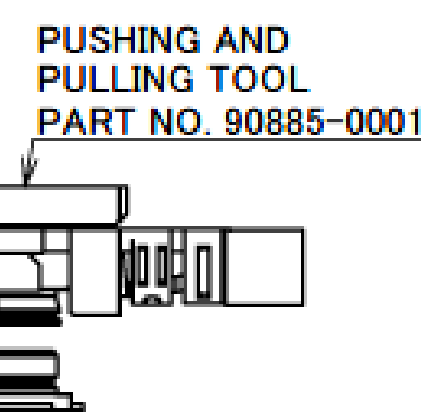
Recommended P/N	20767-001R-20
PART No.	
20767-001R-20	



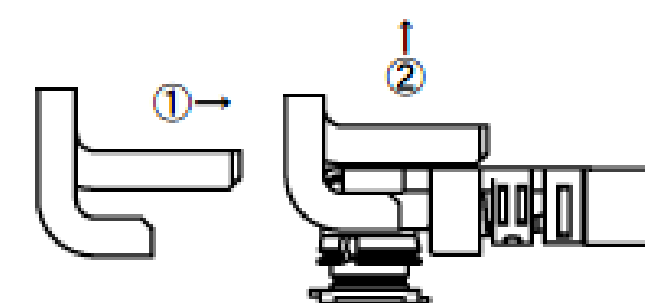
**NOTES**

1. APPLICABLE CONNECTOR:  
20279-001E-\*\*, 20431-001E-01, 20441-001E-01
2. MATING AND UNMATING INSTRUCTION
- 2-1. MATING  
MATE THE CONNECTOR VERTICALLY AS MUCH AS POSSIBLE, ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE. DO NOT SLANT MATE.
- 2-2. UNMATING
- 2-2-1. IN CASE OF UNMATING BY PULLING TOOL (PART NO. 90885-0001)  
USE THE PULLING TOOL AS THE FOLLOWING DRAWING, AND PLEASE PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
- 2-2-2. IN CASE OF UNMATING DIRECTLY BY HAND  
CATCH THE CATCHING AREA OF PLUG, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.

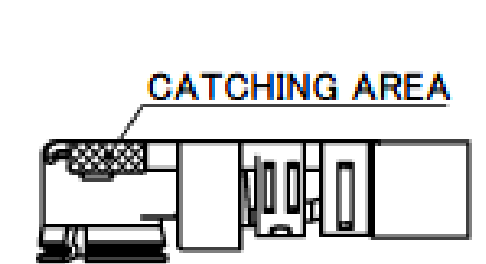
**NOTES 2-1.**



**NOTES 2-2-1.**



**NOTES 2-2-2.**



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 0.10 μm MIN.
1	HOUSING	PBT	UL94V-0, BLACK
NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS

Rev.5

## MHF® I plug (2.0 mm Cable O.D.)

PART NO.	20767-001R-20		
APPLICABLE CABLE NOMINAL DIMENSION			
BRAIDED SHIELD OF OUTER CONDUCTOR	SINGLE		
PART NO. OF SEMI AUTO TERMINATION MACHINE	90876-020		
CRIMP HEIGHT	CH-1 i-Fit® PART	CH-2 SHIELD PART	CH-3 JACKET PART
	 2.28~2.36	 1.81~1.87	 1.95~2.01

Rev.5

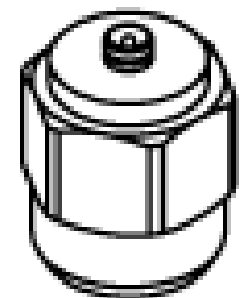
## MHF® I plug (2.0 mm Cable O.D.)

ITEMS	SPECIFICATION	
RECOMMENDED APPLICABLE CONNECTOR PART No.	20279-001E-**	20441-001E-01
RATING VOLTAGE	60 V AC (R.M.S)	
RATING FREQUENCY	DC~9GHz	
OPERATING TEMPERATURE	233~363 K (-40°C~+90°C)	
VSWR (MATED WITH SMA ADAPTER PART No.90193-001)	1.30 MAX. AT 0.1~3 GHz, 1.50 MAX. AT 3~6 GHz, 1.60 MAX. AT 6~9 GHz	
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: $\sphericalangle$ R 20 mohm MAX.	
GROUND CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: $\sphericalangle$ 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)	5 N MIN. / 3 N MIN.	
CRIMP STRENGTH	15 N MIN.	
PRODUCT SPECIFICATION	PRS-2490	
TEST REPORT	TR-18041	
PACKING STANDARD	PST-16007	
INSTRUCTION MANUAL	HIM-17017	
APPEARANCE CRITERIA No.	QLS-A***	

