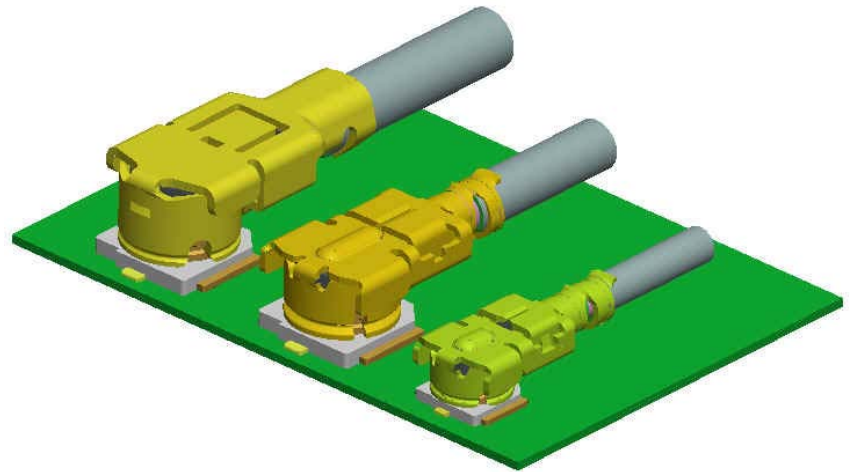


MRF SERIES PRODUCTS

【Major Application】

Wireless LAN Antenna

- Cellular Phone
- Notebook Computer
- Game Equipment
- Digital Appliance
- Access Point



【Key Feature】

- SMT Receptacle and Mating Plug Cable Connector.
- Small form factor and low profile:1.5mm to 2.5mm MAX. mating height.
- Applicable cable: OD 0.81mm/1.13mm/1.32mm/1.37mm and 1.8mm Coaxial cable.
- High productivity: Easy cable termination.
- Applicable technology:IEEE802.11 a/b/g/n; UWB; WiMAX ;Burst ; Zigbee ; Bluetooth wireless and MIMO.

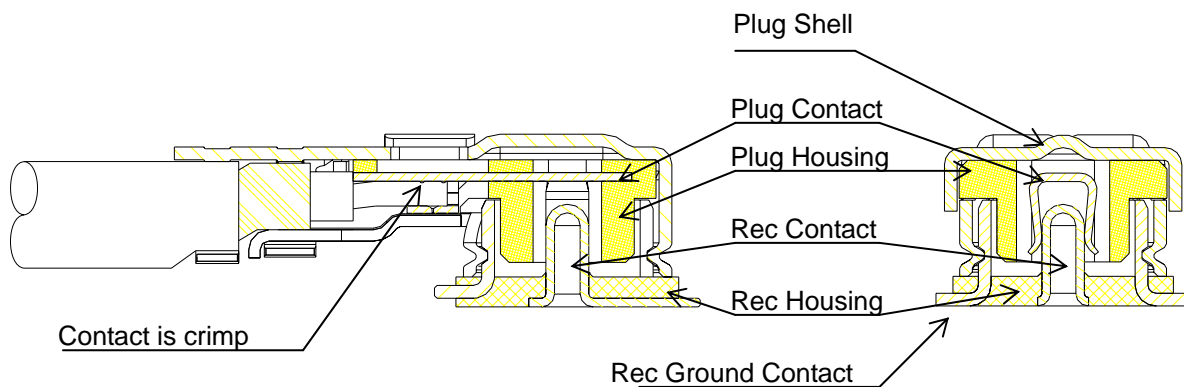
【Specification】

- Frequency range: DC to 6GHz
- Characteristic impedance: 50 Ω (Nominal)
- Temperature: -40 $^{\circ}$ C to 85 $^{\circ}$ C
- Rated voltage: AC 60V
- Contact resistance: 20m Ω Max.(Signal) and 10m Ω Max.(Ground)
- Withstand Voltage: AC 200V
- Insulation Resistance: 500M Ω Min./DC100V

【Compatibility】

HMT's MRF series products compatible with I-PEX's MHF plug & MHF II plug & MHF III plug & 20279 products and HRS's U.FL & W.FL series products in electrical, mechanical and environmental performance.

