

# NOVASTACK® 35-HDN

5G毫米波模组开发, 全屏蔽, 超窄型设计, 间距0.35 mm, 配合高度0.7 mm

## Product Specifications:

|                    |             |   |
|--------------------|-------------|---|
| Board Pitch (mm)   | 0.35        |   |
| Wiping Length (mm) | 0.14        |   |
| Mated Size (mm)    | Height      | 0.7 +/- 0.05  |
|                    | Width       | Formula: 4.15 (10 P), 5.90 (20 P), 7.90 (30 P)                    |
|                    | Depth       | 2.15 mm   |
| Frequency          | DC ~ 15 GHz |   |
| Current Rating     | Signal      | 1.0 A / pin (Max. 10 P)<br>(12 P and over : 12.0 A AC/DC (Total)) |
|                    | Power       | -   |
| Pin Counts         | Range       | 10 - 60   |
|                    | Available   | 10, 20, 30  |

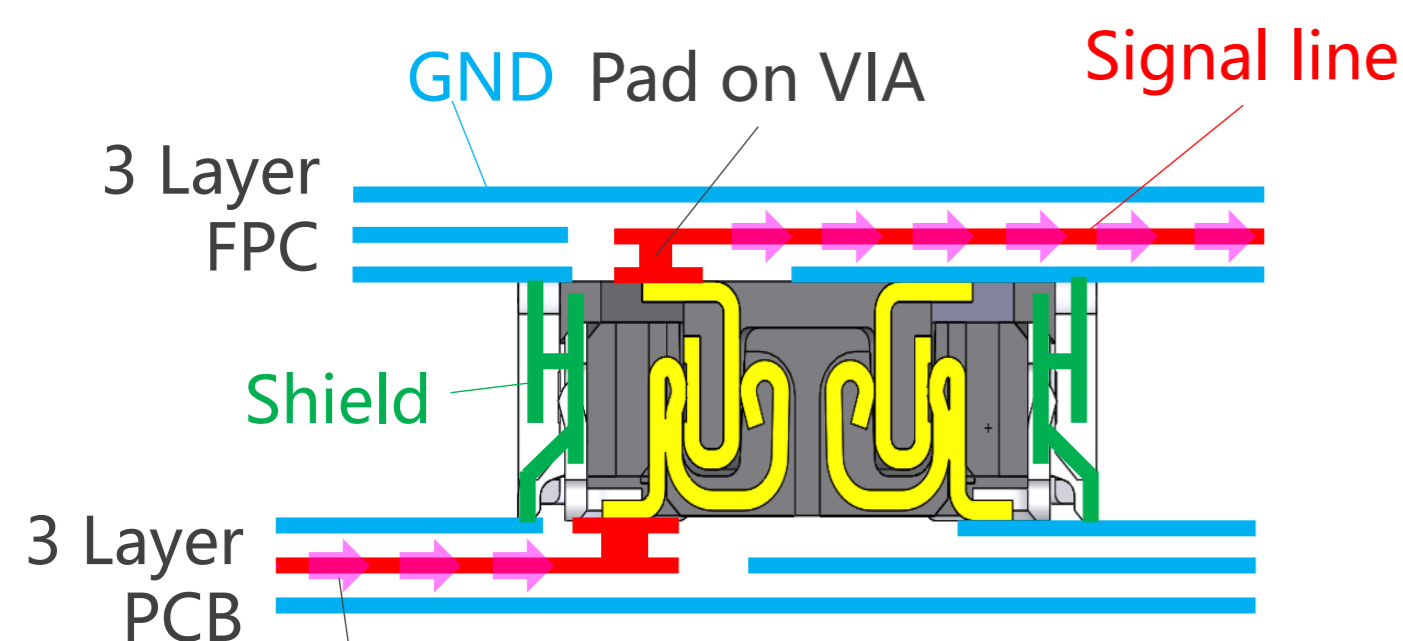
## Applicable Standards (Reference Only):

USB4 (20 Gbps/lane) USB 3.1 Gen 2 (10 Gbps)

\*如您需要了解未列出或不在范围内的Pin数, 请咨询我们。

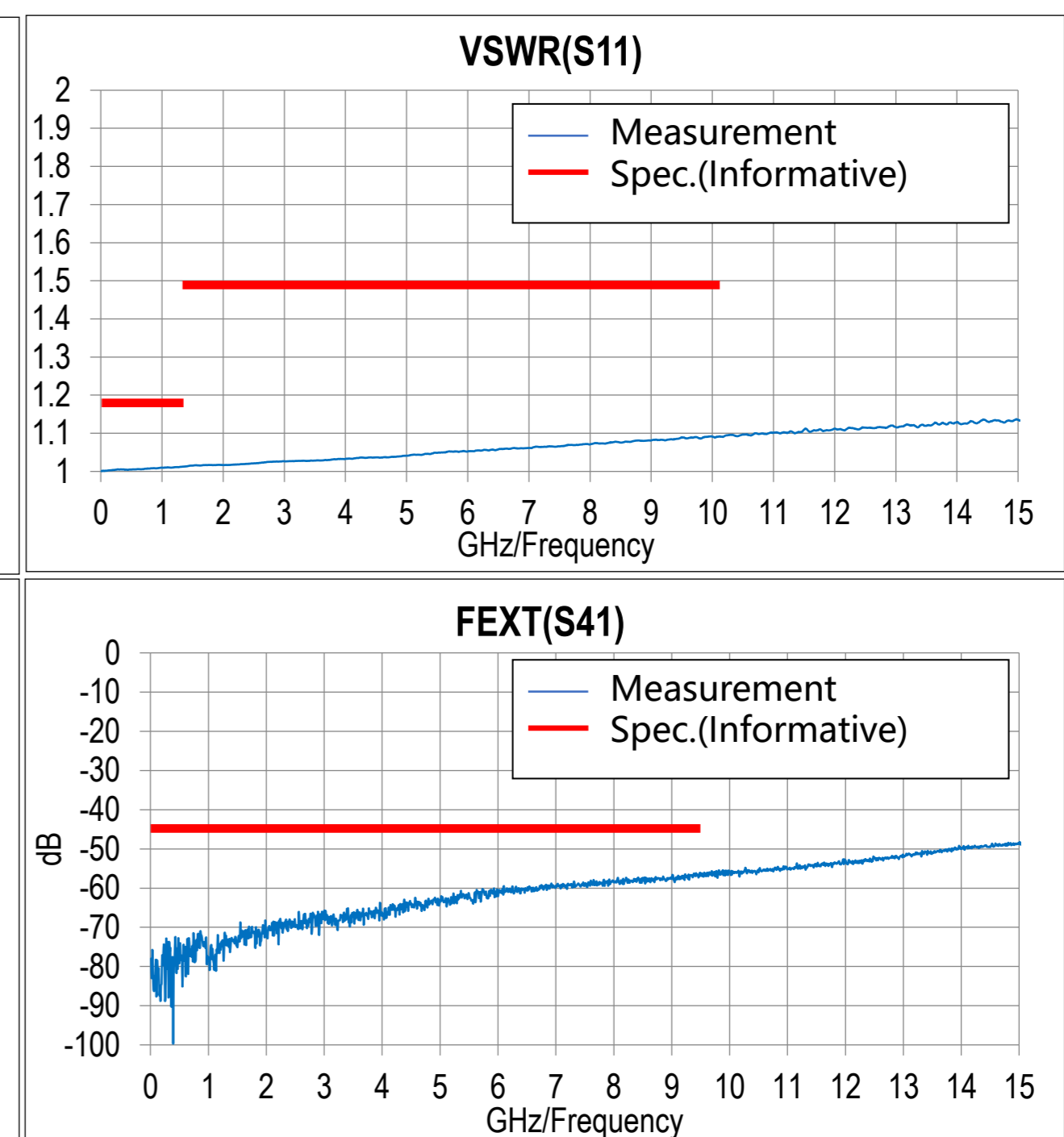
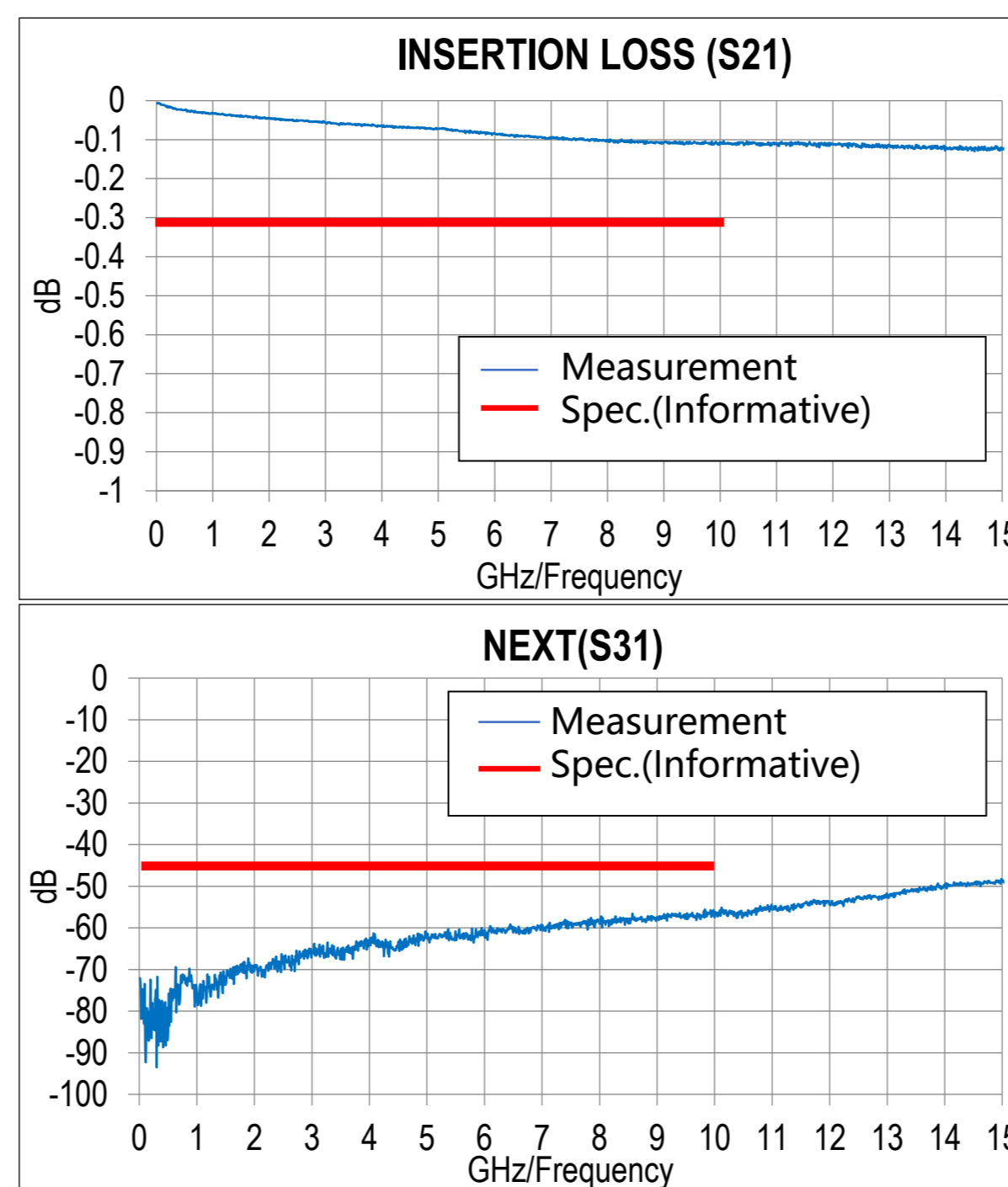
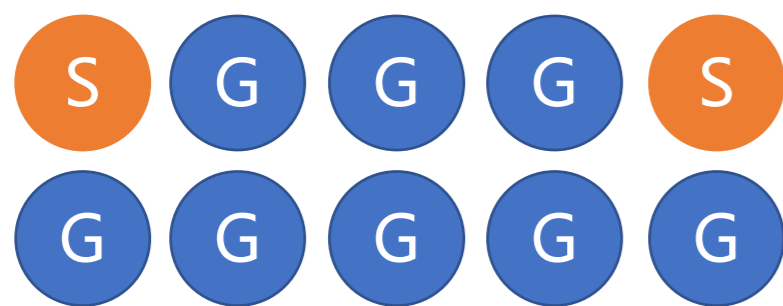


