

MHF® I

Supports up to 9 GHz, mated height of 2.5 mm max. and 3.0 mm max.

Product Specifications:

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

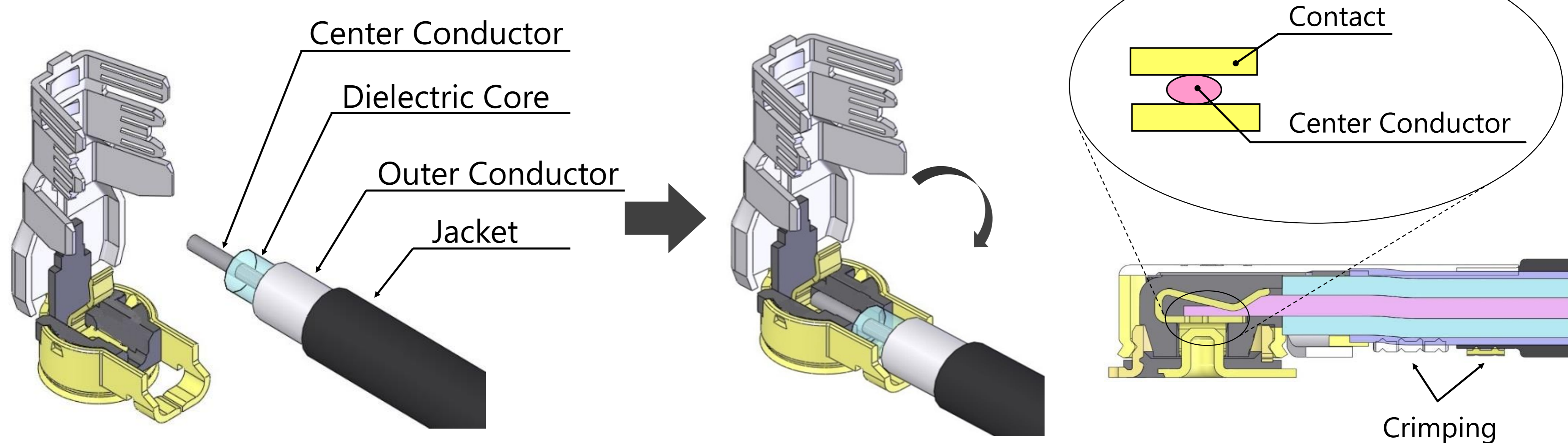
* Cable size O.D. (1) 0.81 mm, 1.13 mm, 1.37 mm, 1.80 mm (2) 1.32 mm (3) 2.0 mm

Applicable Cable Size:

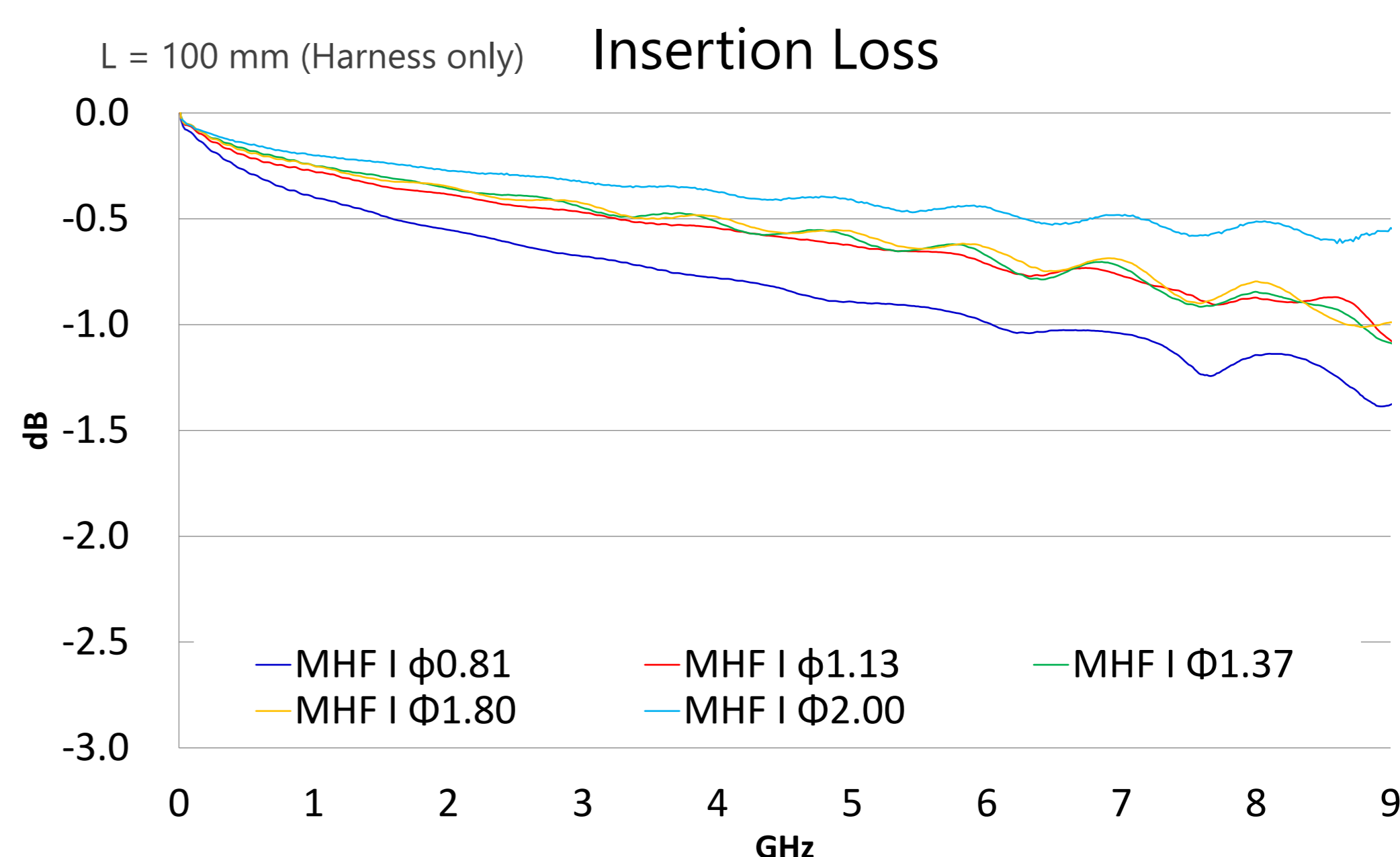
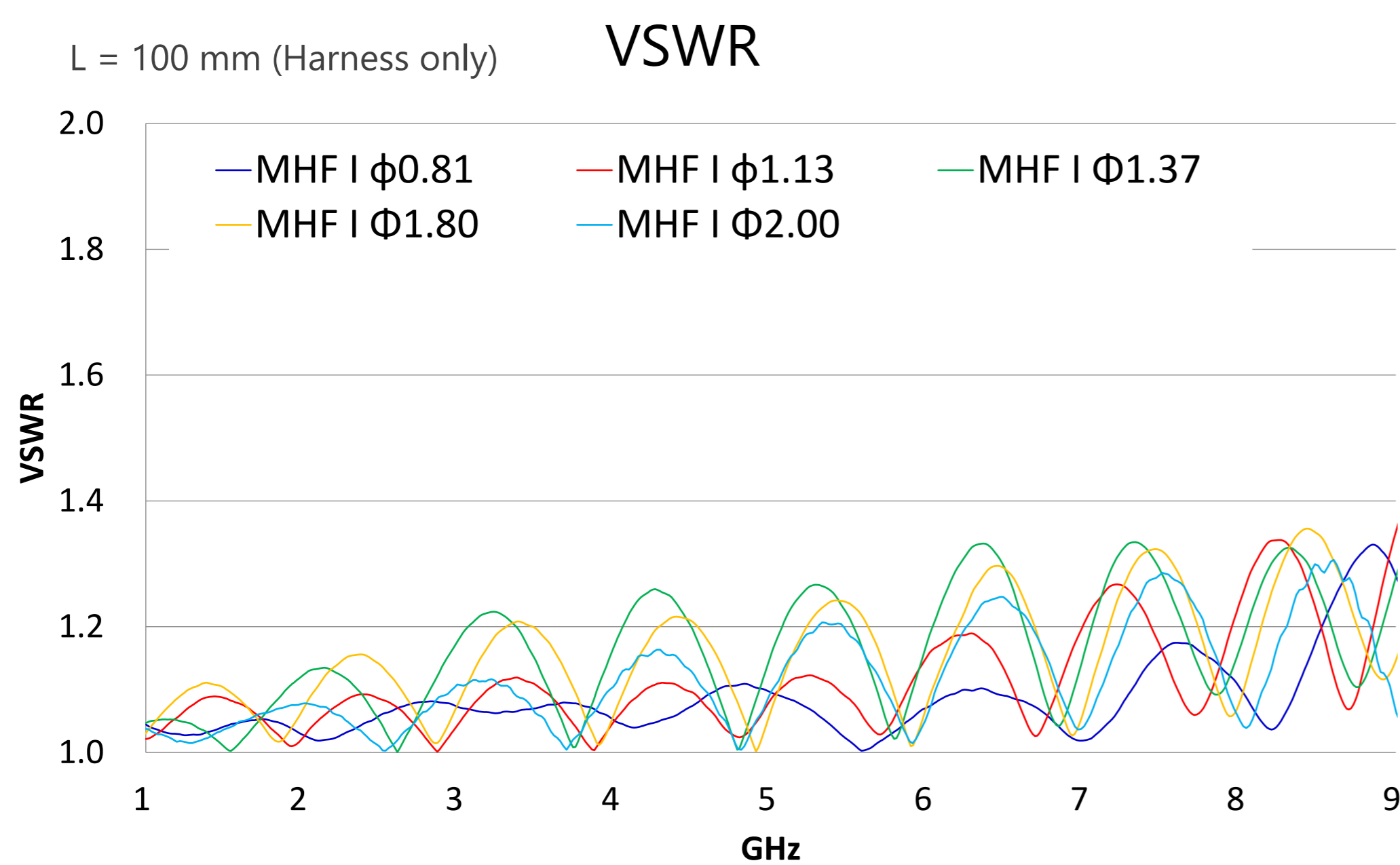
20278-112R-**
O.D. 0.81 mm/AWG 36
O.D. 1.13 mm, 1.32 mm/AWG 32
O.D. 1.80 mm/AWG 30
20351-112R-37
O.D. 1.37 mm/AWG 30
20767-001R-20
O.D. 2.0 mm/AWG 26
Applicable Standards (Reference Only):
5G sub-6, Wi-Fi 6E, LTE/LTE-Advanced, LPWA, Bluetooth, GPS



► **Solderless micro-coax termination technology "i-Fit®" provides consistent performance**



► **Small form factor with big performance through 9 GHz**

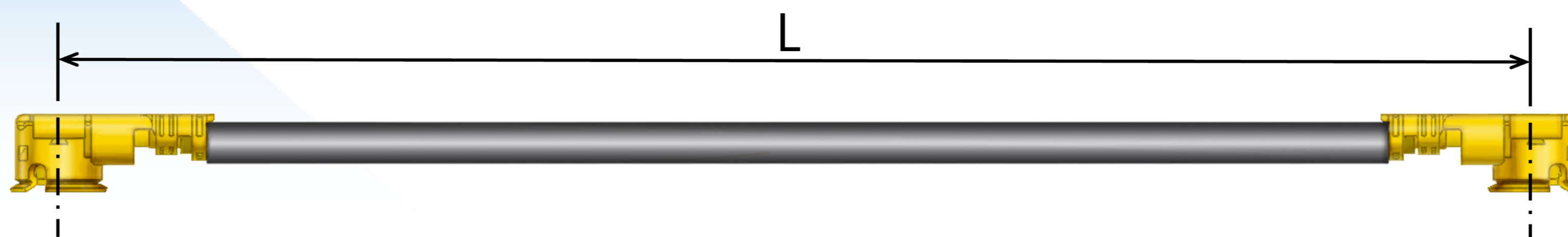


► **MHF® I plug available with various cable O.D. and additional locking option**

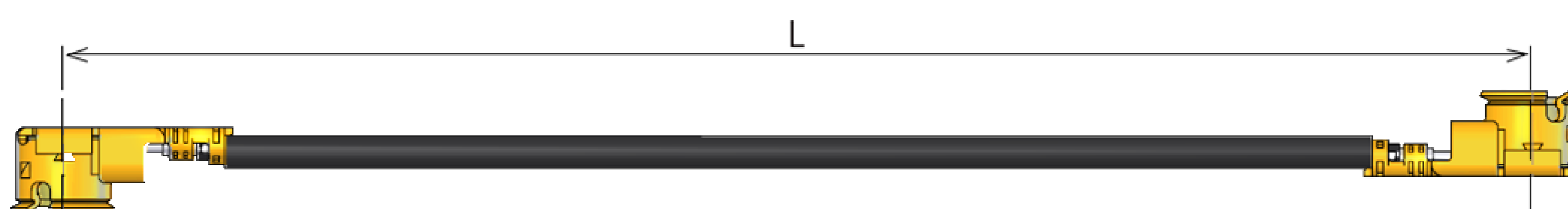
Product name	MHF® I LK	MHF® I	MHF® I
Lock	With Lock	Without Lock	Without Lock
Mating Height	2.9 mm max.	2.5 mm max.	3.0 mm max.
Coaxial O.D. (Center Conductor AWG)	2.00 mm (AWG 26)		●
	1.80 mm (AWG 30)	●	
	1.37 mm (AWG 30)	●	●
	1.32 mm (AWG 32)	●	●
	1.13 mm (AWG 32)	●	●
	●	●	
Receptacle	MHF® I receptacle 20279-001E-03 (3 pads) /20441-001E-01 (4 pads)		

MHF® I standard harness

- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.



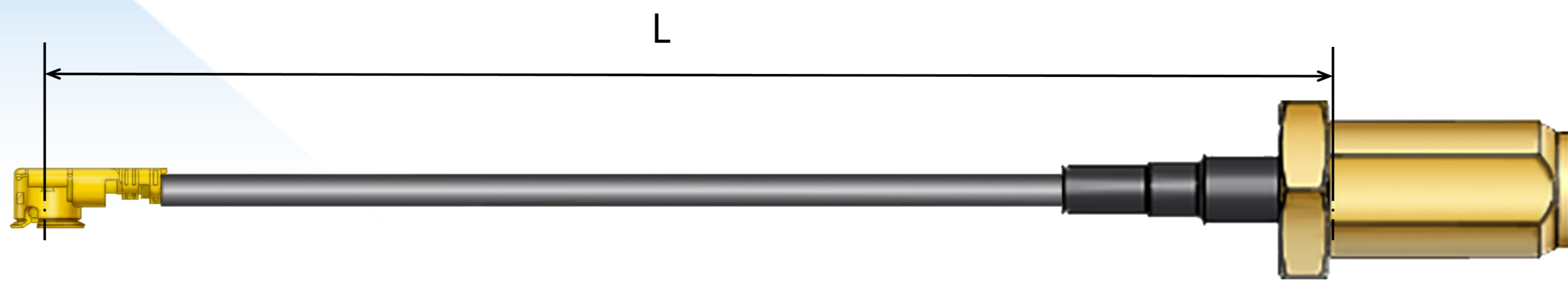
Part Number Description	Part Number (Link to Drawing)	Sample available
MHF I-I harness OD=0.81mm L=100mm	8-25-0819	Contact us
MHF I-I harness OD=0.81mm L=200mm	8-25-0820	Contact us
MHF I-I harness OD=0.81mm L=500mm	8-25-0823	Contact us
MHF I-I harness OD=1.13mm L=50mm	8-24-0113	Buy from Digikey
MHF I-I harness OD=1.13mm L=100mm	8-24-0114	Buy from Digikey
MHF I-I harness OD=1.13mm L=200mm	8-21-0048	Buy from Digikey
MHF I-I harness OD=1.13mm L=500mm	8-24-0115	Buy from Digikey
MHF I-I harness OD=1.32mm L=100mm	8-25-0814	Contact us
MHF I-I harness OD=1.32mm L=200mm	8-25-0815	Contact us
MHF I-I harness OD=1.32mm L=500mm	8-25-0818	Contact us
MHF I-I harness OD=1.37mm L=50mm	8-24-0140	Buy from Digikey
MHF I-I harness OD=1.37mm L=100mm	8-24-0141	Buy from Digikey
MHF I-I harness OD=1.37mm L=200mm	8-24-0142	Buy from Digikey
MHF I-I harness OD=1.37mm L=500mm	8-24-0143	Buy from Digikey
MHF I-I harness OD=1.80mm L=100mm	8-25-0858	Contact us
MHF I-I harness OD=1.80mm L=200mm	8-25-0859	Contact us
MHF I-I harness OD=1.80mm L=500mm	8-25-0862	Contact us



Part Number Description	Part Number (Link to Drawing)	Sample available
MHF I-I harness OD=0.81mm L=100mm 180 degree orientation	8-25-0832	Contact us
MHF I-I harness OD=0.81mm L=200mm 180 degree orientation	8-25-0833	Contact us
MHF I-I harness OD=1.13mm L=100mm 180 degree orientation	8-25-0827	Contact us
MHF I-I harness OD=1.13mm L=200mm 180 degree orientation	8-25-0828	Contact us
MHF I-I harness OD=1.32mm L=100mm 180 degree orientation	8-25-0837	Contact us
MHF I-I harness OD=1.32mm L=200mm 180 degree orientation	8-25-0838	Contact us
MHF I-I harness OD=1.37mm L=100mm 180 degree orientation	8-25-0845	Contact us
MHF I-I harness OD=1.37mm L=200mm 180 degree orientation	8-25-0846	Contact us
MHF I-I harness OD=1.80mm L=100mm 180 degree orientation	8-25-0853	Contact us
MHF I-I harness OD=1.80mm L=200mm 180 degree orientation	8-25-0854	Contact us

MHF® I standard harness

- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.



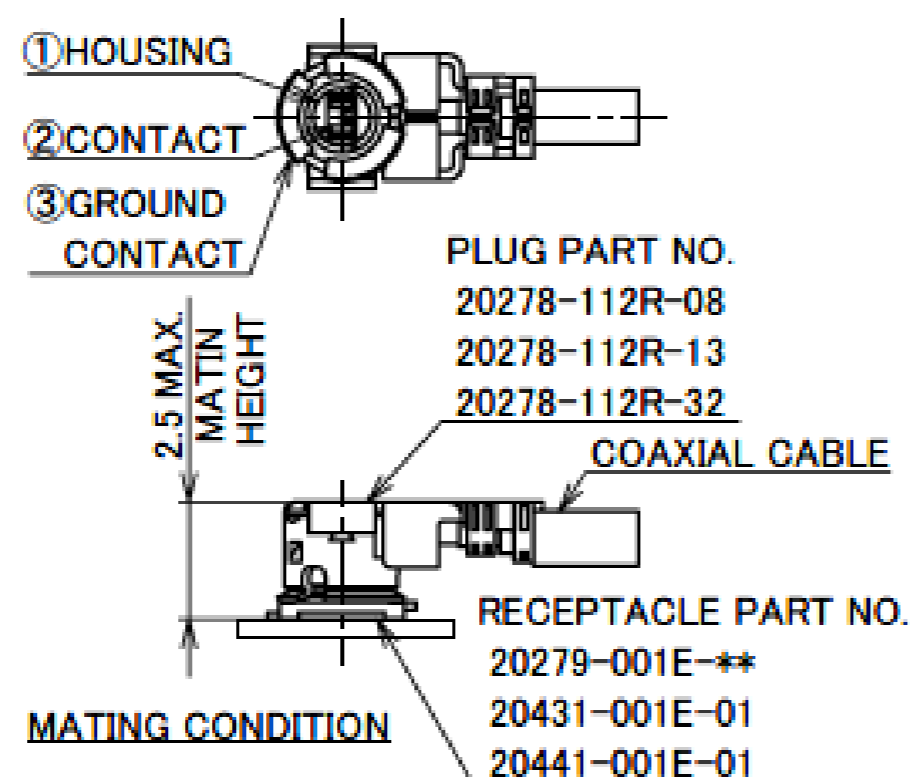
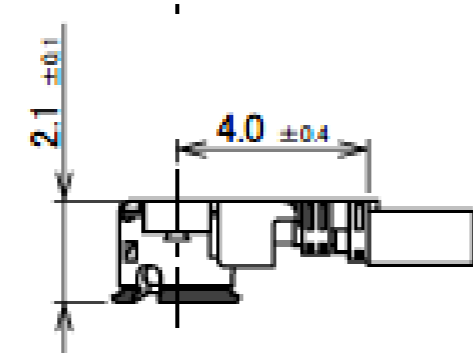
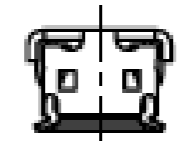
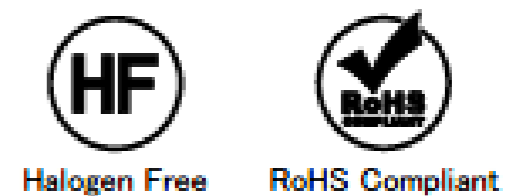
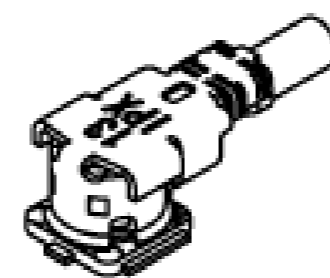
Part Number Description	Part Number (Link to Drawing)	Sample available
MHF I-SMA Jack harness OD=1.13mm L=100mm	8-25-0046	Contact us
MHF I-SMA Jack harness OD=1.13mm L=150mm	8-25-0047	Contact us
MHF I-SMA Jack harness OD=1.13mm L=200mm	8-25-0048	Contact us
MHF I-SMA Jack harness OD=1.37mm L=100mm	8-25-0066	Contact us
MHF I-SMA Jack harness OD=1.37mm L=150mm	8-25-0067	Contact us
MHF I-SMA Jack harness OD=1.37mm L=200mm	8-25-0068	Contact us

Component Parts Details

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

Recommended P/N 20278-112R-**

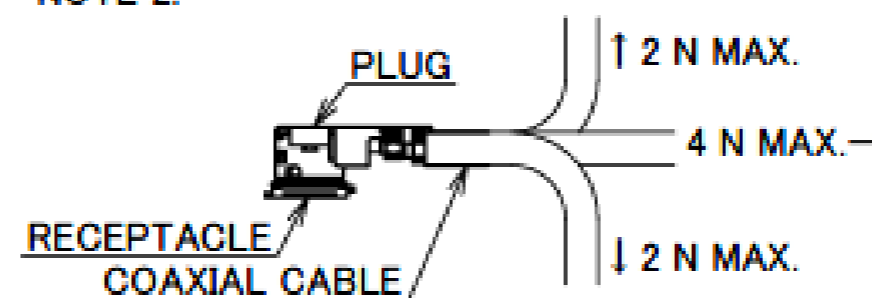
PART No.	APPLICABLE CABLE
20278-112R-08	AWG#36 (0.81 O.D.)
20278-112R-13	AWG#32 (1.13 O.D.)
20278-112R-32	AWG#32 (1.32 O.D.)