【Product Section】



【MINI RF RECEPTACLE CONNECTOR】

- Part Number Description:

M R F R X - X X X X X X X
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

1>. MRF: MINI COAXIAL CONNECTOR

2>. R: RECEPTACLE

3>. RECEPTACLE TYPE: 1:TYPE I, 3: TYPE III

4>. GROUND CONTACT DIA.: 0: 2.0mm, 1: 2.1mm, 2: 1.4mm

5>. GROUND CONTACT PLATING SPEC: 0:AU 1u", 1:AG 100u",
2:SN 100u"

6>. CONTACT PLATING SPEC: 0:AU 3u"

7>. HOUSING COLOR: 0 : IVORY, 1:BLACK

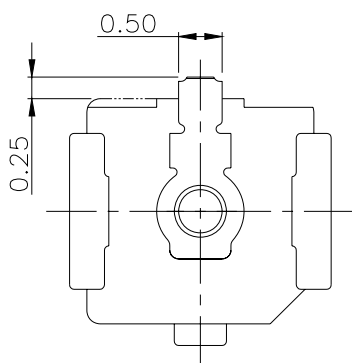
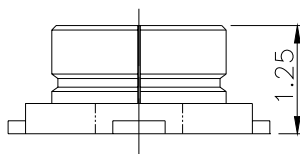
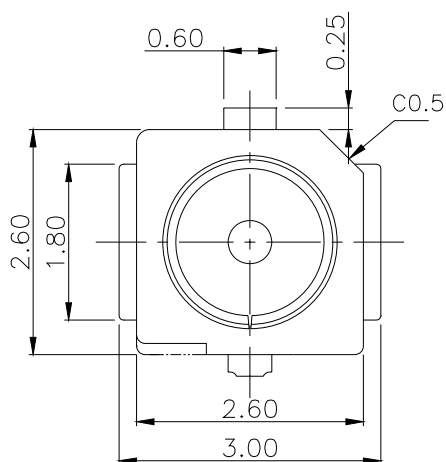
8>. PAD QT'Y: 3: 3PAD, 4: 4PAD

9>. PACKING QT'Y: 1: 1,000PCS/REEL, 10,000PCS/CARTON
2: 5,000PCS/REEL, 50,000PCS/CARTON

10>. EMPTY FOR "0"

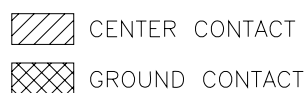
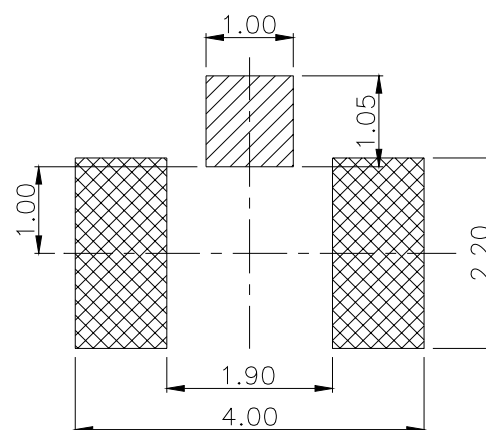
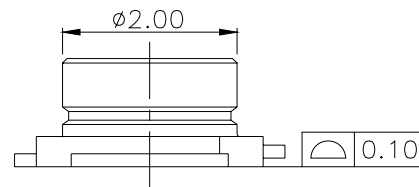
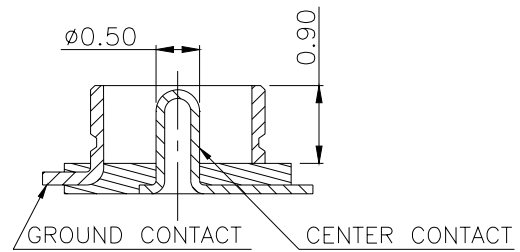
● TYPE I GROUND CONTACT DIA.: 2.0mm, 3PAD:

P/N:	DESCRIPTION
MRFR1-0000310	GROUND CONTACT GOLD PLATING, HOUSING COLOR: IVORY (1,000PCS/REEL;10,000PCS/CARTON)
MRFR1-0000320	GROUND CONTACT GOLD PLATING, HOUSING COLOR: IVORY (5,000PCS/REEL;50,000PCS/CARTON)



REMARK:

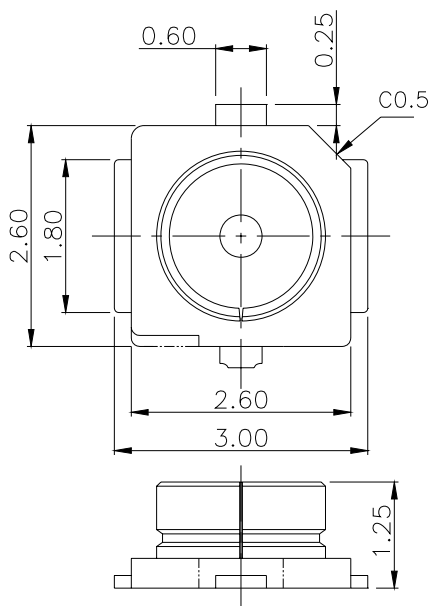
- 1.PRODUCT IS COMPLIANT TO RoHS STANDARDS
- 2.COMMON TOLERANCE:±0.15mm.



RECOMMENDED PCB LAYOUT
(TOLERANCE:±0.05)

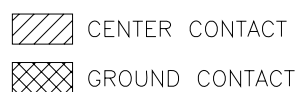
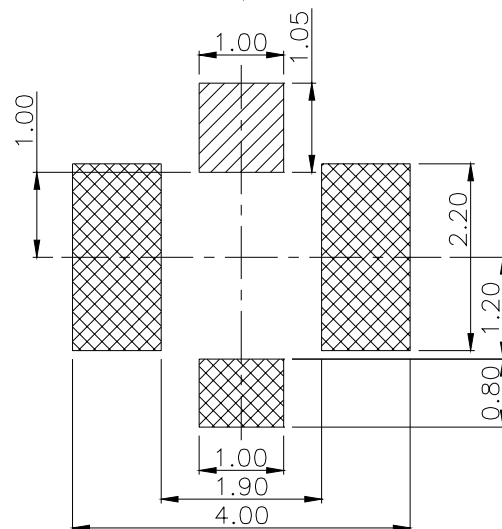
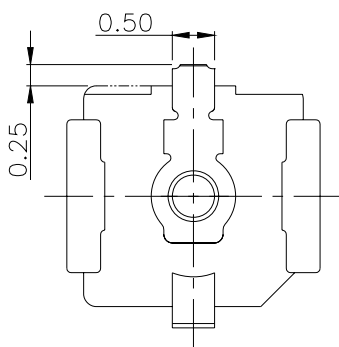
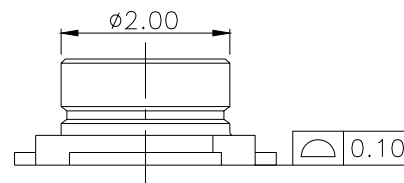
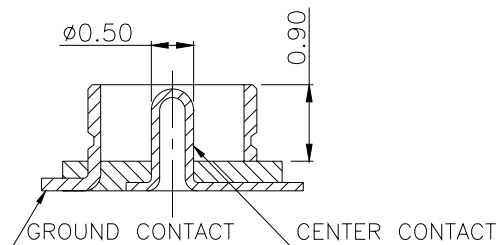
● TYPE I GROUND CONTACT DIA.: 2.0mm,4PAD:

P/N:	DESCRIPTION
MRR1-0000410	GROUND CONTACT GOLD PLATING, HOUSING COLOR: IVORY (1,000PCS/REEL;10,000PCS/CARTON)
MRR1-0000420	GROUND CONTACT GOLD PLATING, HOUSING COLOR: IVORY (5,000PCS/REEL;50,000PCS/CARTON)



REMARK:

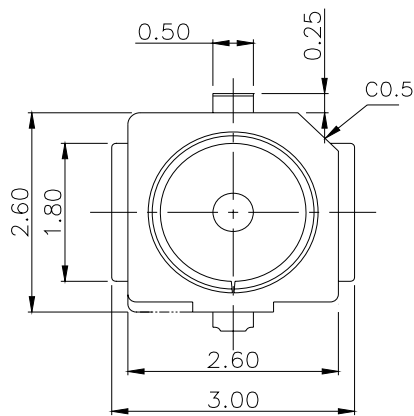
- 1.PRODUCT IS COMPLIANT TO RoHS STANDARD.
- 2.COMMON TOLERANCE:±0.15mm.