## 高频, 高速传输应用的理想选择 (5G 毫米波, USB4 / Thunderbolt 4等)



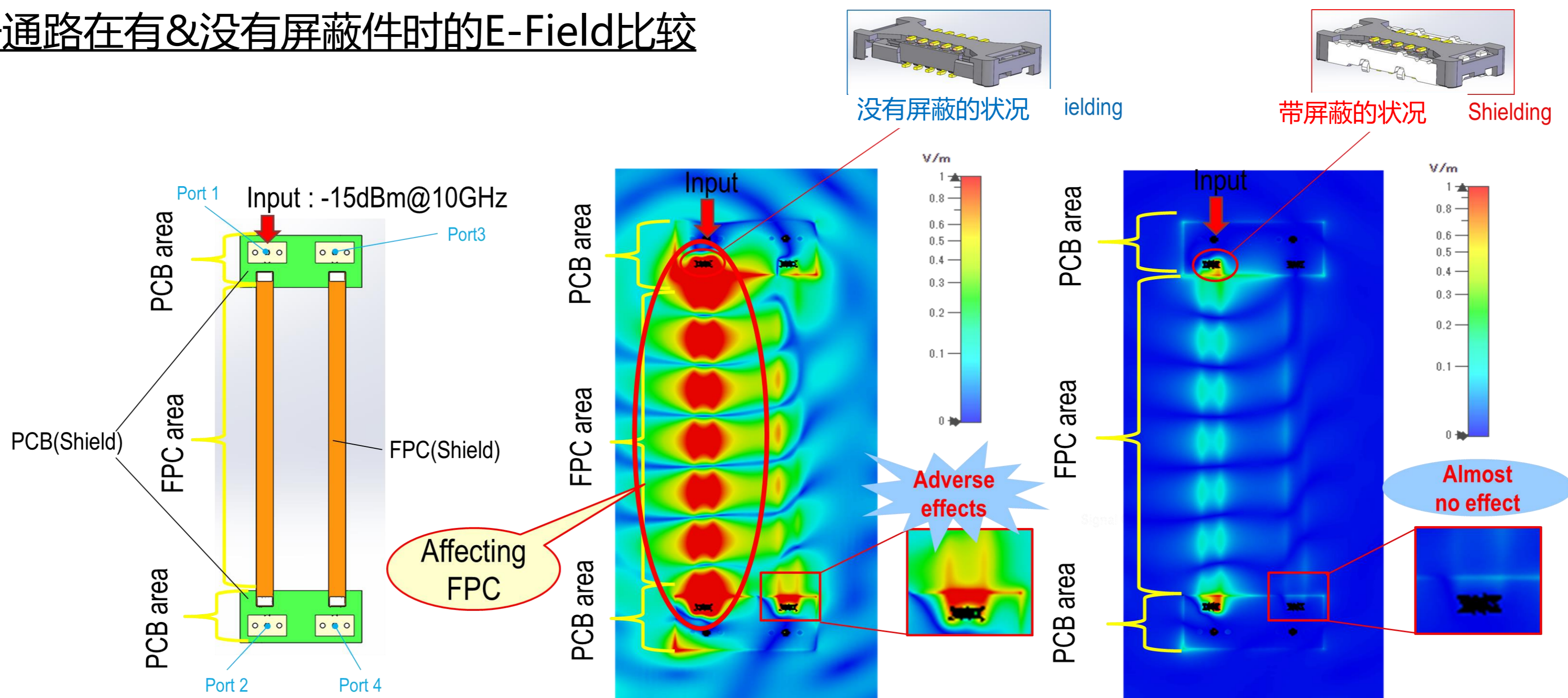
信号通路不受外部噪音的影响。

### Pin assignment



## ZenShield®的全屏蔽设计, 降低了5G应用的EMI

相邻信号通路在有&没有屏蔽件时的E-Field比较



## 窄款低背, 全屏蔽板对板连接器

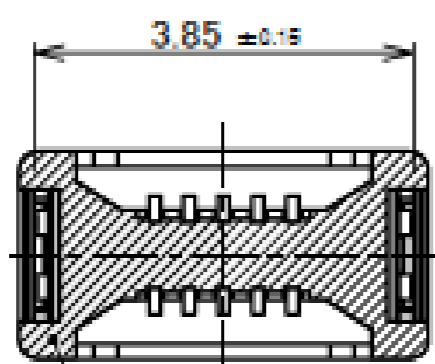
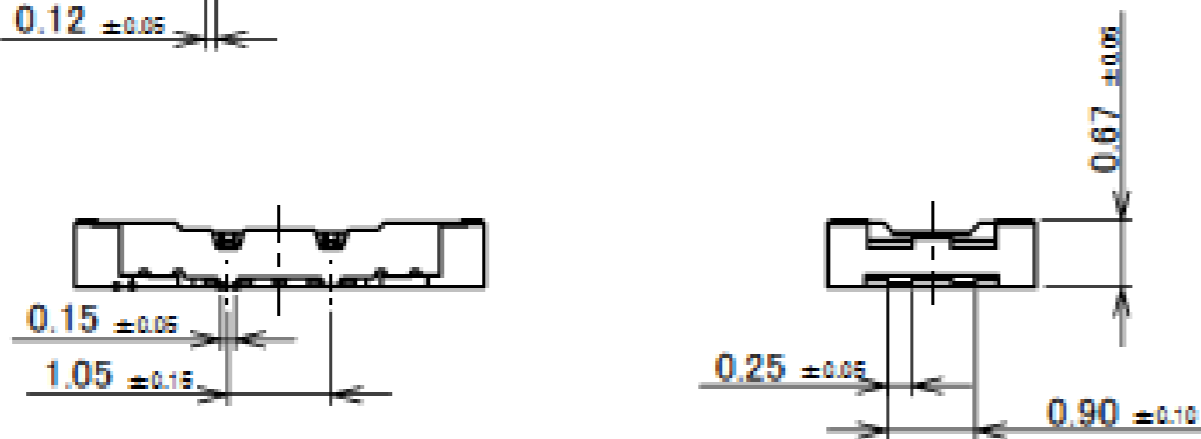
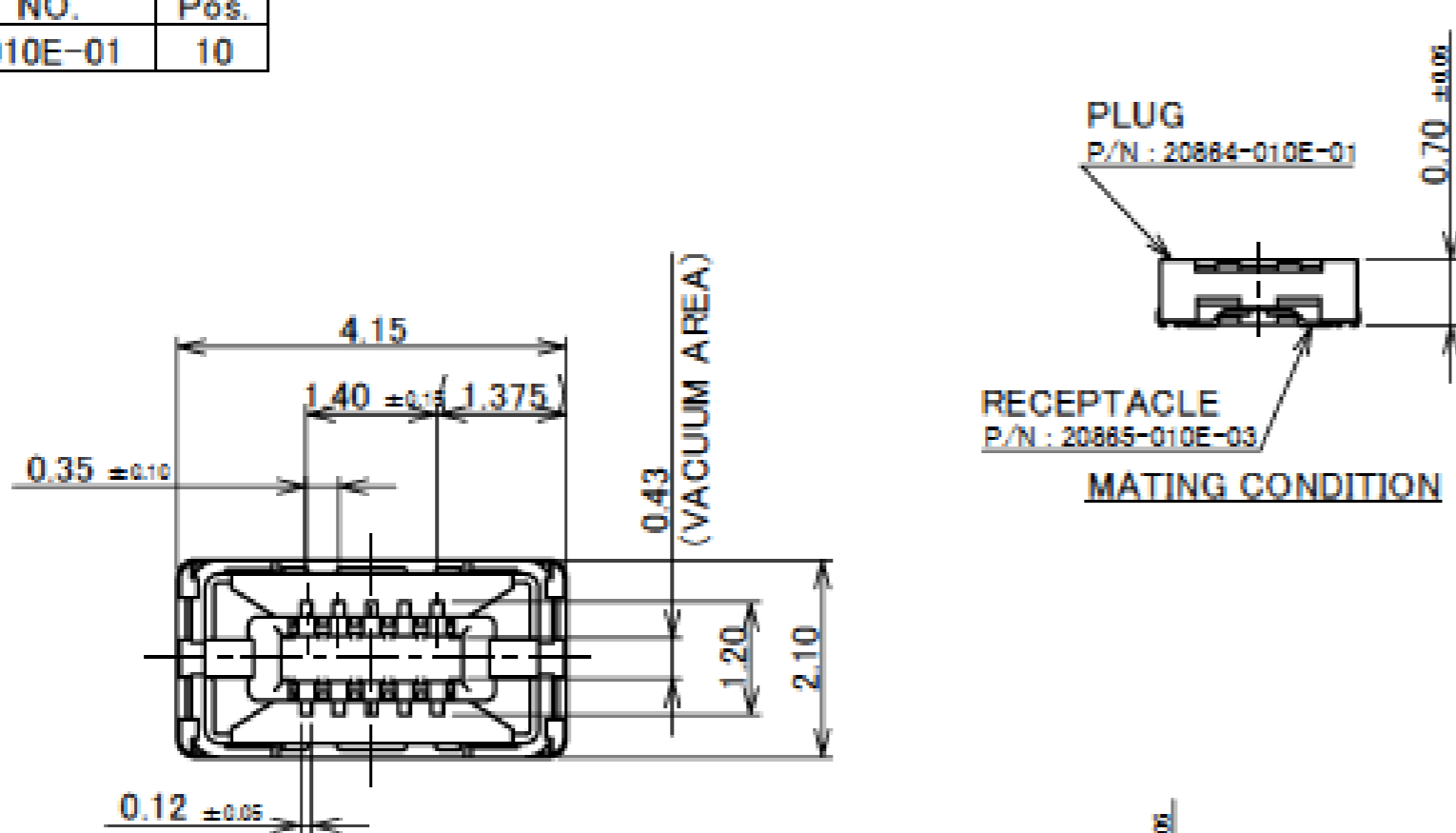
### 针对智能手机