NOTES

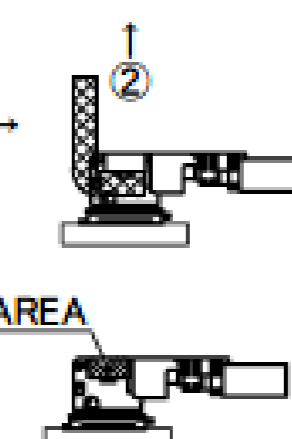
- APPLICABLE CONNECTOR:
20279-001E-**, 20431-001E-01, 20441-001E-01
- PERMISSIBLE LOAD OF CABLE AT MATING
- SUGGESTIONS FOR MATING & UNMATING OPERATION.
- MATING
 - PLEASE MATE THE CONNECTOR STRAIGHTLY TO VERTICAL DIRECTION AS MUCH AS POSSIBLE. ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE. AS EXCESSIVE 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.

NOTE 2.

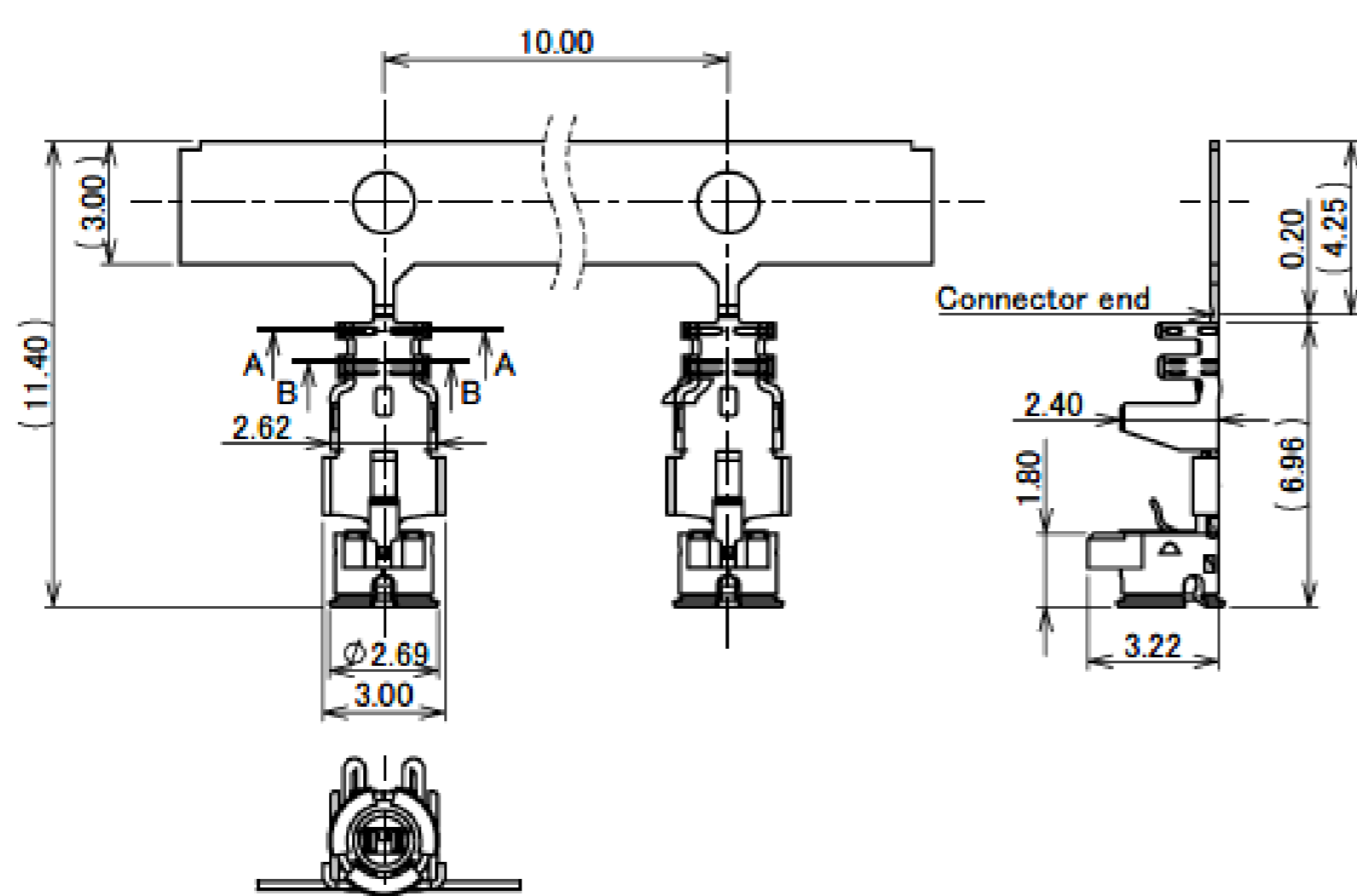


NOTE 3-2-1.

PULLING TOOL
PART NO. 90192-001



NOTE 3-2-2.

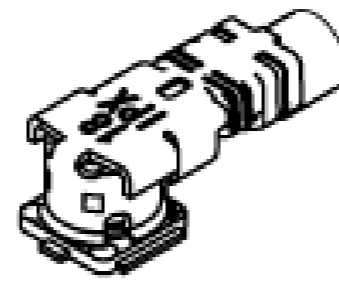
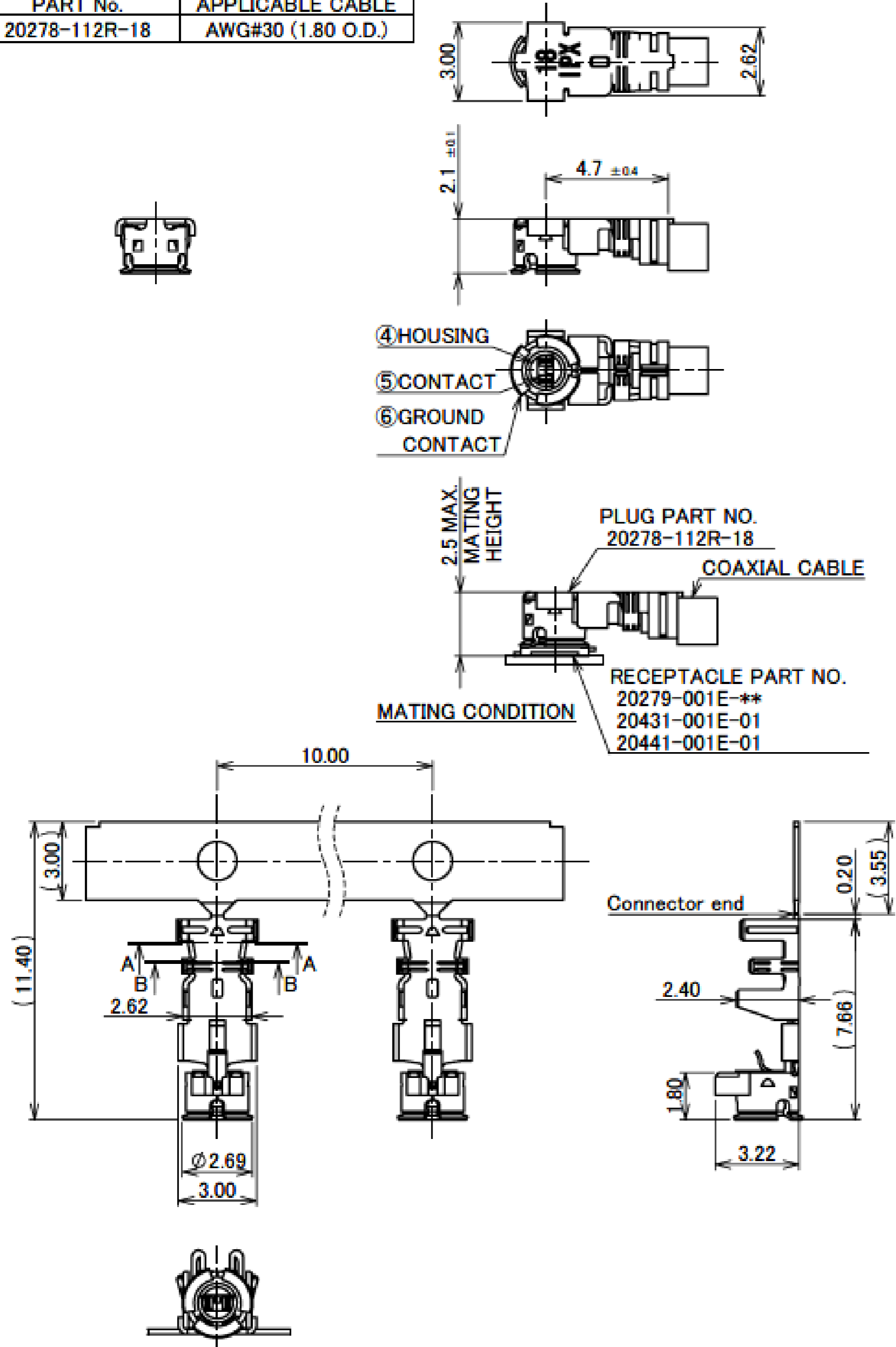


NO.	DESCRIPTION	MATERIAL	FINISH . REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.05 μm MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.10 μm MIN.
1	HOUSING	PBT	UL94V-0, 20278-112R-08: WHITE 20278-112R-13, -32: BLACK

MHF® I plug Au (0.81,1.13,1.32,1.80)

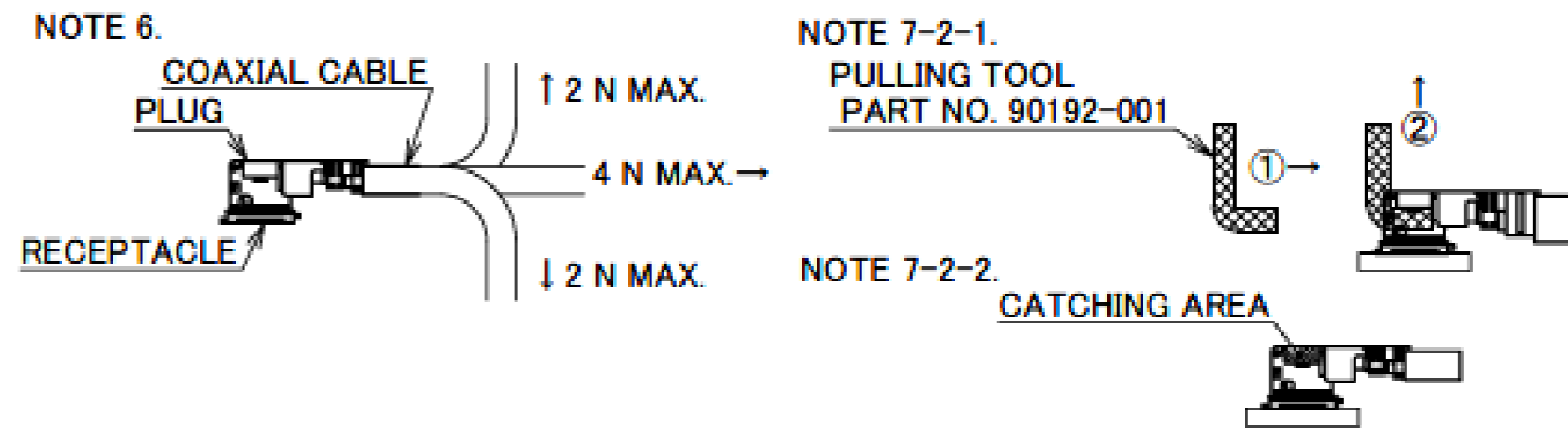
Recommended P/N 20278-112R-**-**

PART No.	APPLICABLE CABLE
20278-112R-18	AWG#30 (1.80 O.D.)



NOTES

5. APPLICABLE CONNECTOR:
20279-001E-**, 20431-001E-01, 20441-001E-01
6. PERMISSIBLE LOAD OF CABLE AT MATING
7. SUGGESTIONS FOR MATING & UNMATING OPERATION.
- 7-1. 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.
- 7-2. UNMATING
- 7-2-1. 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.
- 7-2-2. 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.
- 7-3. 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)
- 7-4. CAUTION ABOUT HEAT SHRINKAGE TUBES
PLEASE BE CAREFUL NOT TO MELT HOUSING WHEN USING HEAT SHRINKAGE TUBES. IT WILL BECOME CAUSE OPEN CIRCUIT.
8. THIS IS "Pb-FREE" CONNECTOR.



NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
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.33

Recommended P/N 20278-112R-**-**

PART NO.	20278-112R-08	20278-112R-13	20278-112R-32	20278-112R-18	
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	 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	 CABLE CUT LENGTH L
INNER CONDUCTOR SILVER PLATING					
DIELECTRIC CORE					
OUTER CONDUCTOR SILVER OR TIN PLATING					
JACKET					
BRAIDED SHIELD OF OUTER CONDUCTOR	SINGLE	SINGLE	DOUBLE	SINGLE	 CRIMP HEIGHT CH-1 BLADE MICROMETER 0.40 i-Fit® PART 0.40
PART NO. OF SEMI AUTO TERMINATION MACHINE	90213-008C	90213-013C	90213-032C	90232-018	 CH-2 0.40 0.40 OUTER CONDUCTOR PART
SECT. B-B	 1.68 1.12	 2.24 1.48	 2.29 1.56	 2.71 1.90	 CH-3 0.40 0.40 JACKET PART
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 9. DO NOT USE SOLDER COATED EITHER INNER OR OUTER CONDUCTOR CABLE.

Rev.33

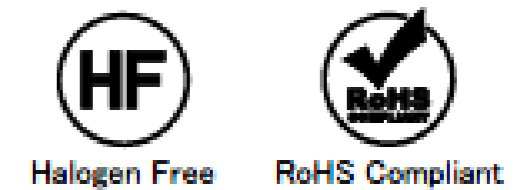
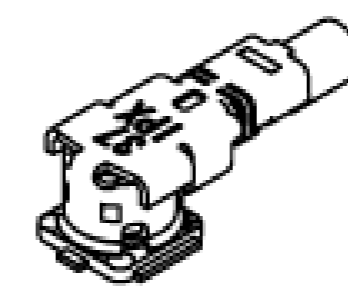
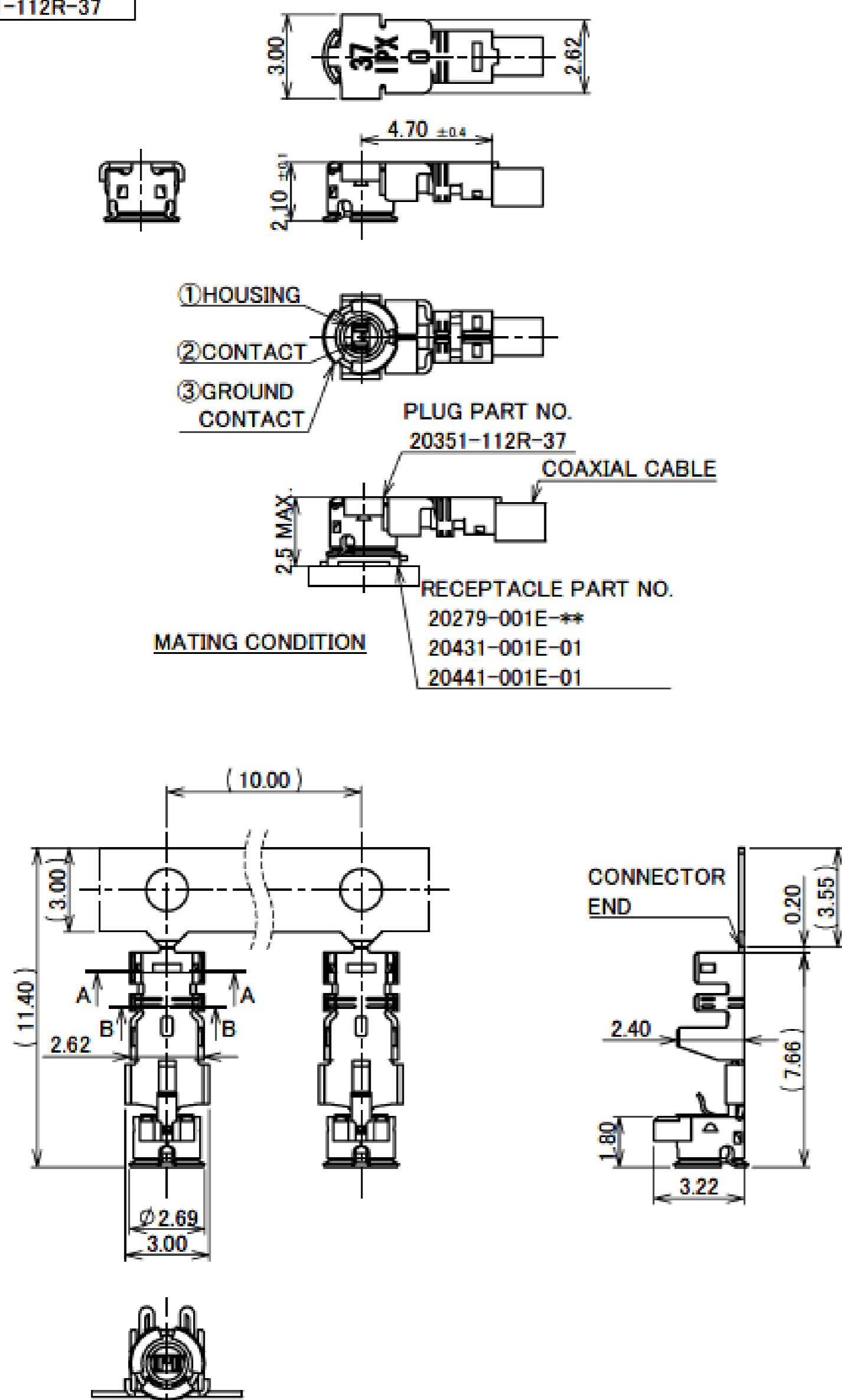
MHF® I plug Au (0.81,1.13,1.32,1.80)

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.33

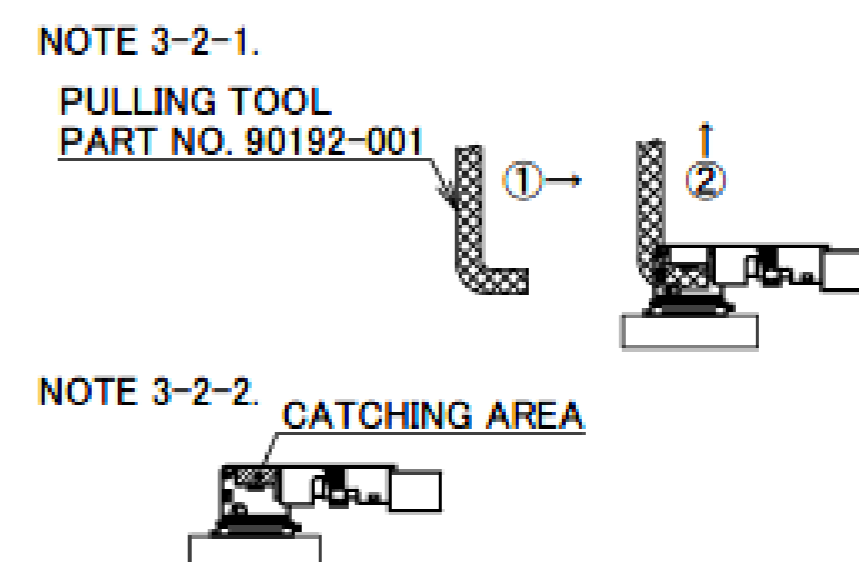
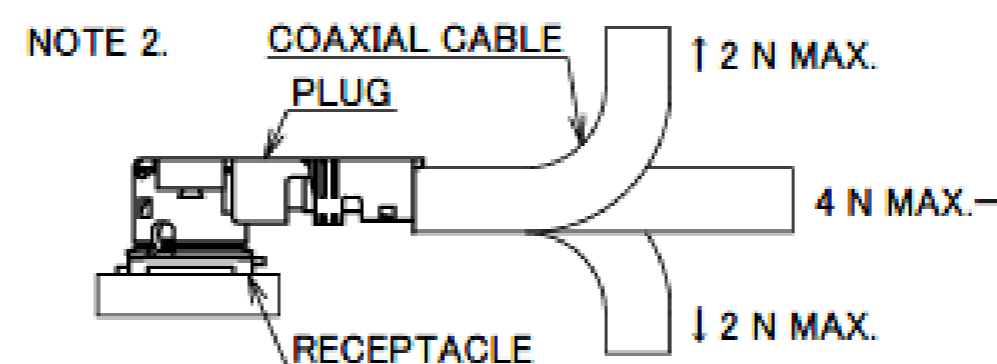
MHF® I plug Au (1.37)