RECOMMENDED PCB LAYOUT
(TOLERANCE:±0.05)

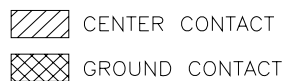
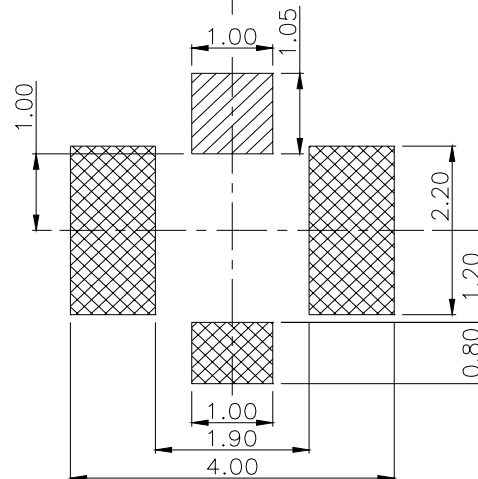
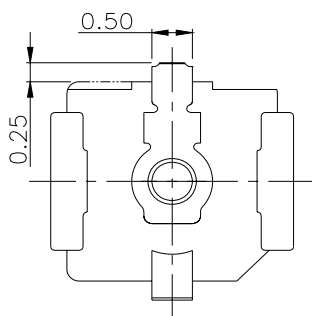
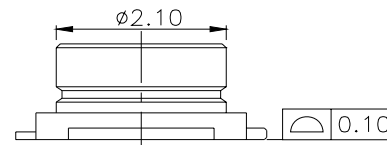
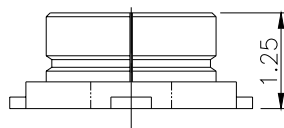
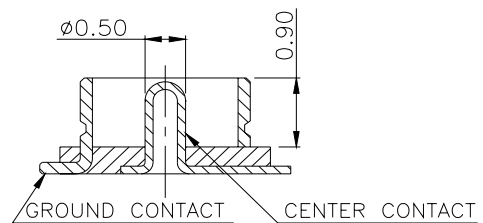
● TYPE I GROUND CONTACT DIA.: 2.1mm, 4PAD:

P/N:	DESCRIPTION
MRFR1-1000410	GROUND CONTACT GOLD PLATING, HOUSING COLOR: IVORY (1,000PCS/REEL;10,000PCS/CARTON)
MRFR1-1000420	GROUND CONTACT GOLD PLATING, HOUSING COLOR: IVORY (5,000PCS/REEL;50,000PCS/CARTON)



REMARK:

- 1.PRODUCT IS COMPLIANT TO RoHS STANDARD.
- 2.COMMON TOLERANCE:±0.15mm.



RECOMMENDED PCB LAYOUT
(TOLERANCE:±0.05)

● Material And Finish

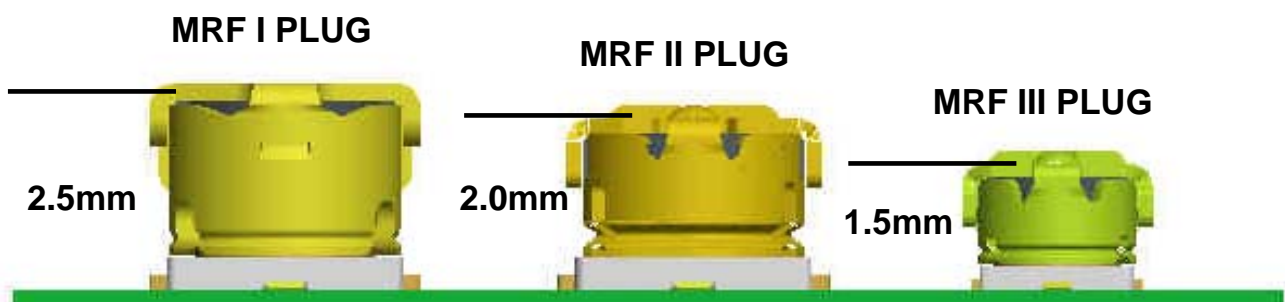
Parts	Material	Finish/Color
Housing	LCP UL94V-0	Nature
Center Contact	Copper Alloy	Gold Plated
Ground Contact	Copper Alloy	Gold or Silver or Tin Plated

