

# MHF<sup>®</sup> III Plug Cable Assembly

Mating profile : **1.6mm MAX.**

Applicable for AWG36 ( $\phi$  0.81mm /  $\phi$  0.64mm) Cable

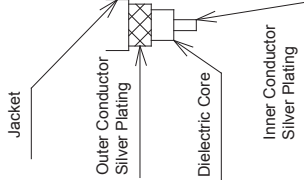
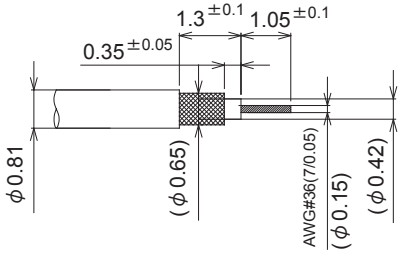
## 【Part Number】

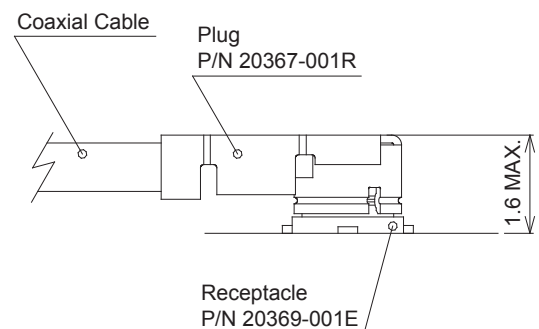
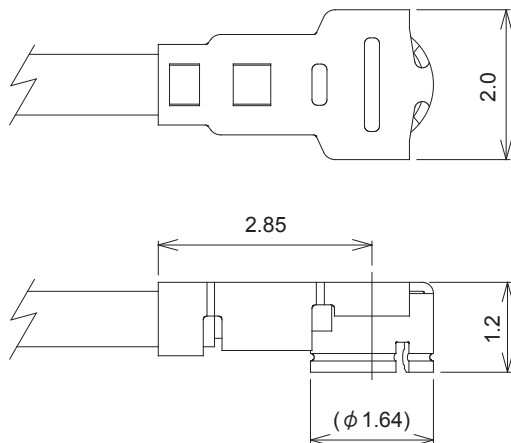
Ground Contact : **Au** Plating

## 20367 - 001 R

Packing : Reel  
1 reel : 2,000pcs

## 【Applicable Cable gauge】

|                                                                                                                             |                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Part No. (Au)                                                                                                               | 20367-001R                                                                          |
| Part No. (Ag)                                                                                                               | -                                                                                   |
|                                                                                                                             | for AWG#36                                                                          |
| Applicable Cable<br>Nominal Dimension<br> |  |
| Braided Shield of Outer Conductor                                                                                           | Single Braided Shield                                                               |



MATED VIEW

## 【Material and Finish】

| Parts          | Material     | Plating / Color |
|----------------|--------------|-----------------|
| HOUSING        | LCP UL94V-0  | NATURAL         |
| CONTACT        | COPPER ALLOY | Au              |
| GROUND CONTACT | COPPER ALLOY | Au              |