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



NOTES

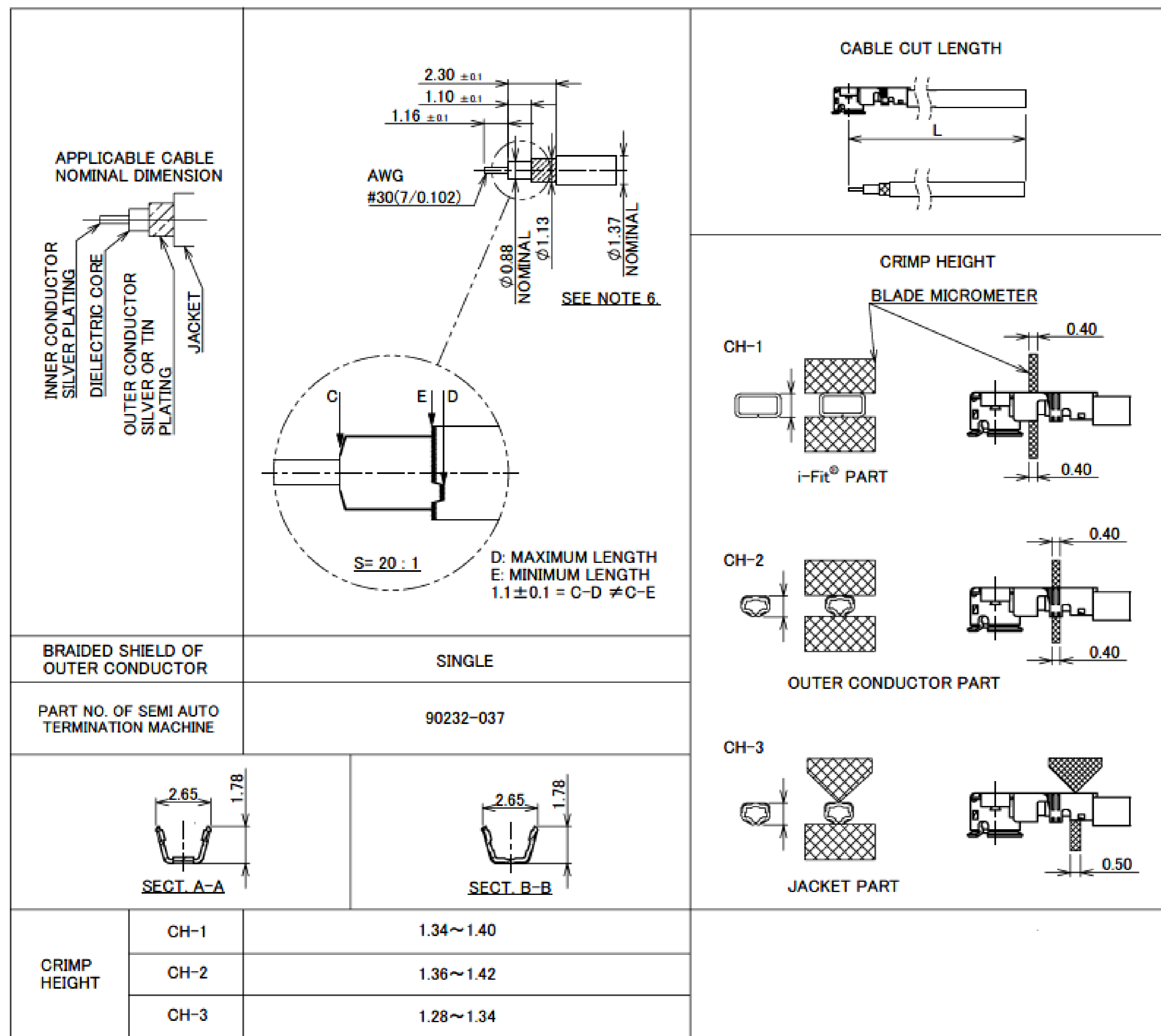
- APPLICABLE CONNECTOR:
20279-001E-**-**, 20431-001E-01, 20441-001E-01
- PERMISSIBLE LOAD OF CABLE AT MATING
- SUGGESTIONS FOR MATING & UNMATING OPERATION
 - MATING
PLEASE MATE THE CONNECTOR STRAIGHTLY TO VERTICAL DIRECTION AS MUCH AS POSSIBLE. ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE. AS EXCESSIVE 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

Rev.21

MHF® I plug Au (1.37)



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

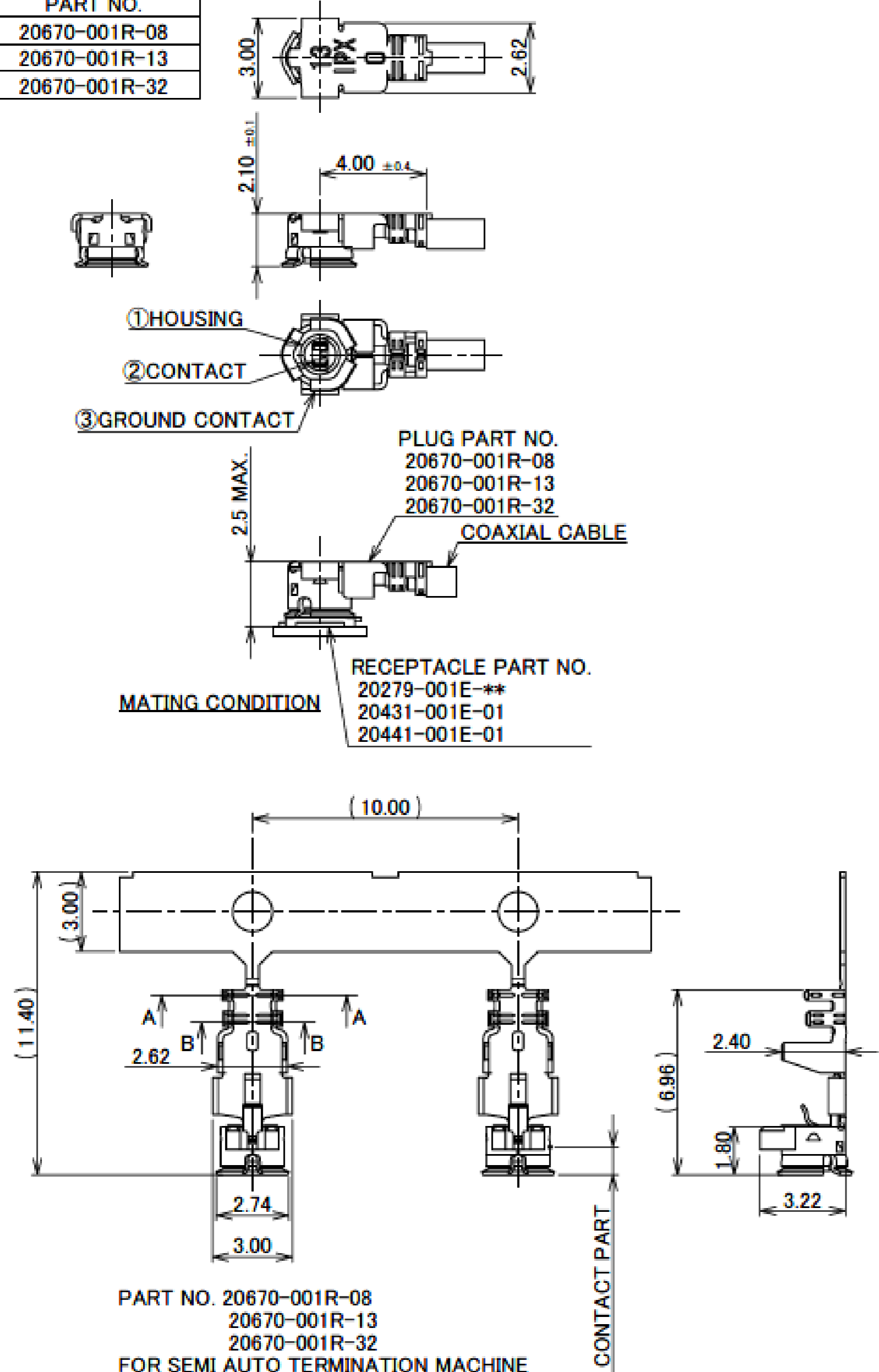
Rev.21

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.21

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

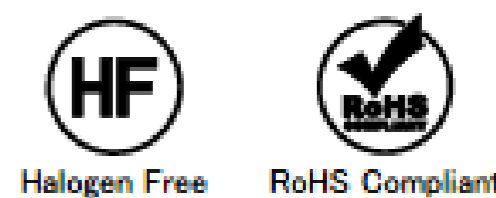
Recommended P/N	20670-001R-**-
PART NO.	
20670-001R-08	
20670-001R-13	
20670-001R-32	



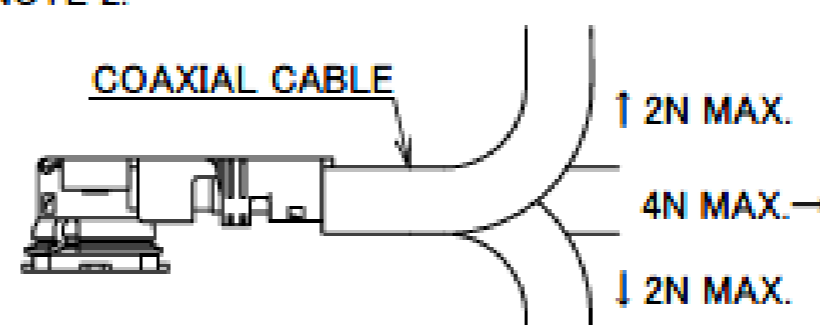
NOTES

- 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.

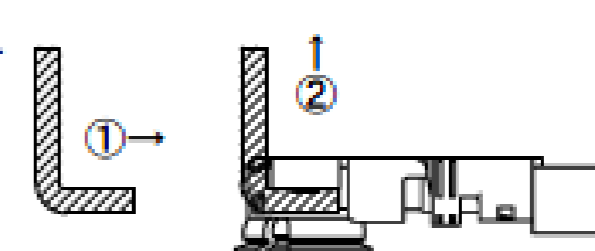
HATCHED AREA: Ni PLATING AREA



NOTE 2.



NOTE 3-2-1.



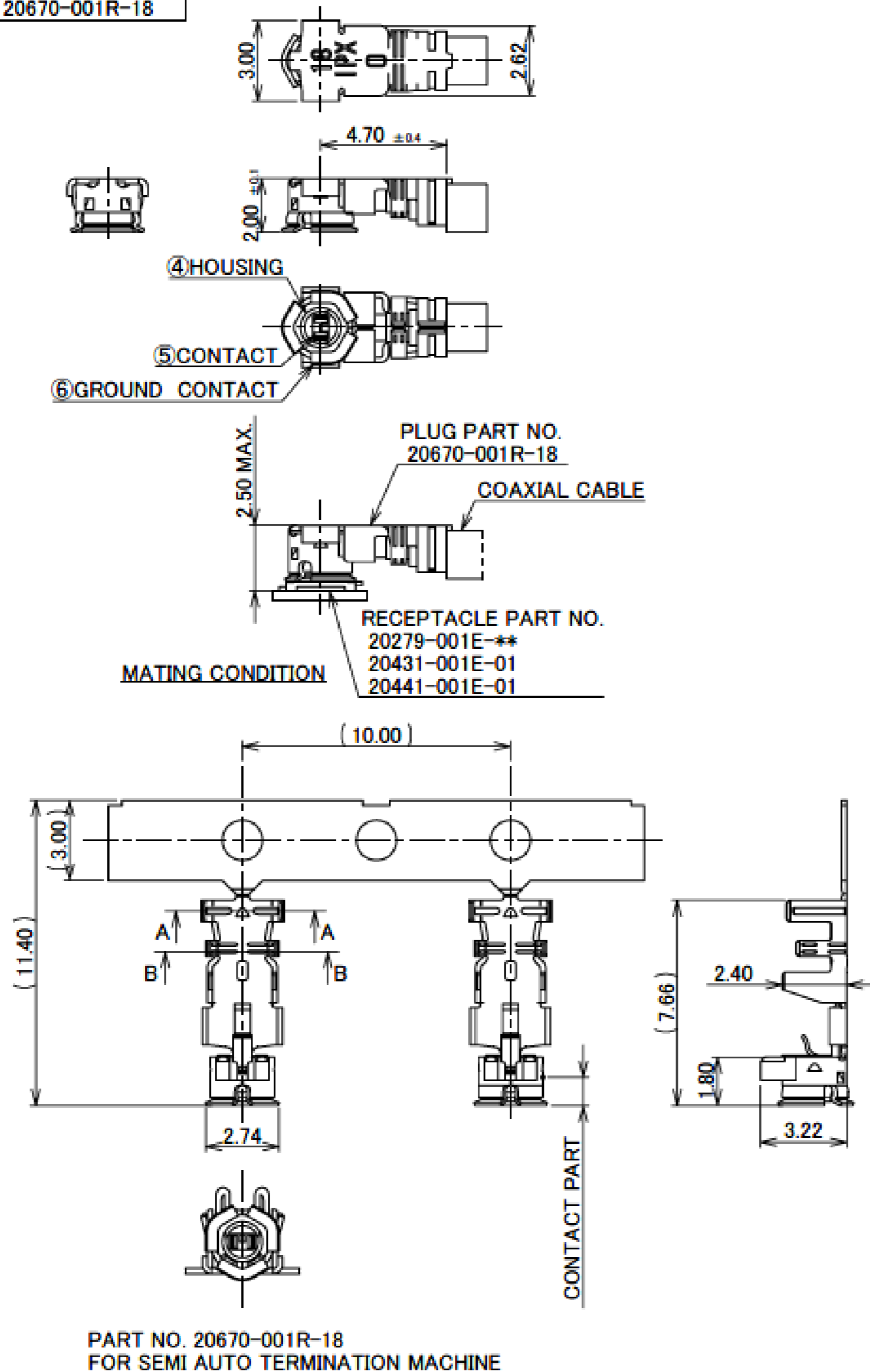
NOTE 3-2-2.



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.8

Recommended P/N	20670-001R-**-
PART No.	
20670-001R-18	



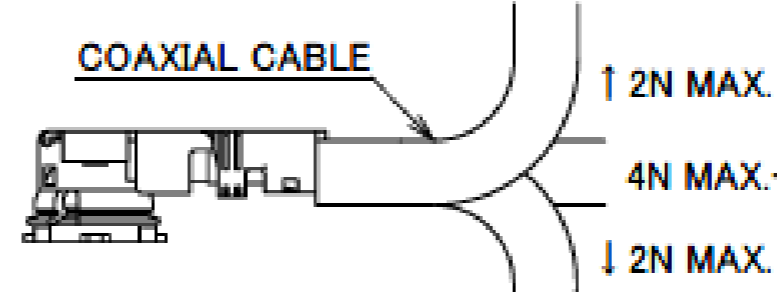
NOTES

- 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.

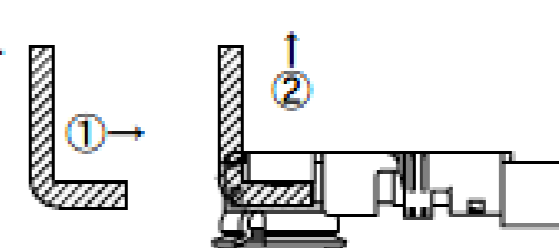
HATCHED AREA: Ni PLATING AREA



NOTE 6.



NOTE 7-2-1.



NOTE 7-2-2.

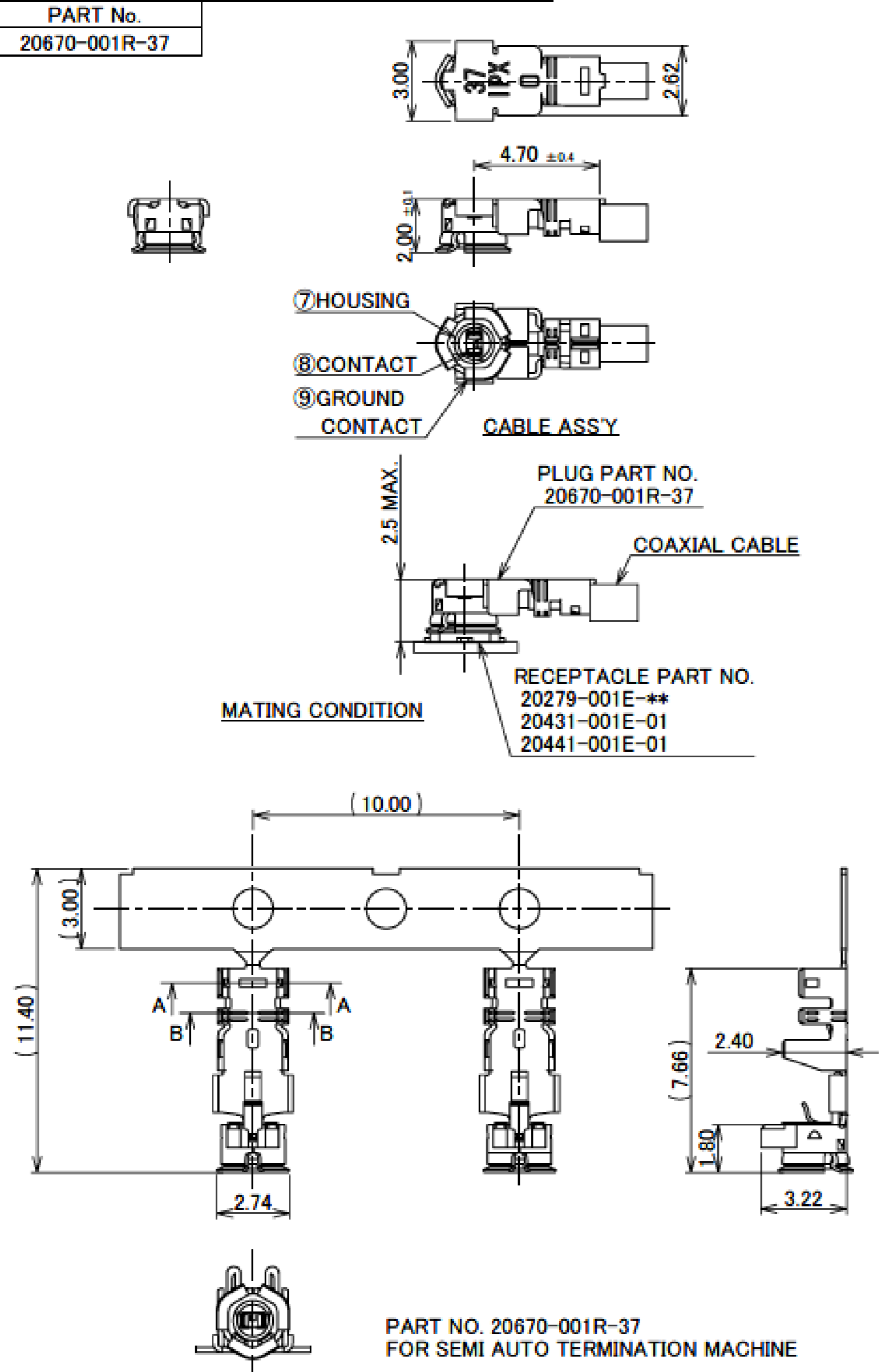


NO.	DESCRIPTION	MATERIAL	FINISH . REMARKS
6	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.02 μm MIN. [Ni PLATING AREA] Ni ONLY
5	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.03 μm MIN.
4	HOUSING	PBT	UL94V-0. BLACK

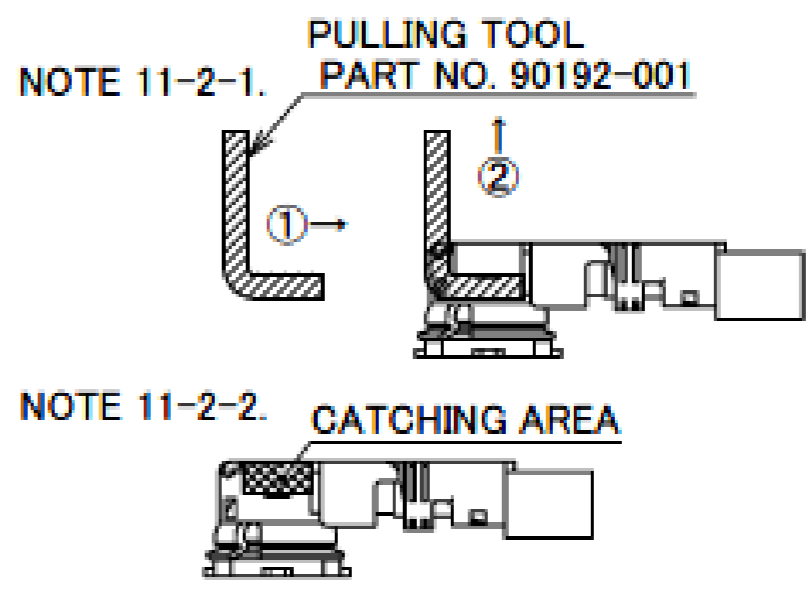
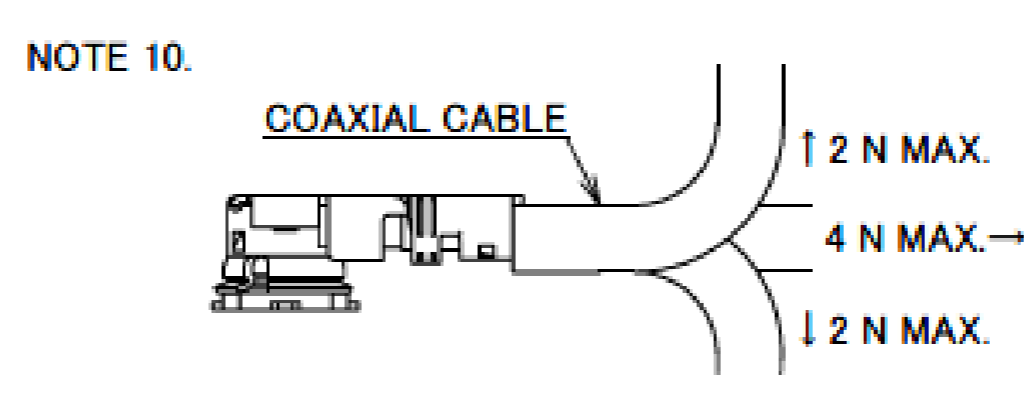
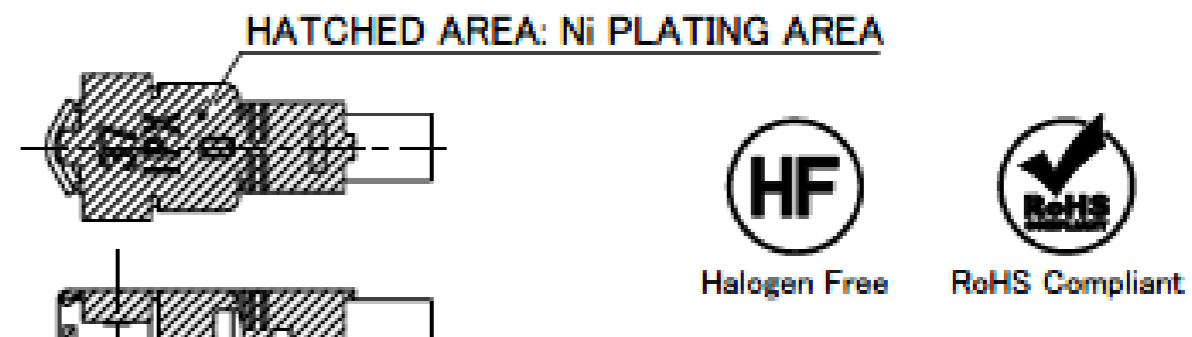
Rev.8

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.



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

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

PART NO.	20670-001R-08	20670-001R-13	20670-001R-32	20670-001R-18	
APPLICABLE CABLE NOMINAL DIMENSION					CABLE CUT LENGTH
INNER CONDUCTOR SILVER PLATING DIELECTRIC CORE	*SEE NOTE 14.				
BRAIDED SHIELD OF OUTER CONDUCTOR	SINGLE	SINGLE	DOUBLE	SINGLE	CRIMP HEIGHT BLADE MICROMETER CH-1
PART NO. OF SEMI AUTO TERMINATION MACHINE	90213-008C	90213-013C	90213-032C	90232-018	i-Fit® PART CH-2
SECT. B-B					OUTER CONDUCTOR PART CH-3
SECT. A-A					JACKET PART
CRIMP HEIGHT	CH-1: 1.34~1.40 CH-2: 0.76~0.84 CH-3: 0.85~0.97	1.34~1.40 1.06~1.14 1.15~1.35	1.34~1.40 1.20~1.30 1.26~1.46	1.34~1.40 1.41~1.49 1.70~1.80	

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

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

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

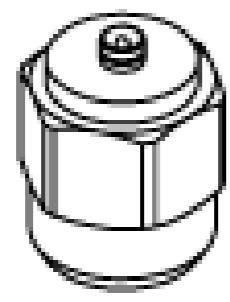
PART NO.		20670-001R-37		CABLE CUT LENGTH	
APPLICABLE CABLE NOMINAL DIMENSION					
BRAIDED SHIELD OF OUTER CONDUCTOR		SINGLE		CRIMP HEIGHT 	
PART NO. OF SEMI AUTO TERMINATION MACHINE		90232-037		CH-1 i-Fit® PART 0.40 0.40	
SECT. B-B				CH-2 OUTER CONDUCTOR PART 0.40 0.40	
SECT. A-A				CH-3 JACKET PART 0.50	
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.