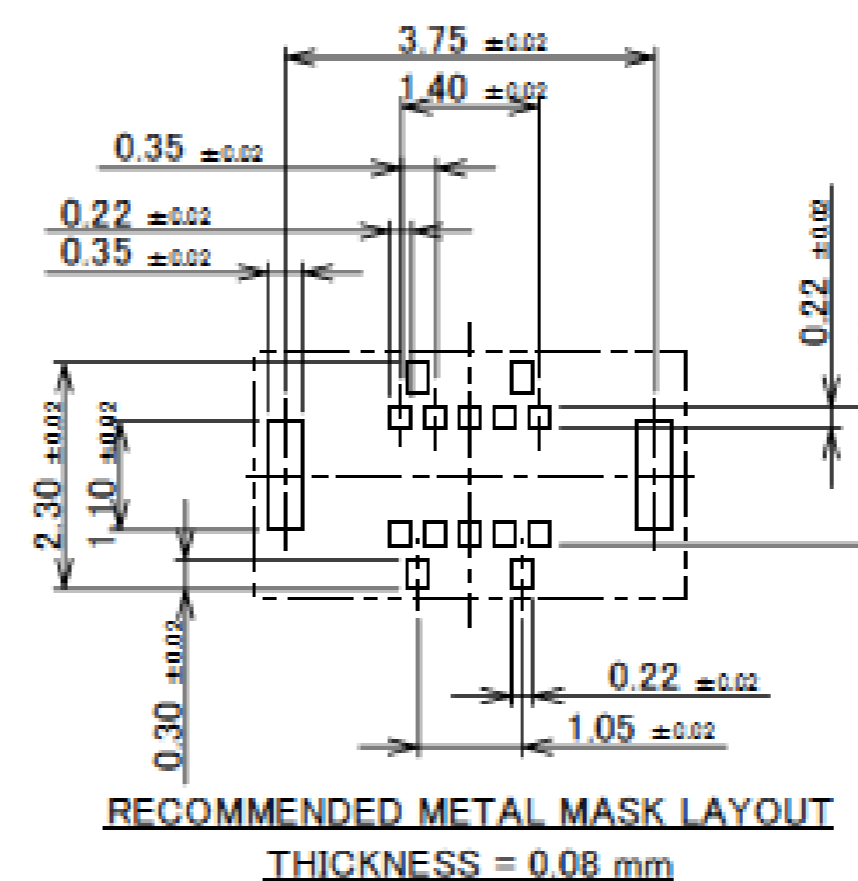
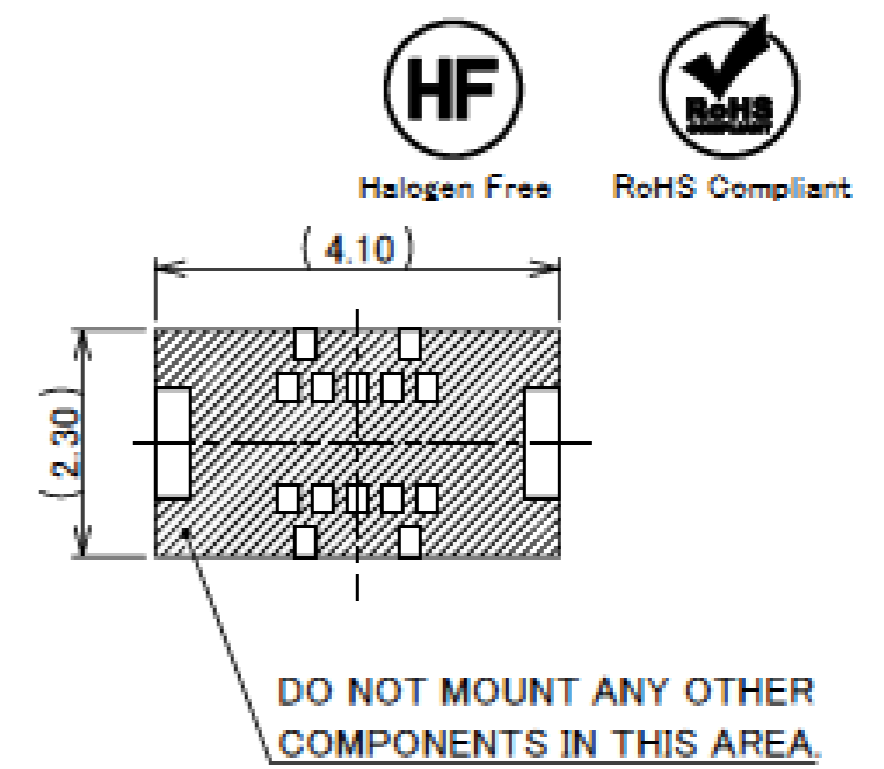
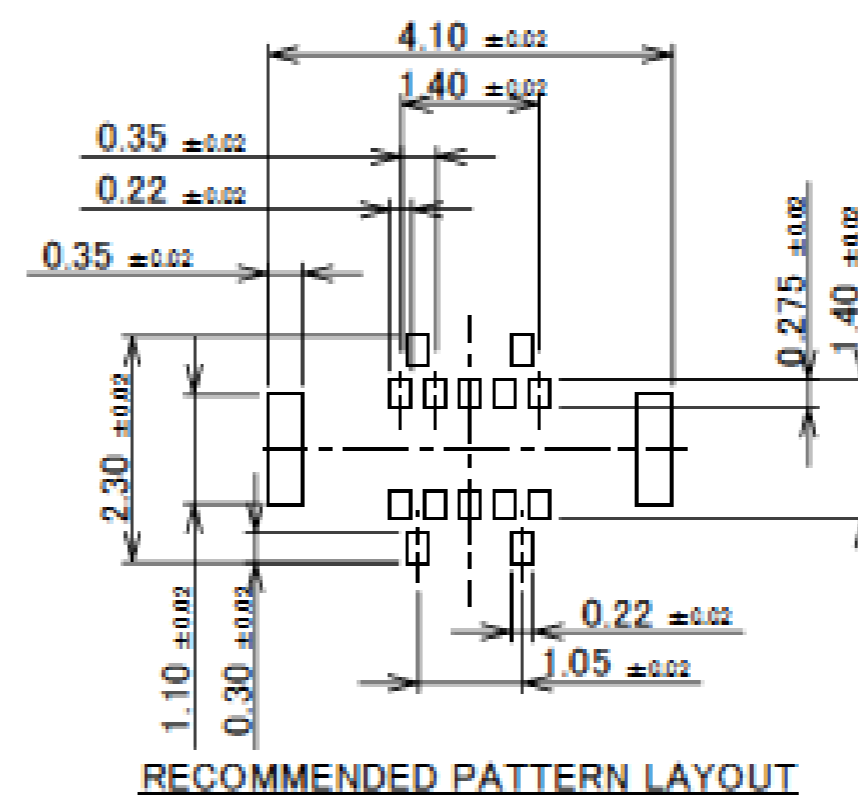
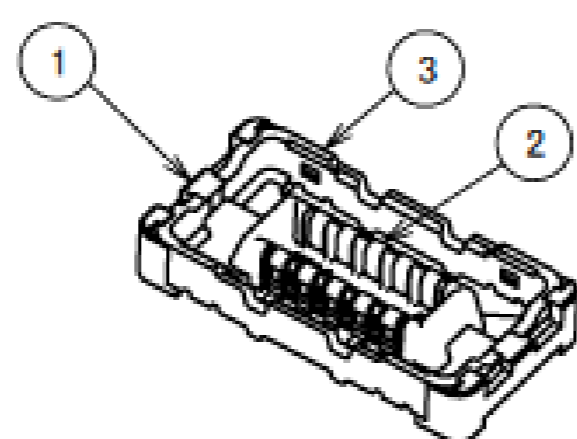
# Component Parts Detail

## Plug Assembly

|                 |               |
|-----------------|---------------|
| Recommended P/N | 20864-010E-01 |
| PART NO.        | Pos.          |
| 20864-010E-01   | 10            |