# MHF® III Receptacle

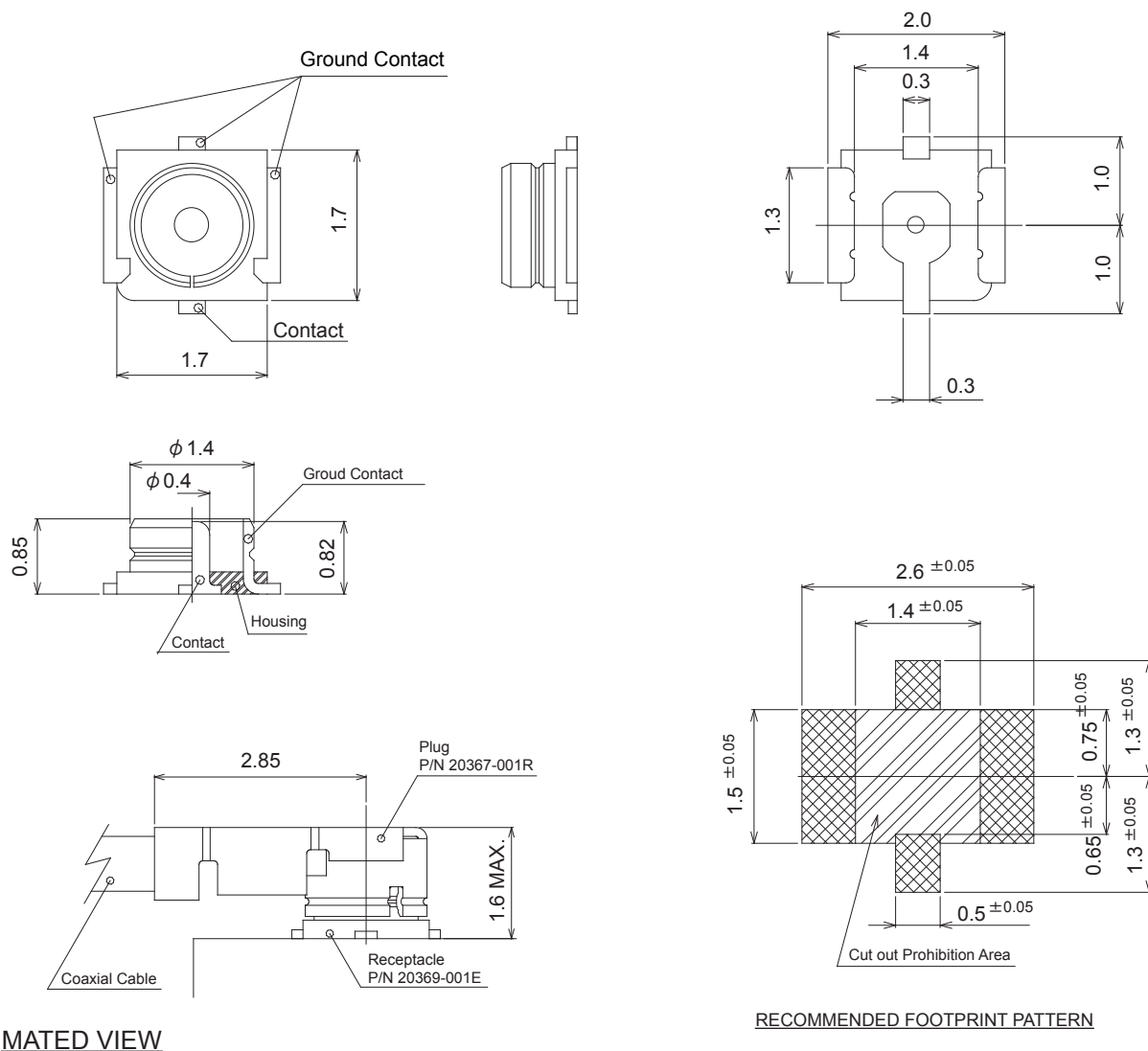
## 【Part Number】

Ground Contact : **Au Plating**

## 20369-001 E

Packing : Emboss Tape

1reel : 5,000pcs



MATED VIEW

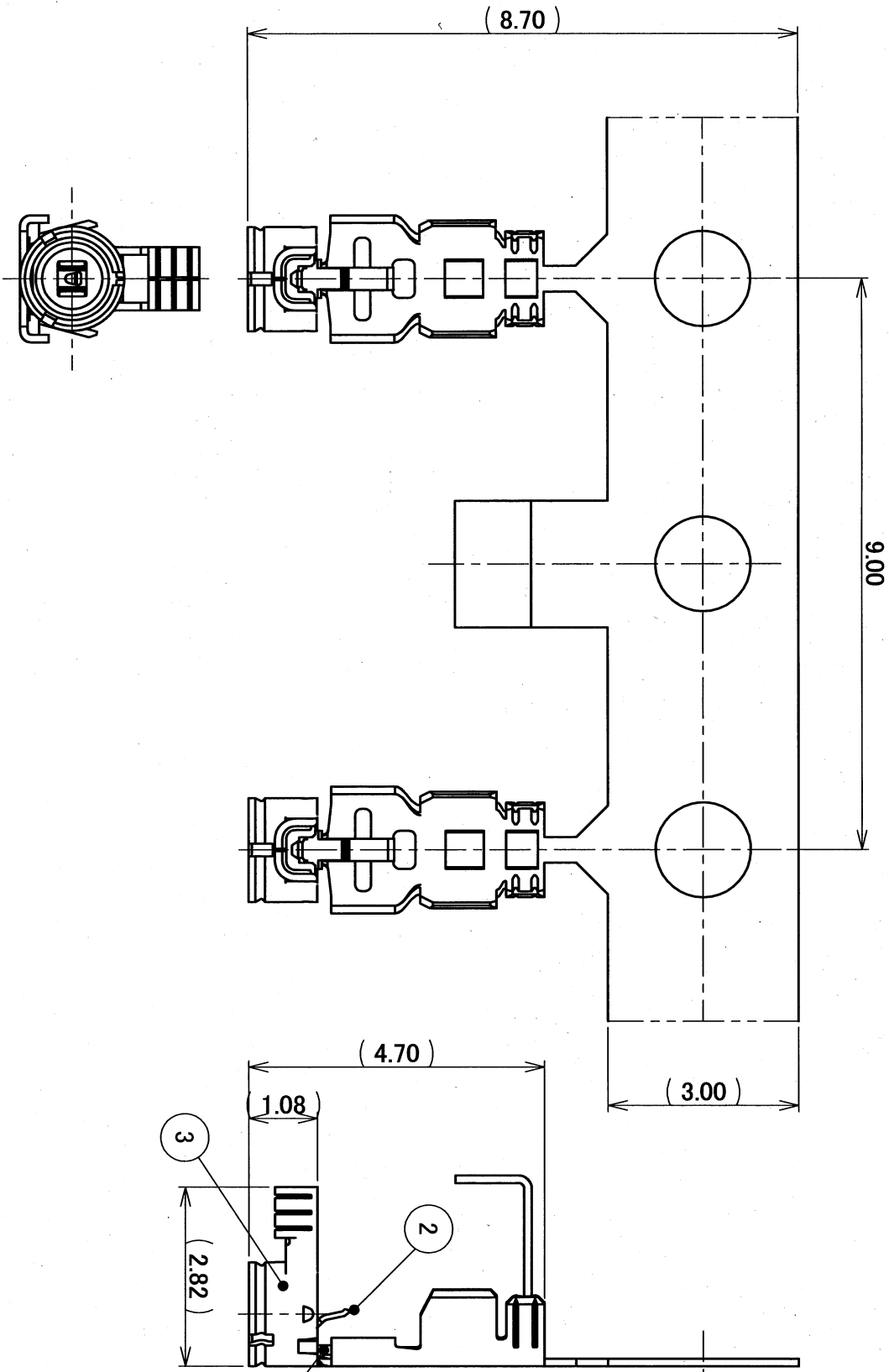
RECOMMENDED FOOTPRINT PATTERN

## 【Material and Finish】

| Parts          | Material     | Plating / Color |
|----------------|--------------|-----------------|
| HOUSING        | LCP UL94V-0  | BLACK           |
| CONTACT        | COPPER ALLOY | Au              |
| GROUND CONTACT | COPPER ALLOY | Au              |

Recommended P / N 20367-001R

|            |
|------------|
| PART No.   |
| 20367-001R |



NOTES

1.MATERIAL

- ①HOUSING : LCP(Natural) UL94-V0
- ②CONTACT : Phosphor Bronze Au over Ni.
- ③GROUND CONTACT : Phosphor Bronze Au over Ni.

2.PACKING : REEL

3.APPLICABLE CABLE

3-1. DESCRIPTION

Inner conductor : AWG#36(7/0.05)

Silver plating annealed copper wire or silver plating tin-copper alloy.