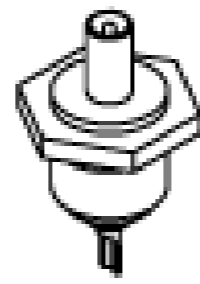
Rev.8

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: Δ R 20 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL: 20mohm 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)	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***

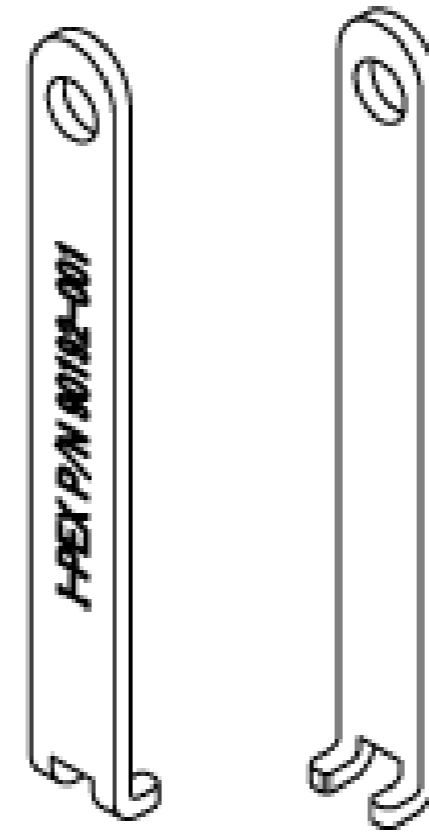
Accessories for MHF® I plug



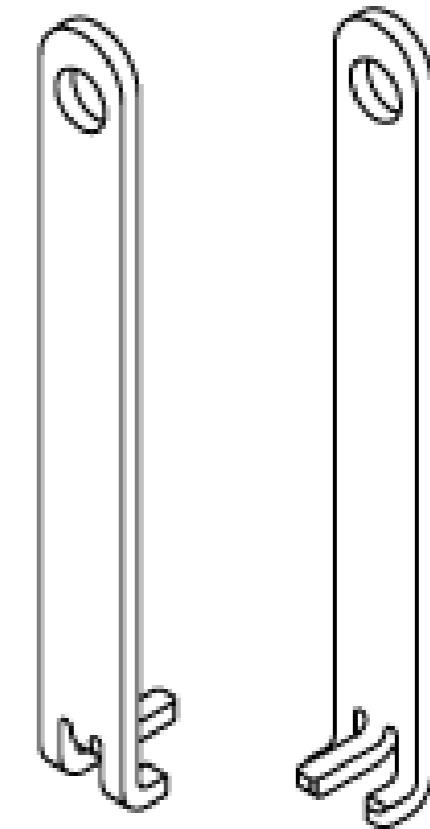
MHF I SMA ADAPTOR
PART NO. 90193-001



MHF I PLUG INSPECTION CONNECTOR
PART NO. 90194-001



FRONT SIDE BACK SIDE
MHF I UNMATING TOOL
PART NO. 90192-001

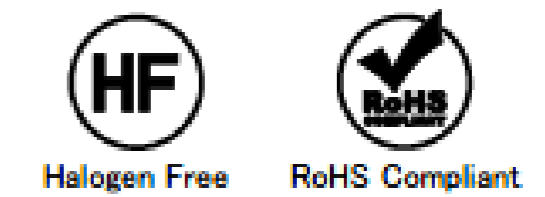
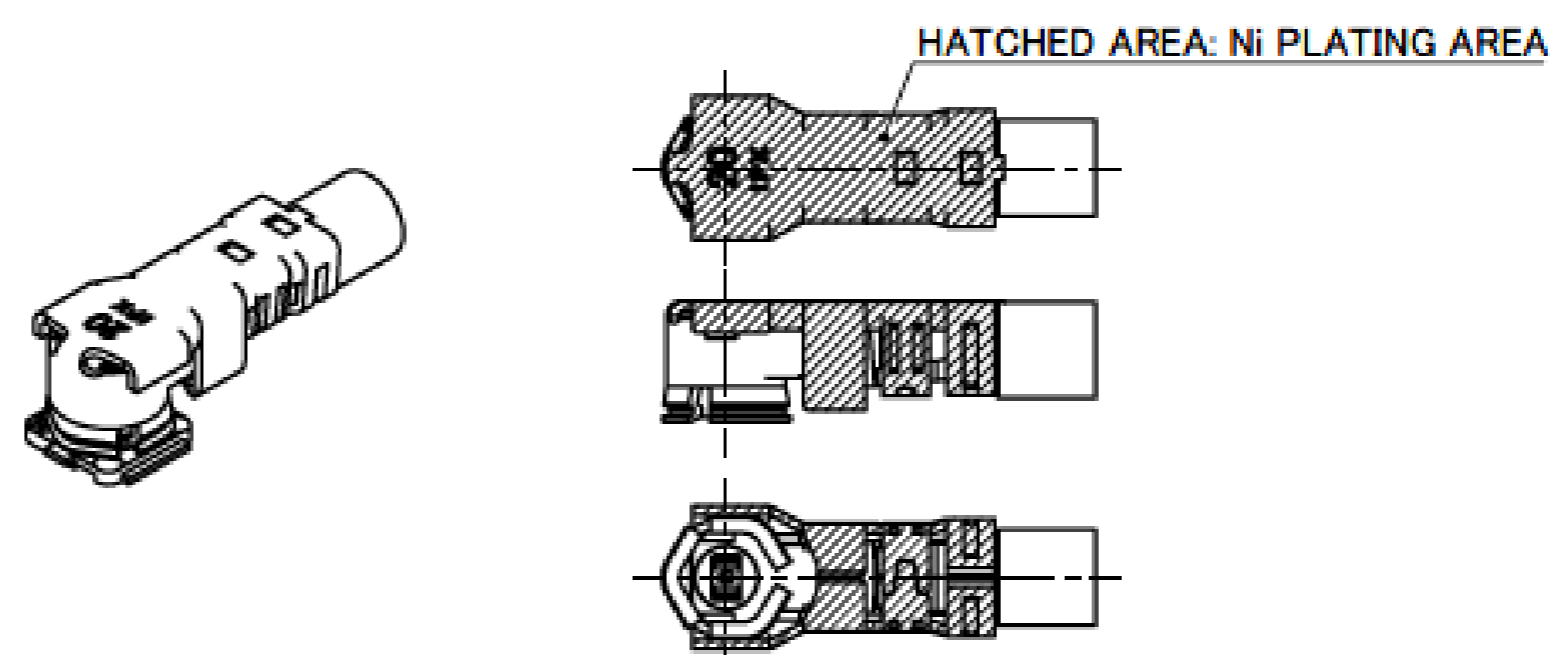
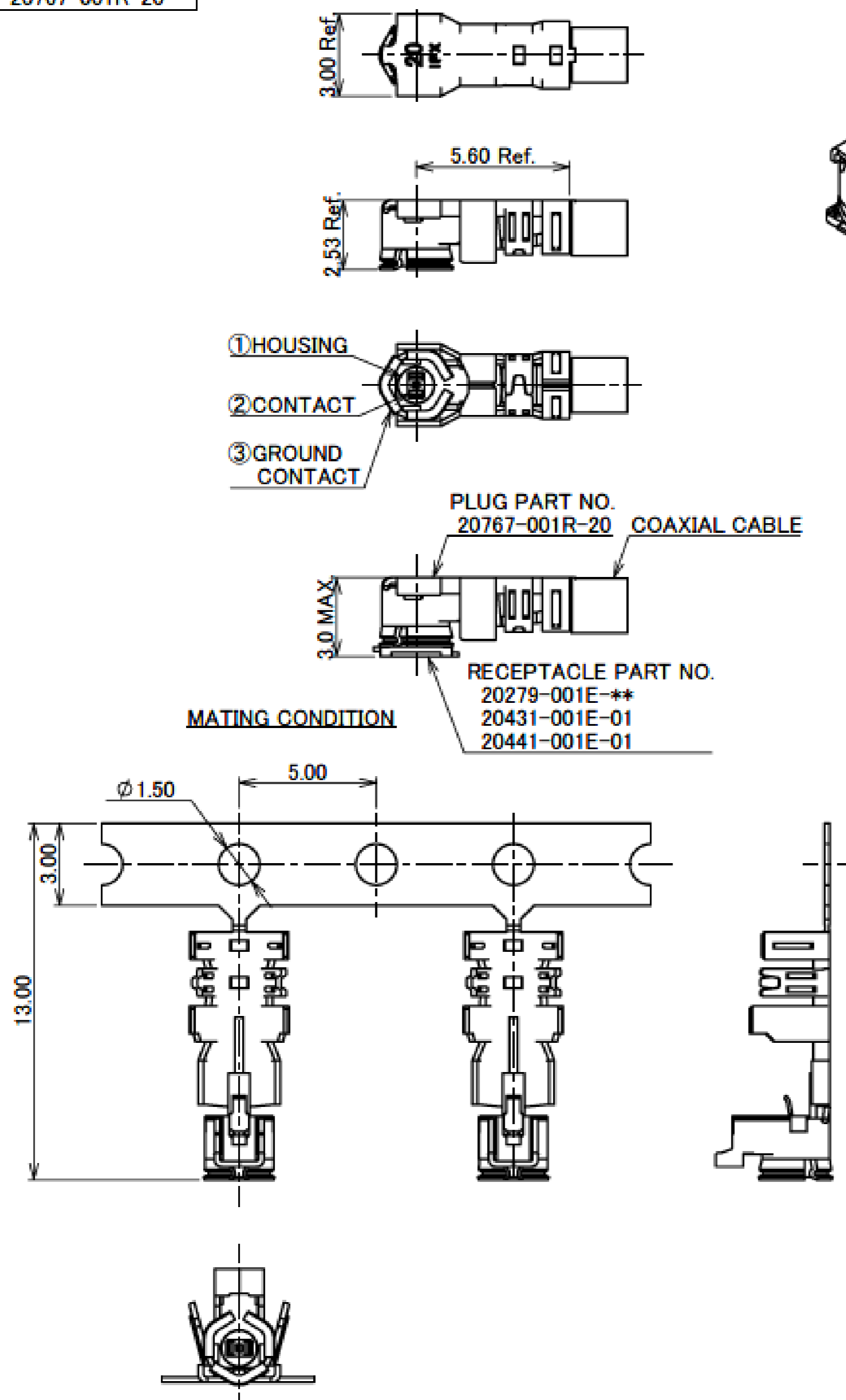


FRONT SIDE BACK SIDE
MHF I MATING AND UNMATING TOOL
PART NO. 90224-001

Rev.8

MHF® I plug (2.0 mm Cable O.D.)

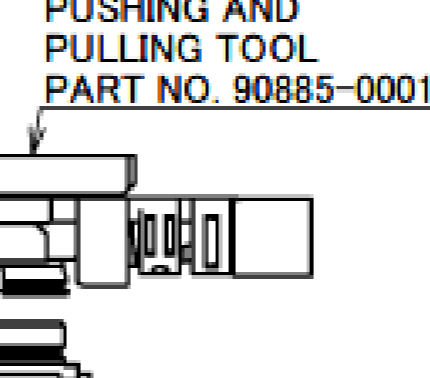
Recommended P/N	20767-001R-20
PART No.	
20767-001R-20	



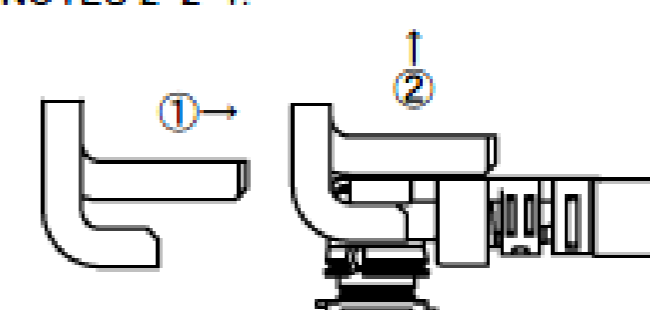
NOTES

- APPLICABLE CONNECTOR:
20279-001E-***, 20431-001E-01, 20441-001E-01
- 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. 90885-0001)
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
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.



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, BLACK

Rev.6

MHF® I plug (2.0 mm Cable O.D.)

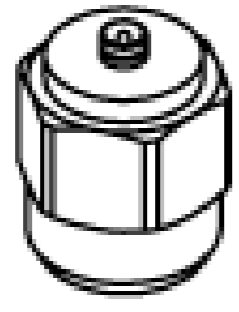
PART NO.	20767-001R-20		
APPLICABLE CABLE NOMINAL DIMENSION			
BRAIDED SHIELD OF OUTER CONDUCTOR	SINGLE		
PART NO. OF SEMI AUTO TERMINATION MACHINE	90876-020		
CRIMP HEIGHT	CH-1 i-Fit® PART	CH-2 SHIELD PART	CH-3 JACKET PART
	 2.28~2.36	 1.81~1.87	 1.95~2.01

Rev.6

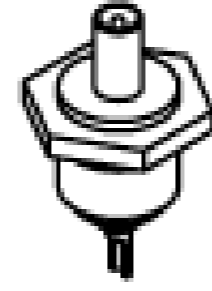
ITEMS	SPECIFICATION	
RECOMMENDED APPLICABLE CONNECTOR PART No.	20279-001E-**	20441-001E-01
RATING VOLTAGE	60 V AC (R.M.S)	
RATING FREQUENCY	DC~9GHz	
OPERATING TEMPERATURE	233~363 K (-40°C~+90°C)	
VSWR (MATED WITH SMA ADAPTER PART No.90193-001)	1.30 MAX. AT 0.1~3 GHz, 1.50 MAX. AT 3~6 GHz, 1.60 MAX. AT 6~9 GHz	
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: \surd R 20 mohm MAX.	
GROUND CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: \surd 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.6

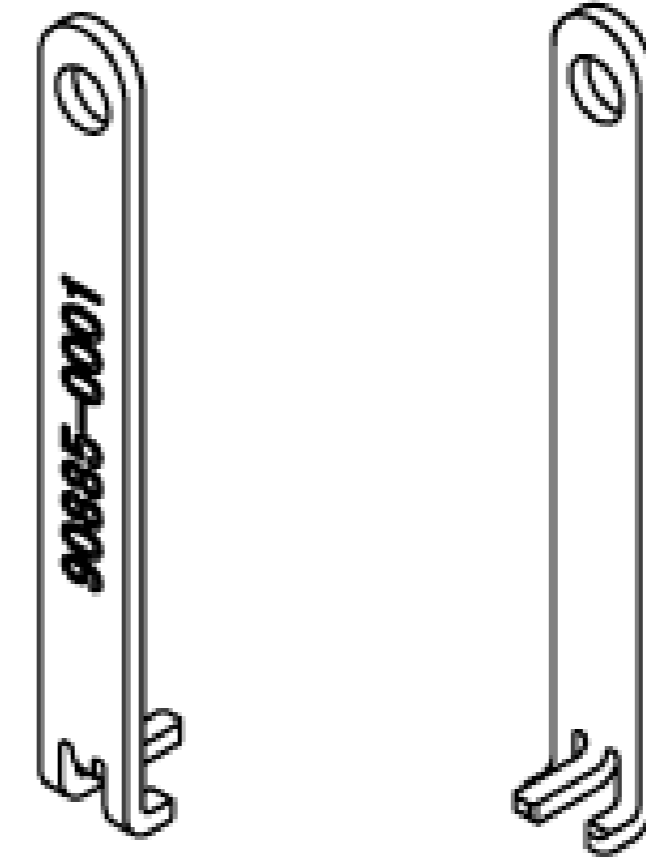
Accessories for MHF® I plug (2.0 mm Cable O.D.)



MHF I SMA ADAPTOR
PART NO. 90193-001



MHF I PLUG INSPECTION CONNECTOR
PART NO. 90194-001

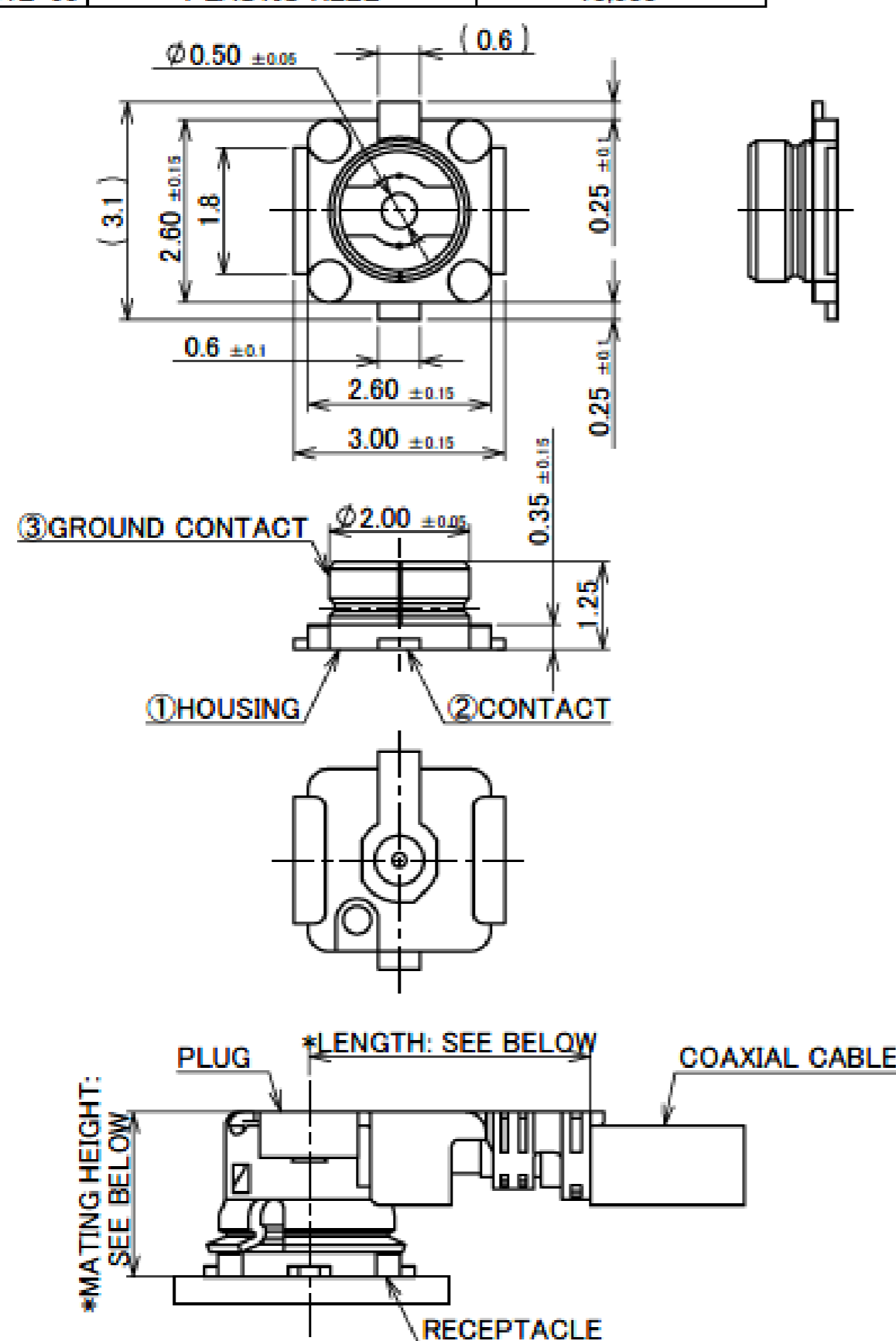
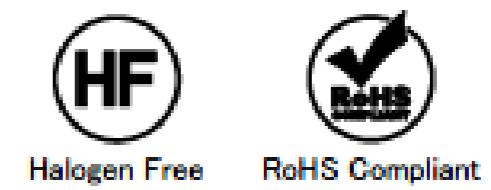


FRONT SIDE BACK SIDE
MHF I 20 TYPE MATING AND UNMATING TOOL
PART NO. 90885-0001

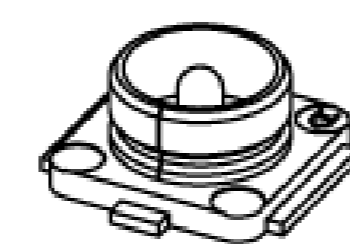
Rev.6

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



*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)
*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
MATING CONDITION



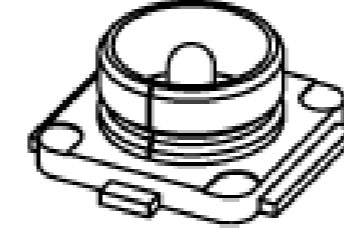
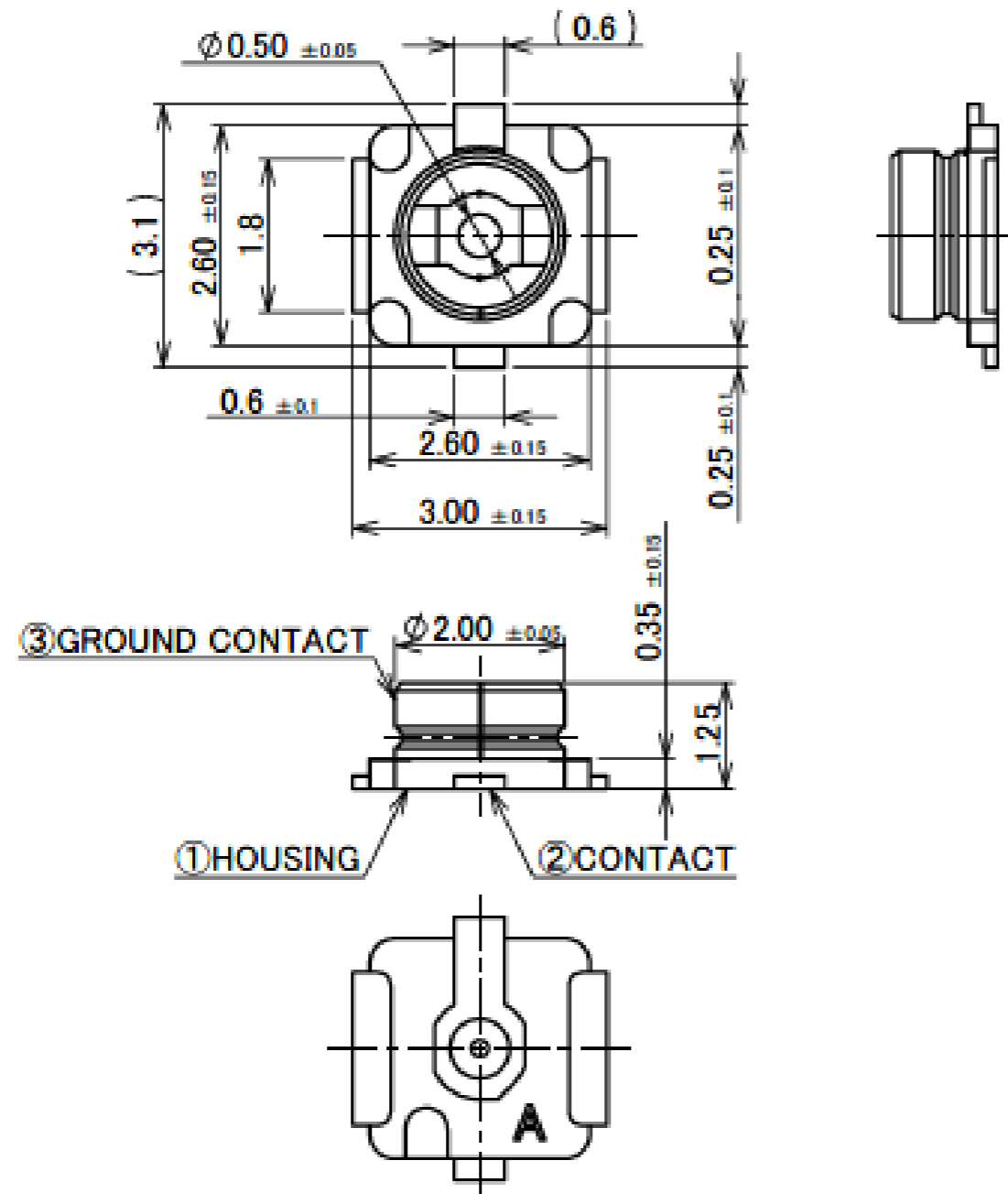
NOTES
1. APPLICABLE CONNECTOR PART NO.
20278-112R-**
20351-12R-37
20631-112R-**
20670-001R-**
20767-001R-20
2. COPLANARITY: 0.1mm MAX.
3. THIS IS "Pb-FREE" CONNECTOR.