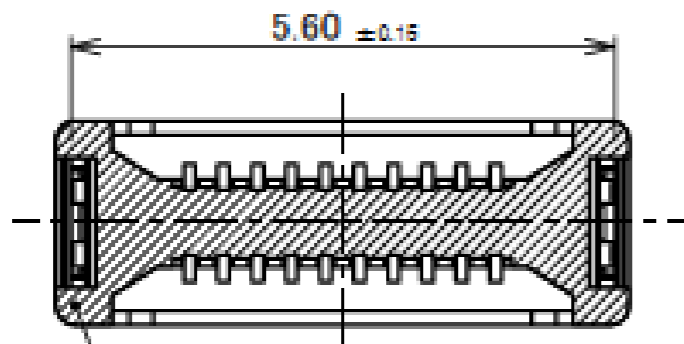
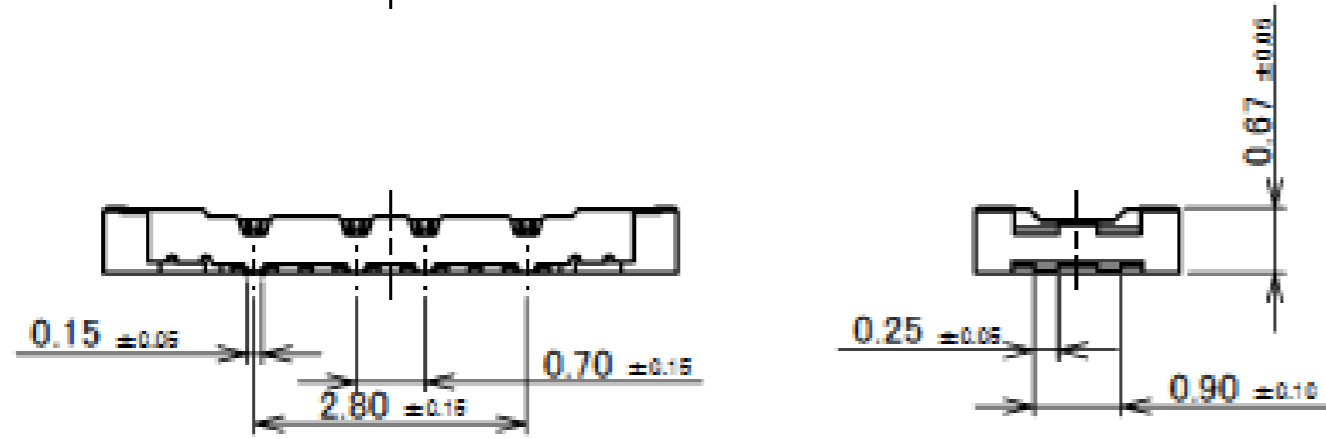
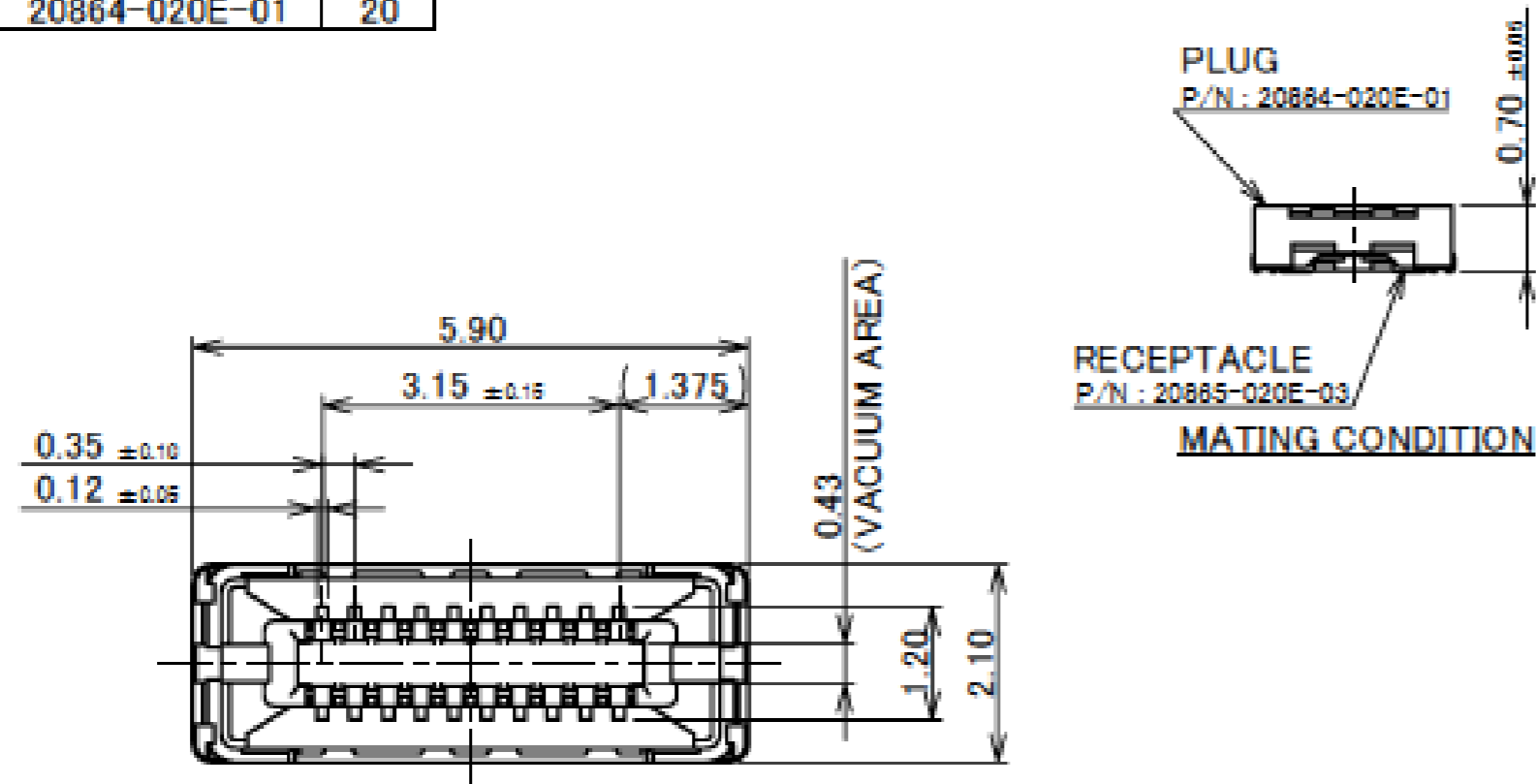
There is a possibility of dent shape in the bottom surface of HOUSING.



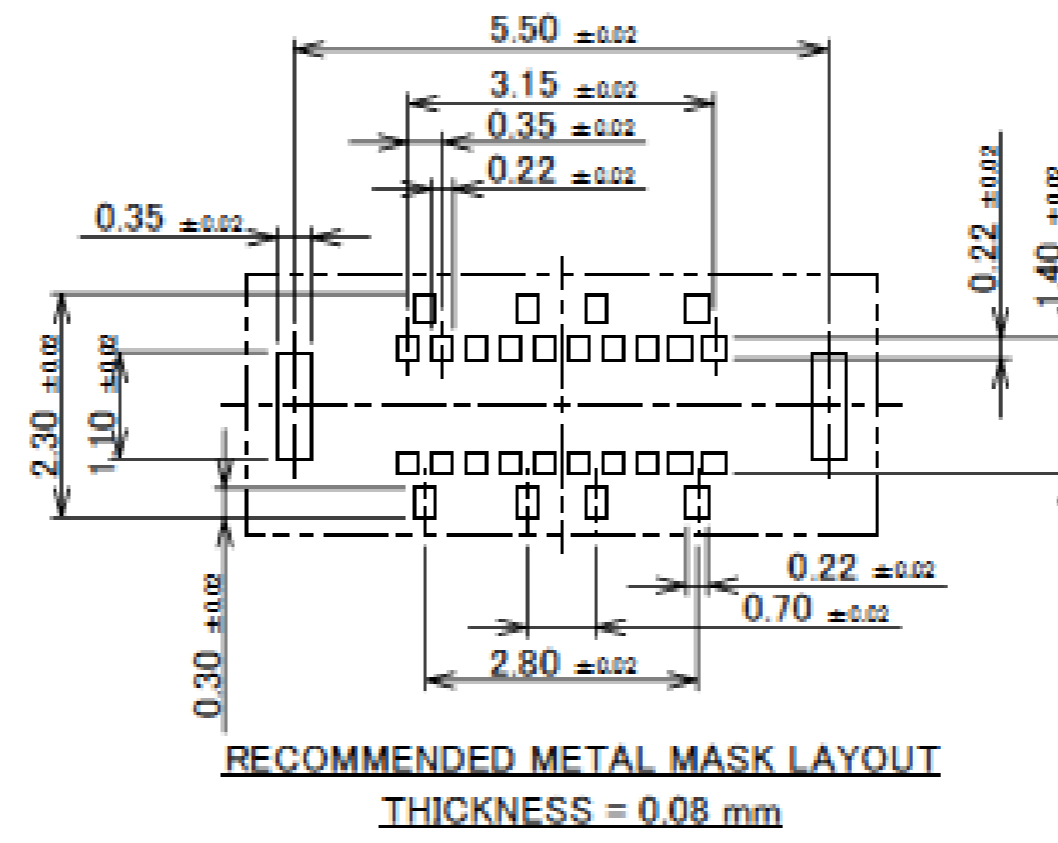
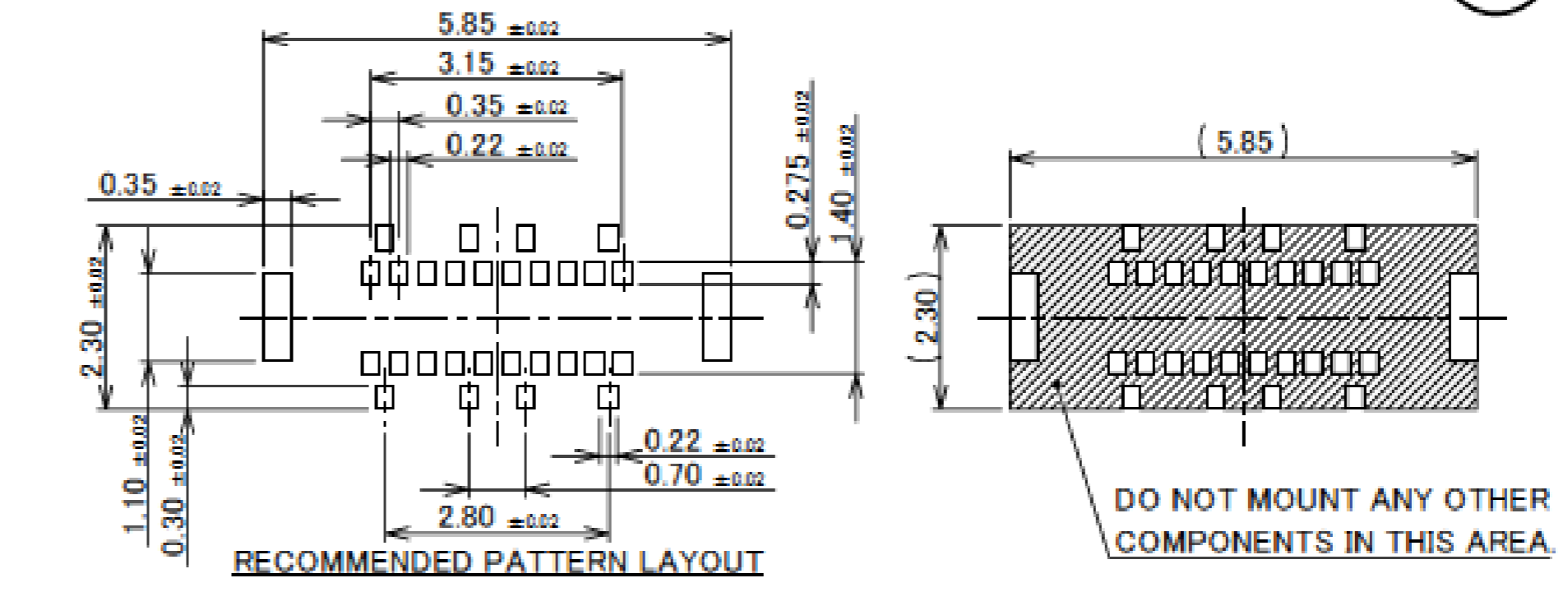
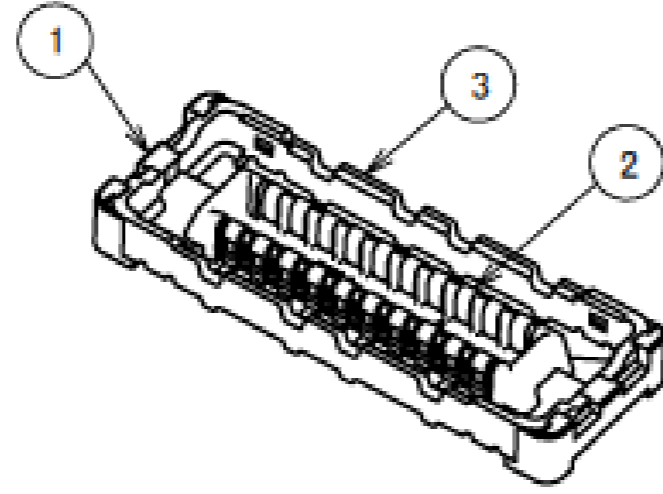
| NO. | DISCRIPTION | MATERIAL     | FINISH, REMARKS   |
|-----|-------------|--------------|---|
| 3   | SHELL       | COPPER ALLOY | SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN.   |
| 2   | CONTACT     | COPPER ALLOY | CONTACT PART Au 0.05 μm MIN. OVER Ni 1.27 μm MIN. SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN. |
| 1   | HOUSING     | LCP          | UL94V-0, BLACK  |

# Plug Assembly

| Recommended P/N |      | 20864-020E-01 |
|-----------------|------|---------------|
| PART NO.        | Pos. |               |
| 20864-020E-01   | 20   |               |



