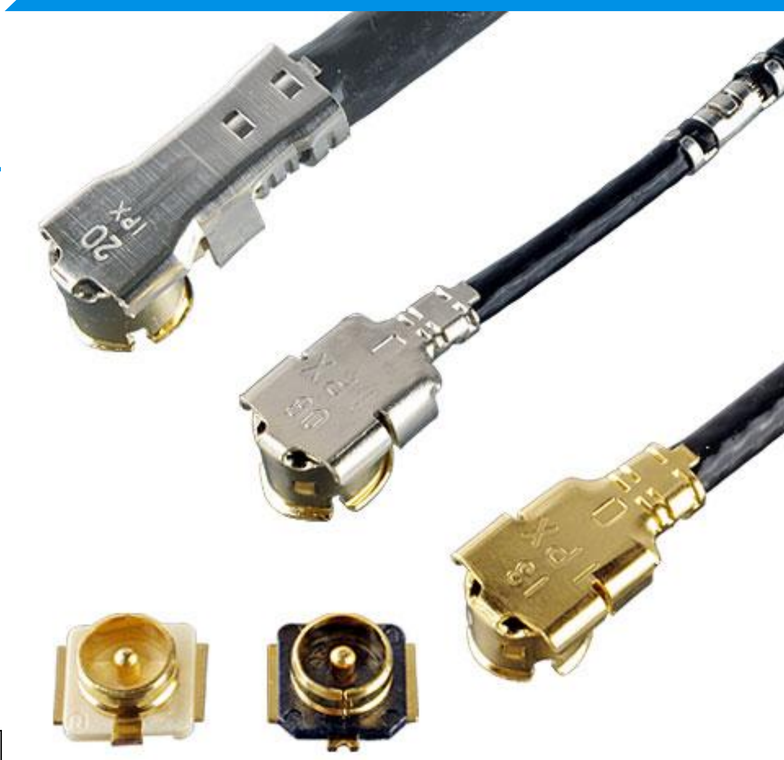
MHF® I

Reliable industry standard for RF antenna connections, up to 9 GHz, 2.5/3.0 mm max. mated height RF connector



Product Specifications:

Mated Height		(1) (2) 2.5 mm max. (3) 3.0 mm max.
Rece. SMT Size		3.1 x 3.0 mm
Frequency Range		Up to 9 GHz
Characteristic Impedance		50 ohm
VSWR (L = 100 mm)	DC to 3 GHz	1.3 max.
	3 to 6 GHz	1.5 max.
	6 to 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, 1.8 mm (2) 1.32 mm (3) 2.0 mm

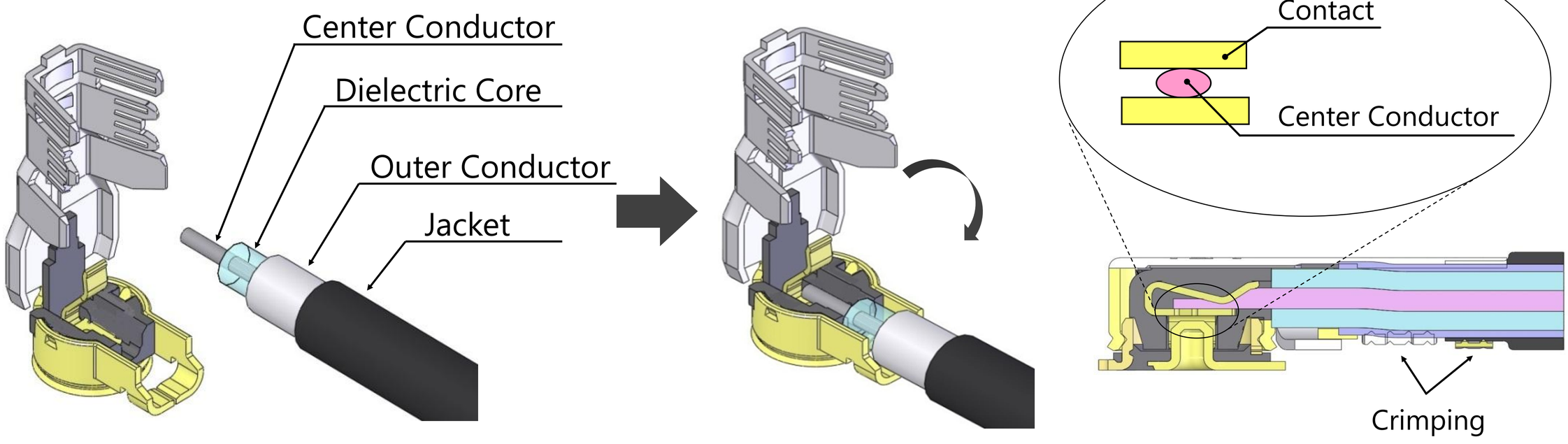
Applicable Cable Size:

20278-112R-**
AWG 30 O.D. 1.8 mm,
AWG 32 O.D. 1.32 mm, 1.13 mm,
AWG 36 O.D. 0.81 mm
20351-112R-37
AWG 30 O.D. 1.37 mm
20767-001R-20
AWG 26 O.D. 2.0 mm

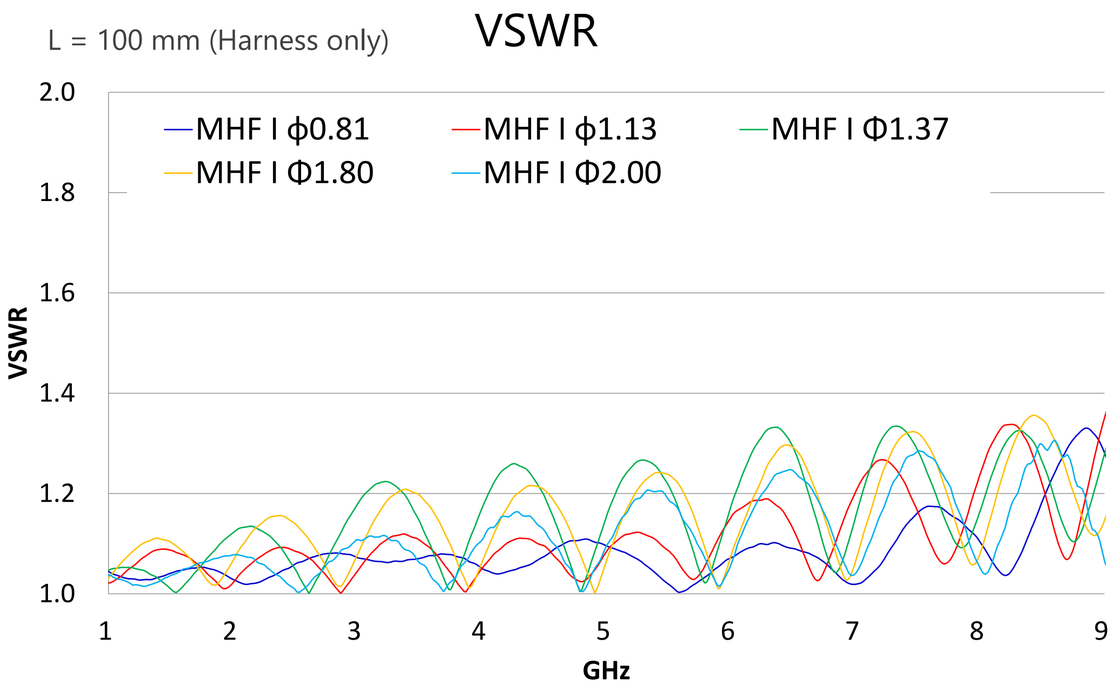
Applicable Standards (Reference Only):

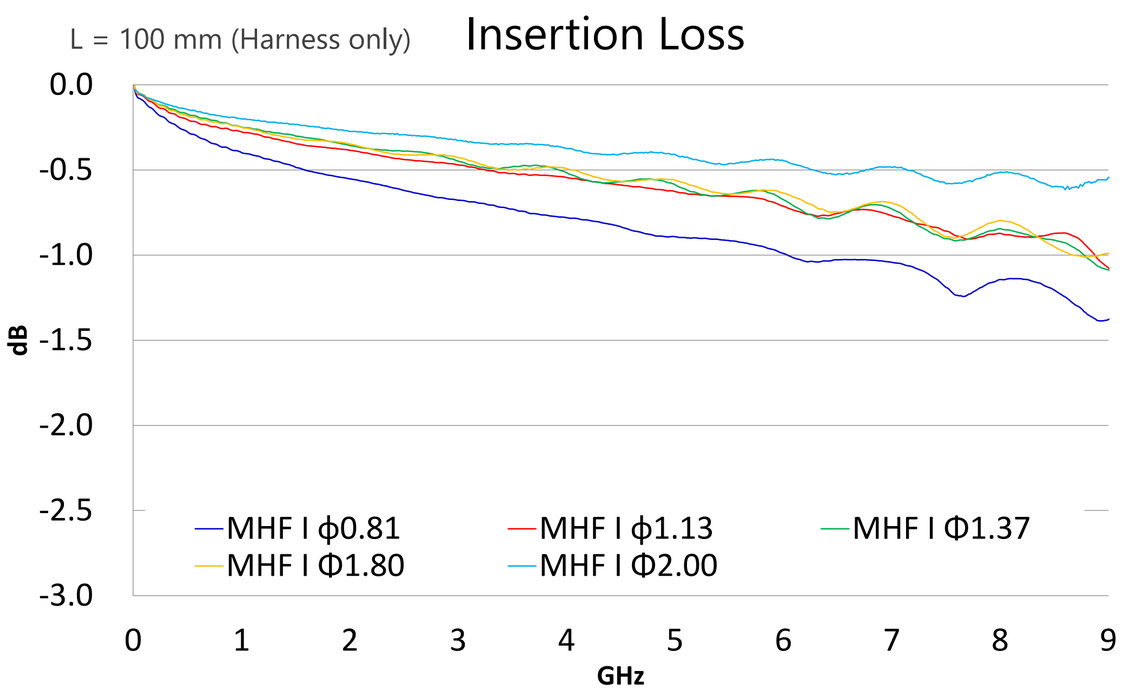
5G sub6, Wi-Fi, LTE / LTE-Advanced, LPWA, Bluetooth, GPS

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

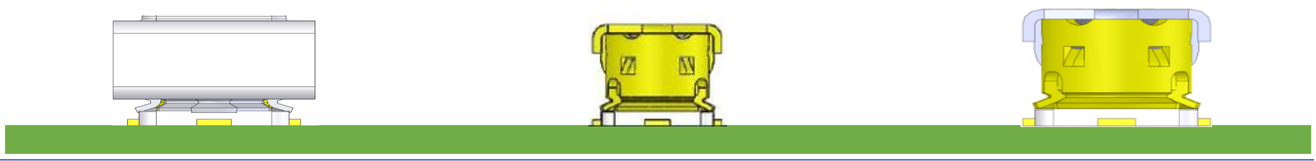


Small form factor with big performance through 9 GHz





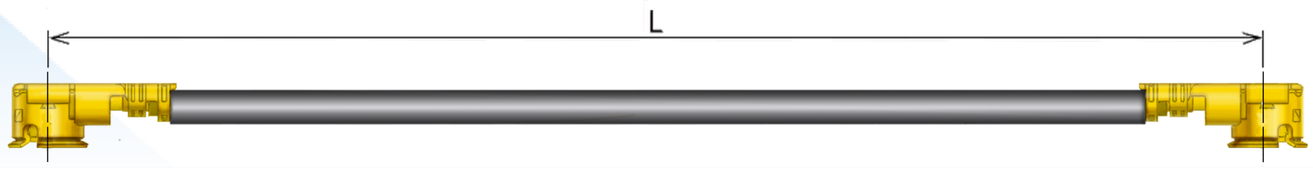
MHF® I plug available with various cable O.D. and additional locking option



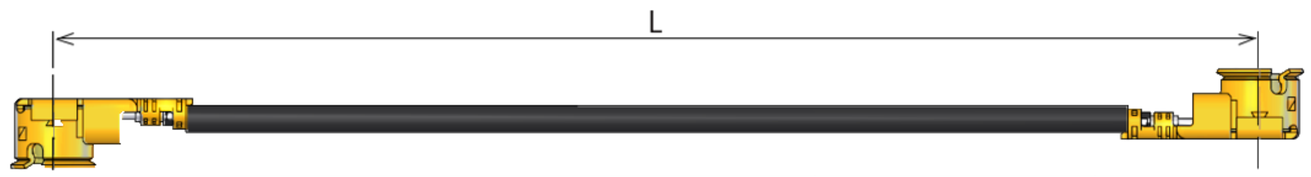
Product name		MHF® I LK	MHF® I	MHF® I
Lock		With Lock	Without Lock	Without Lock
Mating Height		2.9 mm max.	2.5 mm max.	3.0 mm max.
Coaxial O.D. (Center Conductor AWG)	2.00 mm (AWG 26)			●
	1.80 mm (AWG 30)	●	●	
	1.37 mm (AWG 30)	●	●	
	1.32 mm (AWG 32)	●	●	
	1.13 mm (AWG 32)	●	●	
	0.81 mm (AWG 36)	●	●	
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.