\* Must not use solder coated inner conductor.

Dielectric core : Fluoro-plastics, diameter 0.4(+0.04/-0.02)mm, nominal thickness 0.125mm.

Outer conductor : 8/5/0.05, nominal diameter 0.65mm, silver plating annealed copper wire.

\* Must not use solder coated outer conductor.

Jacket : Fluoro-plastics, diameter 0.81(+0.04/-0.02)mm, nominal thickness 0.08mm.

3-2. REQUIREMENTS

Characteristic impedance : 50(+2/-2)ohm by TDR method

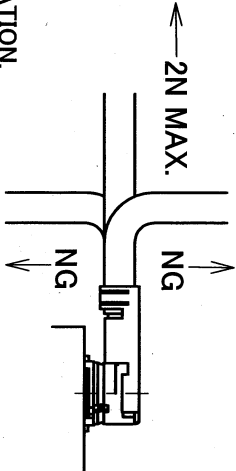
Nominal capacitance(Reference value) : 96pF/m

Conductor resistance of inner conductor at 293K (Reference value) : 1400 ohm/km

Insulation resistance : 1000mega-ohm. km MIN.

Dielectric with stance voltage : no breakdown at AC1000V for 1 minutes.

4.PERMISSIBLE LOAD OF CABLE AT MATING.



5.SUGGESTIONS FOR MATING & UNMATING OPERATION.

5-1. MATING

Mate the connector vertically as much as possible, adjusting the mating axis of plug and receptacle. Do not slant mate.