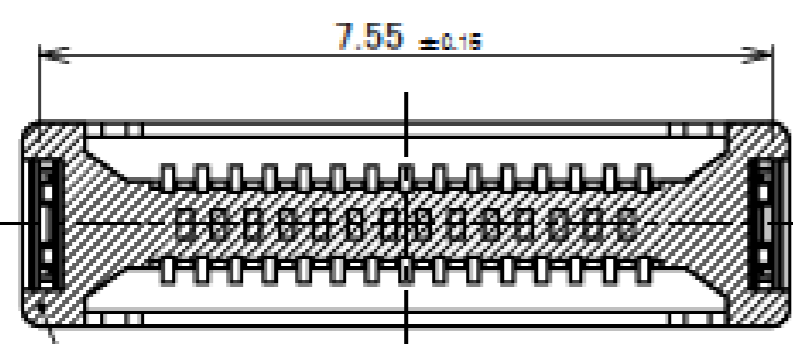
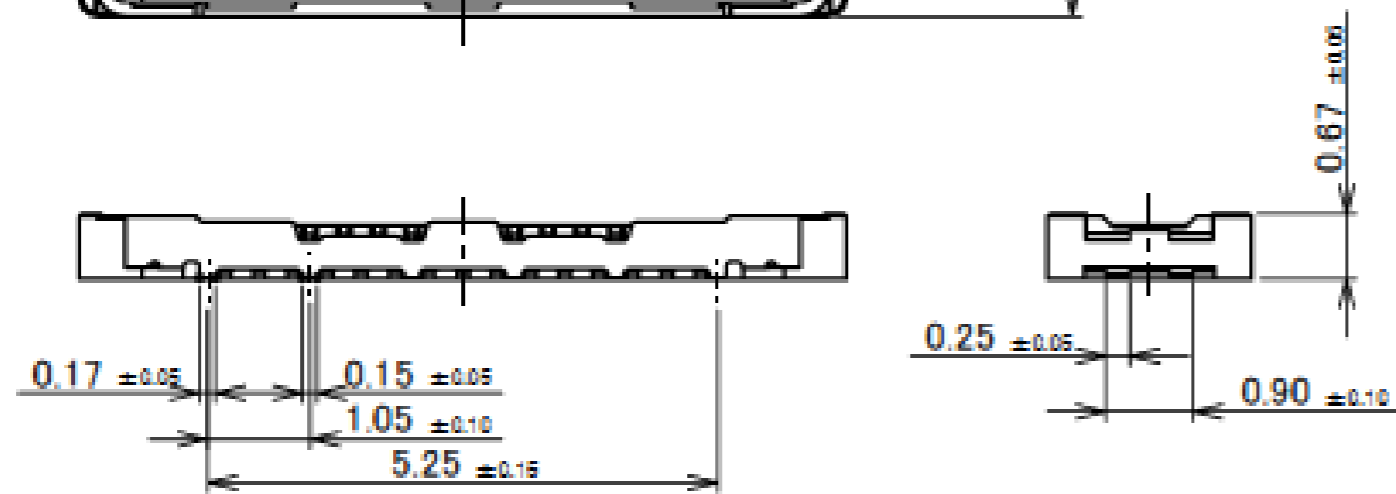
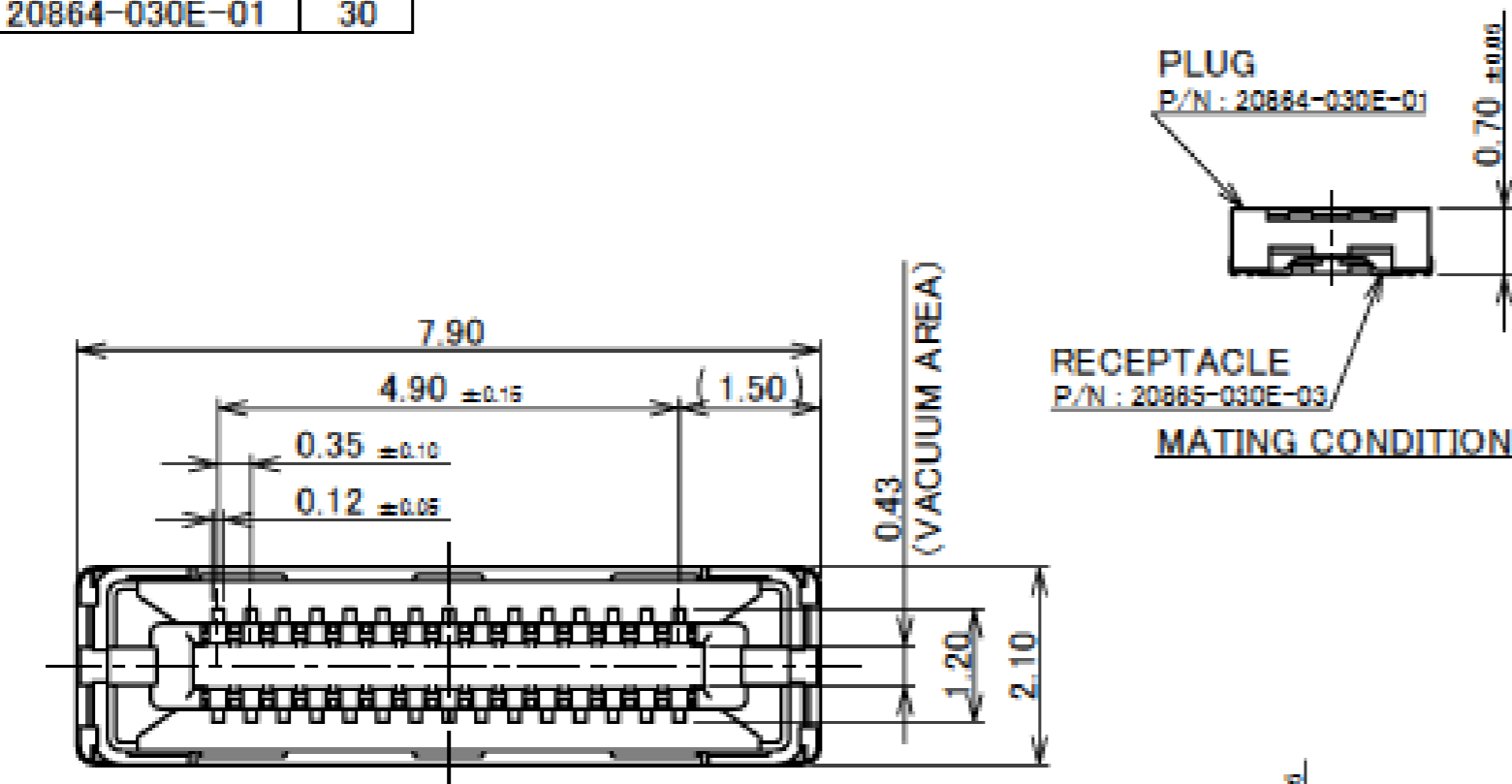
There is a possibility of dent shape in the bottom surface of HOUSING.



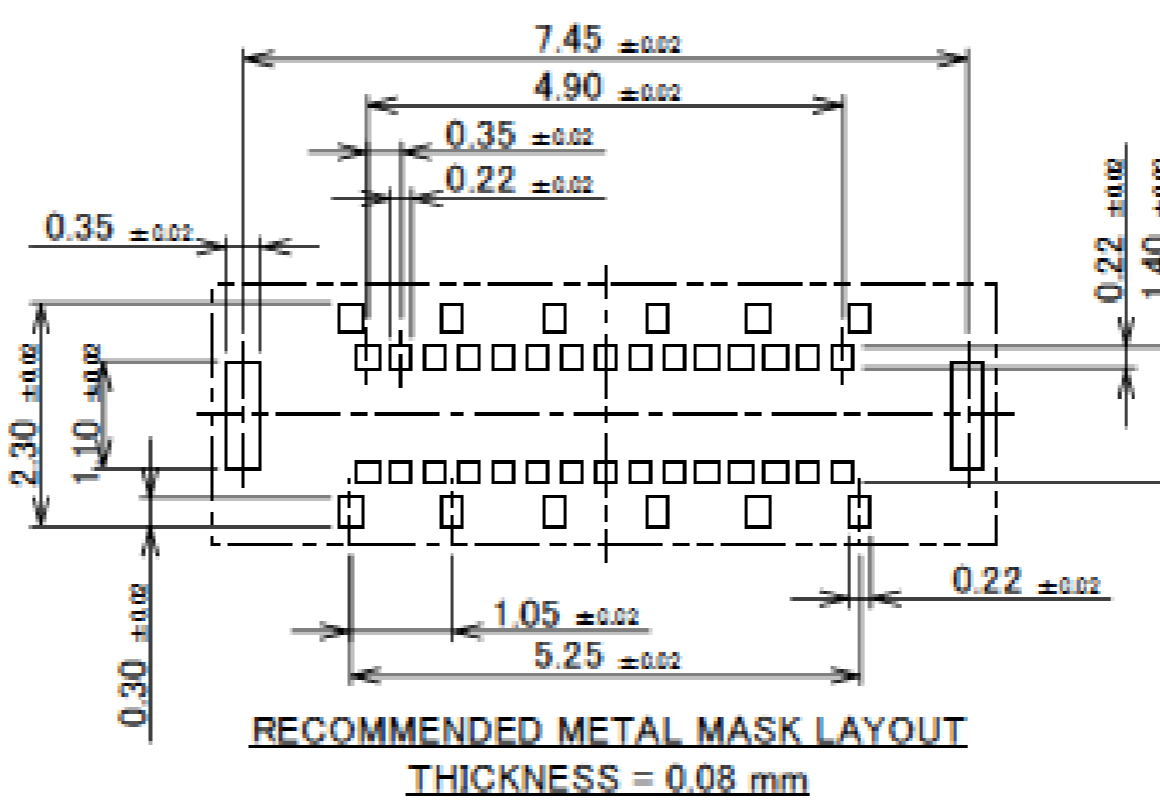
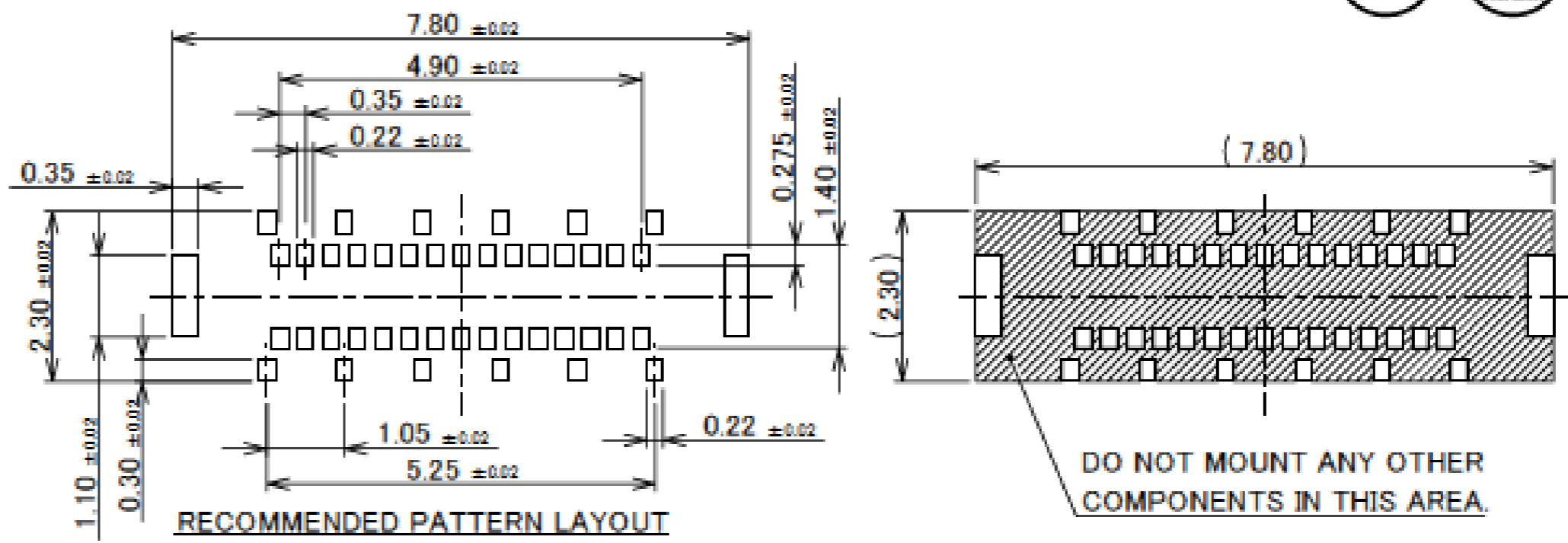
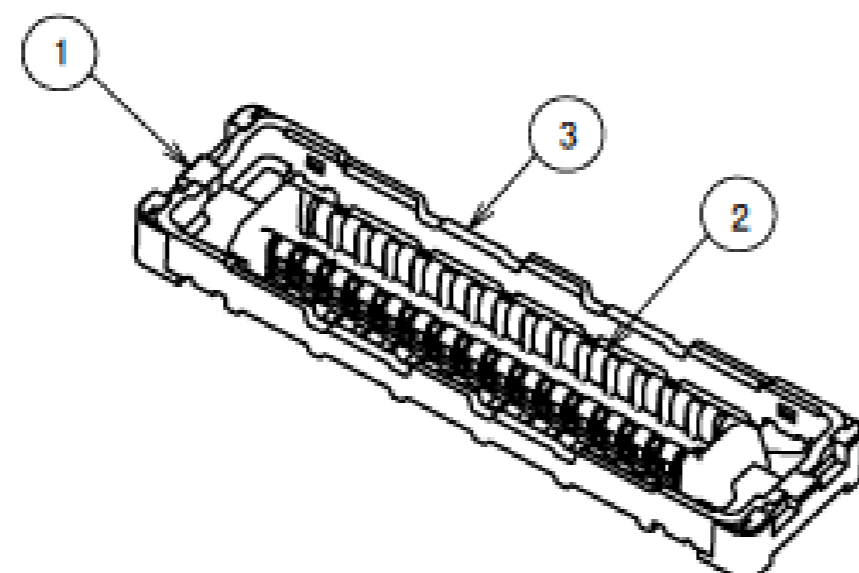
| 3   | SHELL       | COPPER ALLOY | SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN.   |
|-----|-------------|--------------|---|
| 2   | CONTACT     | COPPER ALLOY | CONTACT PART Au 0.05 μm MIN. OVER Ni 1.27 μm MIN. SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN. |
| 1   | HOUSING     | LCP          | UL94V-0, BLACK  |
| NO. | DISCRIPTION | MATERIAL     | FINISH, REMARKS   |