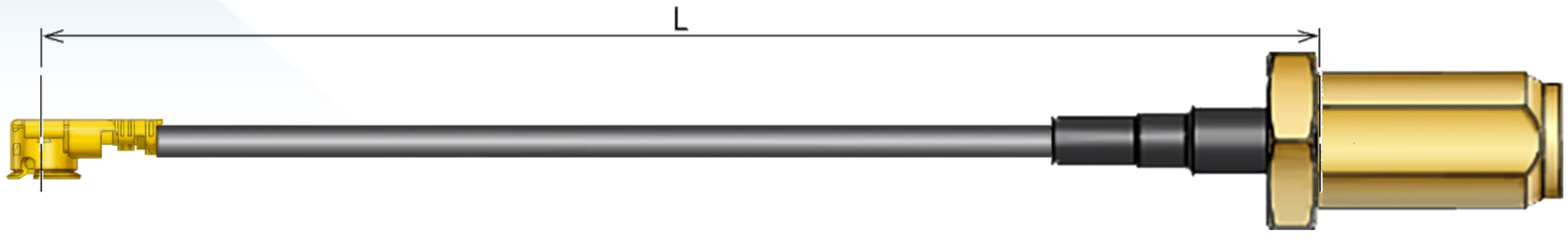
Part Number Description	Part Number	Sample available
MHF I-I harness OD=0.81mm L=100mm	8-25-0819	Buy from Digikey
MHF I-I harness OD=0.81mm L=200mm	8-25-0820	Buy from Digikey
MHF I-I harness OD=0.81mm L=300mm	8-25-0821	Buy from Digikey
MHF I-I harness OD=0.81mm L=400mm	8-25-0822	Buy from Digikey
MHF I-I harness OD=0.81mm L=500mm	8-25-0823	Buy from Digikey
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=300mm	8-25-1005	Buy from Digikey
MHF I-I harness OD=1.13mm L=400mm	8-25-1006	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	Buy from Digikey
MHF I-I harness OD=1.32mm L=200mm	8-25-0815	Buy from Digikey
MHF I-I harness OD=1.32mm L=300mm	8-25-0816	Buy from Digikey
MHF I-I harness OD=1.32mm L=400mm	8-25-0817	Buy from Digikey
MHF I-I harness OD=1.32mm L=500mm	8-25-0818	Buy from Digikey
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=300mm	8-26-0040	Buy from Digikey
MHF I-I harness OD=1.37mm L=400mm	8-26-0041	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	Buy from Digikey
MHF I-I harness OD=1.80mm L=200mm	8-25-0859	Buy from Digikey
MHF I-I harness OD=1.80mm L=300mm	8-25-0860	Buy from Digikey
MHF I-I harness OD=1.80mm L=400mm	8-25-0861	Buy from Digikey
MHF I-I harness OD=1.80mm L=500mm	8-25-0862	Buy from Digikey
MHF I-I harness OD=2.0mm L=100mm	8-26-0082	Contact us
MHF I-I harness OD=2.0mm L=200mm	8-26-0083	Contact us
MHF I-I harness OD=2.0mm L=300mm	8-26-0084	Contact us
MHF I-I harness OD=2.0mm L=400mm	8-26-0085	Contact us
MHF I-I harness OD=2.0mm L=500mm	8-26-0086	Contact us



Part Number Description	Part Number	Sample available
MHF I-I harness OD=0.81mm L=100mm 180 degree orientation	8-25-0832	Buy from Digikey
MHF I-I harness OD=0.81mm L=200mm 180 degree orientation	8-25-0833	Buy from Digikey
MHF I-I harness OD=0.81mm L=300mm 180 degree orientation	8-25-0834	Buy from Digikey
MHF I-I harness OD=0.81mm L=400mm 180 degree orientation	8-25-0835	Buy from Digikey
MHF I-I harness OD=0.81mm L=500mm 180 degree orientation	8-25-0836	Buy from Digikey
MHF I-I harness OD=1.13mm L=50mm 180 degree orientation	8-25-0826	Buy from Digikey
MHF I-I harness OD=1.13mm L=100mm 180 degree orientation	8-25-0827	Buy from Digikey
MHF I-I harness OD=1.13mm L=200mm 180 degree orientation	8-25-0828	Buy from Digikey
MHF I-I harness OD=1.13mm L=300mm 180 degree orientation	8-25-0829	Buy from Digikey
MHF I-I harness OD=1.13mm L=400mm 180 degree orientation	8-25-0830	Buy from Digikey
MHF I-I harness OD=1.13mm L=500mm 180 degree orientation	8-25-0831	Buy from Digikey
MHF I-I harness OD=1.32mm L=100mm 180 degree orientation	8-25-0837	Buy from Digikey
MHF I-I harness OD=1.32mm L=200mm 180 degree orientation	8-25-0838	Buy from Digikey
MHF I-I harness OD=1.32mm L=300mm 180 degree orientation	8-25-0839	Buy from Digikey
MHF I-I harness OD=1.32mm L=400mm 180 degree orientation	8-25-0840	Buy from Digikey
MHF I-I harness OD=1.32mm L=500mm 180 degree orientation	8-25-0841	Buy from Digikey
MHF I-I harness OD=1.37mm L=50mm 180 degree orientation	8-25-0844	Buy from Digikey
MHF I-I harness OD=1.37mm L=100mm 180 degree orientation	8-25-0845	Buy from Digikey
MHF I-I harness OD=1.37mm L=200mm 180 degree orientation	8-25-0846	Buy from Digikey
MHF I-I harness OD=1.37mm L=300mm 180 degree orientation	8-25-0847	Buy from Digikey
MHF I-I harness OD=1.37mm L=400mm 180 degree orientation	8-25-0848	Buy from Digikey
MHF I-I harness OD=1.37mm L=500mm 180 degree orientation	8-25-0849	Buy from Digikey
MHF I-I harness OD=1.80mm L=100mm 180 degree orientation	8-25-0853	Buy from Digikey
MHF I-I harness OD=1.80mm L=200mm 180 degree orientation	8-25-0854	Buy from Digikey
MHF I-I harness OD=1.80mm L=300mm 180 degree orientation	8-25-0855	Buy from Digikey
MHF I-I harness OD=1.80mm L=400mm 180 degree orientation	8-25-0856	Buy from Digikey
MHF I-I harness OD=1.80mm L=500mm 180 degree orientation	8-25-0857	Buy from Digikey
MHF I-I harness OD=2.0mm L=100mm 180 degree orientation	8-26-0087	Contact us
MHF I-I harness OD=2.0mm L=200mm 180 degree orientation	8-26-0088	Contact us
MHF I-I harness OD=2.0mm L=300mm 180 degree orientation	8-26-0089	Contact us
MHF I-I harness OD=2.0mm L=400mm 180 degree orientation	8-26-0090	Contact us
MHF I-I harness OD=2.0mm L=500mm 180 degree orientation	8-26-0091	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.



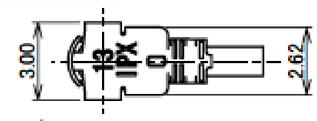
Part Number Description	Part Number (Link to Drawing)	Sample available
MHF I-SMA Jack harness OD=1.13mm L=100mm	8-25-0046	Buy from Digikey
MHF I-SMA Jack harness OD=1.13mm L=150mm	8-25-0047	Buy from Digikey
MHF I-SMA Jack harness OD=1.13mm L=200mm	8-25-0048	Buy from Digikey
MHF I-SMA Jack harness OD=1.37mm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

Component Parts Details

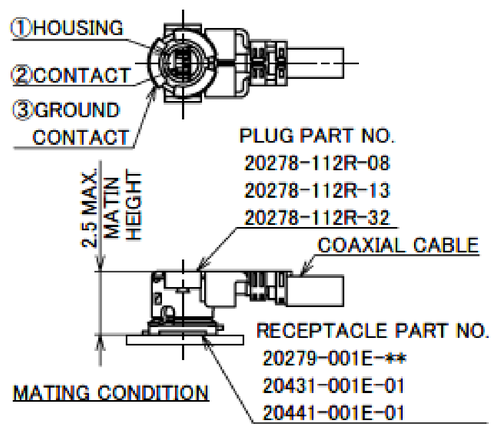
MHF® I plug Au (0.81,1.13,1.32,1.80)

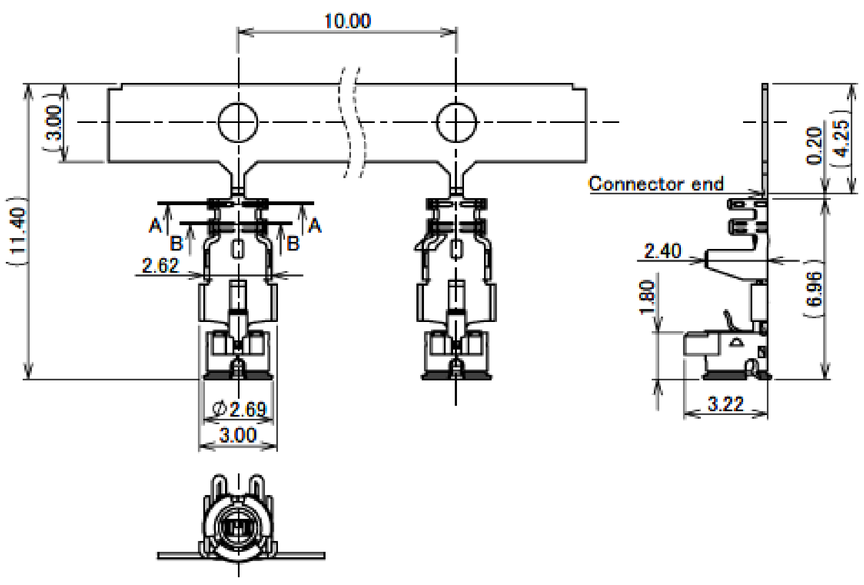
Recommended P/N	20278-112R-**

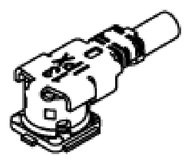
PART No.	APPLICABLE CABLE
20278-112R-08	AWG#36 (0.81 O.D.)
20278-112R-13	AWG#32 (1.13 O.D.)
20278-112R-32	AWG#32 (1.32 O.D.)









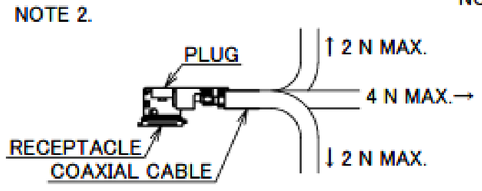


Halogen Free

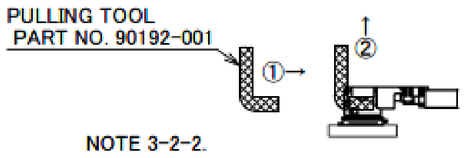
RoHS Compliant

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

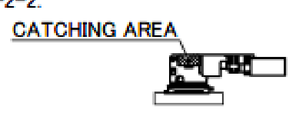
NOTE 2.



NOTE 3-2-1.



NOTE 3-2-2.

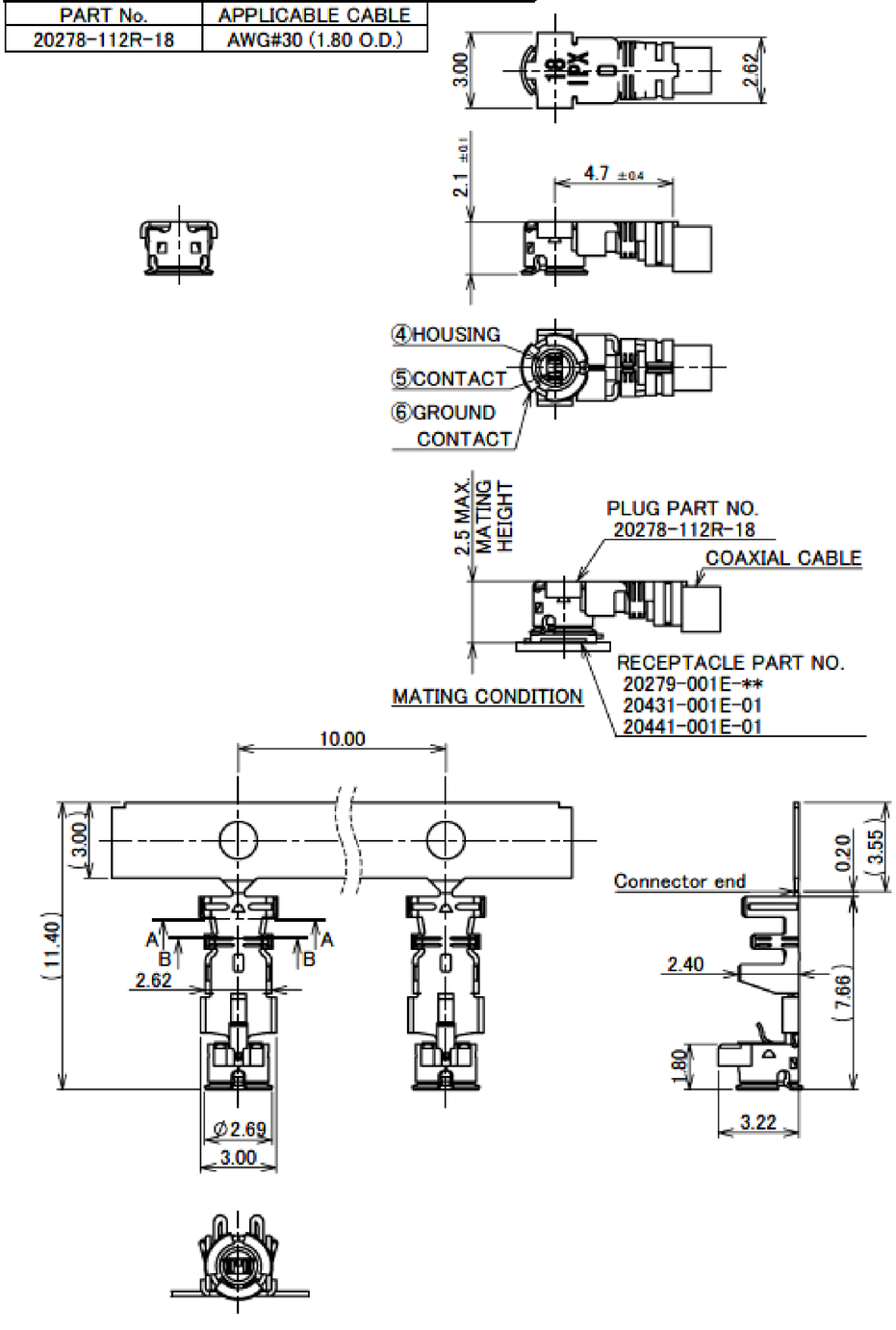


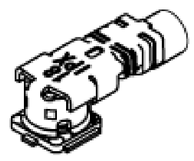
NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.05 μm MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.10 μm MIN.
1	HOUSING	PBT	UL94V-0, 20278-112R-08: WHITE 20278-112R-13, -32: BLACK

Rev.33

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.)