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

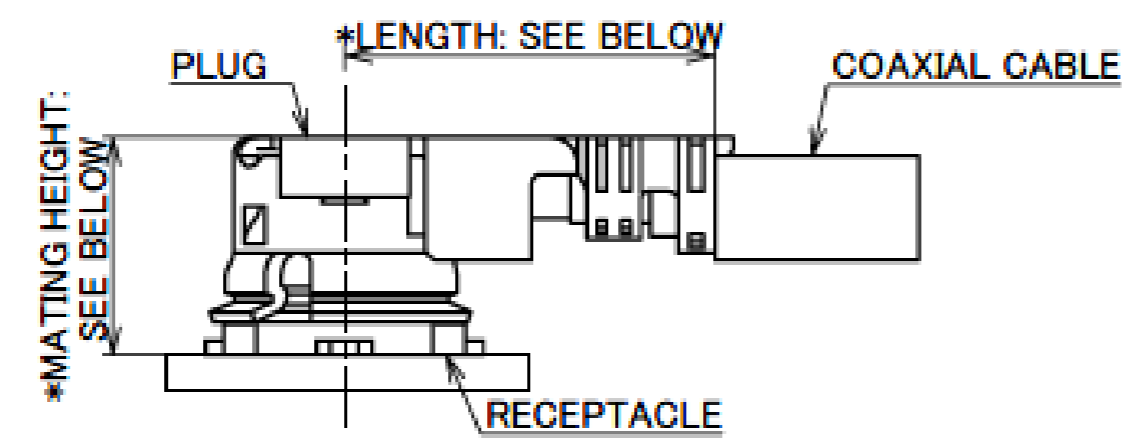
Rev.34

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



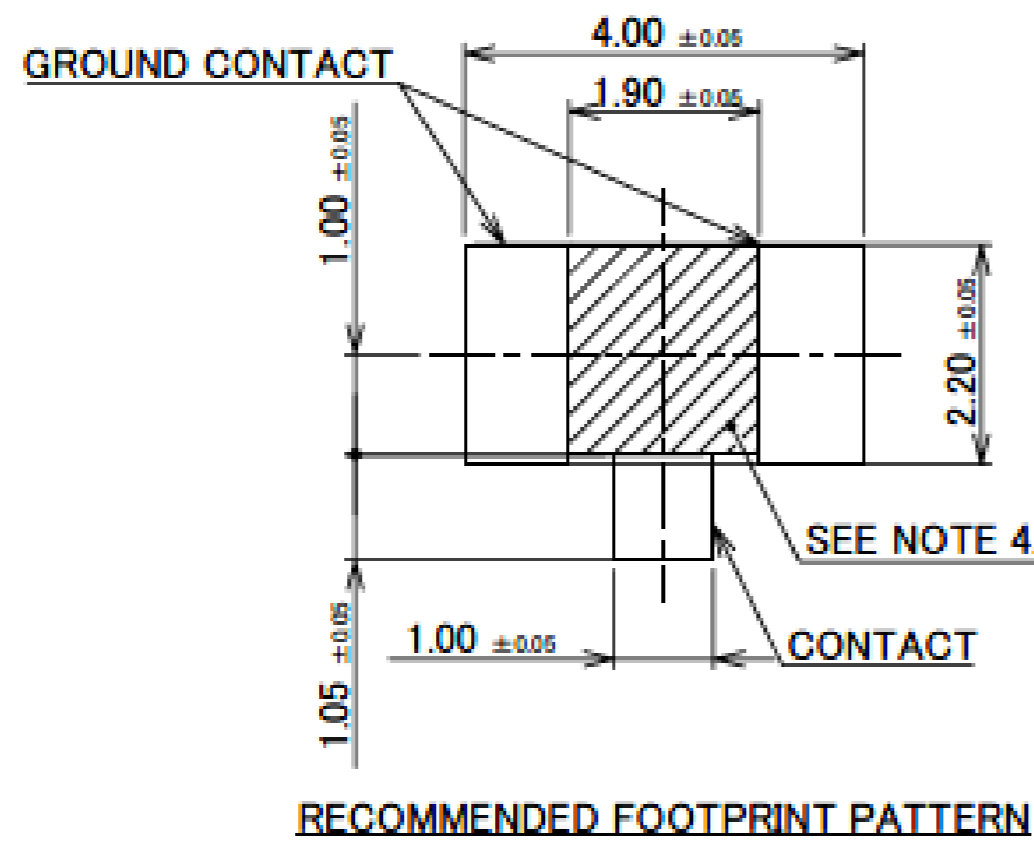
- NOTES
1. APPLICABLE CONNECTOR PART NO.
20278-112R-**-
20351-112R-37
20631-112R-**-
20670-001R-**-
20767-001R-20
 2. COPLANARITY: 0.1mm MAX.
 3. THIS IS "Pb-FREE" CONNECTOR.



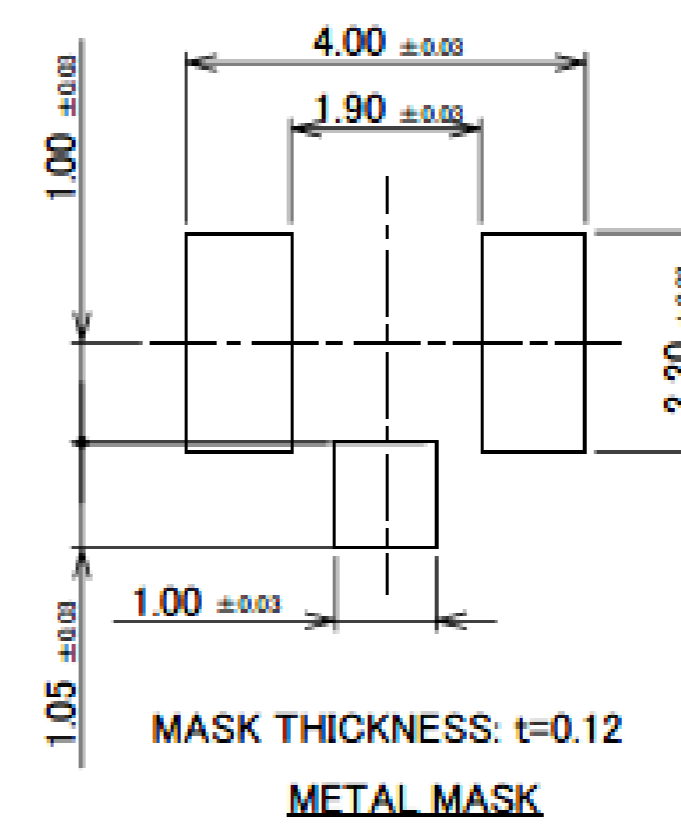
- *LENGTH: 4.0±0.4 AT PLUG PART NO. 20670-001R-08, 20670-001R-13, 20670-001R-32
- 4.7±0.4 AT PLUG PART NO. 20670-001R-18, 20670-001R-37
- 5.6 AT PLUG PART NO. 20767-001R-20 (REFERENCE DIMENSION)
- *MATING HEIGHT: 2.5 MAX. AT PLUG PART NO. 20670-001R-**-
(2.9 MAX. AT MHF I LK LOCKED CONDITION)
- 3.0 MAX.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

MATING CONDITION

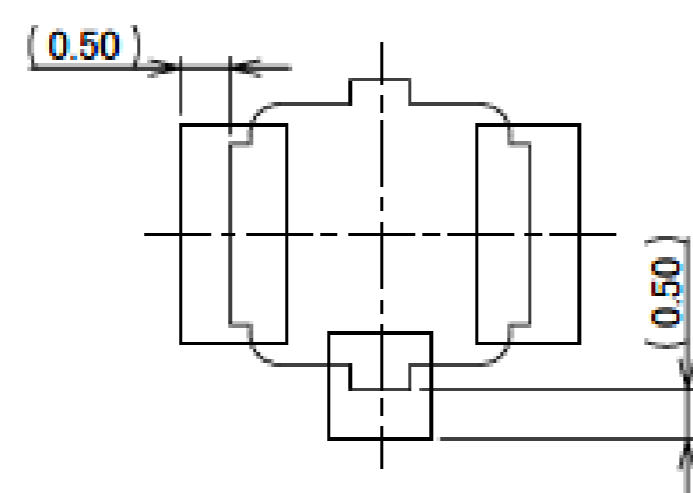
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN. CONTACT PART Au 0.05 μ m MIN. SOLDERING PART Au 0.05 μ m MIN.
2	CONTACT	BRASS	ALL OVER Ni 1.00 μ m MIN. CONTACT PART Au 0.10 μ m MIN. SOLDERING PART Au 0.03 μ m MIN.
1	HOUSING	LCP	UL94V-0, WHITE



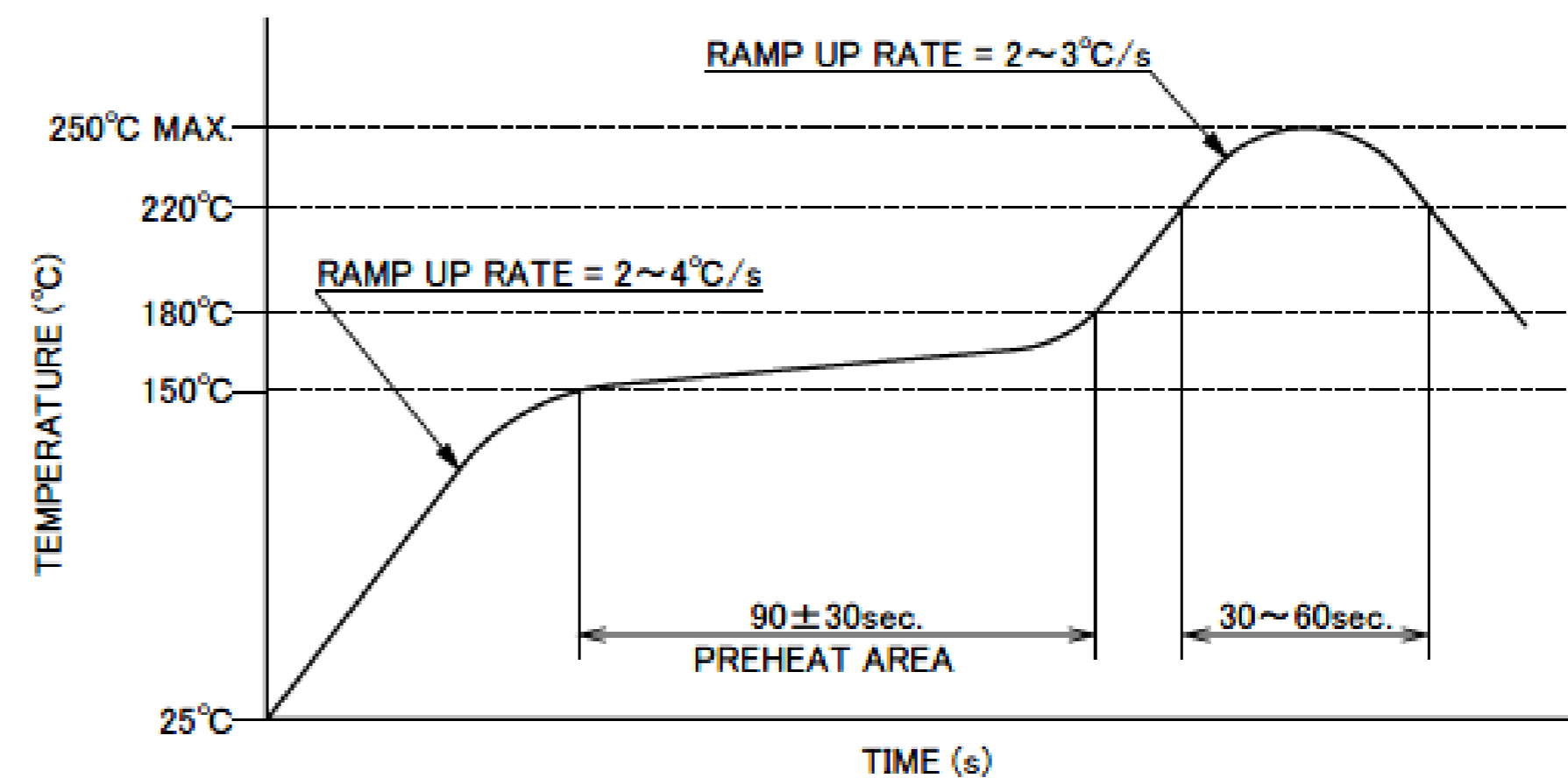
RECOMMENDED FOOTPRINT PATTERN



METAL MASK



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



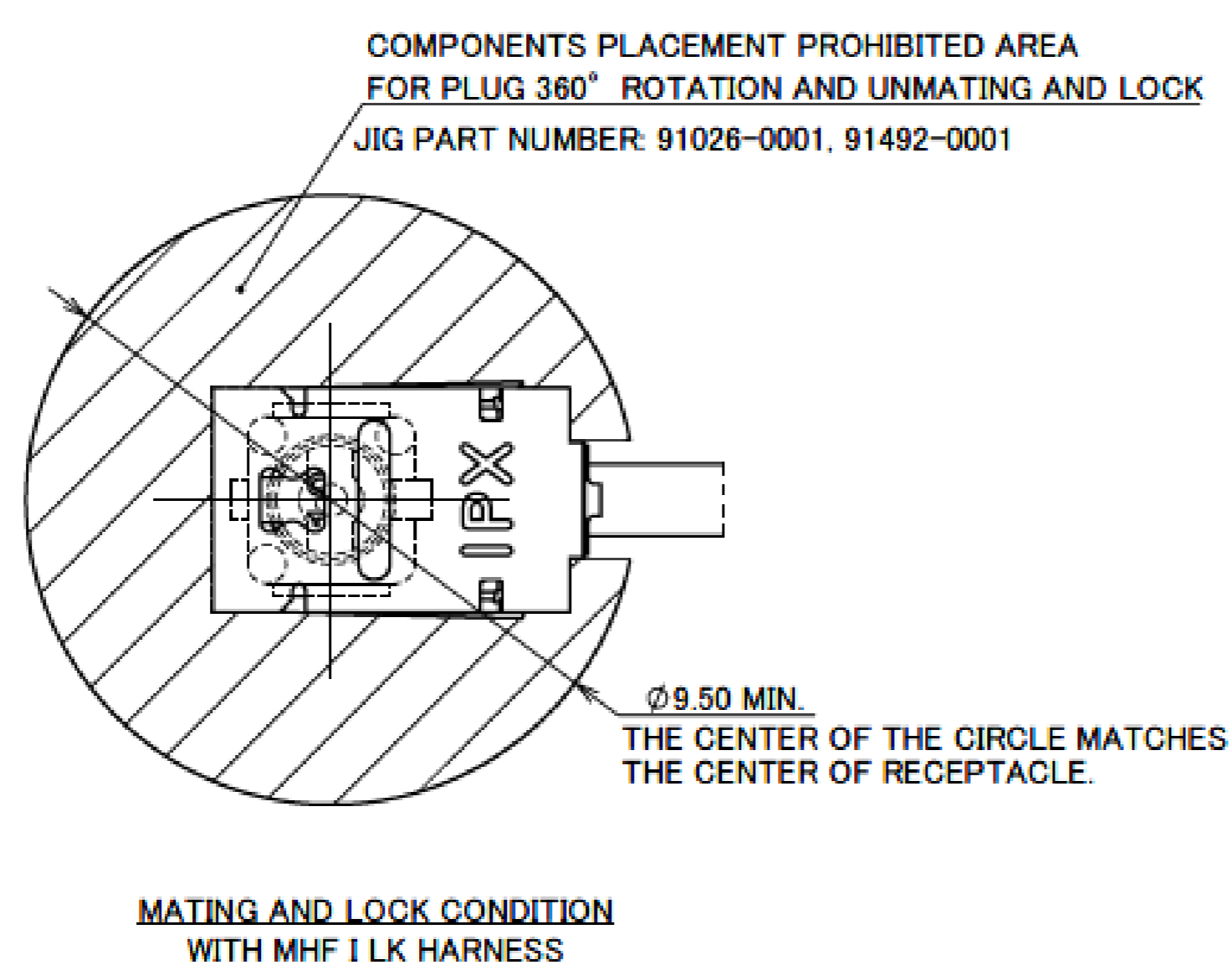
REFLOW TEMPERATURE PROFILE
SENJU METAL INDUSTRY CO., LTD. : M705-SHF(Sn96.5 Ag3.0 Cu0.5)

- NOTES
4. NO GROUND, SIGNAL, OR RESIST ALLOWED IN THIS AREA.

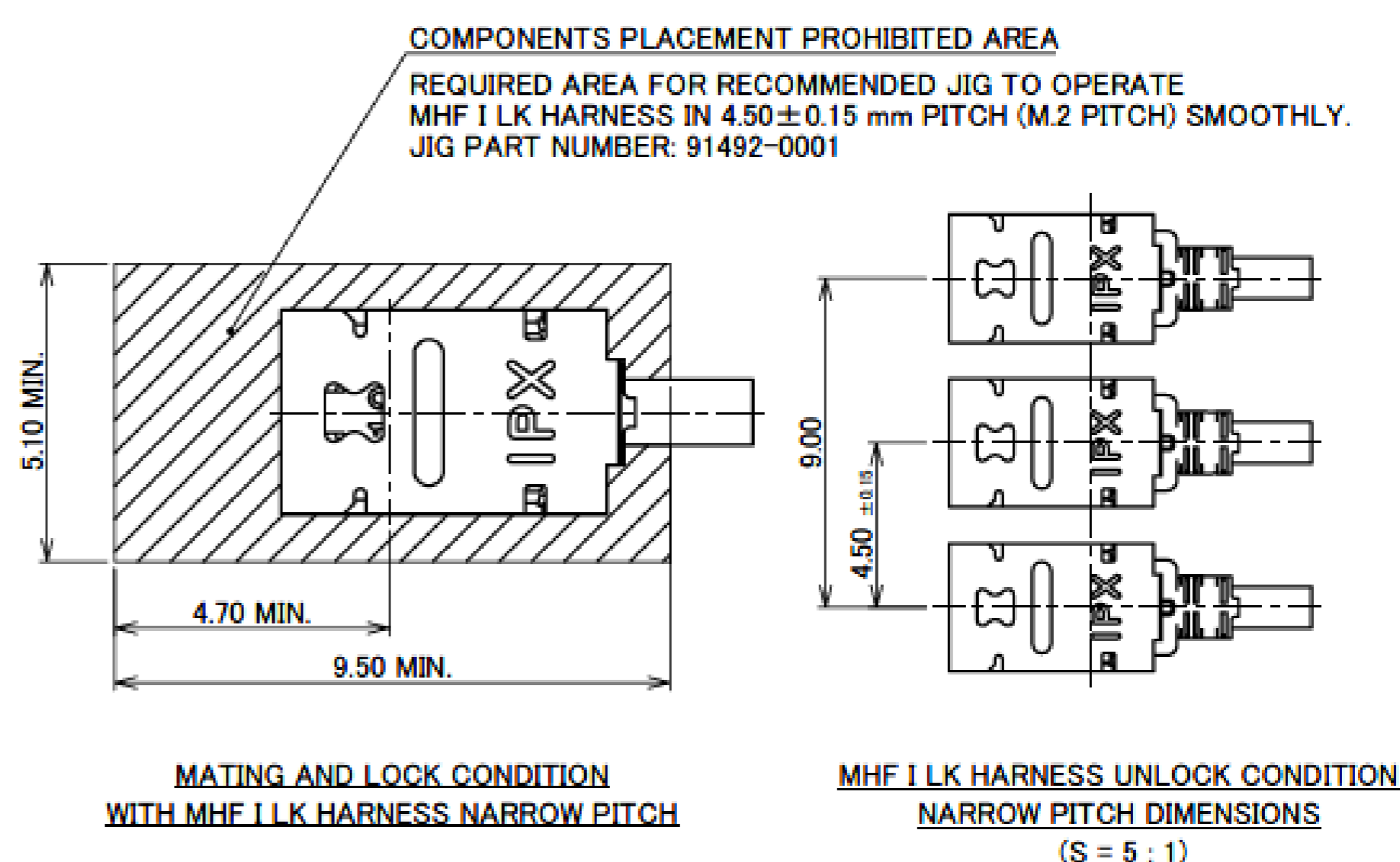
MHF® I Receptacle (3pads)