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| Recommended P/N |      | 20864-030E-01 |
|-----------------|------|---------------|
| PART NO.        | Pos. |               |
| 20864-030E-01   | 30   |               |



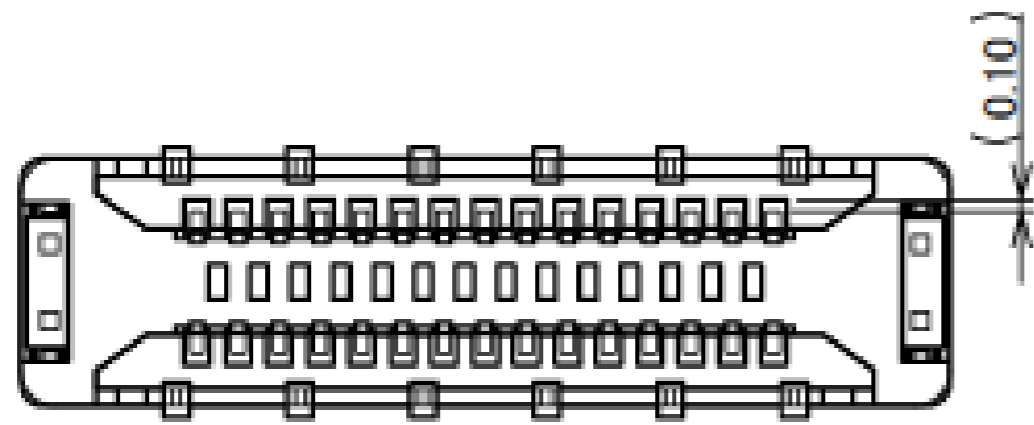
There is a possibility of dent shape in the bottom surface of HOUSING.



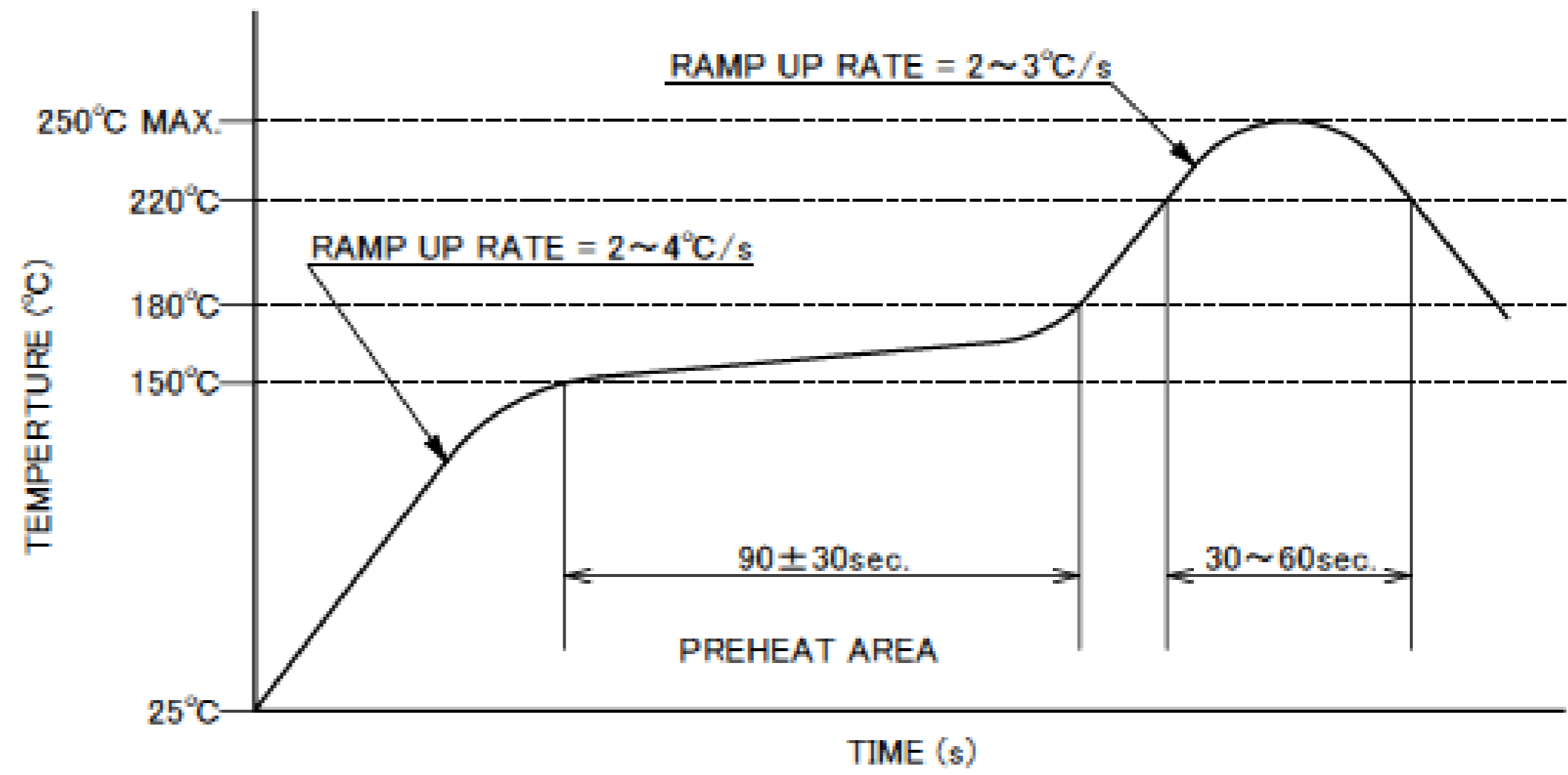
| 3   | SHELL       | COPPER ALLOY | SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN.   |
|-----|-------------|--------------|---|
| 2   | CONTACT     | COPPER ALLOY | CONTACT PART Au 0.05 μm MIN. OVER Ni 1.27 μm MIN. SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN. |
| 1   | HOUSING     | LCP          | UL94V-0, BLACK  |
| NO. | DISCRIPTION | MATERIAL     | FINISH, REMARKS   |

