

Low-profile (mated height = 1.0 mm max.), supports to 12 GHz

Maximum beight (mm)

Insulation resistance

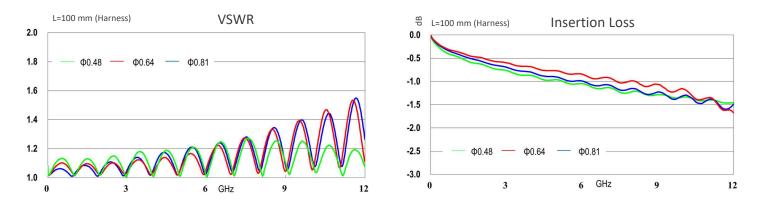
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500M ohm min./DC100V

|   |              | IVIAAIITIUTI             |                           | 1.0   |  |
|---|--------------|--------------------------|---------------------------|---|--|
|   |              |                          | dimension of<br>tacle(mm) | 2.0 x 2.0   |  |
| ✓ Small form factor with big performanc<br>GHz      | e through 12 | Applicable<br>wire gauge |                           | O.D. 0.48 mm / AWG 38<br>O.D. 0.64 mm / AWG 36<br>O.D. 0.81 mm / AWG 36 |  |
|   |              | Fre                      | quency                    | DC~12 GHz   |  |
| ✓ MHF <sup>®</sup> 5 Plug available, micro-coax O.E | D.(AWG) :    |                          | DC~3 GHz                  | 1.3 max.  |  |
| 0.81 mm (36), 0.64 mm (36), 0.48 mm                 | . ,          |                          | 3 GHz∼6 GHz               | 1.5 max.  |  |
| 0.81 IIIII (30), 0.84 IIIII (30), 0.48 IIIII        | (50)         | VSWR<br>=100 mm)         | 6 GHz∼9 GHz               | 1.6 max.  |  |
| ✓ Lowest profile connector of MHF <sup>®</sup> ser  | ies          |                          | 9 GHz~12 GHz              | 1.6~1.8 max.  |  |
|   |              |                          | 12 GHz $\sim$ 15 GHz      | -   |  |
|   |              | Service te               | emp. (Celsius)            | -40 degree $\sim$ +90 degree  |  |
|   |              | Characteri               | stic impedance            | 50 ohm  |  |
| 6   |              | Rate                     | d voltage                 | AC60V   |  |
|   |              | Contact resistance       |                           | 20m ohm max.  |  |
| -   |              | Withsta                  | and voltage               | AC200V/min  |  |

#### Small form factor with big performance through 12 GHz



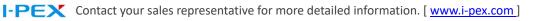
MHF<sup>®</sup> 5 Plug available, micro-coax O.D. (AWG) : 0.81 mm (36), 0.64 mm (36), 0.48 mm (38)

| Coax O.D.<br>(Center Conductor AWG) | Mating Height<br>1.0 mm max. |
|-------------------------------------|------------------------------|
| 2.00 mm (26)                        |                              |
| 1.80 mm (30)                        |                              |
| 1.37 mm (30)                        |                              |
| 1.32 mm (32)                        |                              |
| 1.13 mm (32)                        |                              |
| 0.95 mm (33)                        |                              |
| 0.81 mm (33)                        |                              |
| 0.81 mm (36)                        | 0                            |
| 0.64 mm (36)                        | 0                            |
| 0.48 mm (38)                        | 0                            |
| Receptacle                          | MHF 5 receptacle             |