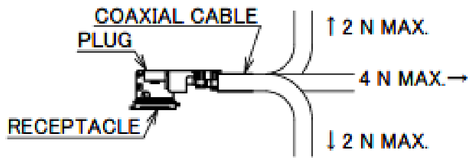


Halogen Free

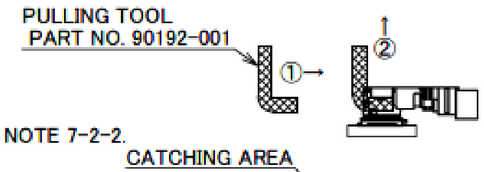
RoHS Compliant

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)
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PLEASE BE CAREFUL NOT TO MELT HOUSING WHEN USING HEAT SHRINKAGE TUBES. IT WILL BECOME CAUSE OPEN CIRCUIT.
8. THIS IS "Pb-FREE" CONNECTOR.

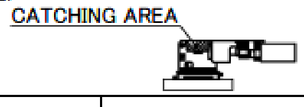
NOTE 6.



NOTE 7-2-1.



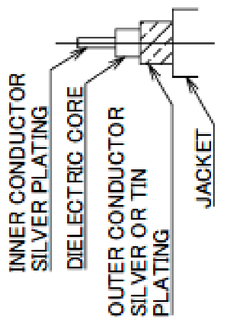
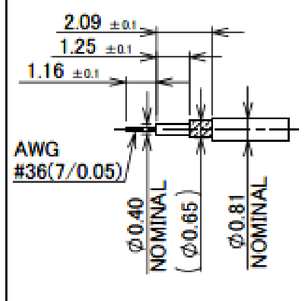
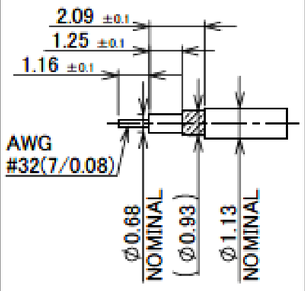
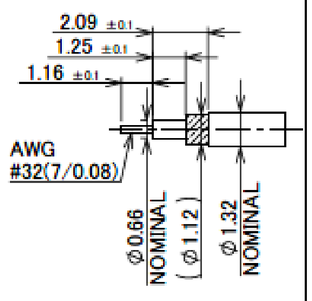
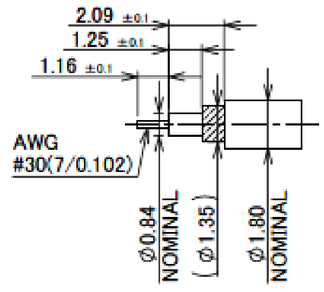
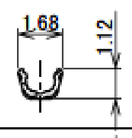
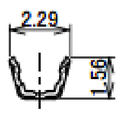
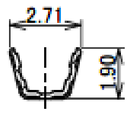
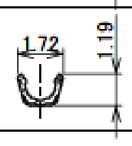
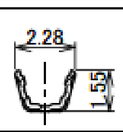
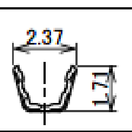
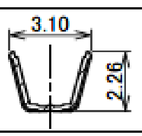
NOTE 7-2-2.



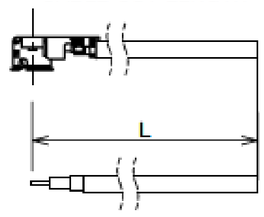
NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS
6	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00μm MIN. CONTACT PART Au 0.05μm MIN.
5	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00μm MIN. CONTACT PART Au 0.10μm MIN.
4	HOUSING	PBT	UL94V-0, WHITE

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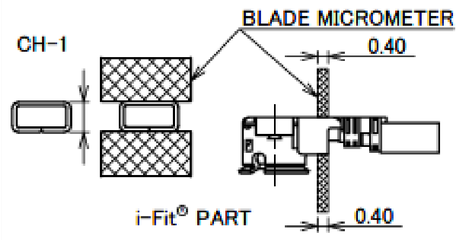
Recommended P/N	20278-112R-**

PART NO.		20278-112R-08	20278-112R-13	20278-112R-32	20278-112R-18
APPLICABLE CABLE NOMINAL DIMENSION			 *SEE NOTE 9.			
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					
SECT. A-A					
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

CABLE CUT LENGTH



CRIMP HEIGHT



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

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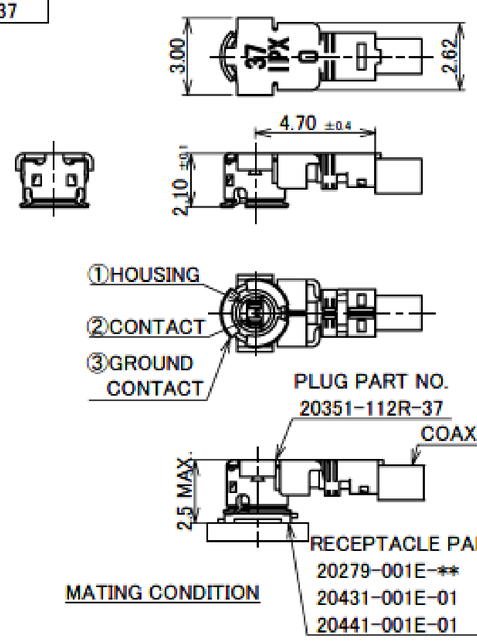
MHF® I plug Au (0.81,1.13,1.32,1.80)

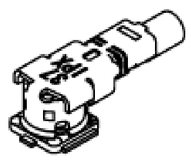
ITEMS	SPECIFICATION	
RECOMMENDED APPLICABLE CONNECTOR PART No.	20279-001E-**	20441-001E-01
RATING VOLTAGE	60 V AC (R.M.S)	
RATING FREQUENCY	DC～9GHz	
OPERATING TEMPERATURE	233～363 K (-40℃～+90℃)	
VSWR (MATED WITH SMA ADAPTER PART No.90193-001)	1.30 MAX. AT 0.1～3 GHz, 1.50 MAX. AT 3～6 GHz, 1.90 MAX. AT 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	

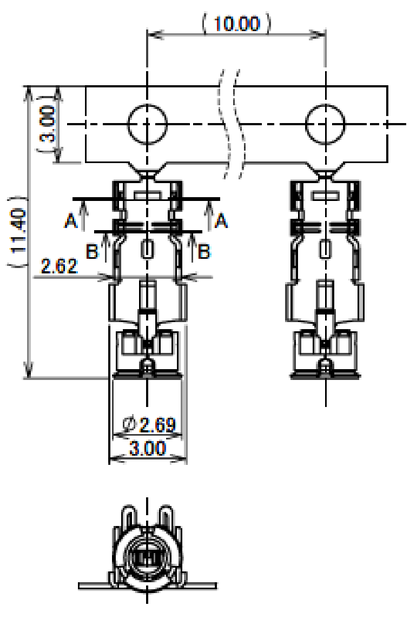


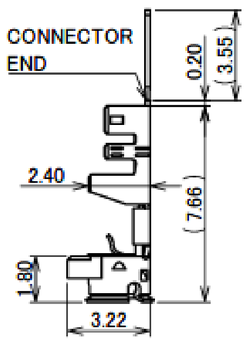


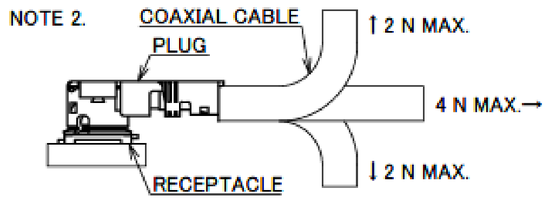
HF Halogen Free

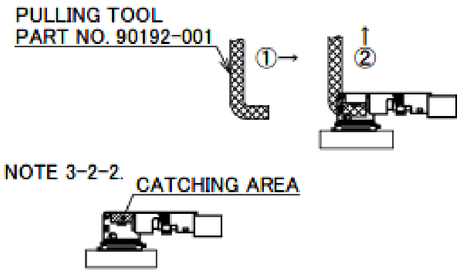
RoHS Compliant

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





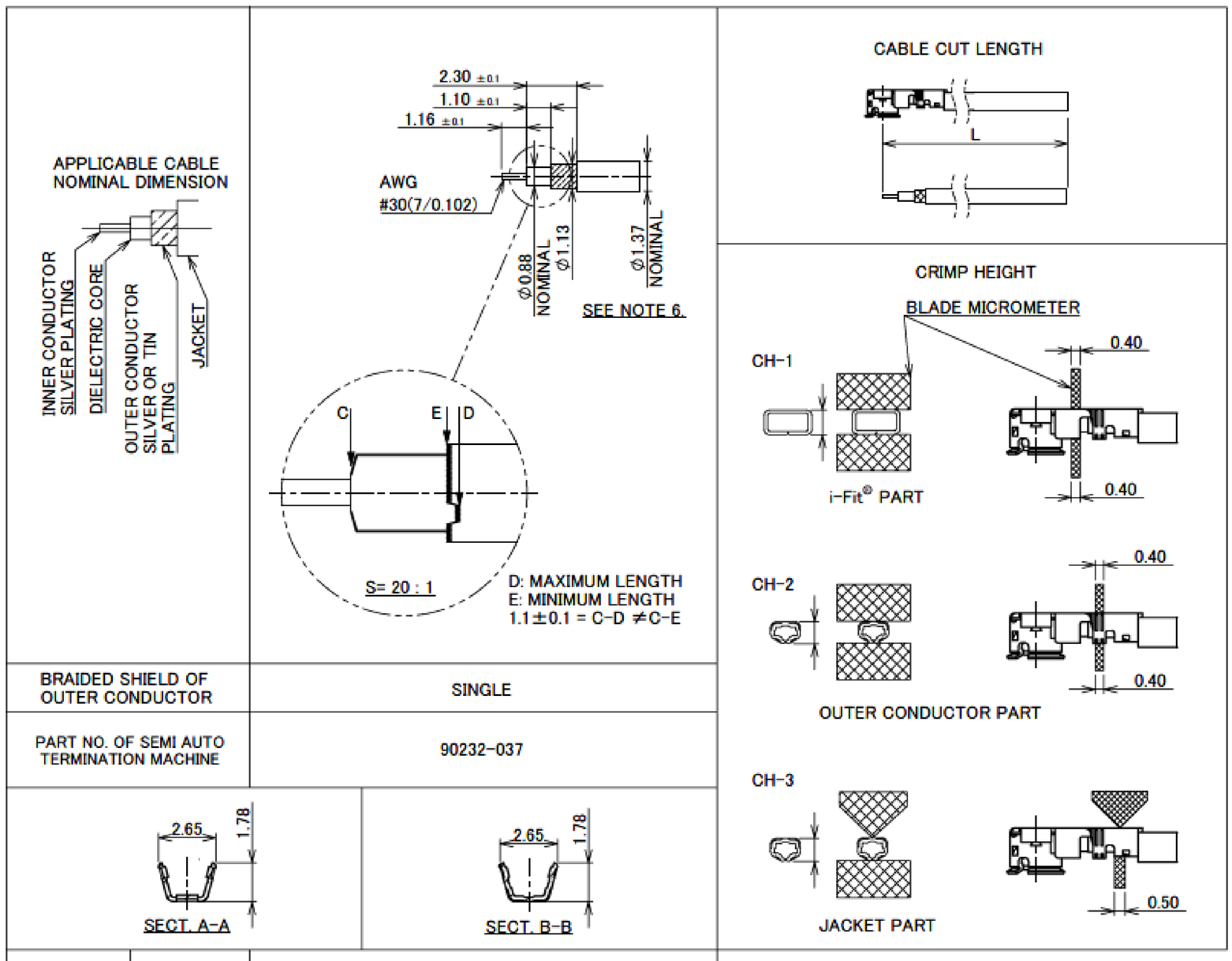




NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00μm MIN. CONTACT PART Au 0.05μm MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00μm MIN. CONTACT PART Au 0.10μm MIN.
1	HOUSING	PBT	UL94V-0, WHITE

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MHF® I plug Au (1.37)



BRAIDED SHIELD OF OUTER CONDUCTOR	SINGLE	
PART NO. OF SEMI AUTO TERMINATION MACHINE	90232-037	
CRIMP HEIGHT	CH-1	1.34～1.40
	CH-2	1.36～1.42
	CH-3	1.28～1.34