【MINI RF PLUG TERMINAL】

- Part Number Description:

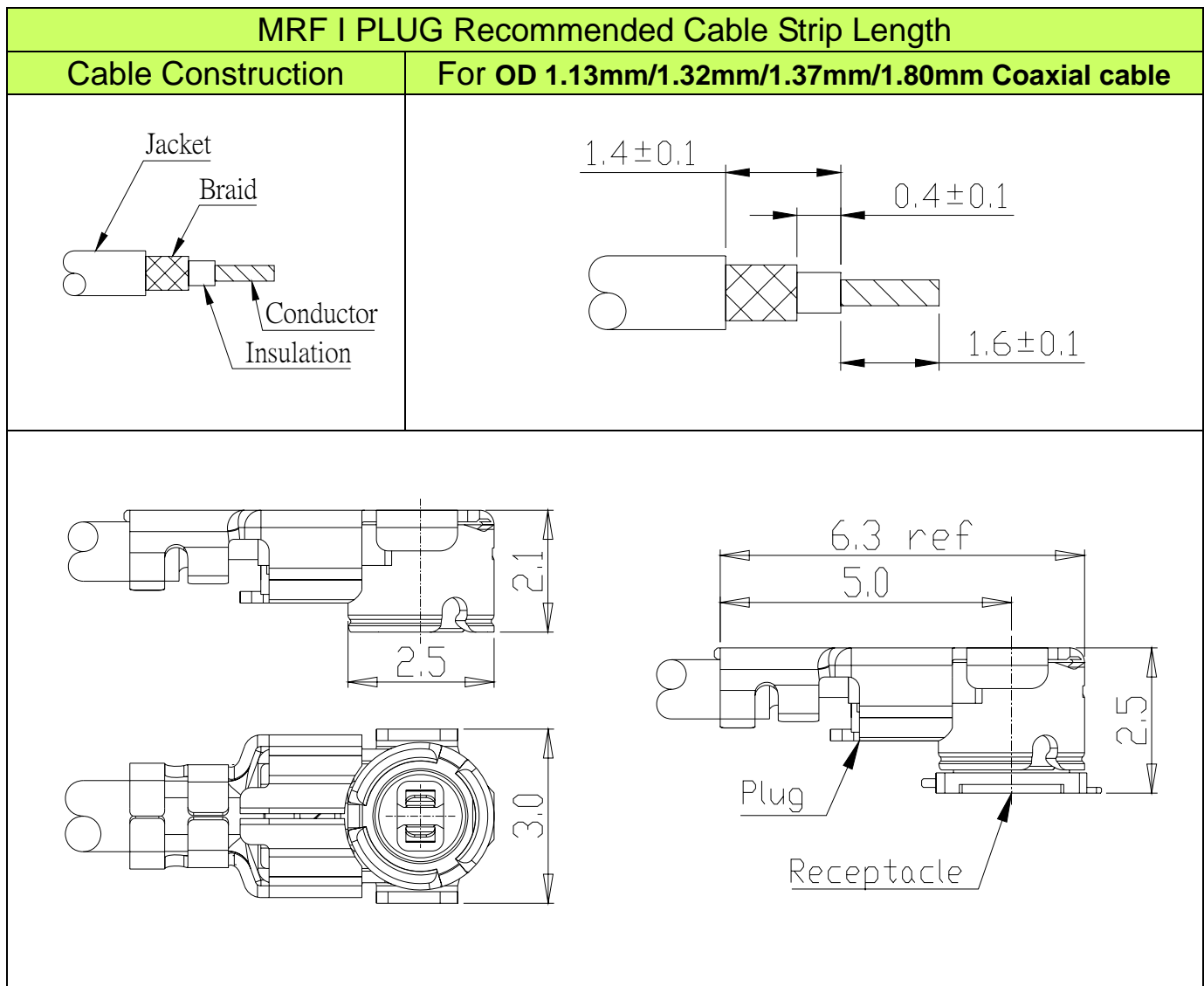
M R F P X - X X X X X X X
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