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# Plug Assembly



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

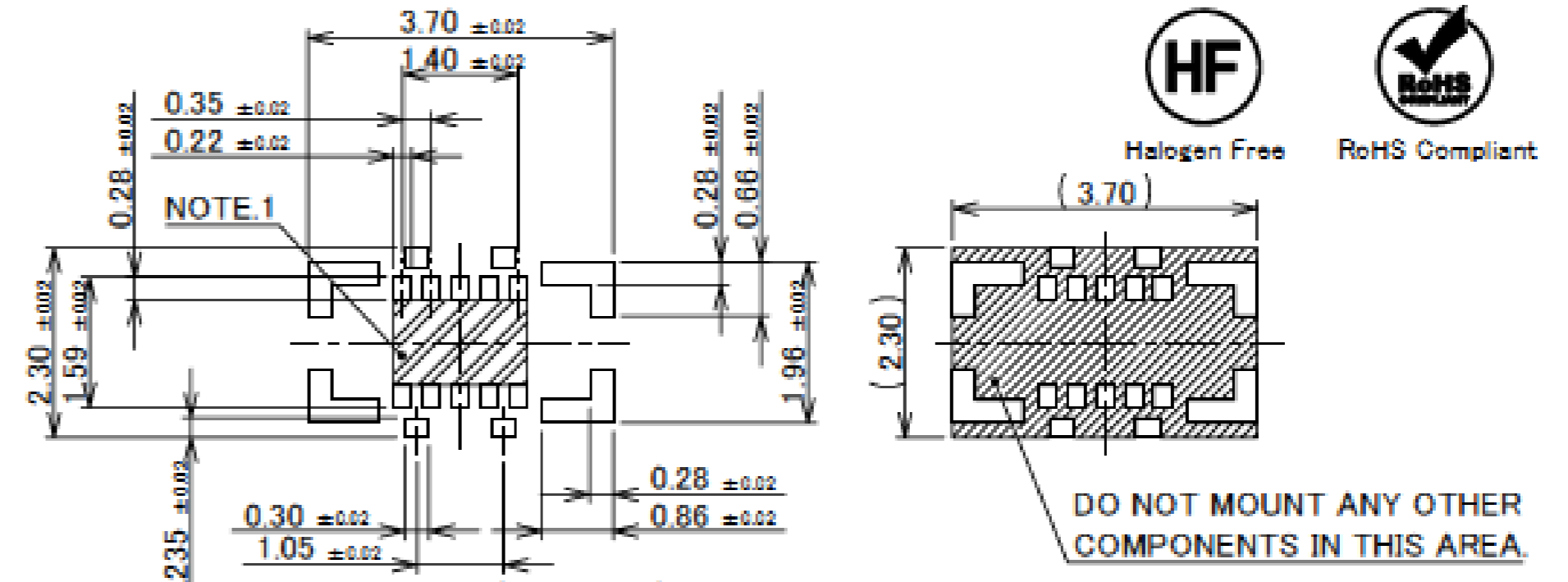
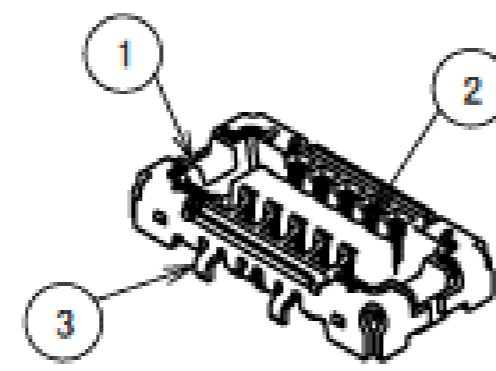
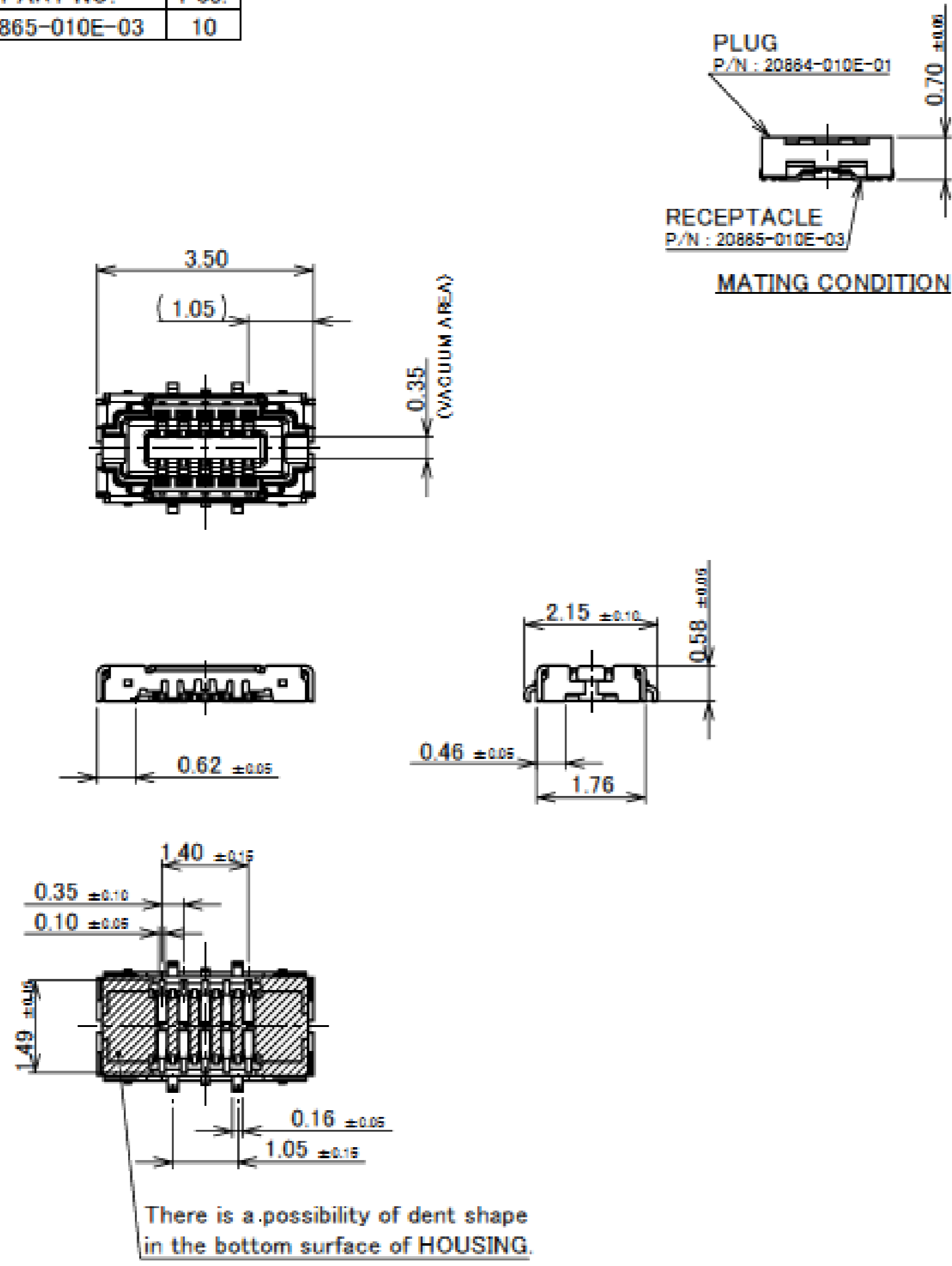
Rev.9

| ITEMS                                   | SPECIFICATION   |
|---|---|
| APPLICABLE CONNECTOR PART No.           | 20865-0**E-**   |
| RATING VOLTAGE                          | 60V AC(r.m.s) / DC (PER CONTACT PIN)  |
| RATING AMPERAGE (FOR SIGNAL CONTACT)    | 10P:1.0 A MAX. AC/DC x PIN COUNTS = 10.0 A (TOTAL)<br>12P AND OVER : 12.0 A AC/DC (TOTAL) |
| OPERATING TEMPERATURE                   | 233~358K(-40°C~85°C)  |
| OPERATING HUMIDITY                      | 85% MAX.(NON-CONDENDING)  |
| CONTACT RESISTANCE (FOR SIGNAL CONTACT) | INITIAL : 40mohm MAX. / AFTER TEST : <math>\triangleleft</math>40mohm MAX.                |
| CONTACT RESISTANCE (FOR GROUND)         | INITIAL : 20mohm MAX. / AFTER TEST : <math>\triangleleft</math>20mohm MAX.                |
| INSULATION RESISTANCE                   | INITIAL : 1,000Mohm MIN. / AFTER TEST : 500Mohm MIN.                                      |
| DIELECTRIC WITHSTANDING VOLTAGE         | AC250V 1min   |
| DURABILITY                              | 10 CYCLES   |
| MATING FORCE (INITIAL / AFTER TEST)     | INITIAL 2.0N/Pin MAX.   |
| UNMATING FORCE (INITIAL / AFTER TEST)   | 10 CYCLES 0.15N/Pin MIN.  |
| COPLANARITY                             | 0.08 MAX  |
| PRODUCT SPECIFICATION                   | PRS-2607  |
| TEST REPORT                             | TR-19055  |
| PACKING STANDARD                        | PST-18022   |
| INSTRUCTION MANUAL                      | HIM-18019   |
| APPEARANCE CRITERIA No.                 | QLS-A***  |

Rev.9

# Receptacle Assembly

|                 |      |               |
|-----------------|------|---------------|
| Recommended P/N |      | 20865-010E-03 |
| PART NO.        | Pos. |               |
| 20865-010E-03   | 10   |               |