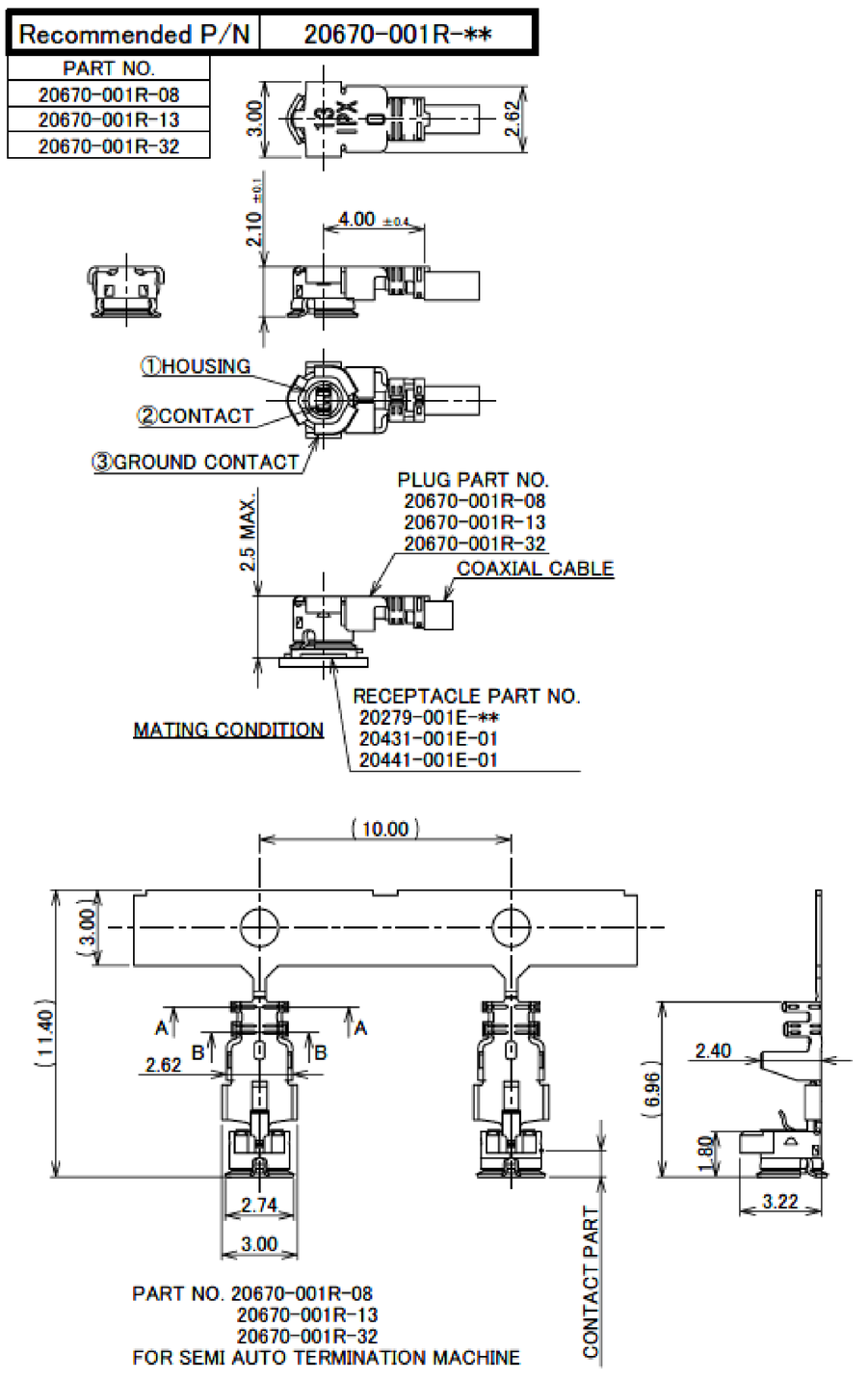
NOTE 6. DO NOT USE SOLDER COATED EITHER INNER OR OUTER CONDUCTOR CABLE.

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***	

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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	



PART NO. 20670-001R-08
20670-001R-13
20670-001R-32
FOR SEMI AUTO TERMINATION MACHINE

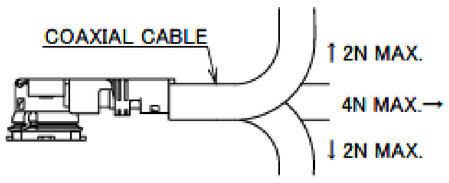


HF Halogen Free

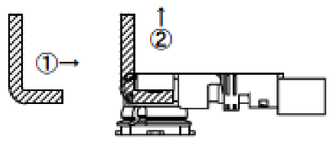
RoHS Compliant

NOTES
1. APPLICABLE CONNECTOR:
   20279-001E-**
   20431-001E-01
   20441-001E-01
2. PERMISSIBLE LOAD OF CABLE AT MATING
3. MATING AND UNMATING INSTRUCTION
3-1. MATING
   MAKE THE CONNECTOR VERTICALY AS MUCH AS POSSIBLE, ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE.
3-2. UNMATING
3-2-1. 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.
3-2-2. IN CASE OF UNMATING DIRECTLY BY HAND: CATCH THE CATCHING AREA OF PLUG, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
3-3. 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)
3-4. CAUTION ABOUT HEAT SHRINKAGE TUBES
   PLEASE BE CAREFUL NOT TO MELT HOUSING WHEN USING HEAT SHRINKAGE TUBES.
   IT WILL CAUSE OPEN CIRCUIT.
4. THIS IS "Pb-FREE" CONNECTOR.

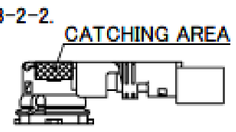
NOTE 2.



NOTE 3-2-1.



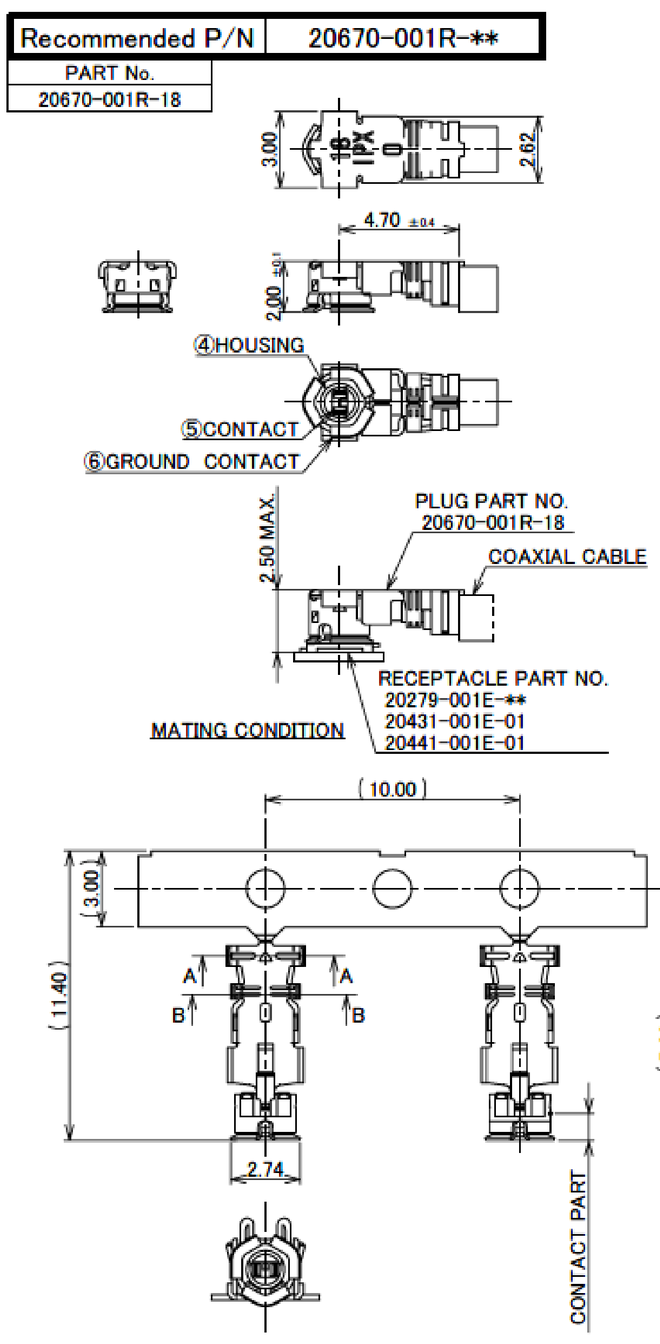
NOTE 3-2-2.



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

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



PART NO. 20670-001R-18
FOR SEMI AUTO TERMINATION MACHINE

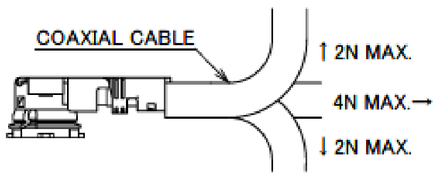


HF Halogen Free

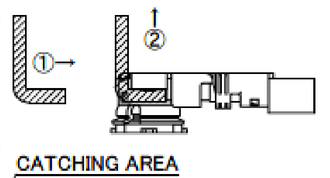
RoHS Compliant

NOTES
5. APPLICABLE CONNECTOR:
   20279-001E-**
   20431-001E-01
   20441-001E-01
6. PERMISSIBLE LOAD OF CABLE AT MATING
7. MATING AND UNMATING INSTRUCTION
7-1. MATING
   MAKE THE CONNECTOR VERTICALY AS MUCH AS POSSIBLE, ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE.
7-2. UNMATING
7-2-1. 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.
7-2-2. IN CASE OF UNMATING DIRECTLY BY HAND: CATCH THE CATCHING AREA OF PLUG, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
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 CAUSE OPEN CIRCUIT.
8. THIS IS "Pb-FREE" CONNECTOR.

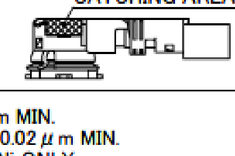
NOTE 6.



NOTE 7-2-1.



NOTE 7-2-2.



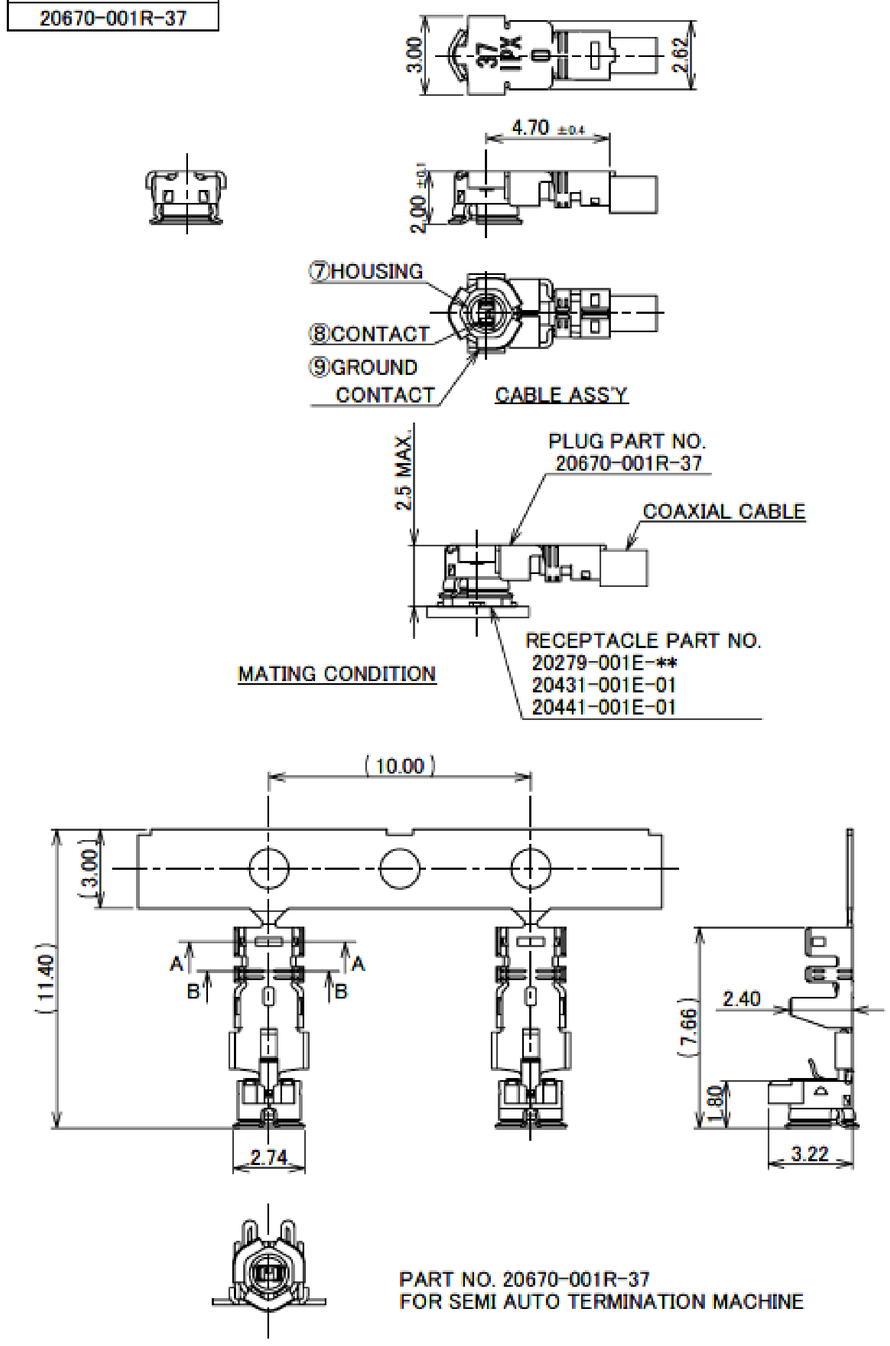
NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS
6	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.02 μm MIN. [Ni PLATING AREA] Ni ONLY
5	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.03 μm MIN.
4	HOUSING	PBT	UL94V-0, BLACK

Rev.8

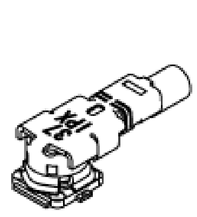
MHF® I plug Ni top (0.81,1.13,1.32,1.37,1.80)

Recommended P/N	20670-001R-**

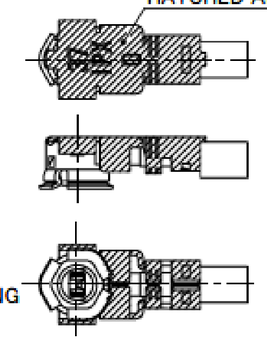
PART No.
20670-001R-37



PART NO. 20670-001R-37
FOR SEMI AUTO TERMINATION MACHINE



HATCHED AREA: Ni PLATING AREA

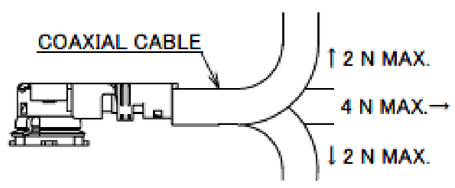


Halogen Free

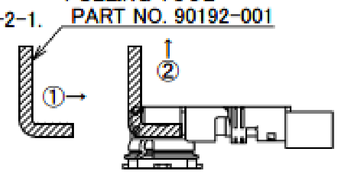
RoHS Compliant

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 VERTICALY 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.