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

SINGLE CONNECTOR LAYOUT



MULTIPLE CONNECTORS LAYOUT



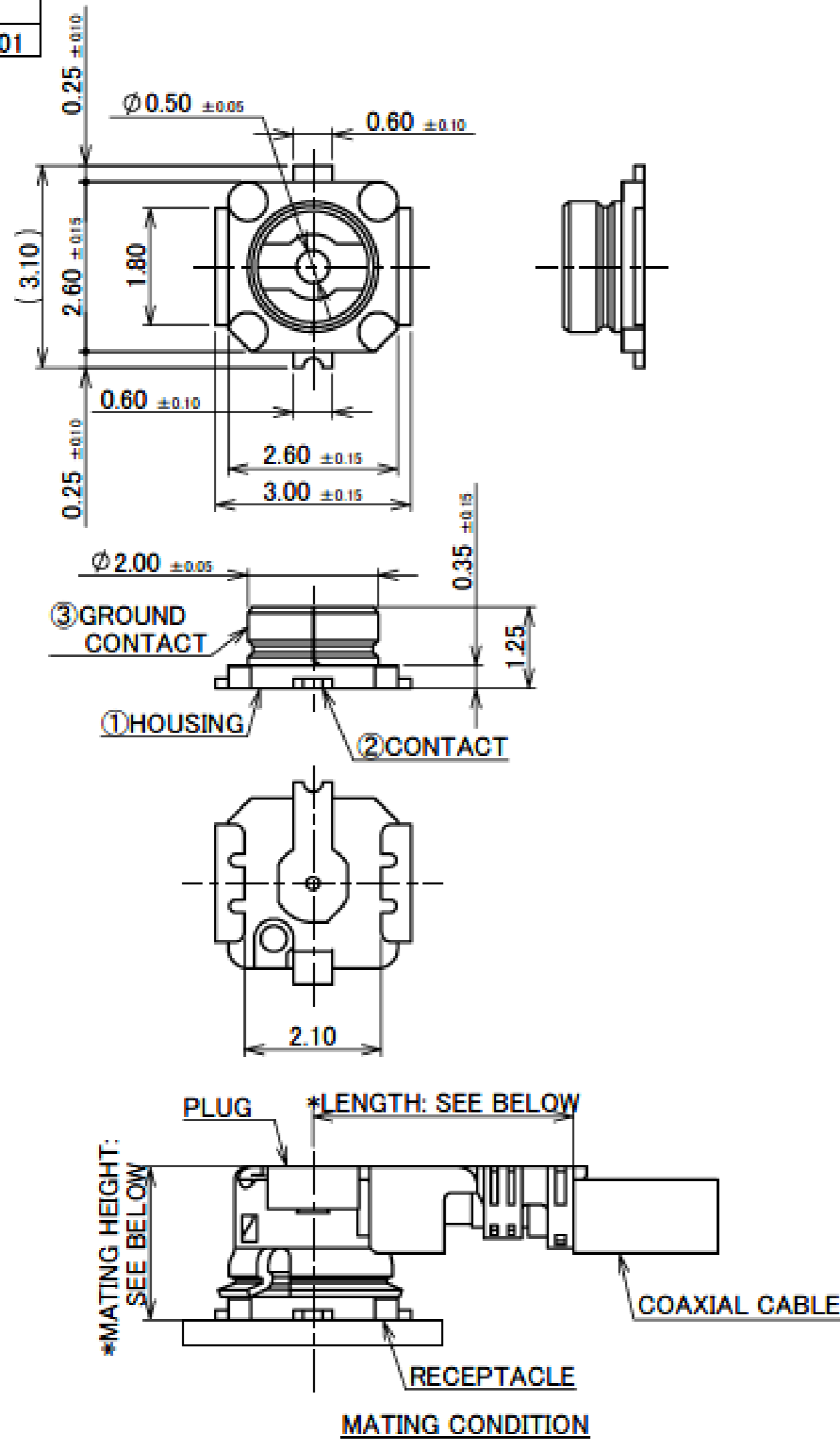
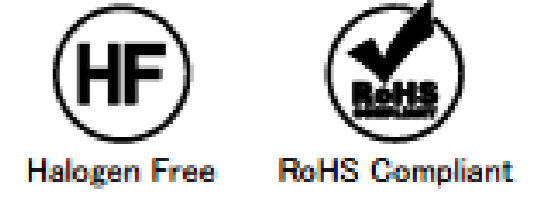
Rev.34

ITEMS	SPECIFICATION			
RECOMMENDED APPLICABLE CONNECTOR PART NO.	20278-112R-** (MHF I PLUG 1.80, 1.32, 1.13, 0.81)	20351-112R-37 (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)
RATED VOLTAGE	60 V AC (R.M.S)			
RATED FREQUENCY	DC TO 9GHz			
OPERATING TEMPERATURE	233 TO 363K (-40°C TO +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 : Δ R 20 mohm MAX.	
GROUND CONTACT RESISTANCE	INITIAL : 10 mohm MAX. AFTER TEST : 15 mohm MAX.		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.			
PRODUCT SPECIFICATION	PRS-1676	PRS-1726	PRS-2105	PRS-2490
TEST REPORT	TR-12044	TR-12096	TR-15059	TR-18041
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
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.

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

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

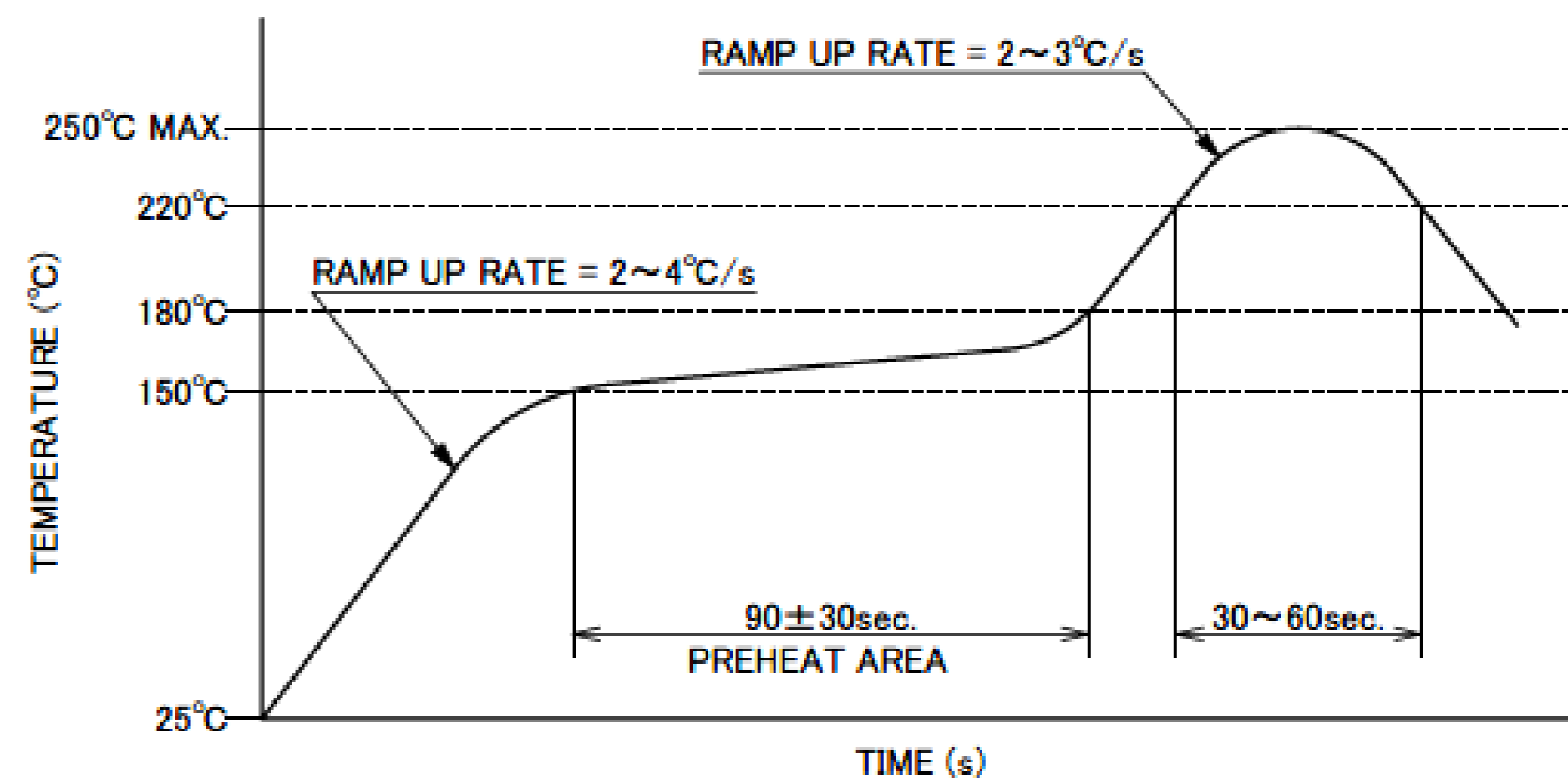
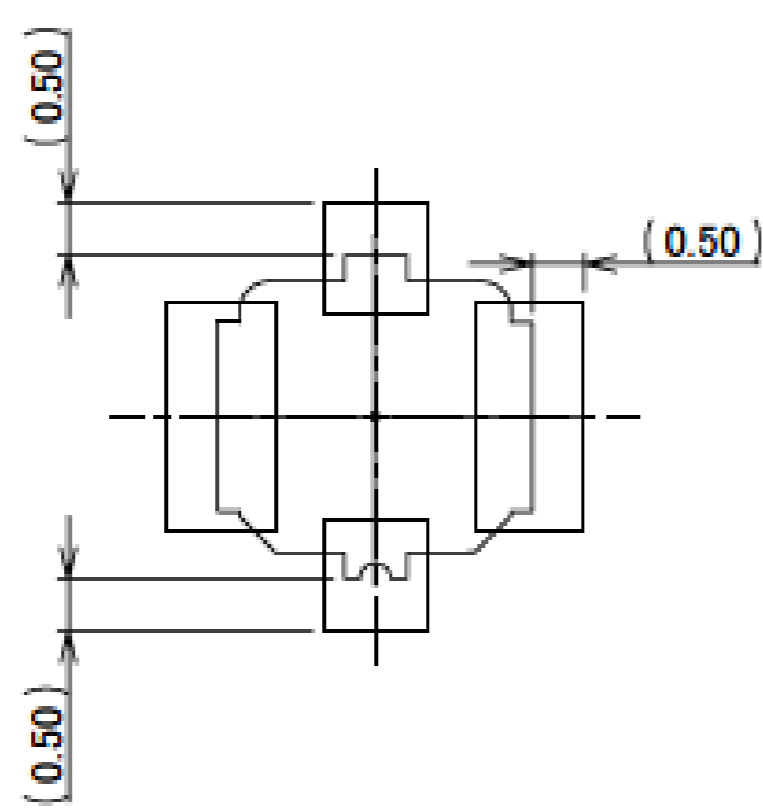
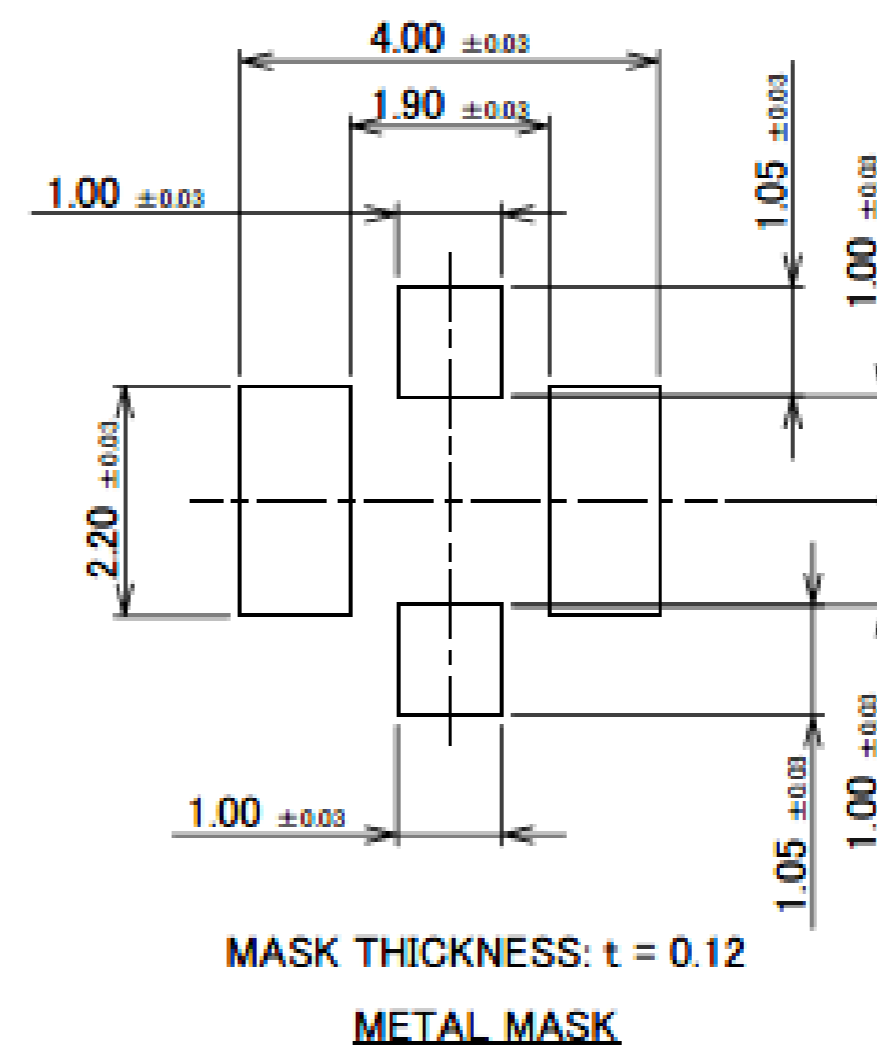
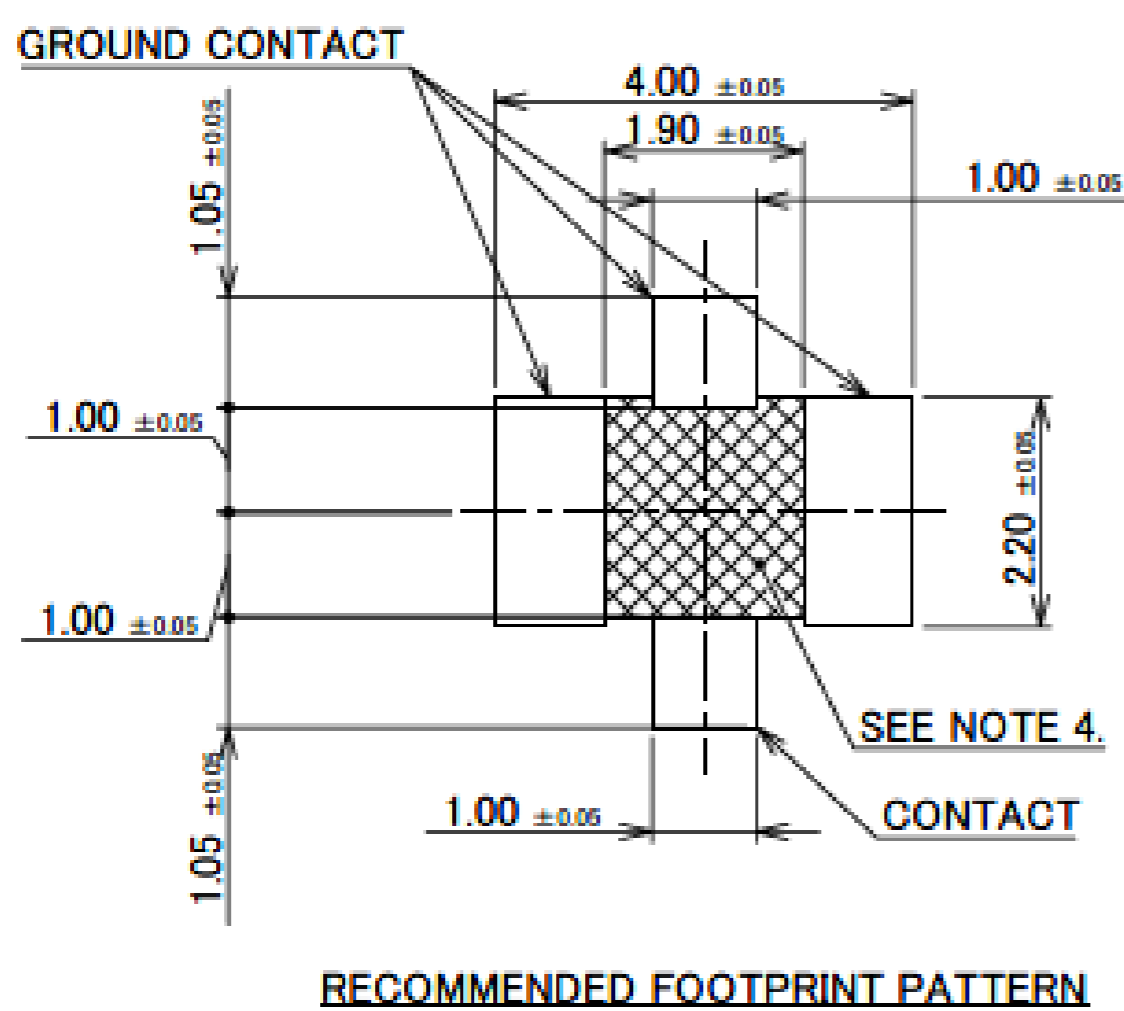


- NOTES.
- APPLICABLE CONNECTOR PART NUMBER:
20278-112R-**-**
20351-12R-37
20670-001R-**-**
20767-001R-20
 - COPLANARITY: 0.1mm MAX.
 - THIS IS "Pb-FREE" CONNECTOR.

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-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)
- *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

Rev.9



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

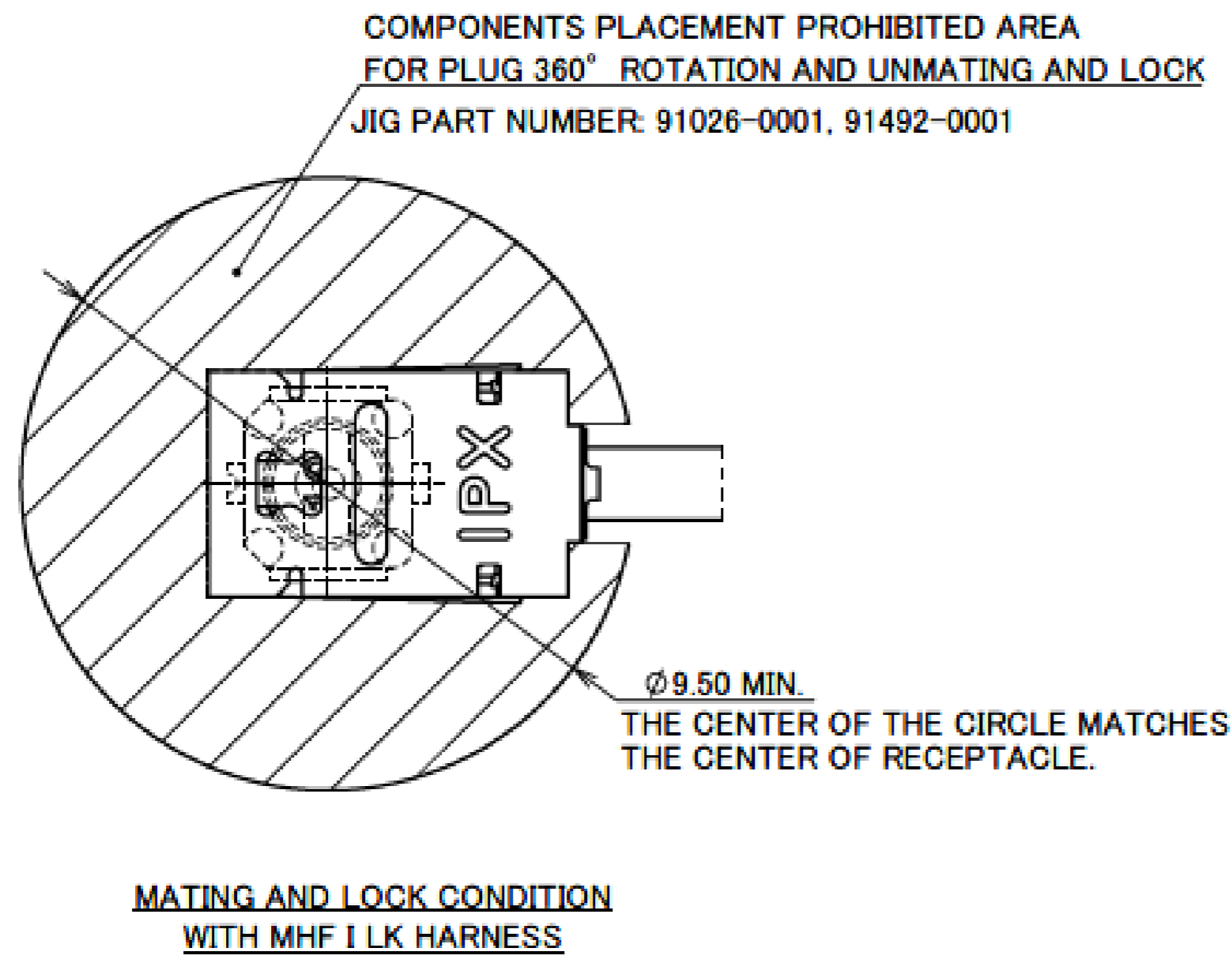
NOTE
4. NO GROUND, SIGNAL, OR RESIST ALLOWED IN THIS AREA.