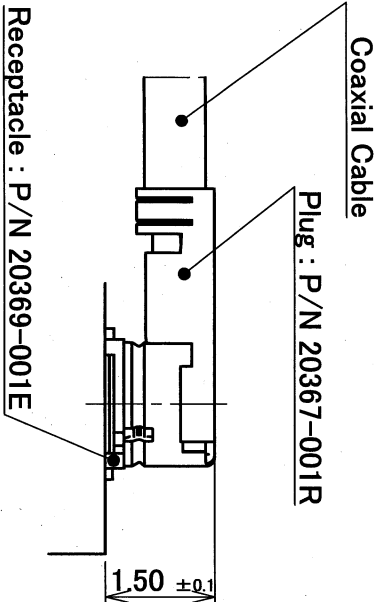
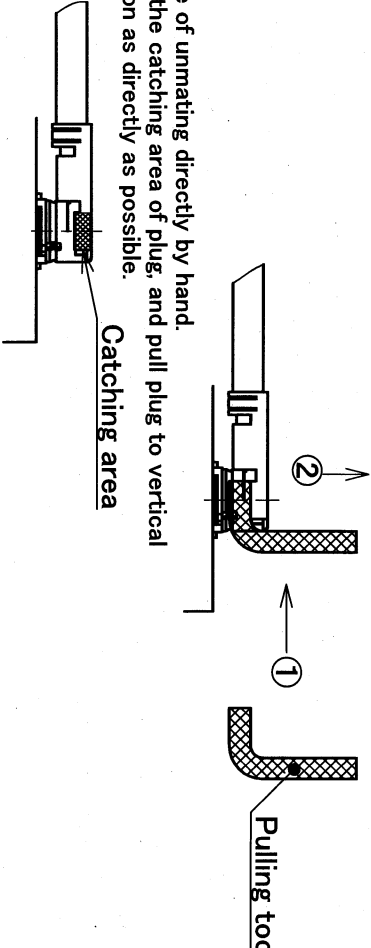
5-2. UNMATING

5-2-1

In case of unmating by pulling tool( P / N : 90435-001 ). Use the pulling tool as the following drawing, and pull plug to vertical direction as directly as possible.

5-2-2.

In case of unmating directly by hand. Catch the catching area of plug, and pull plug to vertical direction as directly as possible.

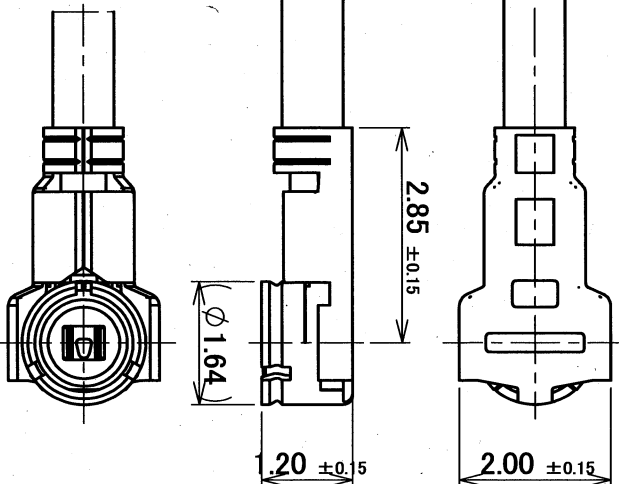


Receptacle : P / N 20369-001E

MATING

GENERAL TOLERANCE

|                  |      |
|------------------|------|
| 6 MAX.           | ±0.2 |
| 6 OVER MAX. 30   | ±0.3 |
| 30 OVER MAX. 120 | ±0.5 |
| ANGLE            | ±2°  |

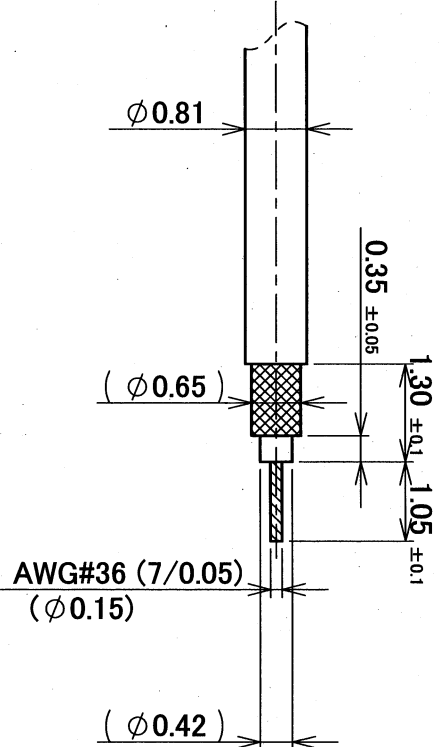
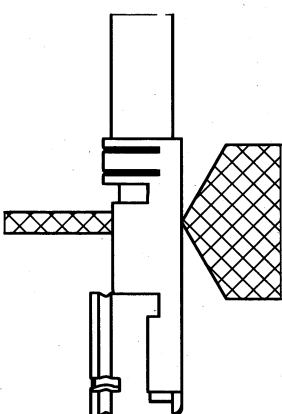
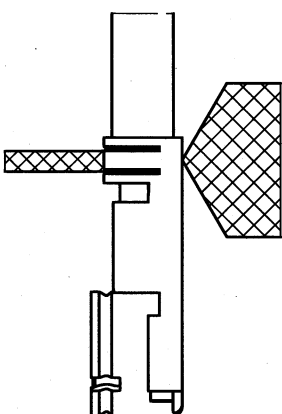