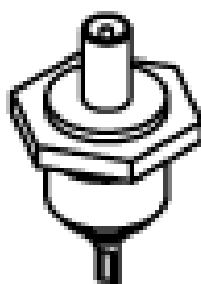
Rev.5



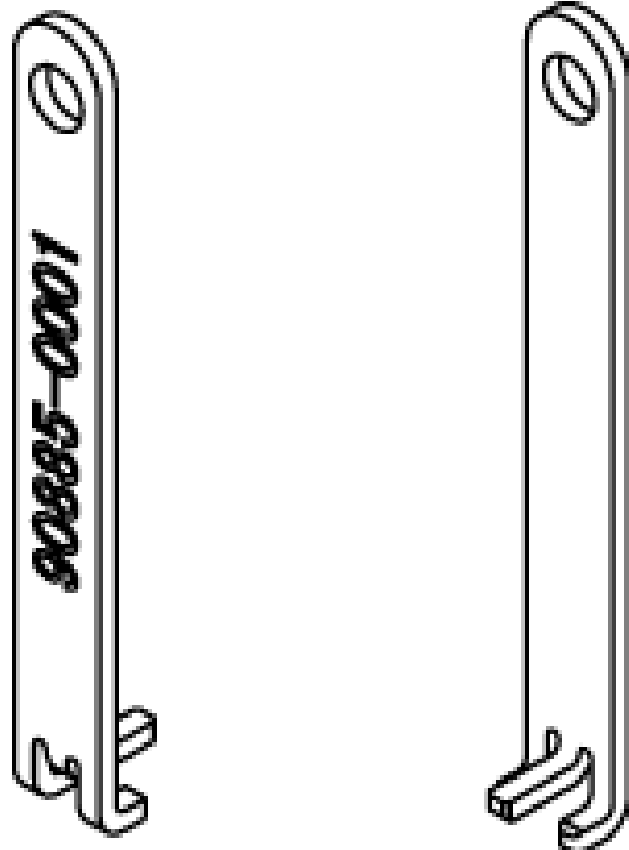
**Accessories for MHF® I plug (2.0 mm Cable O.D.)**