Rev.9

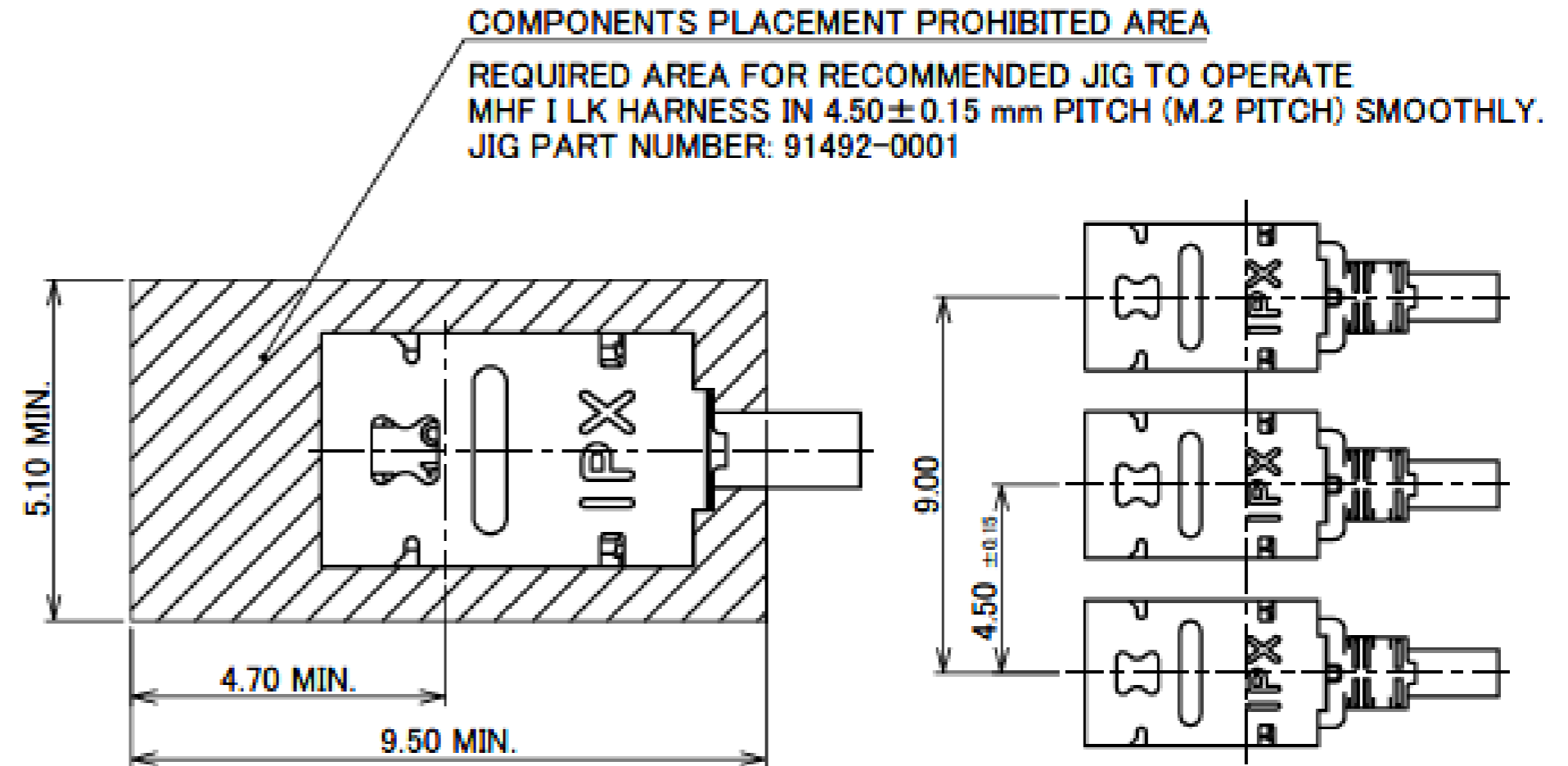
MHF® I Receptacle (4pads/Black color HSG)

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

SINGLE CONNECTOR LAYOUT



MULTIPLE CONNECTORS LAYOUT



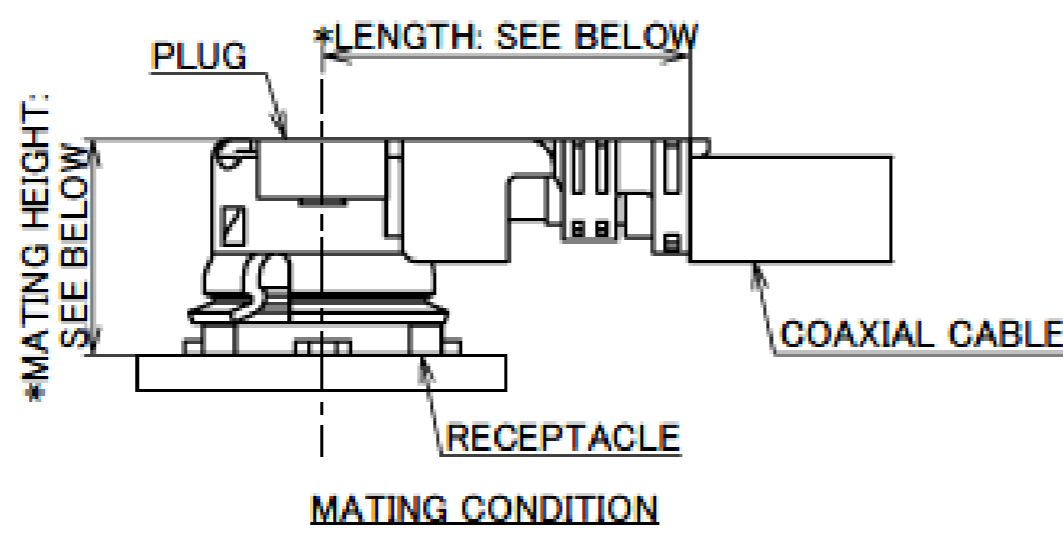
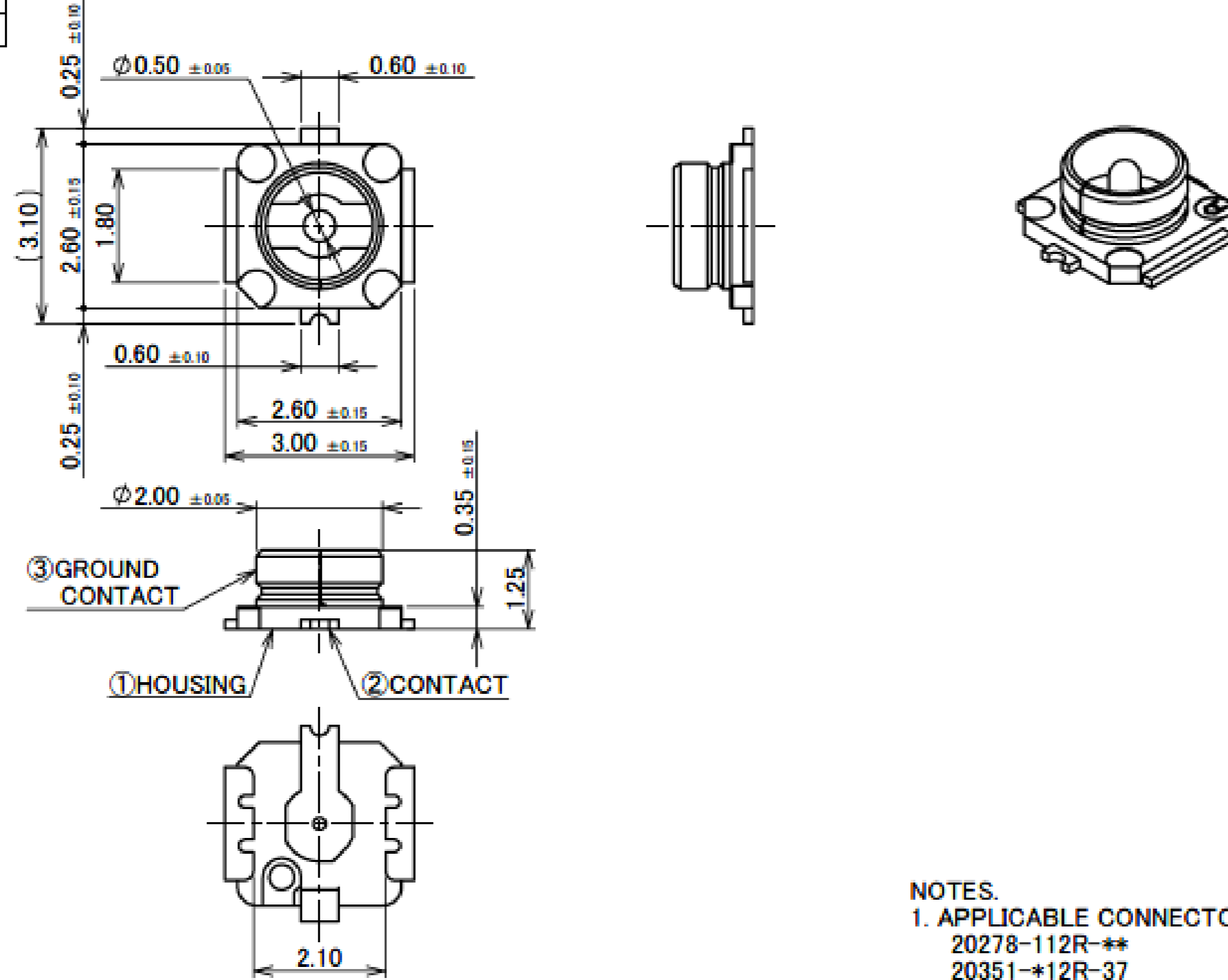
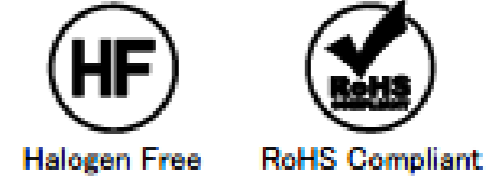
Rev.9

ITEMS	SPECIFICATION			
RECOMMENDED APPLICABLE CONNECTOR PART NO.	20278-112R-** (MHF I PLUG 1.80, 1.32, 1.13, 0.81)	20351-112R-37 (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)
RATING VOLTAGE	60 V AC (R.M.S)			
RATING FREQUENCY	DC TO 9GHz			
OPERATING TEMPERATURE	233 TO 363K (-40°C TO +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.			
PRODUCT SPECIFICATION	PRS-1676	PRS-1726	PRS-2105	PRS-2490
TEST REPORT	TR-12044	TR-12096	TR-15059	TR-18041
PACKING STANDARD	300-596			
INSTRUCTION MANUAL	HIM-10002			HIM-17017
APPEARANCE CRITERIA No.	QLS-A***			

Rev.9

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

Recommended P/N	20431-001E-01
PART No.	20431-001E-01

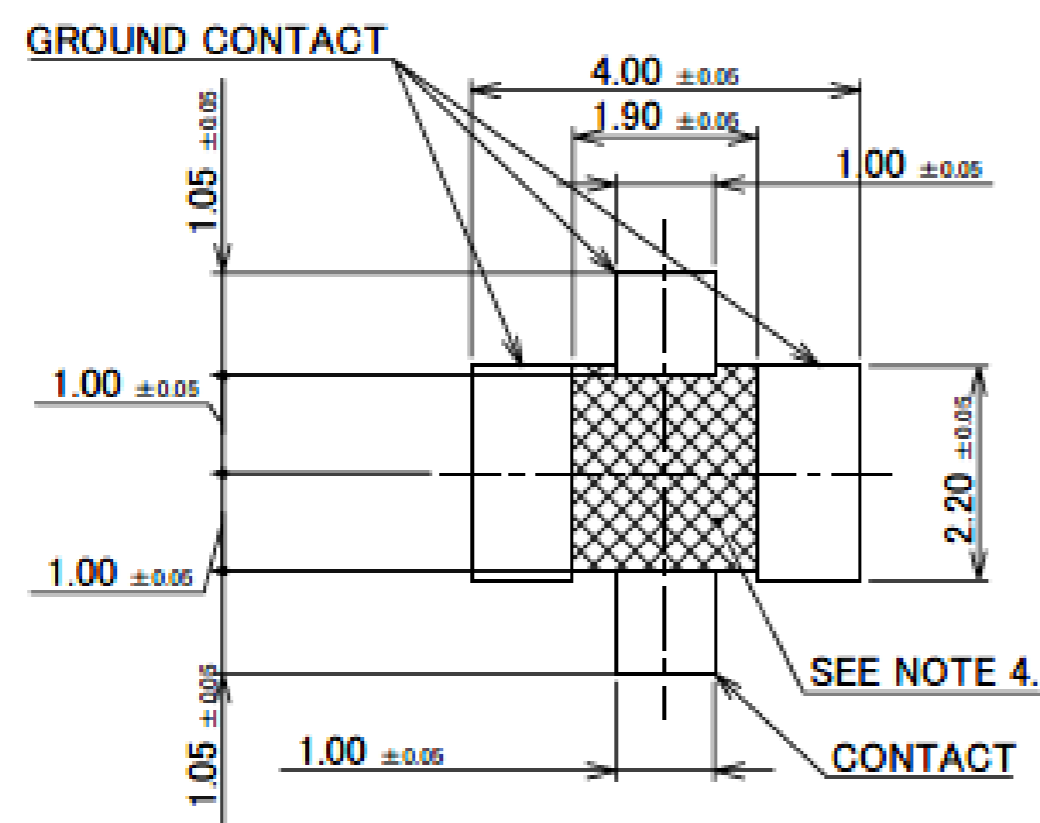


- MATING CONDITION**
- *LENGTH: 4.0 ± 0.4 AT PLUG PART NO. 20670-001R-08, 20670-001R-13, 20670-001R-32
 4.7 ± 0.4 AT PLUG PART NO. 20670-001R-18, 20670-001R-37
 5.6 AT PLUG PART NO. 20767-001R-20 (REFERENCE DIMENSION)
 - *MATING HEIGHT: 2.5 MAX. AT PLUG PART NO. 20670-001R-***
 $(2.9$ MAX. AT MHF I LK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

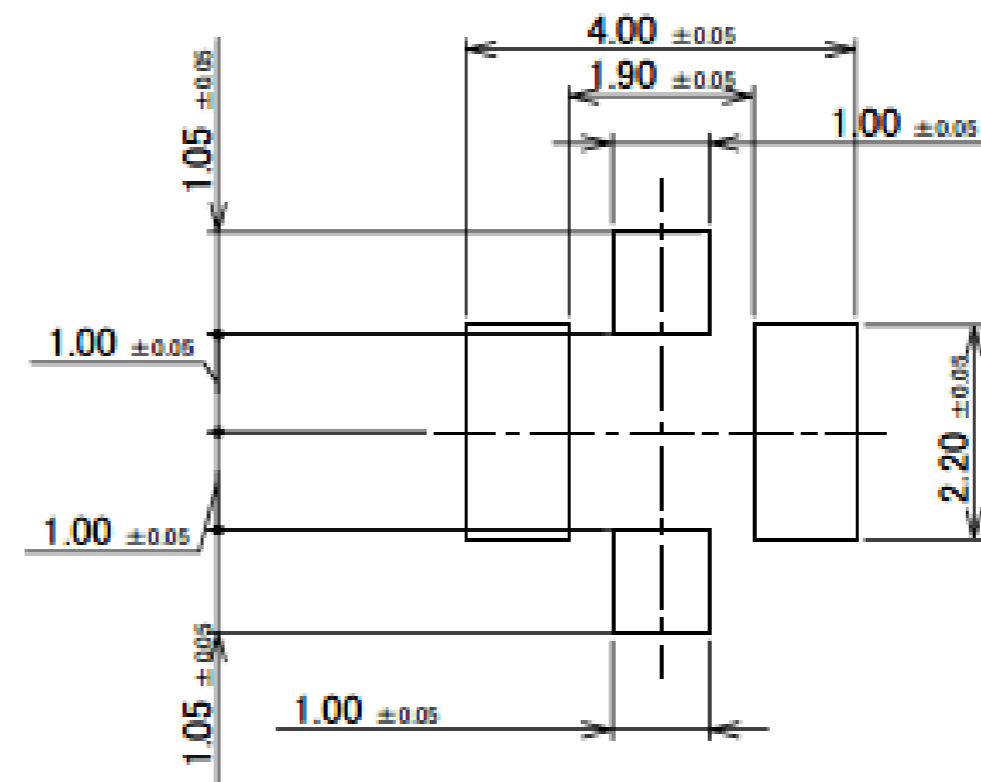
- NOTES.**
- APPLICABLE CONNECTOR PART NUMBER:
 20278-112R-**
 20351-12R-37
 20670-001R-**
 20767-001R-20
 - COPLANARITY: 0.1 mm MAX.
 - THIS IS "Pb-FREE" CONNECTOR.

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

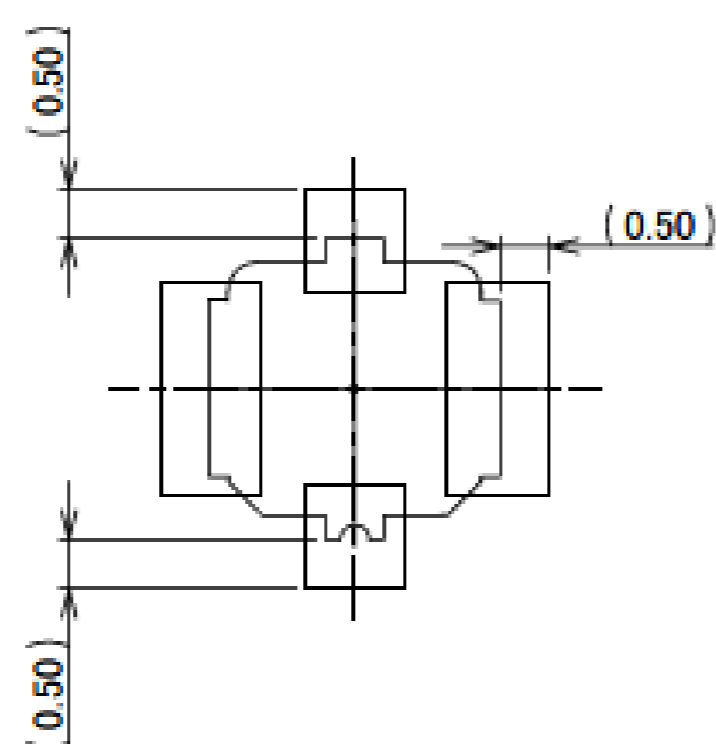
Rev.7



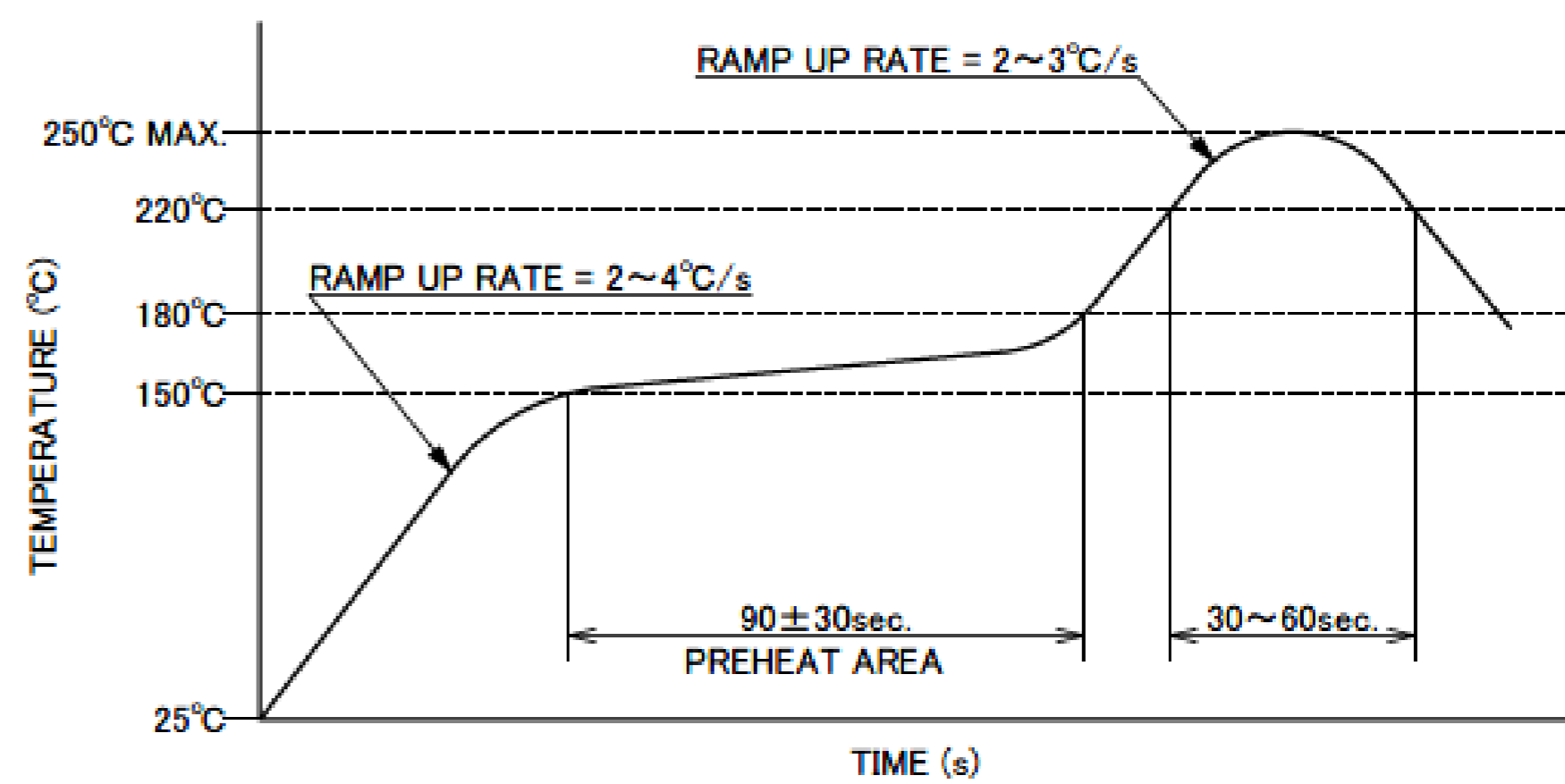
RECOMMENDED FOOTPRINT PATTERN



MASK THICKNESS : $t=0.12$
METAL MASK



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

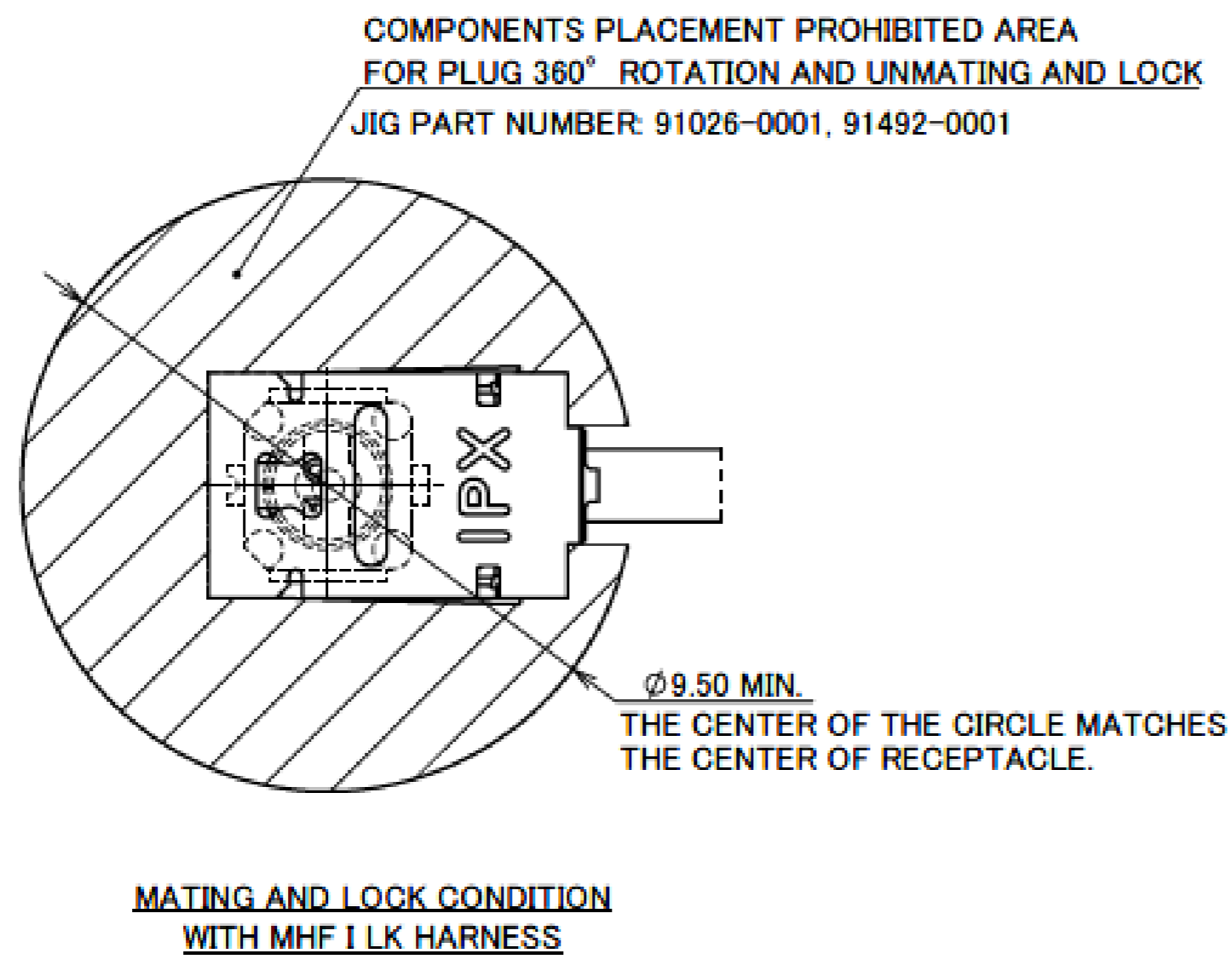
- NOTES.**
- NO GROUND, SIGNAL, OR RESIST ALLOWED IN THIS AREA.