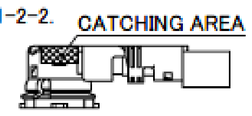
NOTE 10.



NOTE 11-2-1.



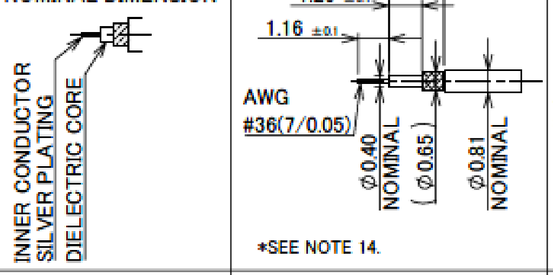
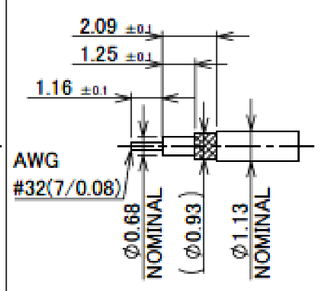
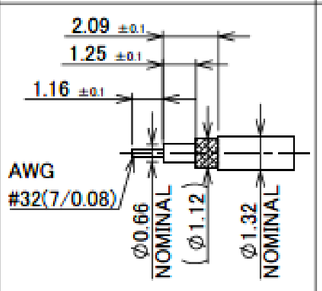
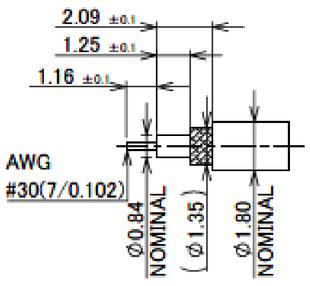
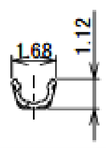
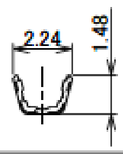
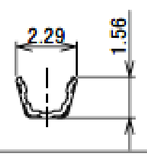
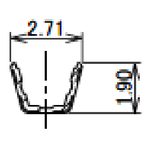
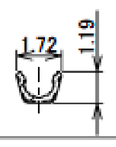
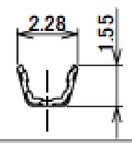
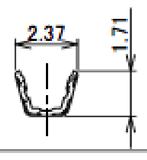
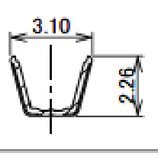
NOTE 11-2-2.



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

Rev.8

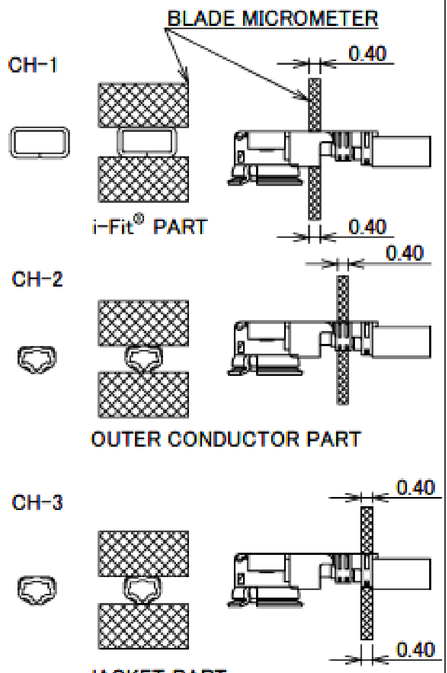
Recommended P/N	20670-001R-**

PART NO.		20670-001R-08	20670-001R-13	20670-001R-32	20670-001R-18
APPLICABLE CABLE NOMINAL DIMENSION		 *SEE NOTE 14.	 *SEE NOTE 14.	 *SEE NOTE 14.	 *SEE NOTE 14.
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					
SECT. A-A					
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

CABLE CUT LENGTH



CRIMP HEIGHT

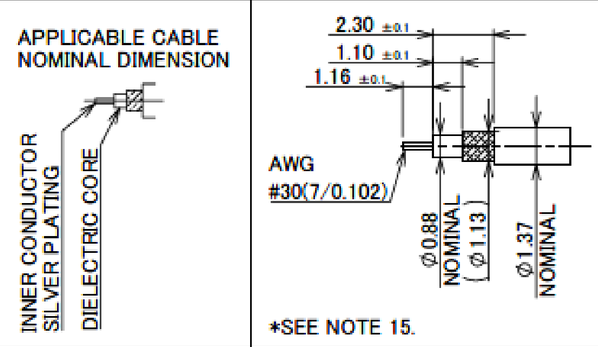
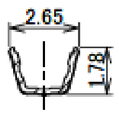
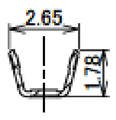


NOTE
13. MUST NOT USE SOLDER COATED INNER CONDUCTOR AND OUTER CONDUCTOR.

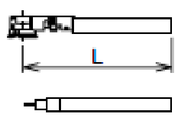
Rev.8

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

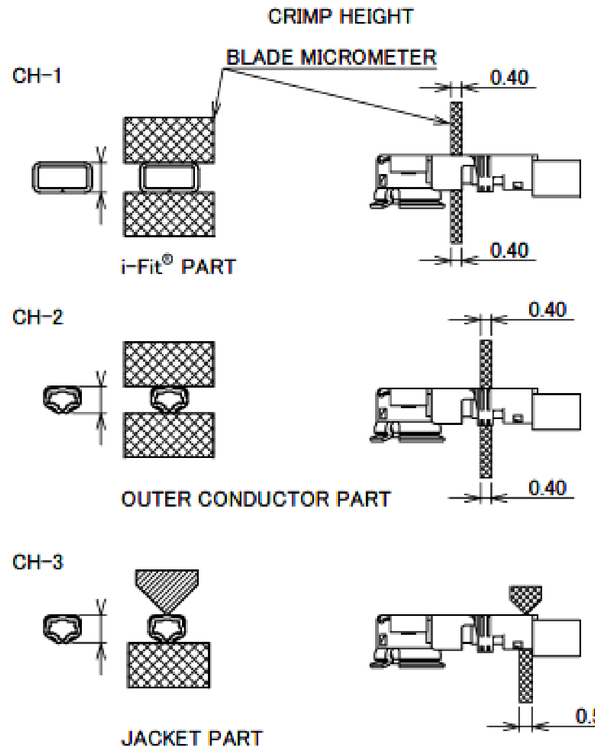
Recommended P/N	20670-001R-**

PART NO.		20670-001R-37
APPLICABLE CABLE NOMINAL DIMENSION		
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

CABLE CUT LENGTH



CRIMP HEIGHT



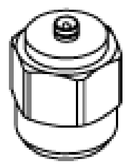
NOTE
14. MUST NOT USE SOLDER COATED INNER CONDUCTOR AND OUTER CONDUCTOR.

Rev.8

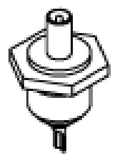
ITEMS	SPECIFICATION
RECOMMENDED APPLICABLE CONNECTOR PART No.	20279-001E-**
RATING VOLTAGE	60 V AC (R.M.S)
RATING FREQUENCY	DC～9GHz
OPERATING TEMPERATURE	233～363 K (-40℃～+90℃)
VSWR (MATED WITH SMA ADAPTER PART No:90193-001)	1.30 MAX. AT 0.1～3 GHz, 1.50 MAX. AT 3～6 GHz, 1.90 MAX. AT 6～9 GHz (0.81 O.D. / 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: ⊿R 20 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL: 20mohm 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)	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***

Rev.8

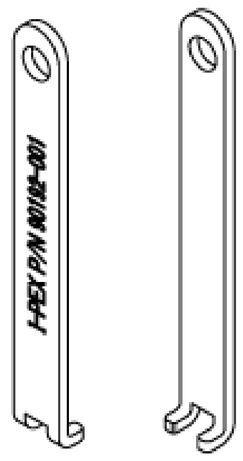
Accessories for MHF® I plug



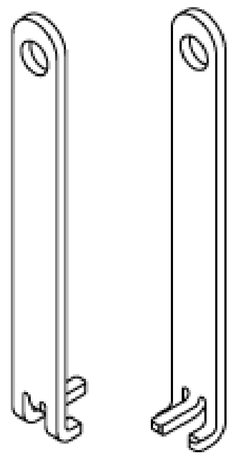
MHF I SMA ADAPTOR
PART NO. 90193-001



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

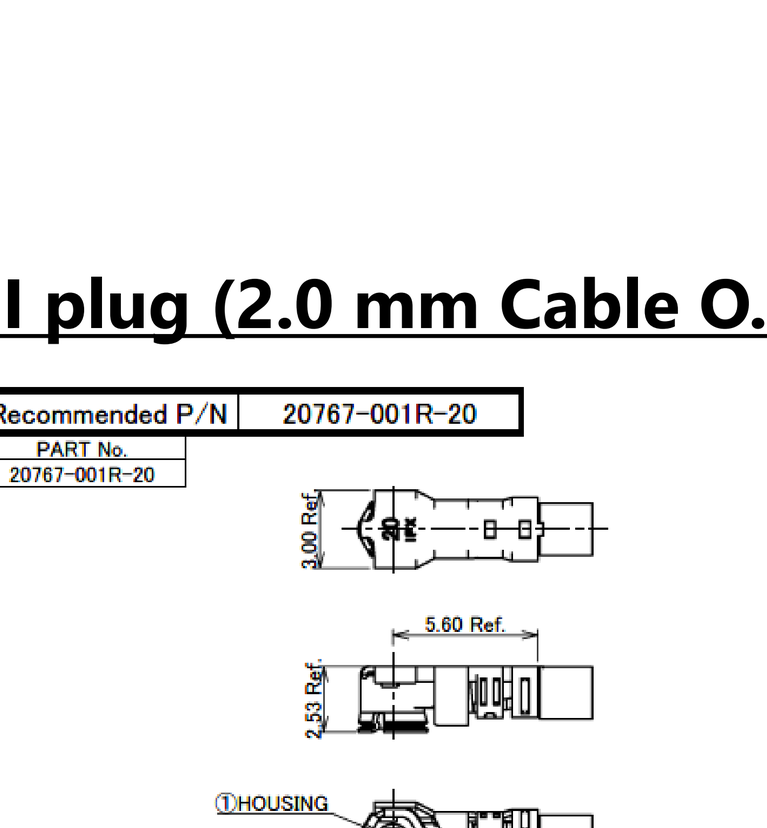
Rev.8

MHF® I plug (2.0 mm Cable O.D.)

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

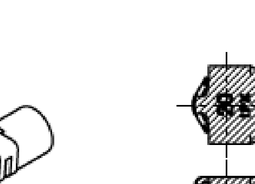
HF Halogen Free

RoHS Compliant

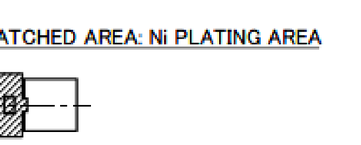


NOTES
1. APPLICABLE CONNECTOR:
20279-001E-**, 20431-001E-01, 20441-001E-01
2. MATING AND UNMATING INSTRUCTION
2-1. MATING
MATE THE CONNECTOR VERTICALY AS MUCH AS POSSIBLE, ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE. DO NOT SLANT MATE.
2-2. UNMATING
2-2-1. IN CASE OF UNMATING BY PULLING TOOL (PART 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.



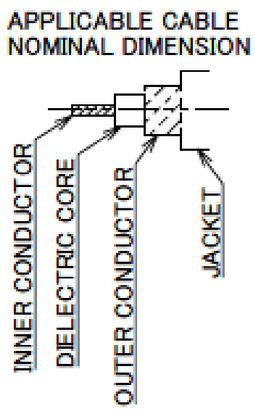
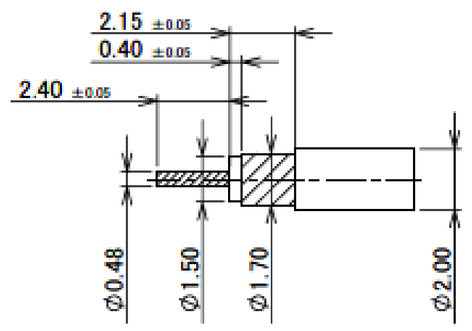
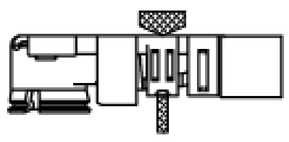
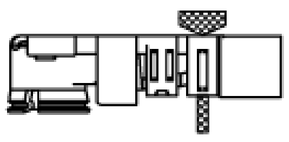
NOTES 2-2-2.