MHF I/II SMA ADAPTOR  
PART NO. 90193-001



MHF I/II PLUG INSPECTION CONNECTOR  
PART NO. 90194-001



FRONT SIDE      BACK SIDE  
MHF I PLUG (2.00) PUSHING AND PULLING TOOL  
PART NO. 90885-0001



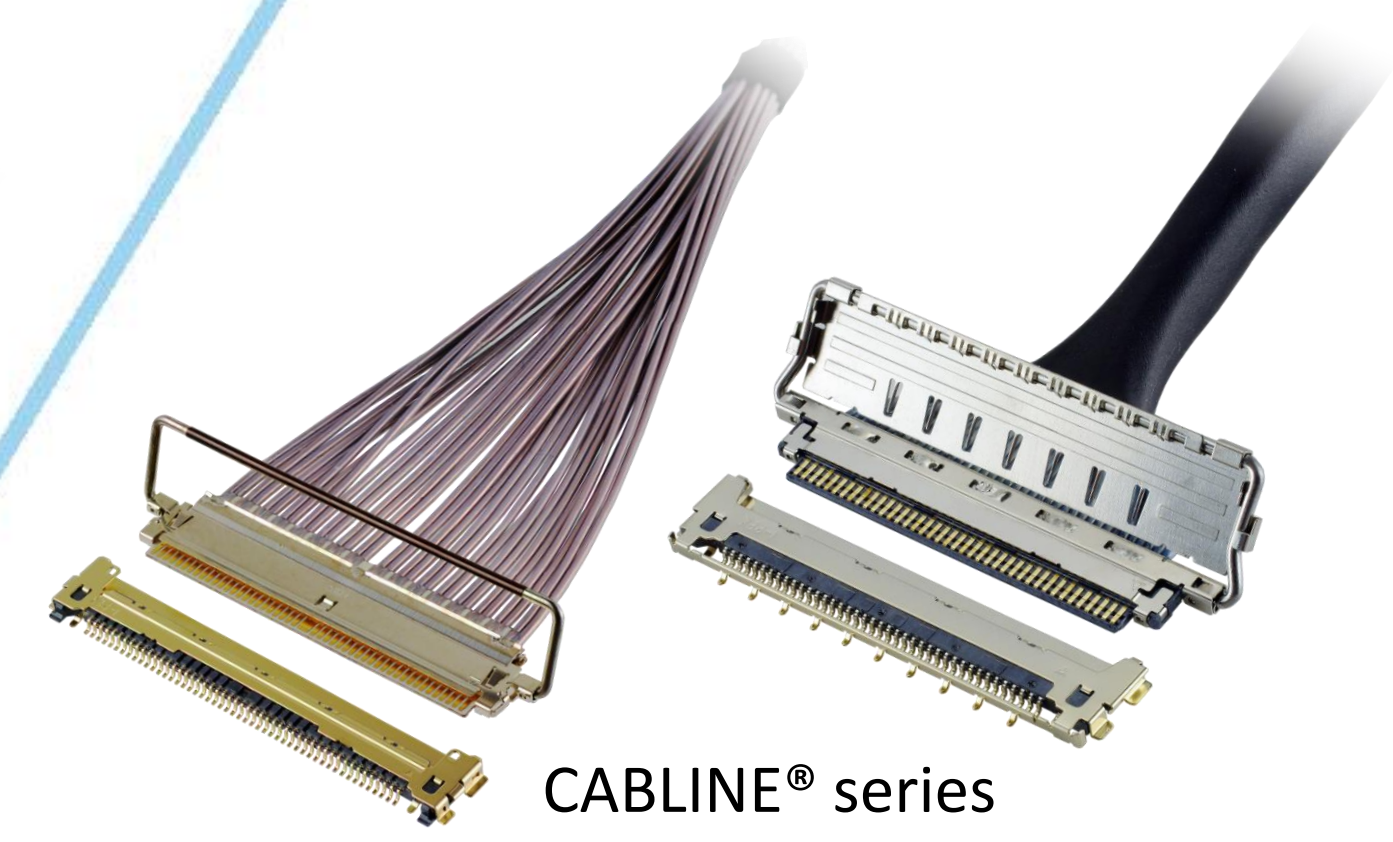
# Custom Products Available

## RF Connector

MHF® series



## Micro-coaxial/Twinax/Discrete Wire Connector



CABLINE® series