- 1>. MRF: MINI COAXIAL CONNECTOR
- 2>. P: PLUG
- 3>. PLUG TYPE: 1:TYPE I, 2:TYPE II, 3: TYPE III
- 4>. APPLICABLE CABLE: 1: OD0.81, 3: OD1.13, 7: OD1.37, 8: OD1.80
- 5>. SHELL PLATING SPEC: 0:AU 1u", 1:AG 100u", 2:SN 100u"
- 6>. CONTACT PLATING SPEC: 0:AU 3u"
- 7>. HOUSING COLOR: 0 : BLACK, 1:IVORY
- 8>. SHELL LOGO: 0:WITHOUT, 1:WITH
- 9>. PACKING QT'Y: 1: 2,000PCS/REEL, 20,000PCS/CARTON
 2: 2,500PCS/RELL, 25,000PCS/CARTON
 3: 4,000PCS/RELL, 40,000PCS/CARTON
- 10>. EMPTY FOR "0"



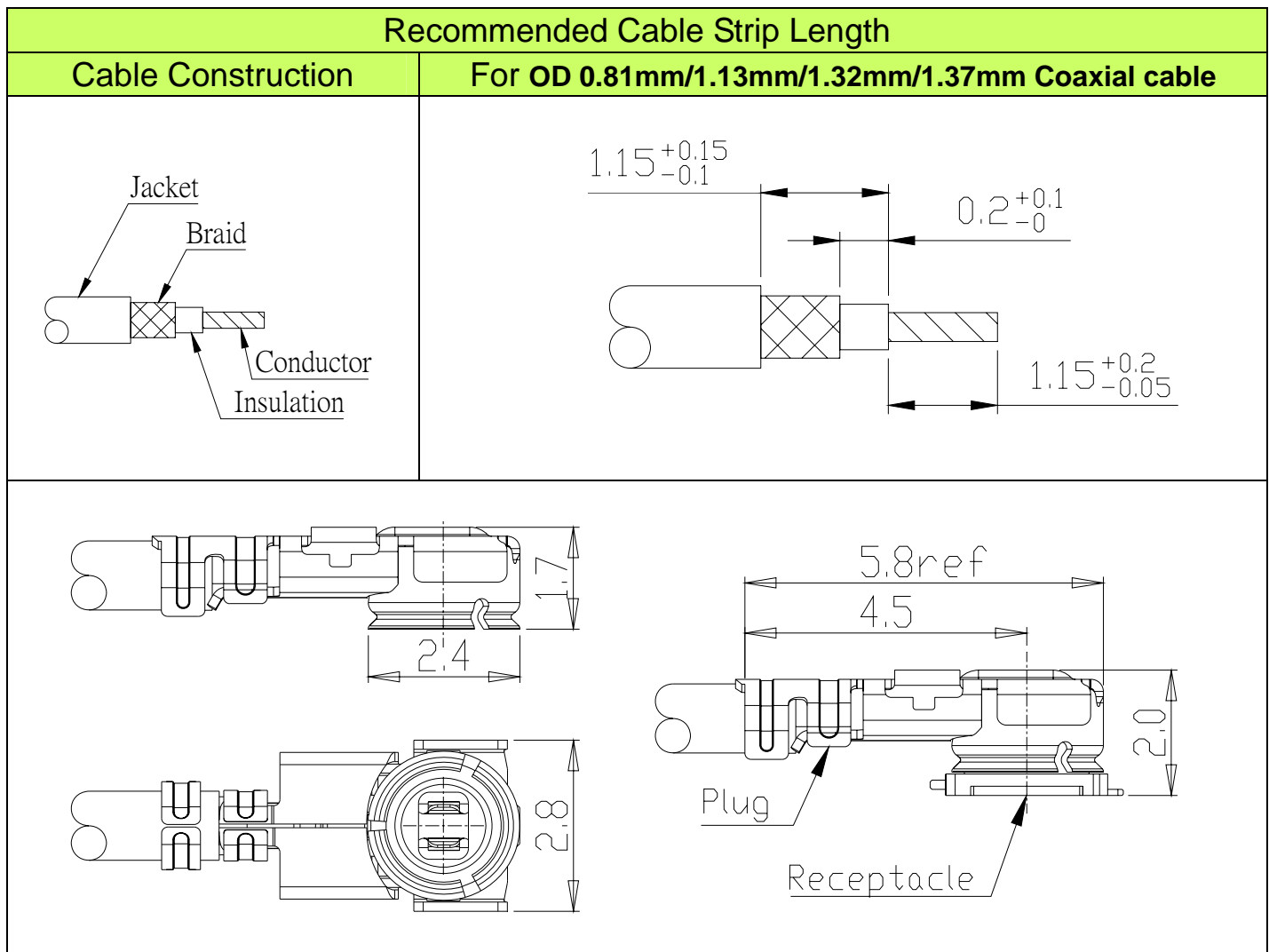
- **MINI RF I PLUG:**
- **Applicable CABLE for OD 1.13/1.32/1.37/1.80mm Coaxial Cable**