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

Rev.6

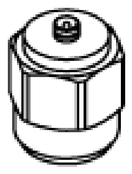
MHF® I plug (2.0 mm Cable O.D.)

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

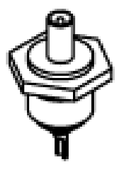
ITEMS	SPECIFICATION	
RECOMMENDED APPLICABLE CONNECTOR PART No.	20279-001E-**	20441-001E-01
RATING VOLTAGE	60 V AC (R.M.S)	
RATING FREQUENCY	DC～9GHz	
OPERATING TEMPERATURE	233～363 K (-40℃～+90℃)	
VSWR (MATED WITH SMA ADAPTER PART No.90193-001)	1.30 MAX. AT 0.1～3 GHz, 1.50 MAX. AT 3～6 GHz, 1.60 MAX. AT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

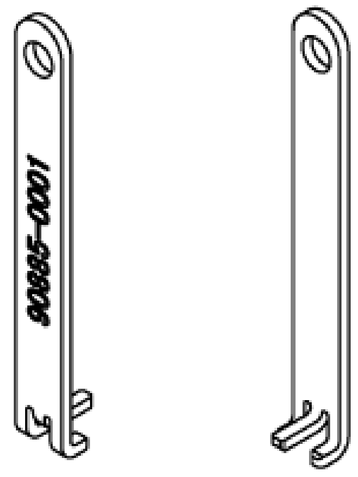
Accessories for MHF® I plug (2.0 mm Cable O.D.)



MHF I SMA ADAPTOR
PART NO. 90193-001



MHF I PLUG INSPECTION CONNECTOR
PART NO. 90194-001

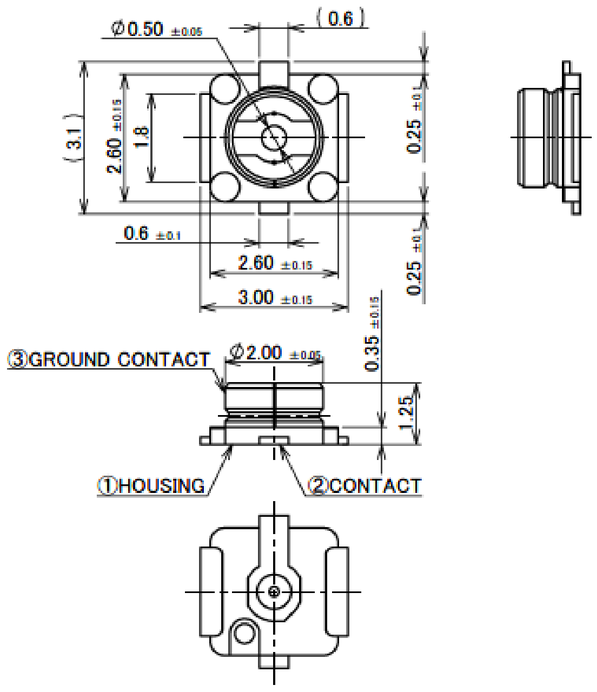


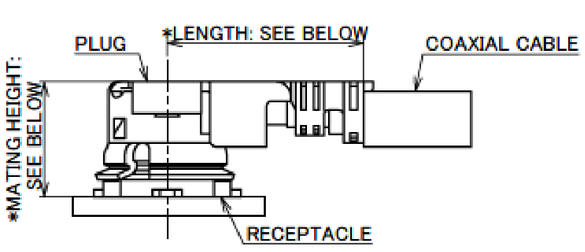
FRONT SIDE BACK SIDE

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

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

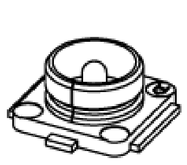




*LENGTH: 4.0±0.4 AT PLUG PART NO. 20670-001R-08, 20670-001R-13, 20670-001R-32
4.7±0.4 AT PLUG PART NO. 20670-001R-18, 20670-001R-37
5.6 AT PLUG PART NO. 20767-001R-20 (REFERENCE DIMENSION)
*MATING HEIGHT: 2.5 MAX. AT PLUG PART NO. 20670-001R-**
(2.9 MAX. AT MHF I LK LOCKED CONDITION)
3.0 MAX. AT PLUG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

MATING CONDITION

Halogen Free RoHS Compliant



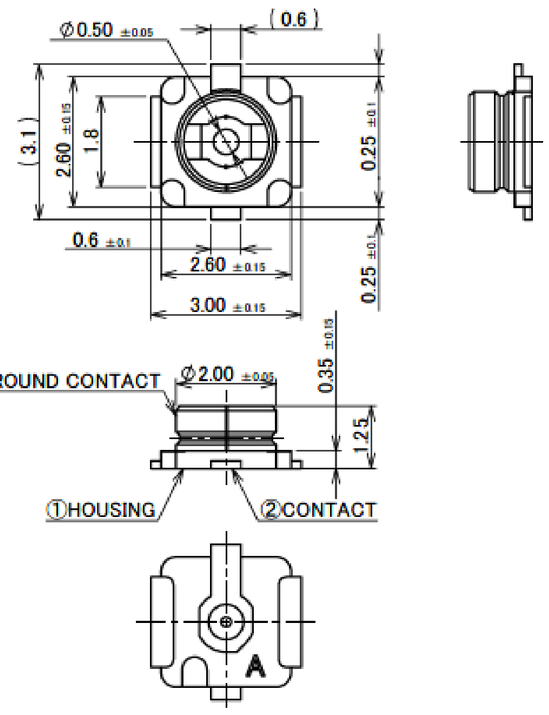
NOTES
1. APPLICABLE CONNECTOR PART NO.
20278-112R-**
20351-*12R-37
20631-112R-**
20670-001R-**
20767-001R-20
2. COPLANARITY: 0.1mm MAX.
3. THIS IS "Pb-FREE" CONNECTOR.

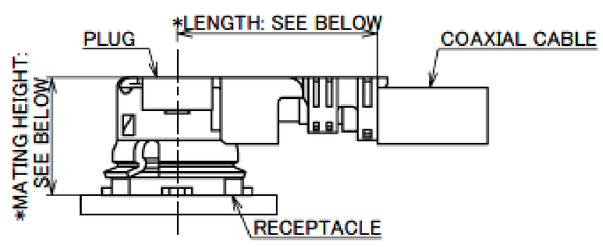
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00μm MIN. CONTACT PART Au 0.05μm MIN. SOLDERING PART Au 0.05μm MIN.
2	CONTACT	BRASS	ALL OVER Ni 1.00μm MIN. CONTACT PART Au 0.10μm MIN. SOLDERING PART Au 0.03μm MIN.
1	HOUSING	LCP	UL94V-0, WHITE

I-PEX
Contact your sales representative for more detailed information. www.i-pex.com

MHF® I Receptacle (3pads)

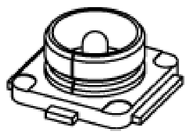
Recommended P/N	20279-001E-03	
PART NO.	PACKING REEL	QUANTITY IN 1 REEL
20279-001E-06	PLASTIC REEL	10,000





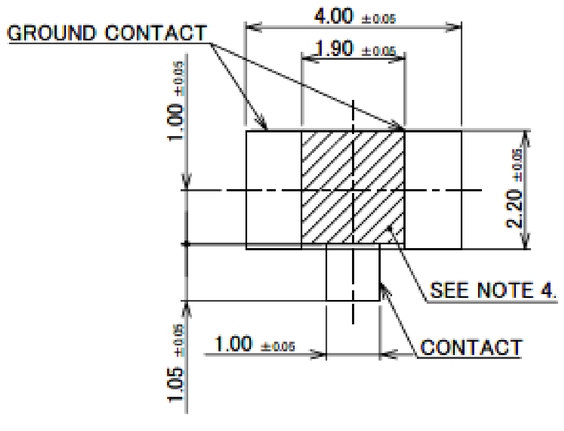
*LENGTH: 4.0±0.4 AT PLUG PART NO. 20670-001R-08, 20670-001R-13, 20670-001R-32
4.7±0.4 AT PLUG PART NO. 20670-001R-18, 20670-001R-37
5.6 AT PLUG PART NO. 20767-001R-20 (REFERENCE DIMENSION)
*MATING HEIGHT: 2.5 MAX. AT PLUG PART NO. 20670-001R-**
(2.9 MAX. AT MHF I LK LOCKED CONDITION)
3.0 MAX. AT PLUG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

MATING CONDITION

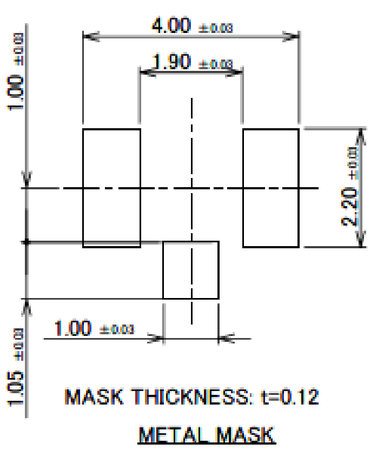


NOTES
1. APPLICABLE CONNECTOR PART NO.
20278-112R-**
20351-*12R-37
20631-112R-**
20670-001R-**
20767-001R-20
2. COPLANARITY: 0.1mm MAX.
3. THIS IS "Pb-FREE" CONNECTOR.

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

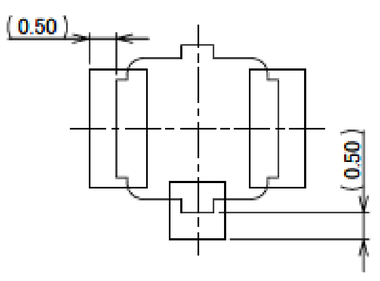


RECOMMENDED FOOTPRINT PATTERN

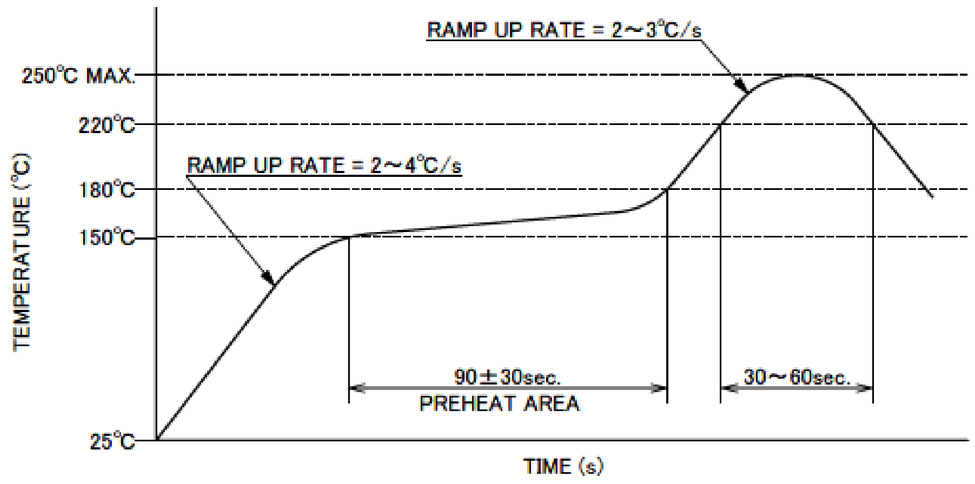


MASK THICKNESS: t=0.12

METAL MASK



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

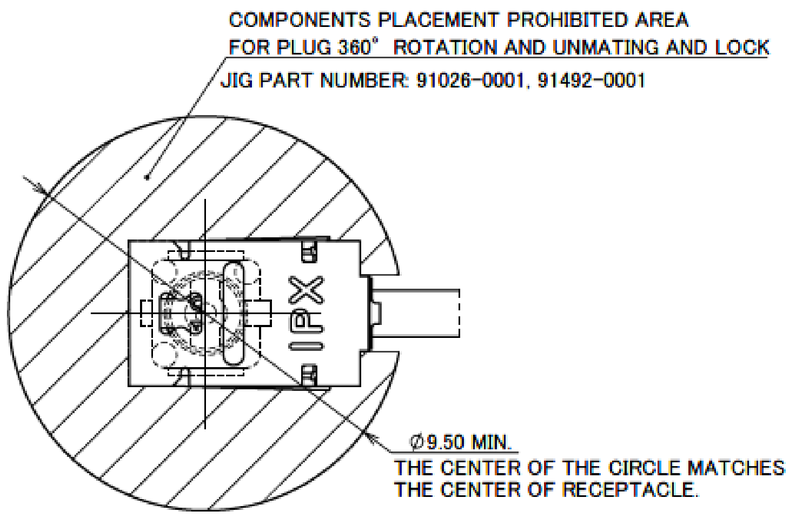
NOTES.
4. NO GROUND, SIGNAL, OR RESIST ALLOWED IN THIS AREA.