#### Lowest profile connector of MHF<sup>®</sup> series

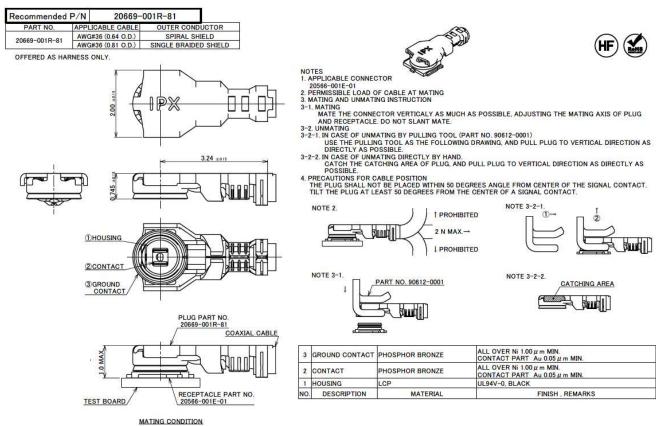
MHF<sup>®</sup> I

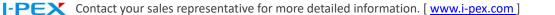




# MHF<sup>®</sup> 5 Component Parts Detail

## MHF<sup>®</sup> 5 plug Au (0.81,0.64)



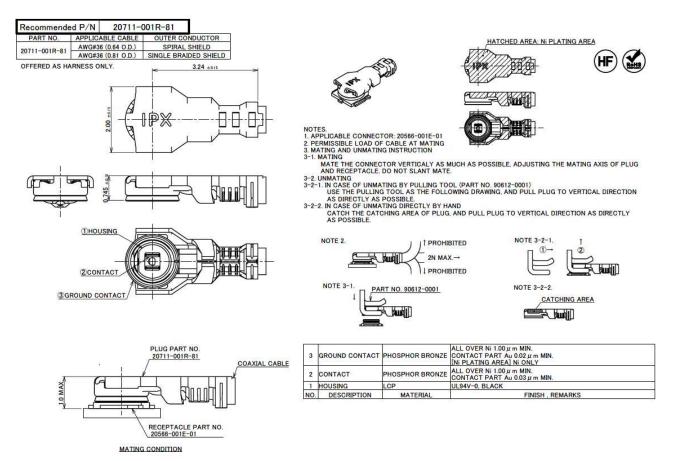


## MHF<sup>®</sup> 5 plug Au (0.81,0.64)

| ITEMS                                 | SPECIFICATION   |  |
|---------------------------------------|---|--|
| RECOMMENDED APPLICABLE CONNECTOR      | 20566-001E-01   |  |
| RATING VOLTAGE                        | 60 V AC (R.M.S)   |  |
| RATING FREQUENCY                      | DC~12 GHz   |  |
| OPERATING TEMPERATURE                 | 233~363 K (-40°C~+90°C)   |  |
| VSWR                                  | 1.3 MAX. AT 0.1 ~ 3 GHz, 1.5 MAX. AT 3 ~ 6 GHz,<br>1.6 MAX. AT 6 ~ 9 GHz, 1.6 ~ 1.8 MAX. AT 9 ~ 12 GH |  |
| MAIN CONTACT RESISTANCE               | INITIAL: 20 mohm MAX. / AFTER TEST: AR 20 mohm MAX.   |  |
| GROUND CONTACT RESISTANCE             | INITIAL: 20 mohm MAX. / AFTER TEST: ZR 20 mohm MA   |  |
| INSULATION RESISTANCE                 | INITIAL: 500 Mohm MIN. / AFTER TEST: 100 Mohm MIN.  |  |
| DIELECTRIC WITHSTANDING VOLTAGE       | 200 V AC, 1 MINUTE  |  |
| DURABILITY                            | 30 CYCLES   |  |
| UNMATING FORCE (INITIAL / AFTER TEST) | INITIAL: 4 N MIN. / AFTER TEST: 2 N MIN.  |  |
| CRIMP STRENGTH                        | 7 N MIN.  |  |
| PRODUCT SPECIFICATION                 | PRS-2532  |  |
| TEST REPORT                           | TR-18089  |  |
| INSTRUCTION MANUAL                    | HIM-16014   |  |
| APPEARANCE CRITERIA No.               | QLS-A***  |  |

Rev.3

## MHF<sup>®</sup> 5 plug Ni top (0.81,0.64)



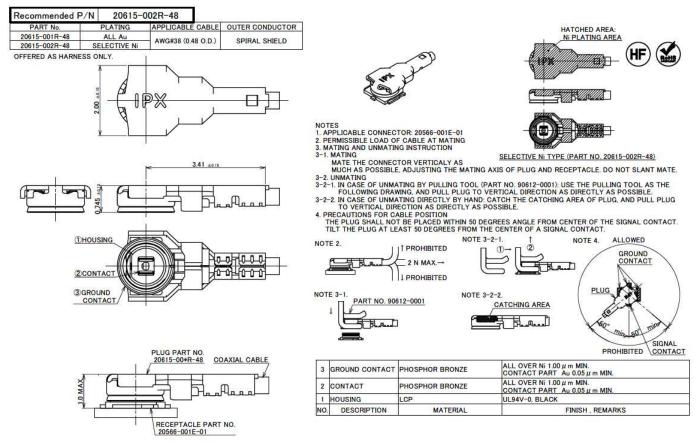
Rev.5

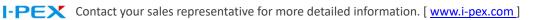
## MHF<sup>®</sup> 5 plug Ni top (0.81,0.64)