Rev.7

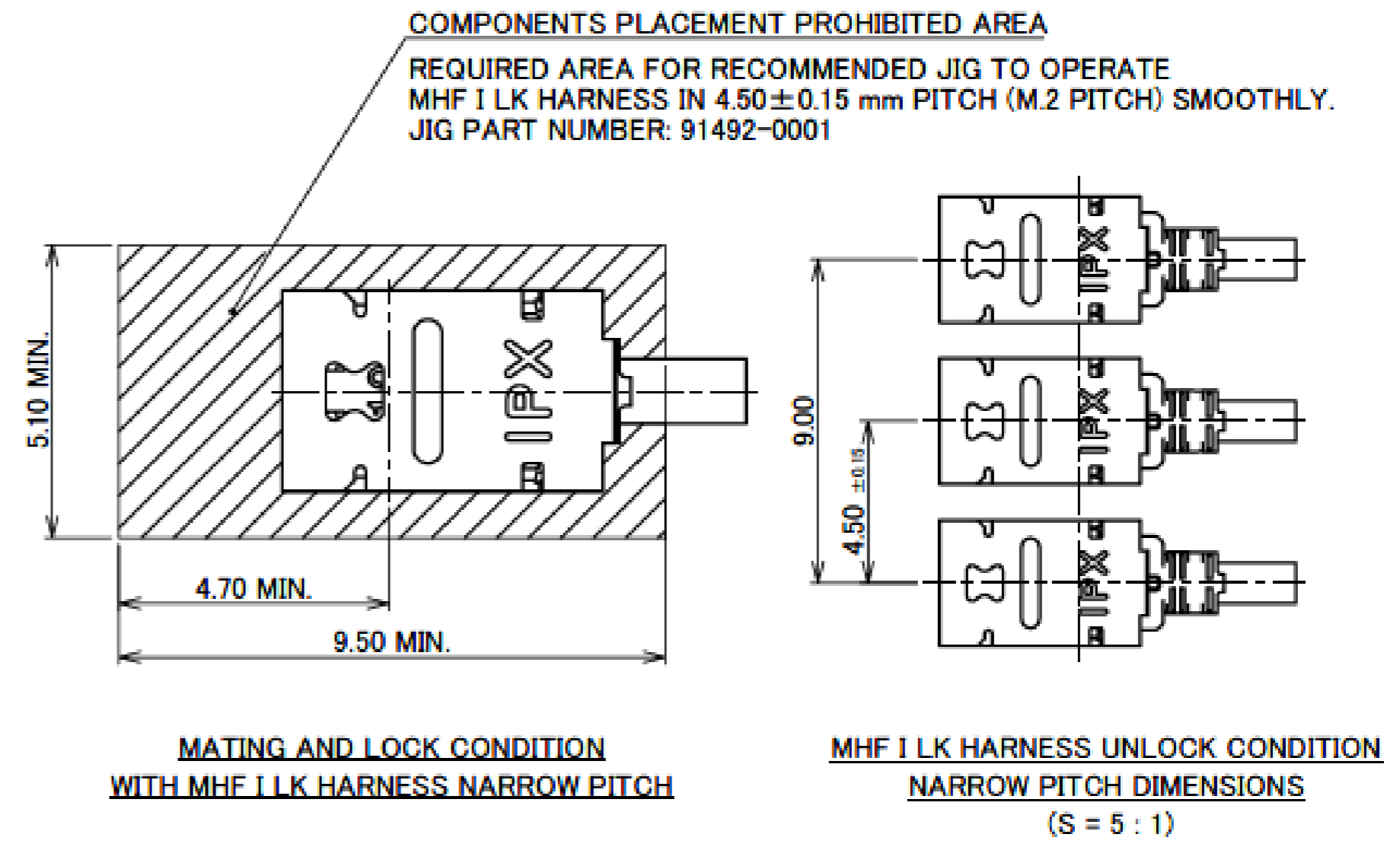
MHF® I Receptacle (4pads/Natural color HSG)

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

SINGLE CONNECTOR LAYOUT



MULTIPLE CONNECTORS LAYOUT

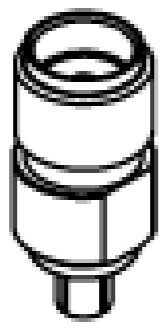


Rev.7

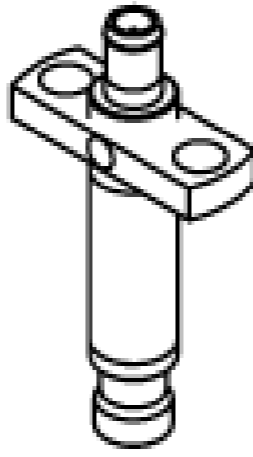
ITEMS	SPECIFICATION			
RECOMMENDED APPLICABLE CONNECTOR PART NO.	20278-112R-** (MHF I PLUG 1.80, 1.32, 1.13, 0.81)	20351-112R-37 (MHF I PLUG 1.37)	20670-001R-** (MHF I PLUG Ni TOP 1.80, 1.37, 1.32, 1.13, 0.81)	20767-001R-20 (MHF I PLUG 2.00)
RATING VOLTAGE	60 V AC (R.M.S)			
RATING FREQUENCY	DC TO 9GHz			
OPERATING TEMPERATURE	233 TO 363K (-40°C TO +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.			
PRODUCT SPECIFICATION	PRS-1676	PRS-1726	PRS-2105	PRS-2490
TEST REPORT	TR-12044	TR-12096	TR-15059	TR-18041
PACKING STANDARD	PST-17011			
INSTRUCTION MANUAL	HIM-10002			HIM-17017
APPEARANCE CRITERIA No.	QLS-A***			

Rev.7

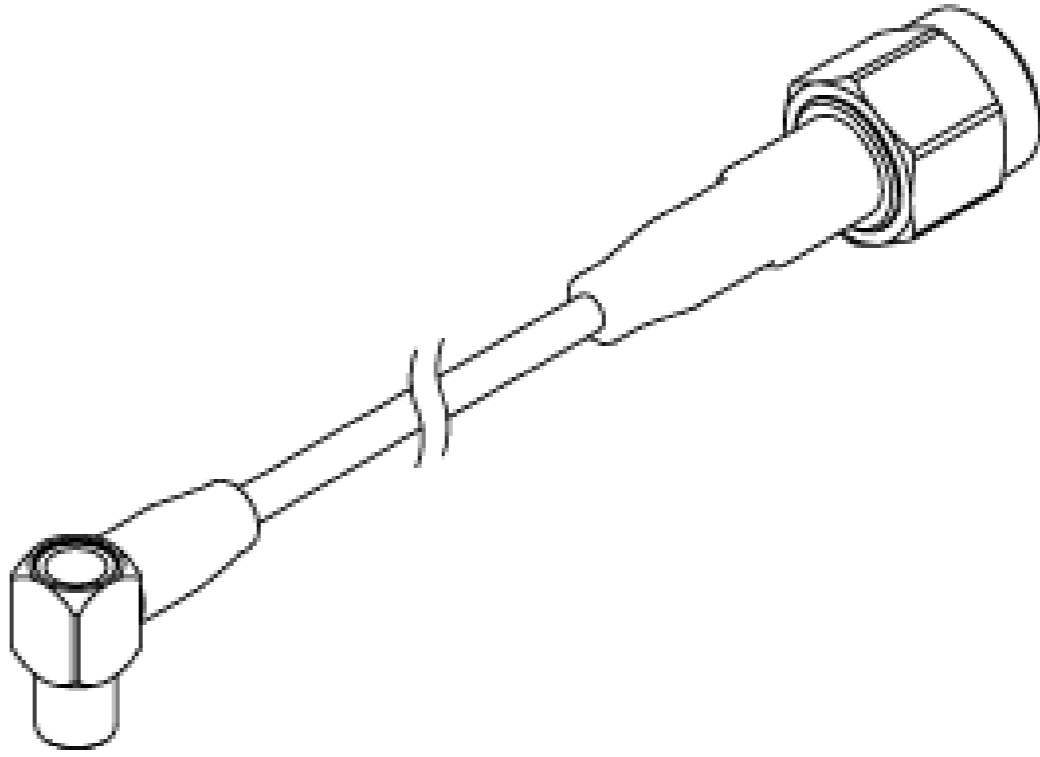
Accessories for MHF® I Receptacle



MHF I SMA ADAPTER
PART NO. 90193-002



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



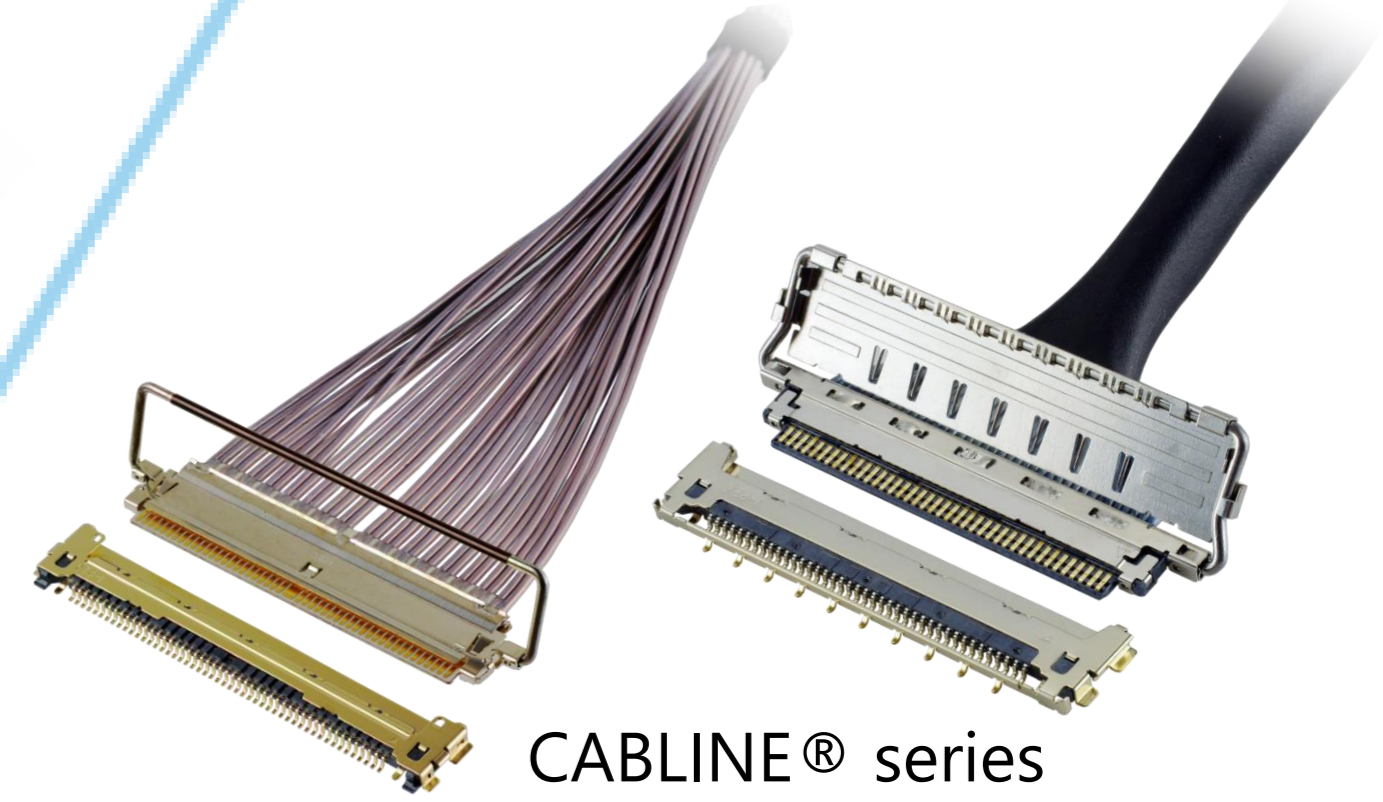
MHF SERIES N45 C TO SMA ADAPTER CABLE
PART NO. 90577-****

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

Custom Connectors Available

RF Connectors

MHF® series



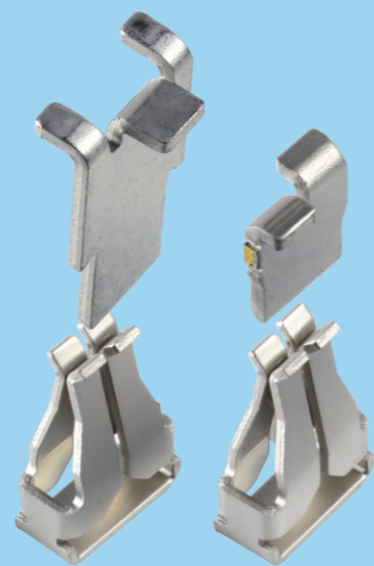
CABLINE® series

Micro-Coaxial/Twinaxial Connectors

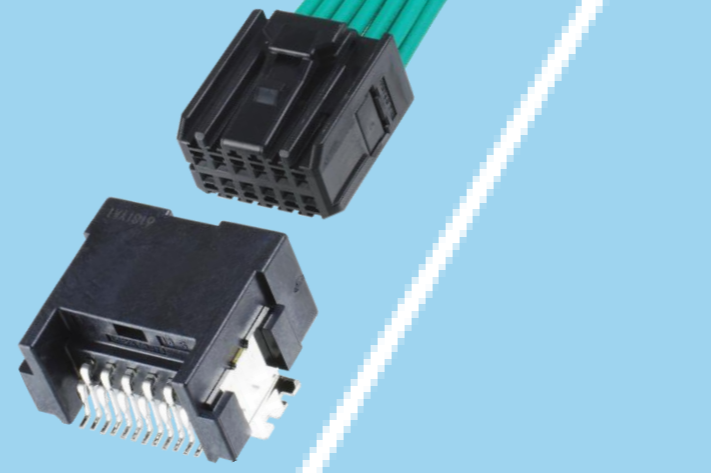


Wire-to-Board Connectors/Terminals

AP series



ISH® series



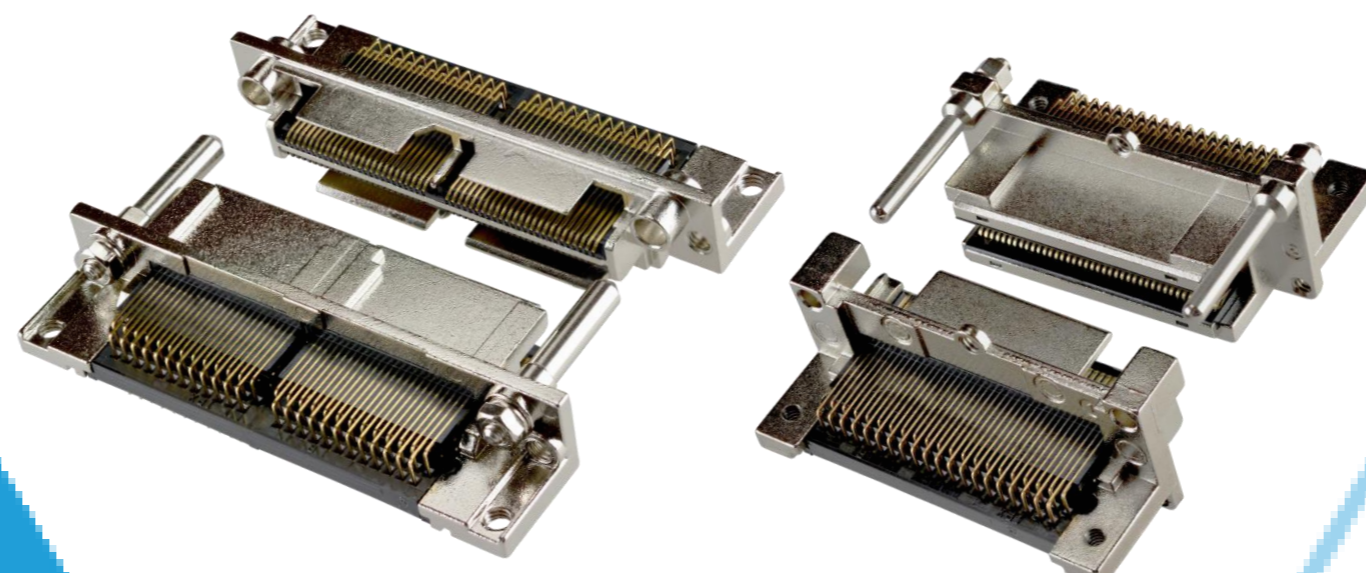
NOVASTACK® series



Board-to-Board Connectors

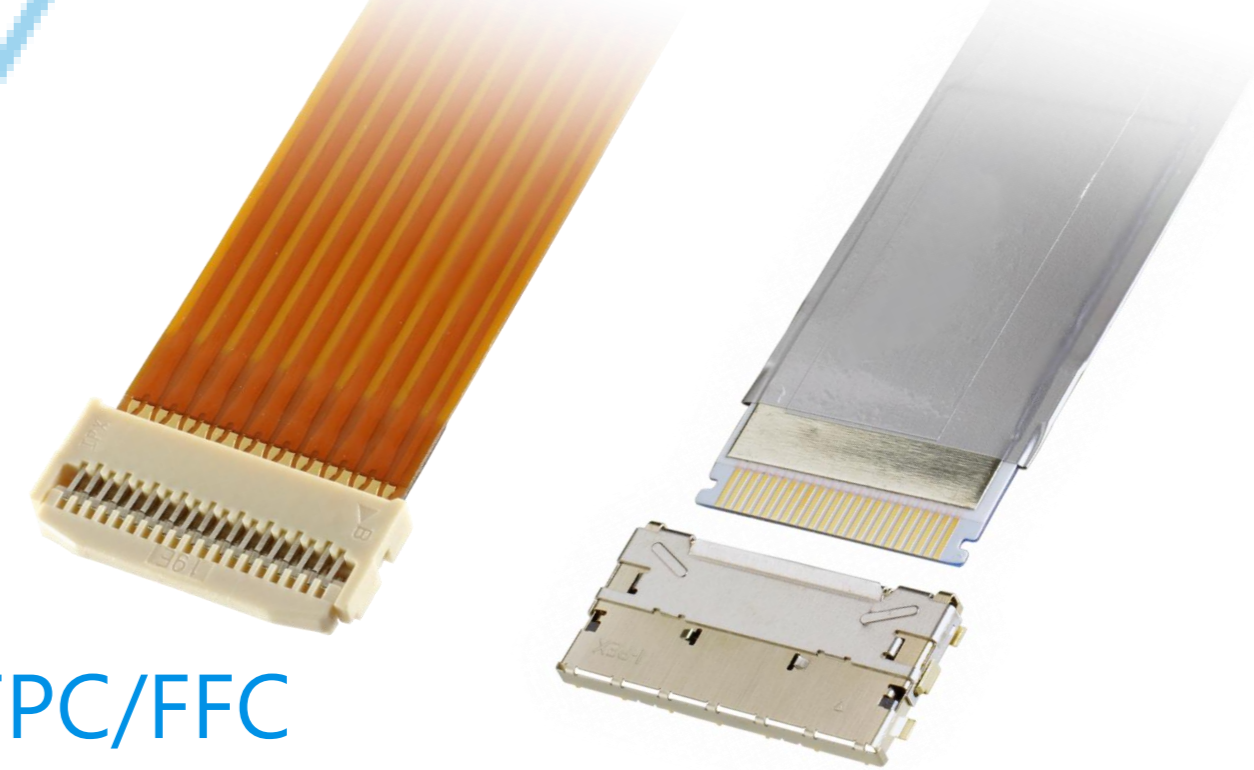


I/O Connectors



MINIDOCK™ series

MINIFLEX® series EVAFLEX® series



FPC/FFC Connectors



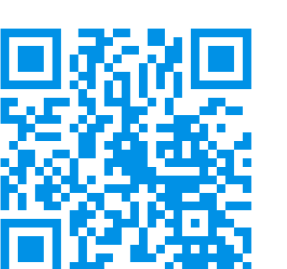
Inquiry



I-PEX, MHF, CABLINE, NOVASTACK, ISH, IARPB, MINIFLEX, EVAFLEX, MINIDOCK, i-Fit and ZenShield are registered trademarks of I-PEX Inc. Please note that the contents in the catalog might be changed without prior notification. I-PEX Inc. assumes no responsibility for any inaccuracies or obligation to update Information on these documents. Please be sure to read and understand the latest "Precautions for Use" and "Instruction Manual" before you use our products. We shall not be responsible for any defects, damages or troubles in case you use our products without following the precautions for use. Please feel free to contact our sales representatives when you use our products for any applications that require very high reliability and safety, or that relate to human life (ex. nuclear power control, aerospace, transportation, medical equipment, safety equipment etc.).

Contact your sales representative or more detailed information.

www.i-pex.com



I-PEX

© I-PEX Inc. 2026
All rights reserved