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MHF® I Receptacle (3pads)

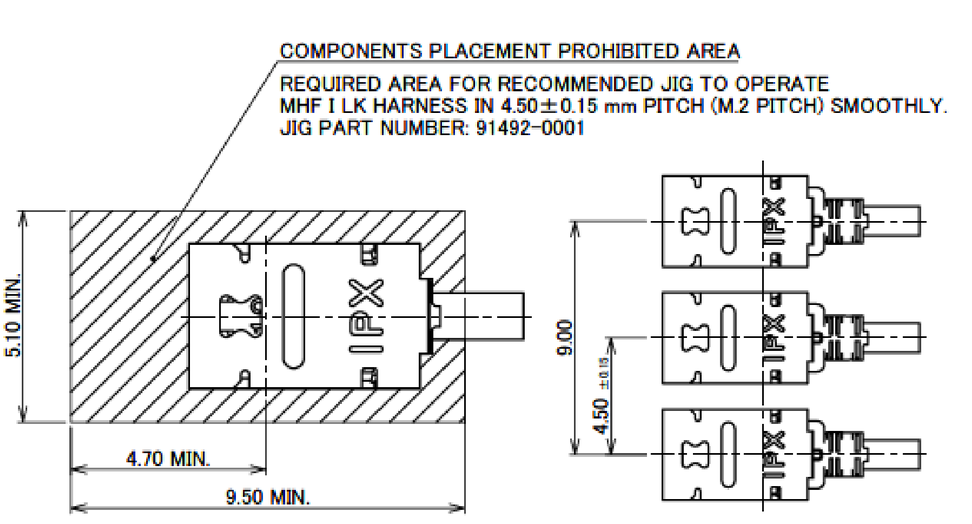
COMPONENT PLACEMENT PROHIBITED AREA
FOR MHF I RECEPTACLE MATED WITH MHF I LK HARNESS
REQUIRED AREA FOR RECOMMENDED JIG TO OPERATE

SINGLE CONNECTOR LAYOUT



MATING AND LOCK CONDITION
WITH MHF I LK HARNESS

MULTIPLE CONNECTORS LAYOUT



MATING AND LOCK CONDITION
WITH MHF I LK HARNESS NARROW PITCH

MHF I LK HARNESS UNLOCK CONDITION
NARROW PITCH DIMENSIONS
(S = 5 : 1)

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 : ⊿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.			
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***			

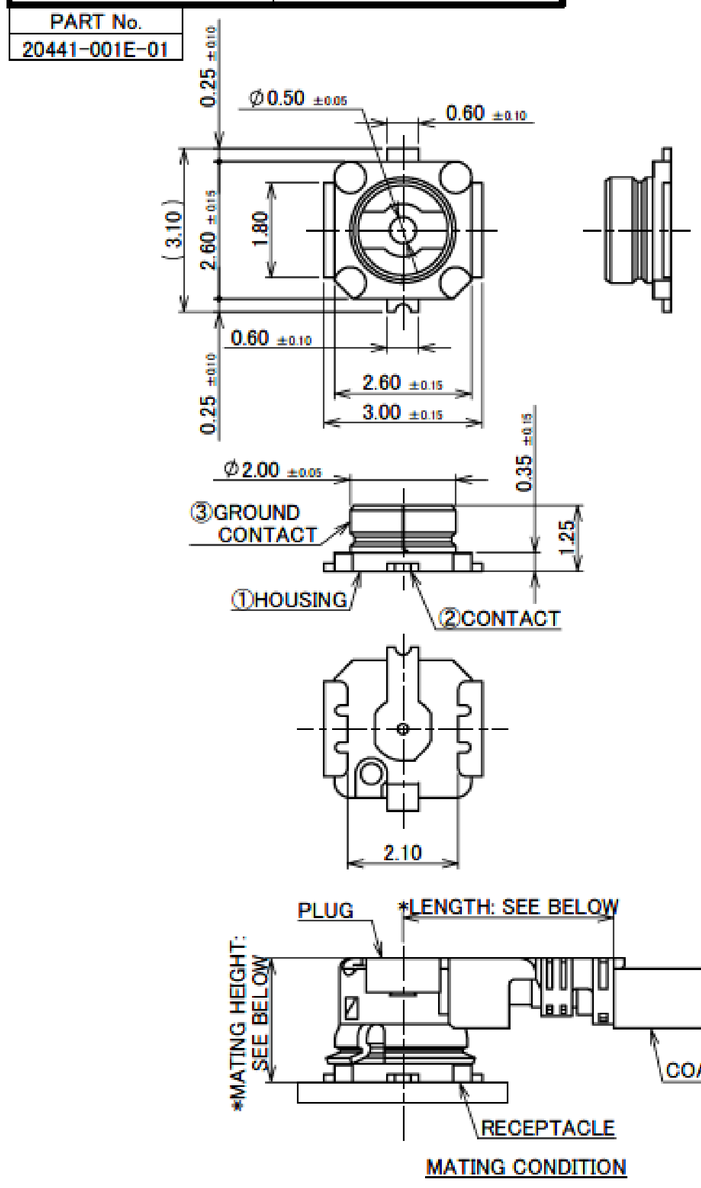
※UNLESS OTHERWISE SPECIFIED, 20279-001E-01 WILL BE DELIVERED IN CORRUGATED PAPER REELS.
CONTACT YOUR I-PEX SALES IF YOU WISH FOR PLASTIC REELS.

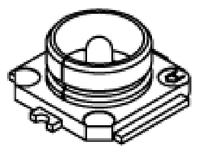
Rev.34

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

Recommended P/N	20441-001E-01

PART No.
20441-001E-01





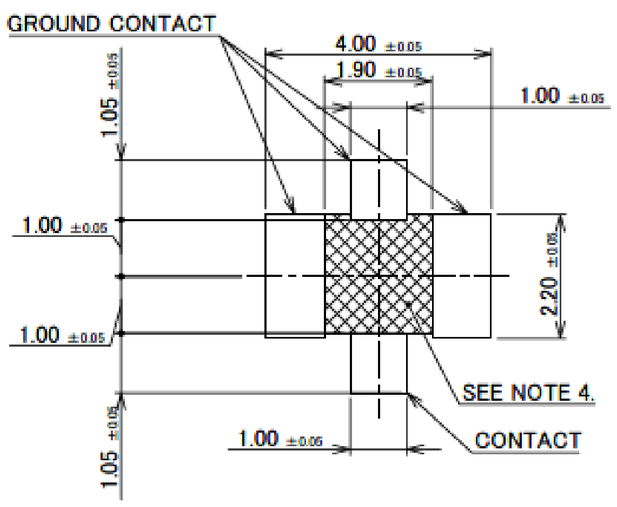
HF Halogen Free

RoHS Compliant

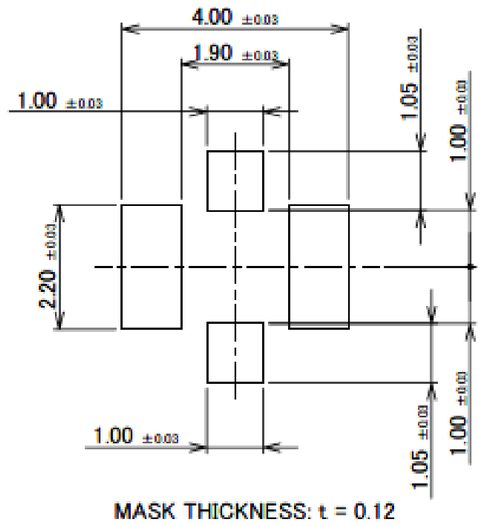
NOTES.
1. APPLICABLE CONNECTOR PART NUMBER:
   20278-112R-**
   20351-*12R-37
   20670-001R-**
   20767-001R-20
2. COPLANARITY: 0.1mm MAX.
3. THIS IS "Pb-FREE" CONNECTOR.

NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00μm MIN. CONTACT PART Au 0.03μm MIN. SOLDERING PART Au 0.03μm MIN.
2	CONTACT	BRASS	ALL OVER Ni 1.00μm MIN. CONTACT PART Au 0.10μm MIN. SOLDERING PART Au 0.03μm 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

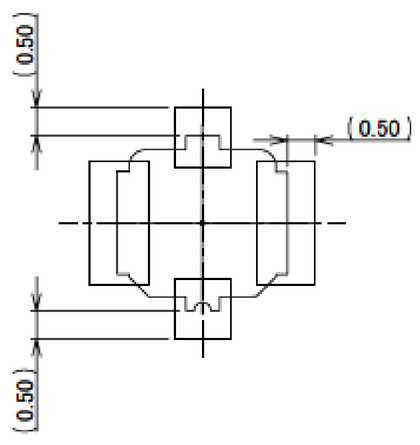


RECOMMENDED FOOTPRINT PATTERN

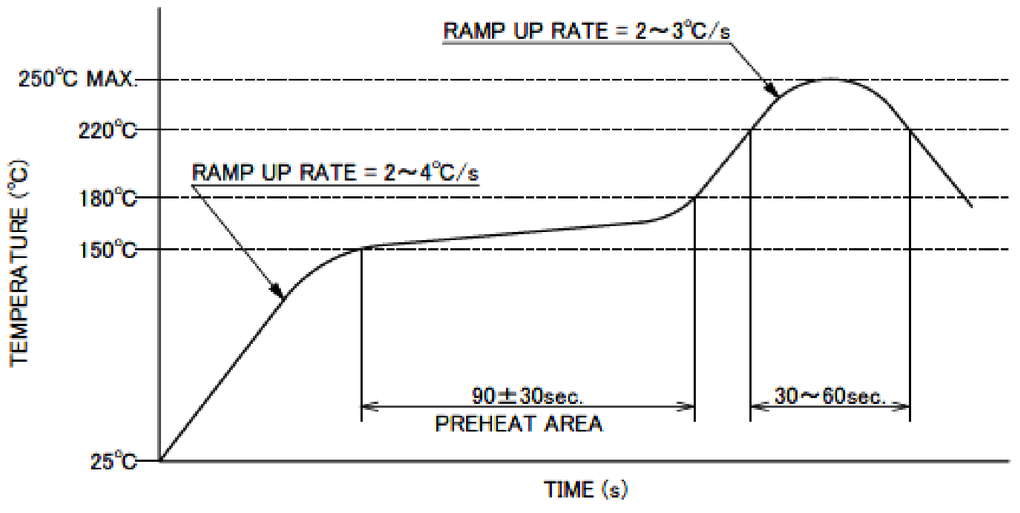


MASK THICKNESS: t = 0.12

METAL MASK



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

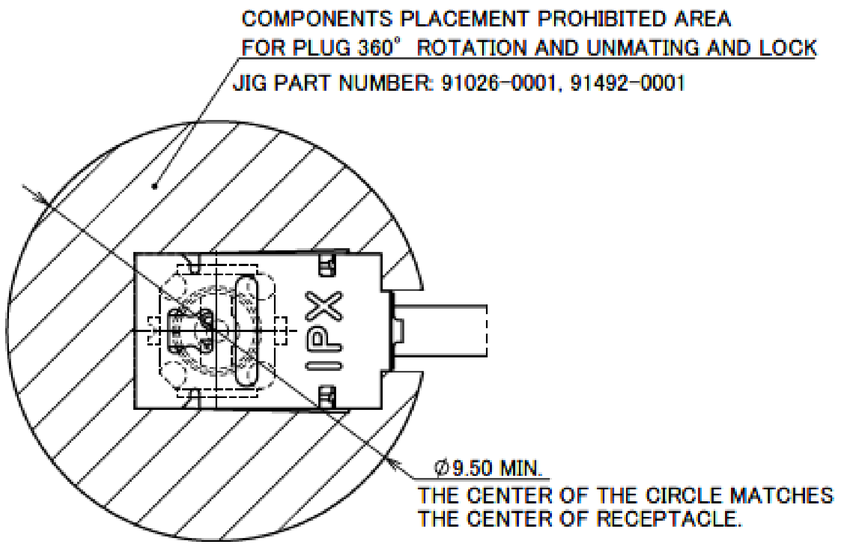
NOTE
4. NO GROUND, SIGNAL, OR RESIST ALLOWED IN THIS AREA.

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

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

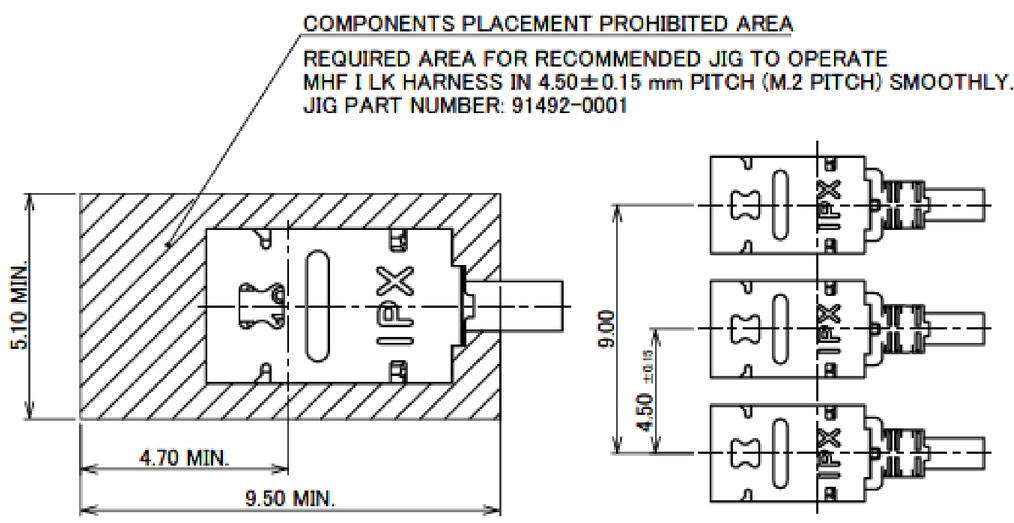
COMPONENT PLACEMENT PROHIBITED AREA
FOR MHF I RECEPTACLE MATED WITH MHF I LK HARNESS
REQUIRED AREA FOR RECOMMENDED JIG TO OPERATE