| ITEMS  | SPECIFICATION   |                    |  |
|--|---|--------------------|--|
| APPLICABLE CABLE                             | AWG#36 (0.81 O.D.)<br>*RECOMMENDED  | AWG#36 (0.64 O.D.) |  |
| RECOMMENDED APPLICABLE CONNECTOR<br>PART No. | 20566-001E-01   |                    |  |
| RATING VOLTAGE                               | 60 V AC (R.M.S)   |                    |  |
| RATING FREQUENCY                             | DC~12 GHz   |                    |  |
| OPERATING TEMPERATURE                        | 233~363 K (-40°C~+90°C)   |                    |  |
| VSWR   | 1.3 MAX. AT 0.1 ~ 3 GHz, 1.5 MAX. AT 3 ~ 6 GHz, 1.6 MAX. AT 6 ~ 9 GHz, 1.7 MAX. AT 9 ~ 12 GHz |                    |  |
| MAIN CONTACT RESISTANCE                      | INITIAL: 20 mohm MAX. / AFTER TEST: AR 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)        | INITIAL: 4 N MIN. / AFTER TEST: 2 N MIN.  |                    |  |
| CRIMP STRENGTH                               | 7 N MIN.  |                    |  |
| PRODUCT SPECIFICATION                        | PRS-2108  | PRS-2109           |  |
| TEST REPORT                                  | TR-15062  | TR-15063           |  |
| INSTRUCTION MANUAL                           | HIM-16013   |                    |  |
| APPEARANCE CRITERIA No.                      | QLS-A***  |                    |  |

Rev.5

## MHF<sup>®</sup> 5 PLUG Ni top (0.48)





MATING CONDITION

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## MHF<sup>®</sup> 5 PLUG Ni top (0.48)

| ITEMS  | SPECIFICATION  |  |  |
|--|--|--|--|
| PLUG PART No.                                | 20615-001R-48<br>(ALL Au PLATING TYPE)   | 20615-002R-48<br>(SELECTIVE NI PLATING TYPE) |  |
| RECOMMENDED APPLICABLE CONNECTOR<br>PART No. | 20566-001E-01  |  |  |
| RATING VOLTAGE                               | 60 V AC (R.M.S)  |  |  |
| RATING FREQUENCY                             | DC~12 GHz  |  |  |
| OPERATING TEMPERATURE                        | 233~363 K (-40°C~+90°C)  |  |  |
| VSWR   | 1.3 MAX. AT 0.1 ~ 3 GHz, 1.5 MAX. AT 3 ~ 6 GHz,<br>1.6 MAX. AT 6 ~ 9 GHz, 1.6 ~ 1.8 MAX. AT 9 ~ 12 GHz |  |  |
| MAIN CONTACT RESISTANCE                      | INITIAL: 20 mohm MAX. / AFTER TEST: ZR 20 mohm MAX.  |  |  |
| GROUND CONTACT RESISTANCE                    | INITIAL: 20 mohm MAX. / AFTER TEST: AR 20 mohm MAX.  |  |  |
| INSULATION RESISTANCE                        | INITIAL: 500 Mohm MIN. / AFTER TEST: 100 Mohm MIN.   |  |  |
| DIELECTRIC WITHSTANDING VOLTAGE              | 200 V AC, 1 MINUTE   |  |  |
| DURABILITY                                   | 30 CYCLES  |  |  |
| UNMATING FORCE (INITIAL / AFTER TEST)        | INITIAL: 4 N MIN. / AFTER TEST: 2 N MIN.   |  |  |
| CRIMP STRENGTH                               | 7 N MIN.   |  |  |
| PRODUCT SPECIFICATION                        | PRS-1939   | PRS-2032                                     |  |
| TEST REPORT                                  | TR-14026   | TR-15029                                     |  |
| INSTRUCTION MANUAL                           | HIM-13003  |  |  |
| APPEARANCE CRITERIA No.                      | QLS-A***   |  |  |

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## MHF<sup>®</sup> 5 PLUG Ni top