P/N:	DESCRIPTION
MRFP1-3000010	MRF I PLUG-1.13:SHELL GOLD PLATING, HOUSING COLOR: BLACK (2,000PCS/REEL; 20,000PCS/CARTON)
MRFP1-7000010	MRF I PLUG-1.37:SHELL GOLD PLATING, HOUSING COLOR: BLACK (2,000PCS/REEL; 20,000PCS/CARTON)
MRFP1-8000010	MRF I PLUG-1.80:SHELL GOLD PLATING, HOUSING COLOR: BLACK (2,000PCS/REEL; 20,000PCS/CARTON)
Remark:1.32&1.37 Sharing.	



- **MINI RF II PLUG:**
- **Applicable CABLE for OD 0.81/1.13/1.32/1.37mm Coaxial Cable**

P/N:	DESCRIPTION
MRFP2-1000020	MRF II PLUG-0.81:SHELL GOLD PLATING, HOUSING COLOR: BLACK (2,500PCS/REEL; 25,000PCS/CARTON)
MRFP2-3000020	MRF II PLUG-1.13:SHELL GOLD PLATING, HOUSING COLOR: BLACK (2,500PCS/REEL; 25,000PCS/CARTON)
MRFP2-7000020	MRF II PLUG-1.37:SHELL GOLD PLATING, HOUSING COLOR: BLACK (2,500PCS/REEL; 25,000PCS/CARTON)
Remark:1.32&1.37 Sharing.	



- **MINI RF III PLUG:**
- **Applicable CABLE for OD 0.81mm Coaxial Cable**

P/N:	DESCRIPTION
MRFP3-1000030	MRF III PLUG-0.81:SHELL GOLD PLATING, HOUSING COLOR: BLACK (4,000PCS/REEL; 40,000PCS/CARTON)

Recommended Cable Strip Length

Cable Construction	For OD 0.81mm Coaxial cable

Parts	Material	Finish/Color
Housing	Engineer Plastic 94-HB	Black
Center Contact	Copper Alloy	Gold Plated
Shell	Copper Alloy	Gold /Silver / Tin Plated

【RF CABLE ASSEMBLY】

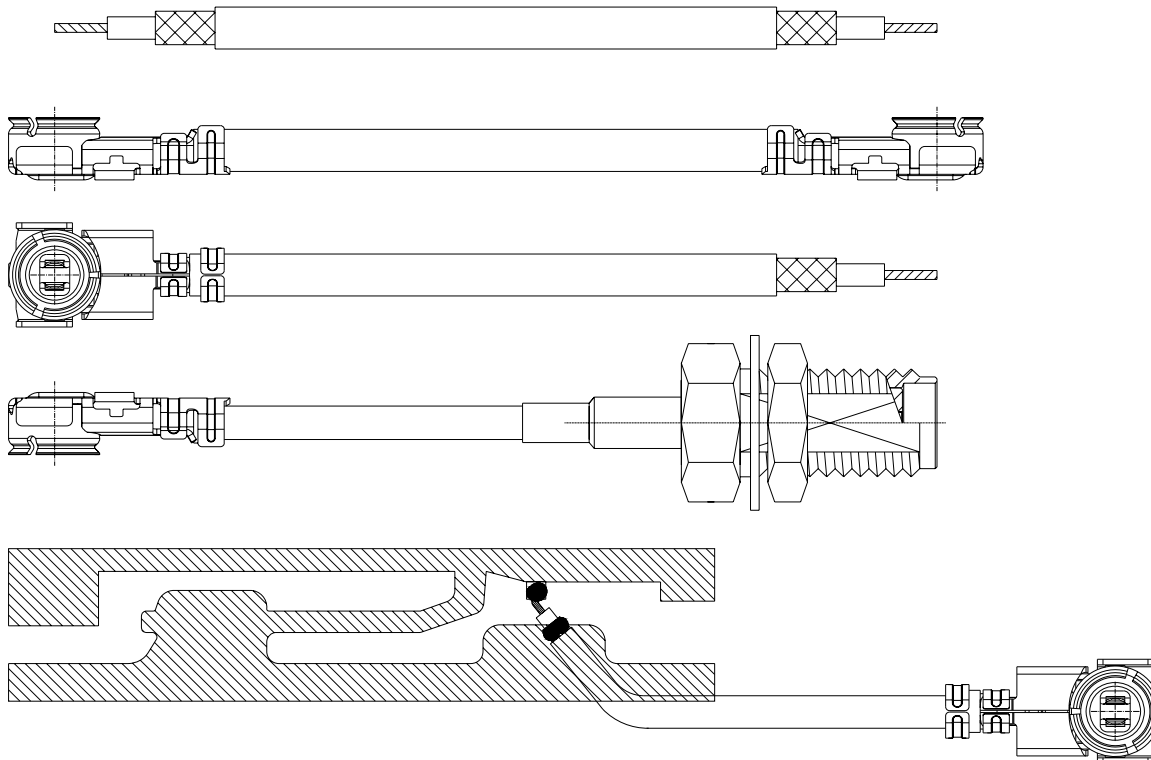
● Part Number Description:

M R F W X - X X X X X X X X
 ① ② ③

1>. MRFW: RF CABLE ASSEMBLY

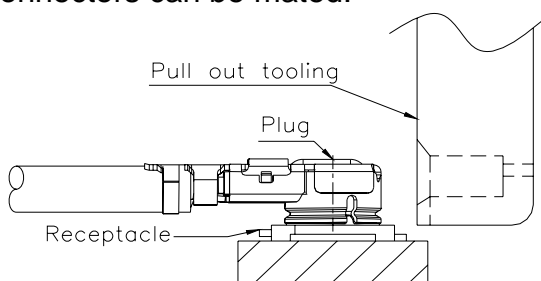
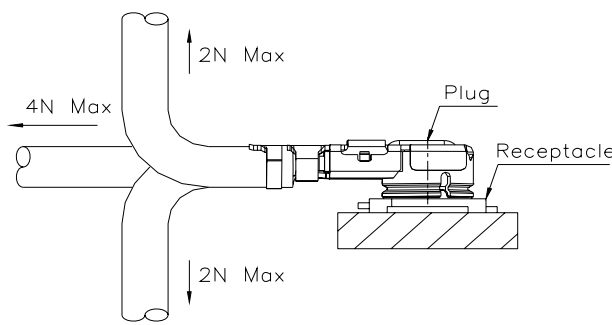
2>. ASSEMBLY TYPE: 0: CABLE BOTH END TINNED,
 1: MRF I PLUG CABLE ASSEMBLY ,
 2: MRF II PLUG CABLE ASSEMBLY ,
 3: MRF III PLUG CABLE ASSEMBLY ,
 4: OTHER CONNECTOR ASSEMBLY.

3>. SERIAL NUMBER: 0000000~9999999



【USAGE PRECAUTIONS】

● MINI RF PLUG TERMINAL

<p>1.Connection and Disconnection</p>	<p>a. To disconnect connector, insert the pull out tooling (P/N:902-0001-006) under the plug terminal's flanges and pull out vertically, in the direction of the mating axis.</p> <p>b. To mate the connector, the mating axis of both connectors must be aligned and the connectors can be mated.</p> 
<p>2.Permissible load on the cable after connectors are mated</p>	<p>Do not apply a load to the cable in excess of the values indicated in the below figure.</p> 



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Address:NO.24 Lian Tang Wei 1st Rd. Lian Tang Wei Industries District Area. He Ao Village, Heng Gang Town, Shen Zhen City, Guang Dong ,China.

Japan Contact Office

Contact person : Managing Director

TEL : +81-45-563-7256 FAX : +81-45-563-7031

E-mail : yamahata@jm.ejnet.ne.jp

Contact Address : 6-9-41,HIYOSHI,KOHOKU-KUYOKOHAMA,JAPAN 〒223-0061