SINGLE CONNECTOR LAYOUT



MATING AND LOCK CONDITION
WITH MHF I LK HARNESS

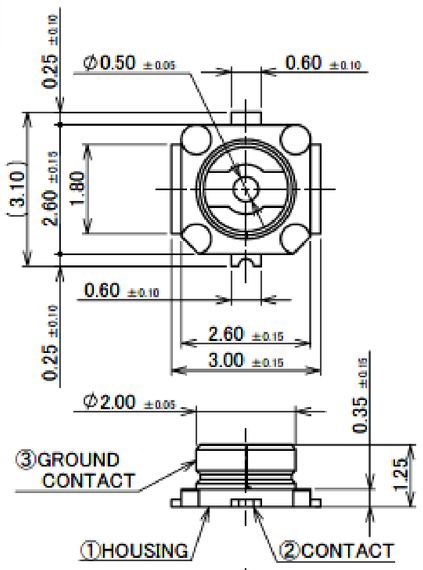
MULTIPLE CONNECTORS LAYOUT

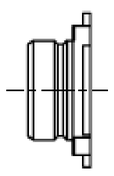


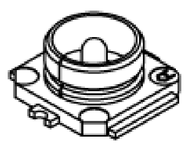
ITEMS	SPECIFICATION			
RECOMMENDED APPLICABLE CONNECTOR PART NO.	20278-112R-** (MHF I PLUG 1.80, 1.32, 1.13, 0.81)	20351-112R-37 (MHF I PLUG 1.37)	20670-001R-** (MHF I PLUG Ni TOP 1.80, 1.37, 1.32, 1.13, 0.81)	20767-001R-20 (MHF I PLUG 2.00)
RATING VOLTAGE	60 V AC (R.M.S)			
RATING FREQUENCY	DC TO 9GHz			
OPERATING TEMPERATURE	233 TO 363K (-40℃ TO +90℃)			
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.			
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***			

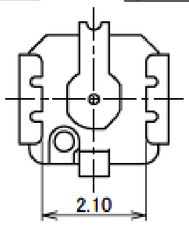
MHF® I Receptacle (4pads/Natural color HSG)

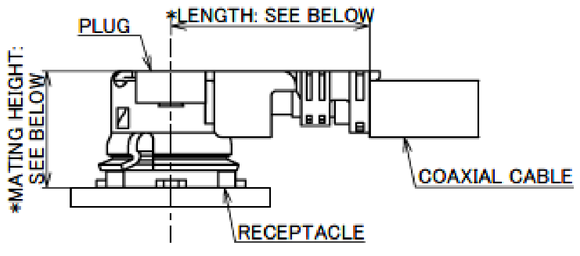
Recommended P/N	20431-001E-01
PART No.	
20431-001E-01	









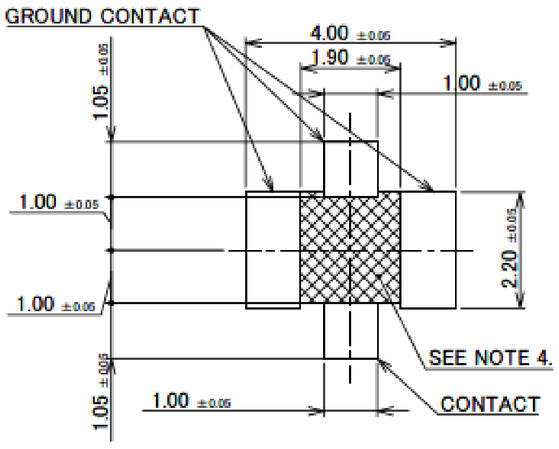


MATING CONDITION

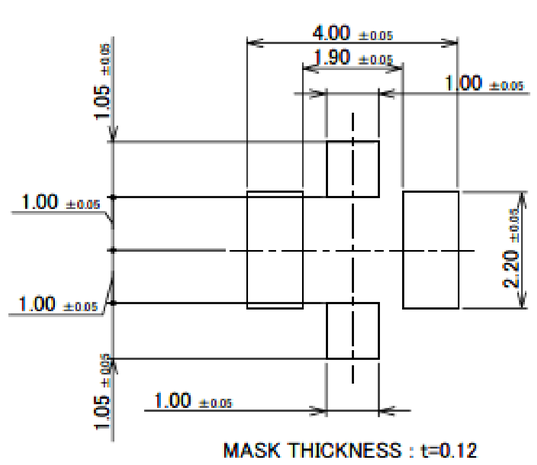
*LENGTH: 4.0±0.4 AT PLUG PART NO. 20670-001R-08, 20670-001R-13, 20670-001R-32
4.7±0.4 AT PLUG PART NO. 20670-001R-18, 20670-001R-37
5.6 AT PLUG PART NO. 20767-001R-20 (REFERENCE DIMENSION)
*MATING HEIGHT: 2.5 MAX. AT PLUG PART NO. 20670-001R-**
(2.9 MAX. AT MHF I LK LOCKED CONDITION)
3.0 MAX. AT PLUG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

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

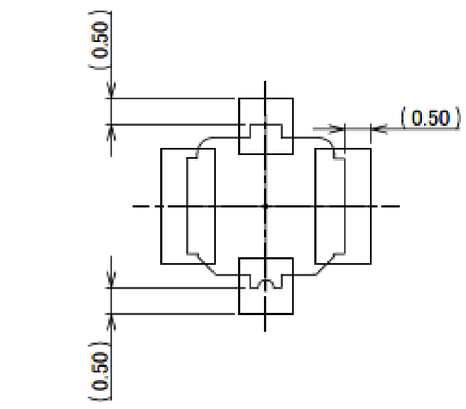
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00μm MIN. CONTACT PART Au 0.03μm MIN. SOLDERING PART Au 0.03μm MIN.
2	CONTACT	BRASS	ALL OVER Ni 1.00μm MIN. CONTACT PART Au 0.10μm MIN. SOLDERING PART Au 0.03μm MIN.
1	HOUSING	LCP	UL94V-0, NATURAL



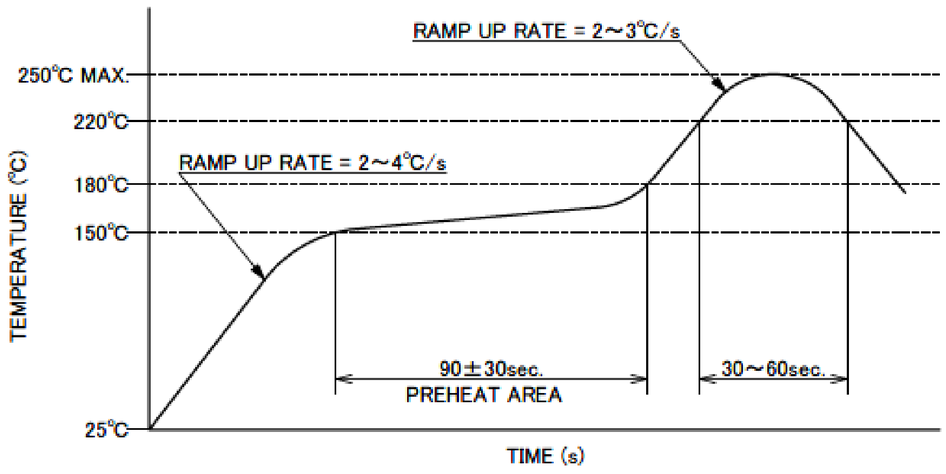
RECOMMENDED FOOTPRINT PATTERN



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

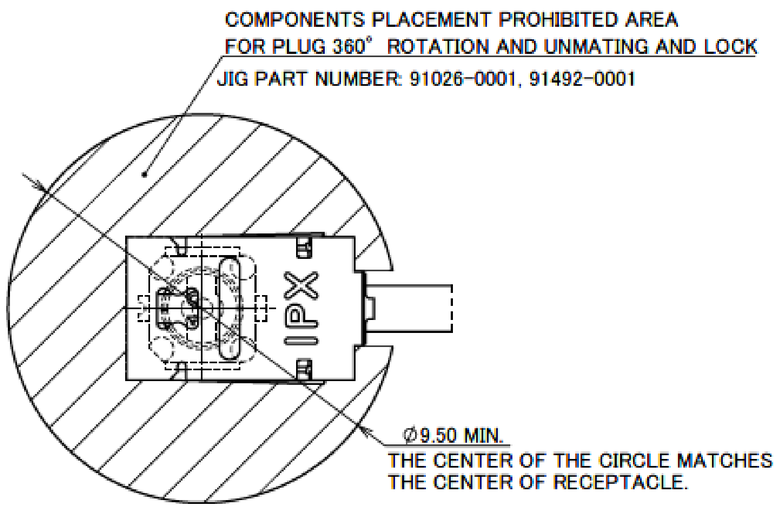
Halogen Free

RoHS Compliant

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

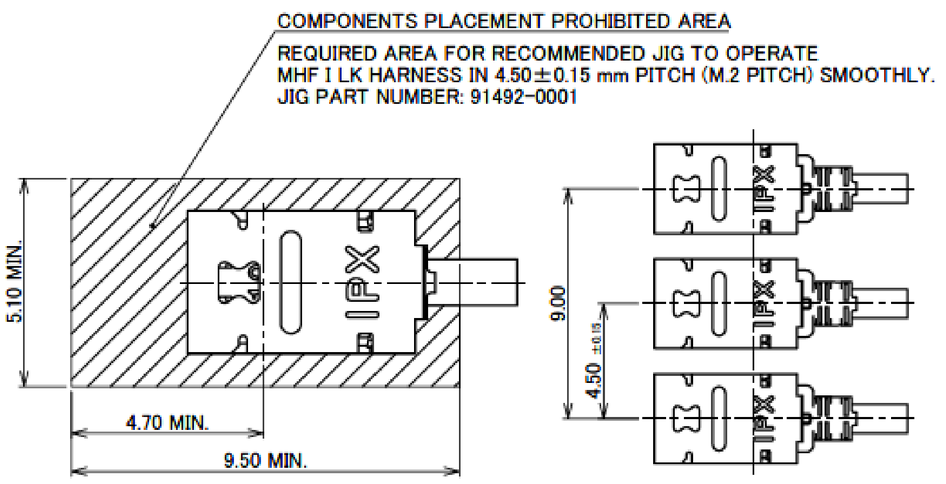
COMPONENT PLACEMENT PROHIBITED AREA
FOR MHF I RECEPTACLE MATED WITH MHF I LK HARNESS
REQUIRED AREA FOR RECOMMENDED JIG TO OPERATE

SINGLE CONNECTOR LAYOUT



MATING AND LOCK CONDITION
WITH MHF I LK HARNESS

MULTIPLE CONNECTORS LAYOUT



MATING AND LOCK CONDITION
WITH MHF I LK HARNESS NARROW PITCH

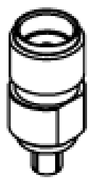
MHF I LK HARNESS UNLOCK CONDITION
NARROW PITCH DIMENSIONS
(S = 5 : 1)

Rev.7

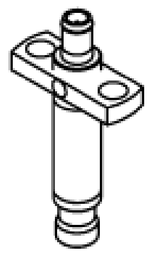
ITEMS	SPECIFICATION			
RECOMMENDED APPLICABLE CONNECTOR PART NO.	20278-112R-** (MHF I PLUG 1.80, 1.32, 1.13, 0.81)	20351-112R-37 (MHF I PLUG 1.37)	20670-001R-** (MHF I PLUG Ni TOP 1.80, 1.37, 1.32, 1.13, 0.81)	20767-001R-20 (MHF I PLUG 2.00)
RATING VOLTAGE	60 V AC (R.M.S)			
RATING FREQUENCY	DC TO 9GHz			
OPERATING TEMPERATURE	233 TO 363K (-40℃ TO +90℃)			
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: ⊿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.			
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

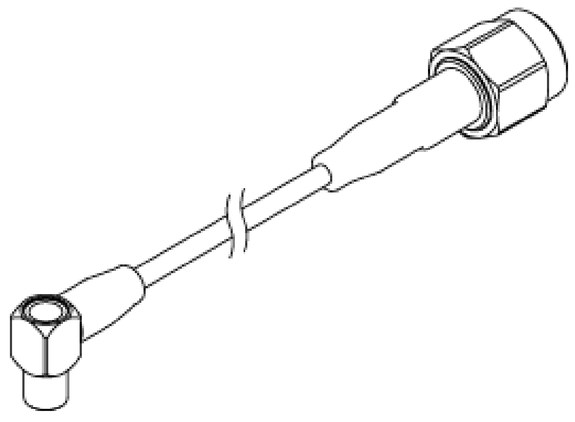
Accessories for MHF® I Receptacle



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



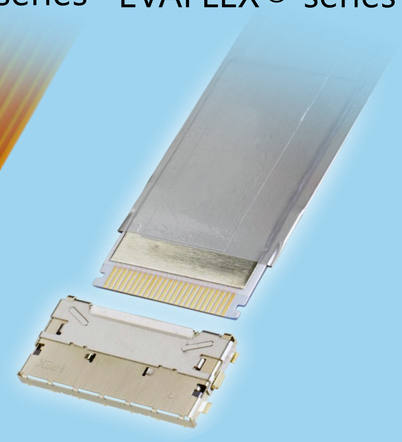
ISH® series



MINIFLEX® series



EVAFLEX® series

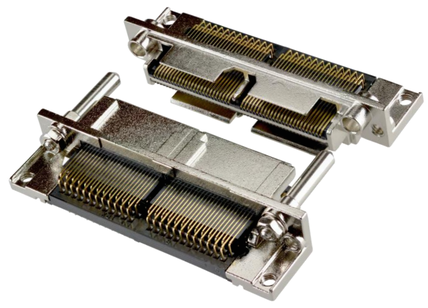


FPC/FFC Connectors

NOVASTACK® series



MINIDOCK™ series



Board-to-Board Connectors

Inquiry

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Contact your sales representative or more detailed information.

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