|             |         |     |                |     |
|-------------|---------|-----|----------------|-----|
| 7           | Z150656 | S.T | Jun./12 / '15. | Tak |
| 6           | Z12104  | H.M | Feb./09/'12    | E.K |
| 5           | Z12059  | J.T | Jan./25/'12    | E.K |
| 4           | Z06046  | TAK | Jan./31/'06    | E.K |
| 3           | Z05306  | Y.H | Jul./01/'05    | E.K |
| REV         | ECN     | BY  | DATE           | APP |
| REV.RECORD  |         |     |                |     |
| R4          |         |     |                |     |
| DESIGNED BY |         |     |                |     |
| T.Takano    |         |     |                |     |
| DATE        |         |     |                |     |
| Mar./01/'04 |         |     |                |     |
| CHK'D BY    |         |     |                |     |
| T.Harada    |         |     |                |     |
| DATE        |         |     |                |     |
| Mar./02/'04 |         |     |                |     |
| APP'D BY    |         |     |                |     |
| K.Katabuchi |         |     |                |     |
| DATE        |         |     |                |     |
| Mar./02/'04 |         |     |                |     |
| CUSTOMER    |         |     |                |     |
| COPY        |         |     |                |     |
| PROJECTION  |         |     |                |     |
| 10:1        |         |     |                |     |
| SCALE       |         |     |                |     |
| UNIT        |         |     |                |     |
| mm          |         |     |                |     |
| DWG. No.    |         |     |                |     |
| 20367       |         |     |                |     |
| SHEET       |         |     |                |     |
| 1/2         |         |     |                |     |
| REV.        |         |     |                |     |
| 7           |         |     |                |     |

I-PEX DA-ICHI SEIKO CO.,LTD.

MHF III Connector Plug

Confidential III C

|                                           |                                                                                                                                     |                                                                                                                                          |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Part No.                                  | 20367-001R                                                                                                                          |                                                                                                                                          |
| Applicable cable nominal dimension        |  <p>※ NOTE-1</p>                                |                                                                                                                                          |
| Braided shield of Outer conductor 外部導体の編組 | Single / 1重編組                                                                                                                       |                                                                                                                                          |
| P/N of semi auto termination machine      | 90283-008<br>Semi-auto                                                                                                              |                                                                                                                                          |
| Crimp Height                              |  <p>※ NOTE-2</p> <p>CH-1(Fit PART) 0.89~0.93</p> |  <p>※ NOTE-2</p> <p>CH-2 (Jacket PART) 0.80~0.85</p> |

NOTES.  
1.中心導体、外部導体への半田コーティングは不可。  
Must not use solder coated inner conductor and outer conductor.  
2.ポイントマイクロメータを使用。  
Use for point micrometer.

|            |      |                                                       |      |     |               |            |       |       |          |       |      |
|------------|------|-------------------------------------------------------|------|-----|---------------|------------|-------|-------|----------|-------|------|
| DESIGN BY  | DATE | TITLE                                                 |      |     |               |            |       |       |          |       |      |
| CHKD BY    | DATE | MHF-III Connector Plug                                |      |     |               |            |       |       |          |       |      |
| APPD BY    | DATE | I-PEX DAICHI SEIKO CO.,LTD.<br>I-PEX Business Company |      |     |               |            |       |       |          |       |      |
| REV        | EON  | BY                                                    | DATE | APP | CUSTOMER COPY | PROJECTION | SCALE | UNIT  | DWG. No. | SHEET | REV. |
| REV.RECORD |      |                                                       |      |     |               | 10:1       | mm    | 20367 | 2/2      | 7     |      |
| SERIES No. |      |                                                       |      |     |               |            |       |       |          |       |      |