MHF 5 SMA ADAPTOR PART NO. 90543-0001

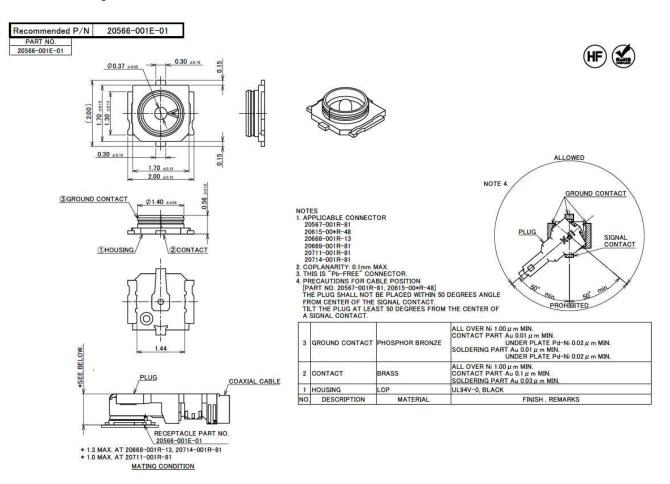
1000-21808 FRONT SIDE BACK SIDE

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



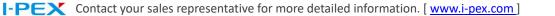
## MHF<sup>®</sup> 5 Receptacle



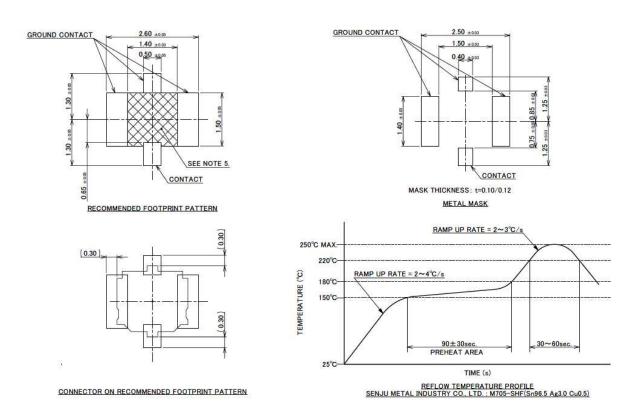
Rev.7

## **MHF<sup>®</sup> 5 Receptacle**

| ITEMS  | SPECIFICATION   |   |  |
|--|---|---|--|
| RECOMMENDED APPLICABLE CONNECTOR<br>PART No. | 20668-001R-13   | 20711-001R-81<br>(CABLE AWG#36 φ 0.81)    | 20714-001R-81                            |
| RATING VOLTAGE                               | 60 V AC (R.M.S)   |   |  |
| RATING FREQUENCY                             | DC~12 GHz   |   |  |
| OPERATING TEMPERATURE                        | 233~363 K (−40°C~+90°C)   |   |  |
| VSWR   | 1.3 MAX. AT DC~3 GHz, 1.4 MAX. AT 3~6 GHz, 1.5 MAX. AT 6~12 GHz |   |  |
| MAIN CONTACT RESISTANCE                      | INITIAL: 20 mohm MAX. / AFTER TEST: ⊿R 20 mohm MAX.             |   |  |
| GROUND CONTACT RESISTANCE                    | INITIAL: 20 mohm MAX. / AFTER TEST: AR 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.<br>AFTER TEST: 3 N MIN.                       | INITIAL: 4 N MIN.<br>AFTER TEST: 2 N MIN. | INITIAL: 5 N MIN.<br>AFTER TEST: 3 N MIN |
| PRODUCT SPECIFICATION                        | PRS-2192  | PRS-2108                                  | PRS-2236                                 |
| TEST REPORT                                  | TR-16003  | TR-15062                                  | TR-16049                                 |
| PACKING STANDARD                             | PST-12036   |   |  |
| INSTRUCTION MANUAL                           | HIM-16014   | HIM-16013                                 | HIM-16014                                |
| APPEARANCE CRITERIA No.                      | QLS-A***  |   |  |



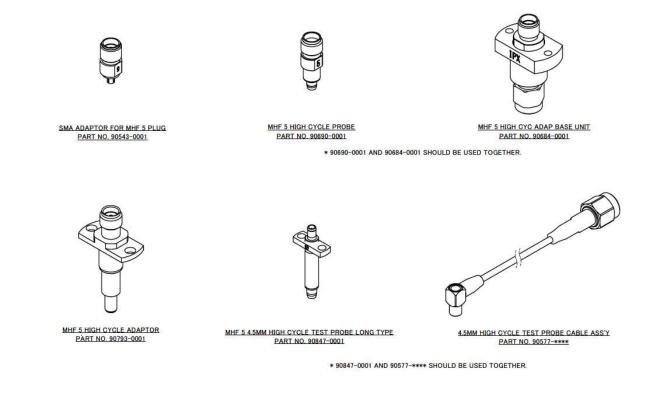
## **MHF<sup>®</sup> 5 Receptacle**



NOTES. 5. CUT OUT PROHIBITION AREA

Rev.7

## Accessories for MHF<sup>®</sup> 5 Receptacle





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