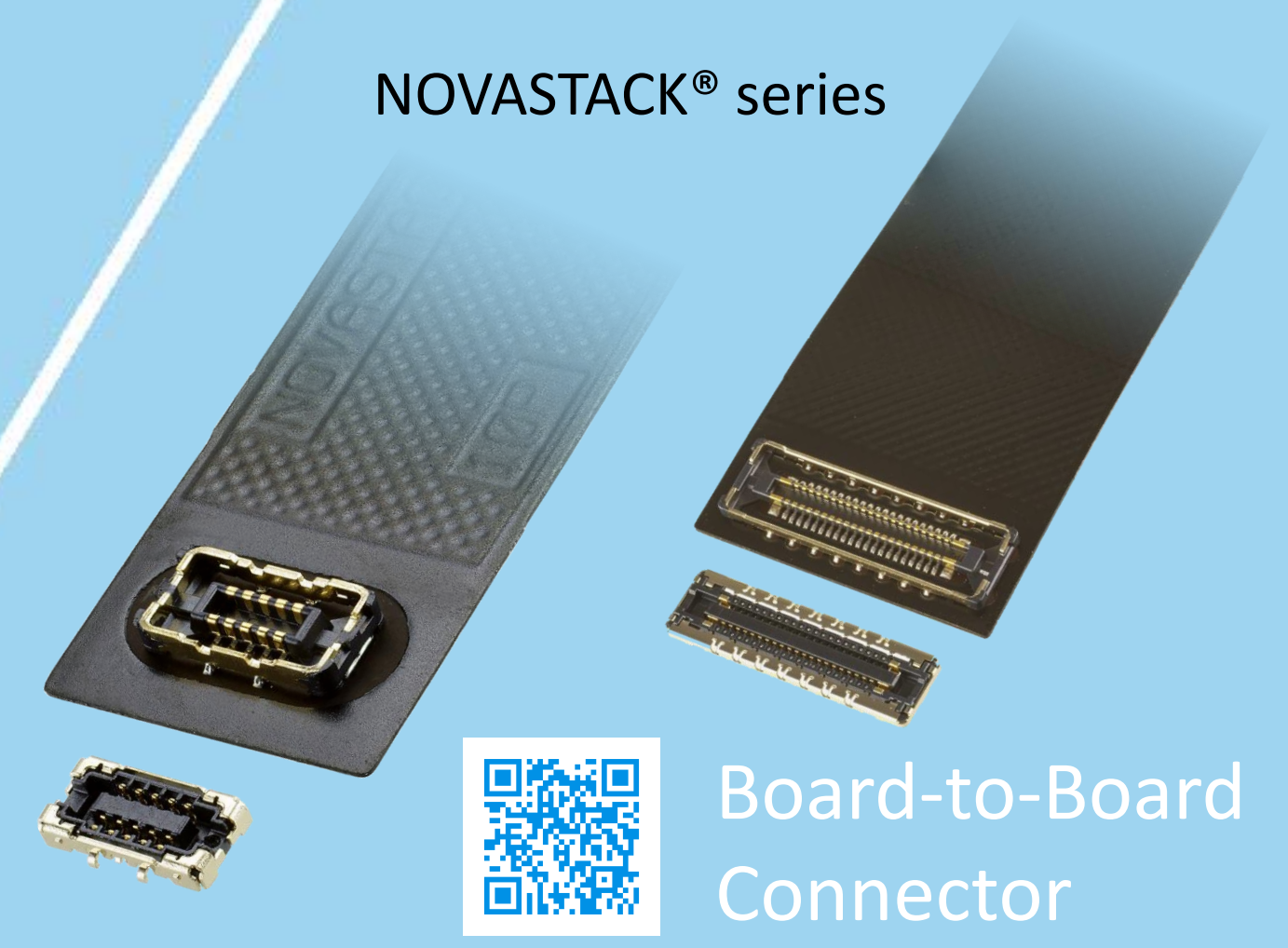


## Optical Module

LIGHTPASS® series



NOVASTACK® series



## Board-to-Board Connector



## Power Connector/Terminal

AP series

ISH® series



MINIFLEX® series

EVAFLEX® series



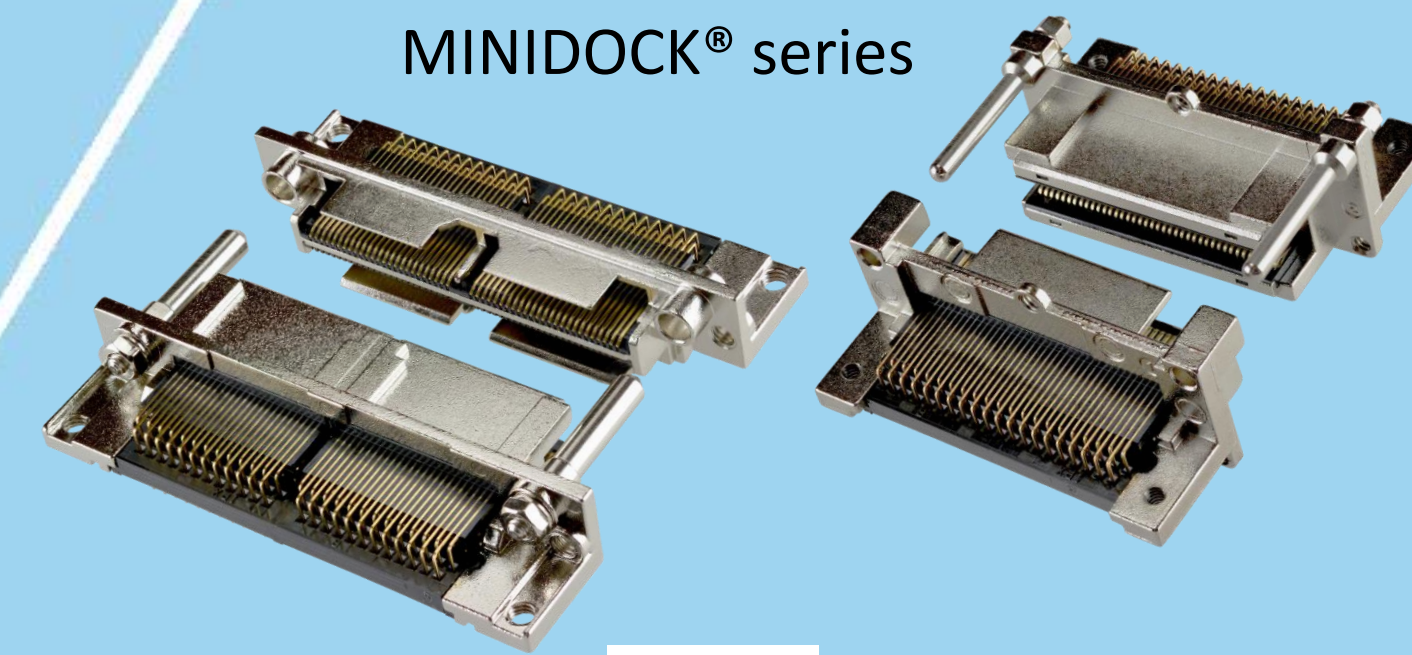
## FPC FFC Connector



Inquiry



MINIDOCK® series



## I/O Connector

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