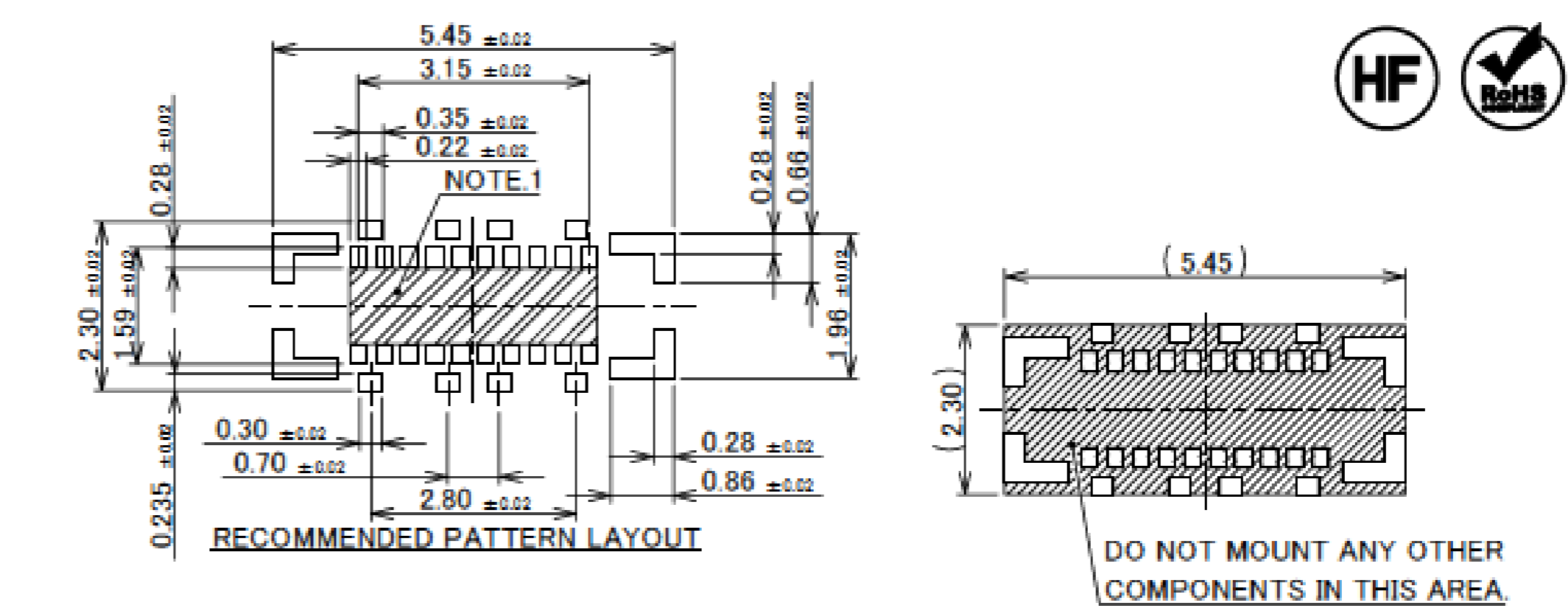
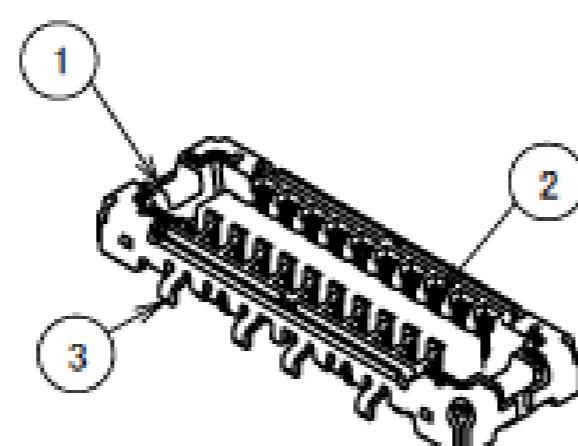
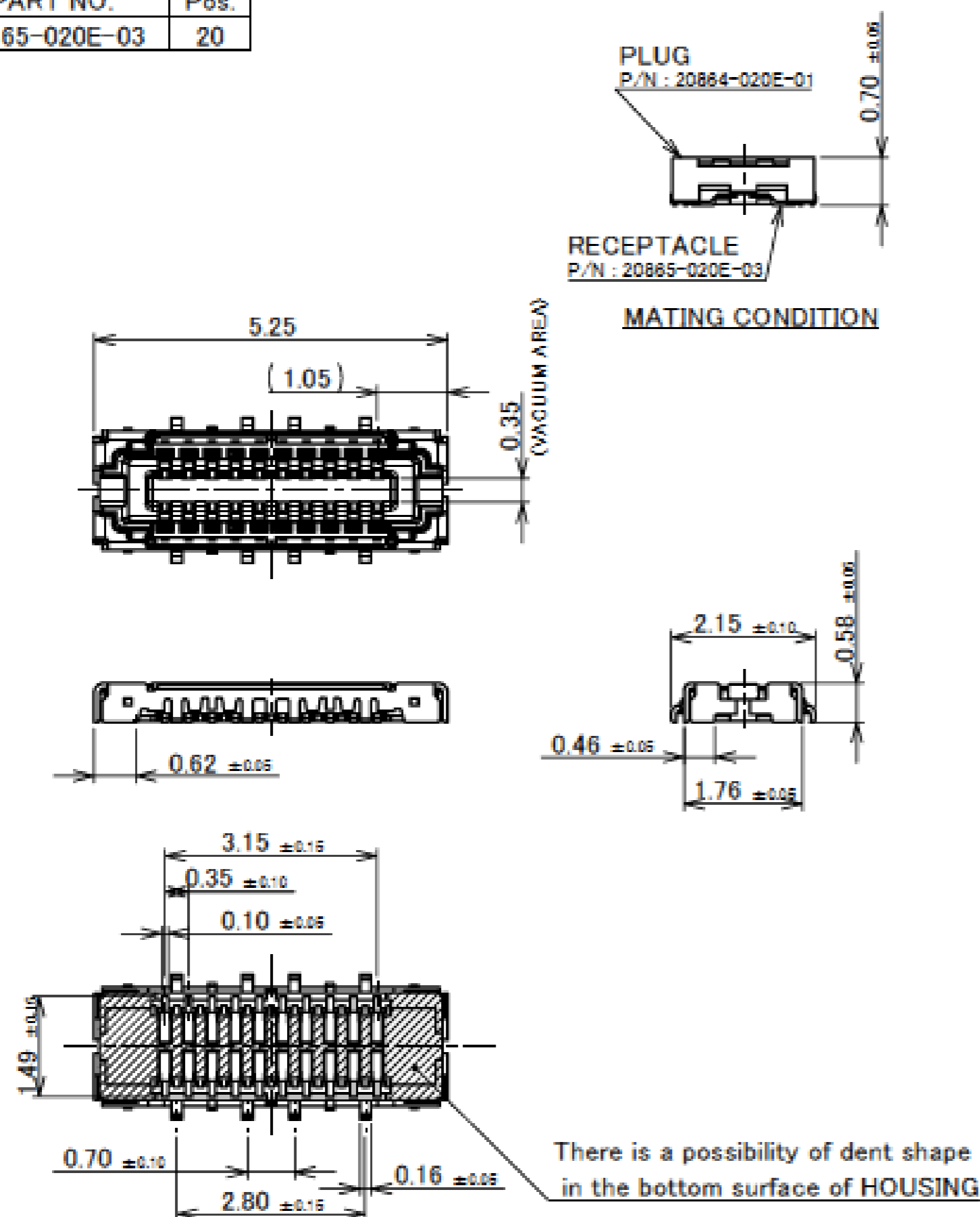


NOTES.  
1. FOOT PRINT PATTERN PROHIBITION AREA :  
SOLDER RESIST MUST BE APPLIED TO THIS HATCHED AREA  
IF SURFACE TRACES ARE ROUNDED.

| NO. | DISCRIPTION | MATERIAL     | FINISH, REMARKS  |
|-----|-------------|--------------|--|
| 3   | SHELL       | COPPER ALLOY | SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN.  |
| 2   | CONTACT     | COPPER ALLOY | CONTACT PART Au 0.05 μm MIN. OVER Ni 1.27 μm MIN.<br>SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN. |
| 1   | HOUSING     | LCP          | UL94V-0 BLACK  |

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|                 |      |               |
|-----------------|------|---------------|
| Recommended P/N |      | 20865-020E-03 |
| PART NO.        | Pos. |               |
| 20865-020E-03   | 20   |               |



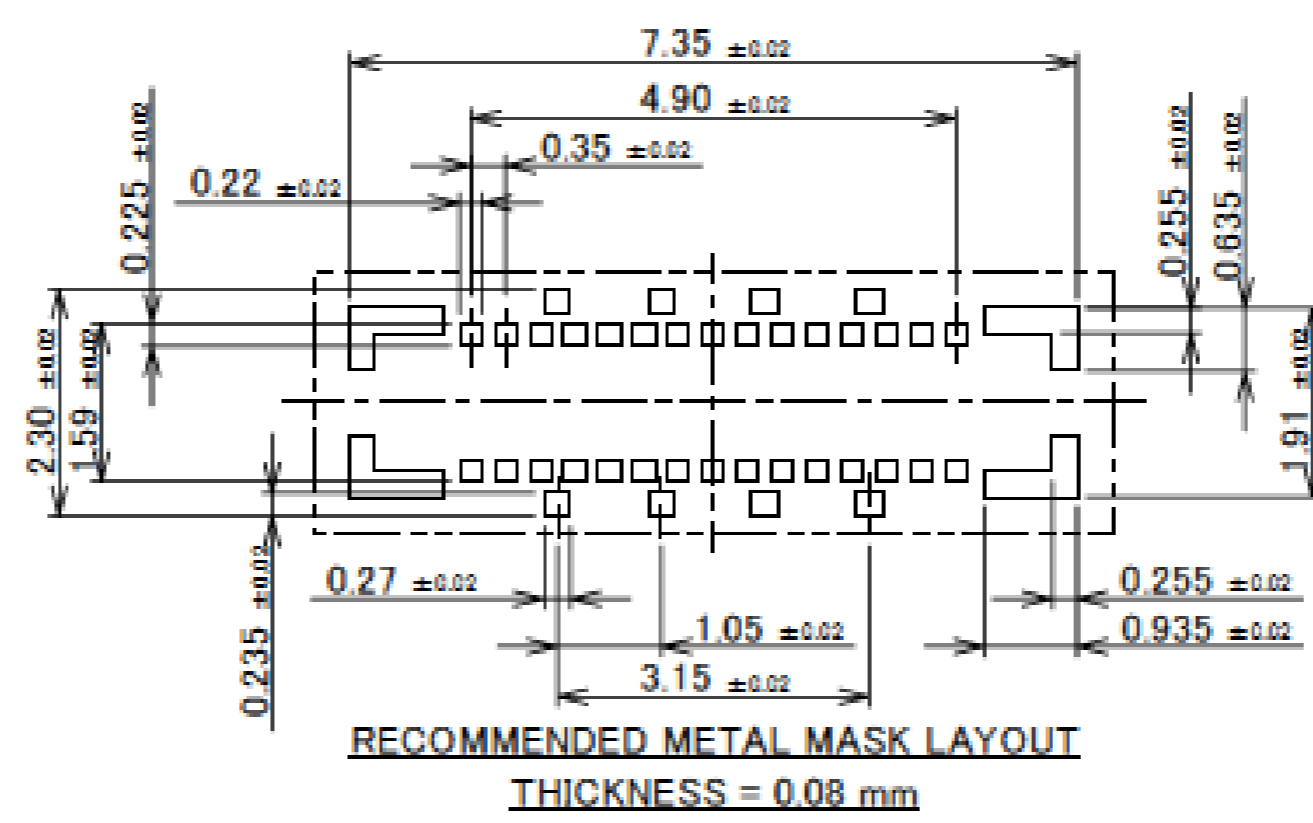
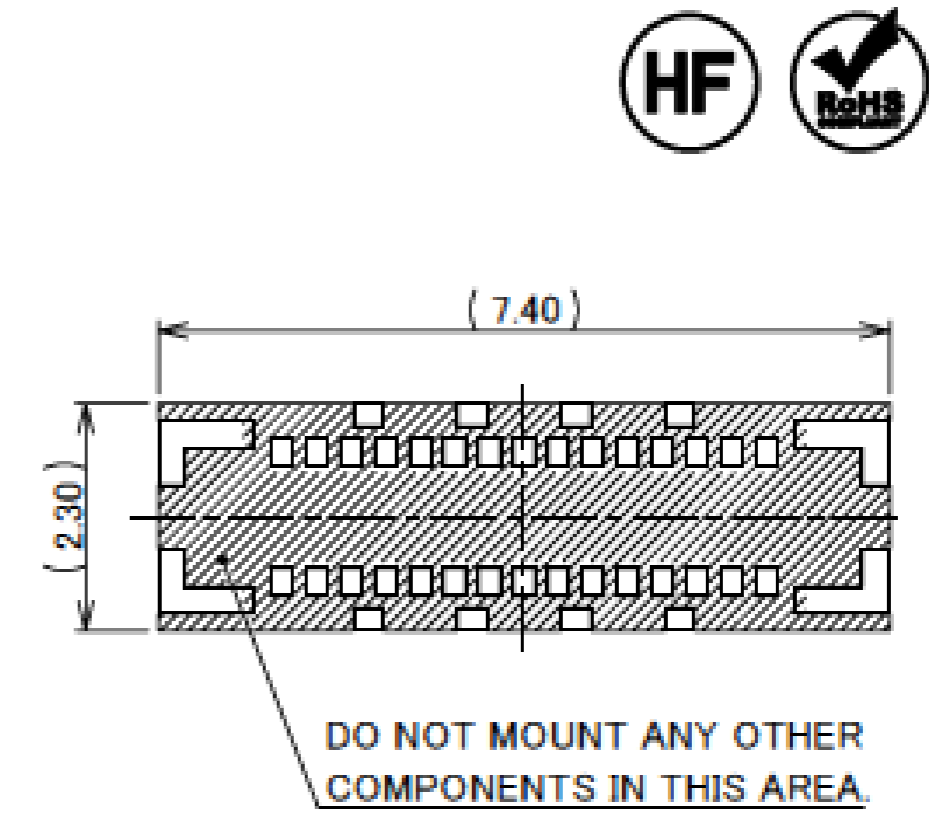
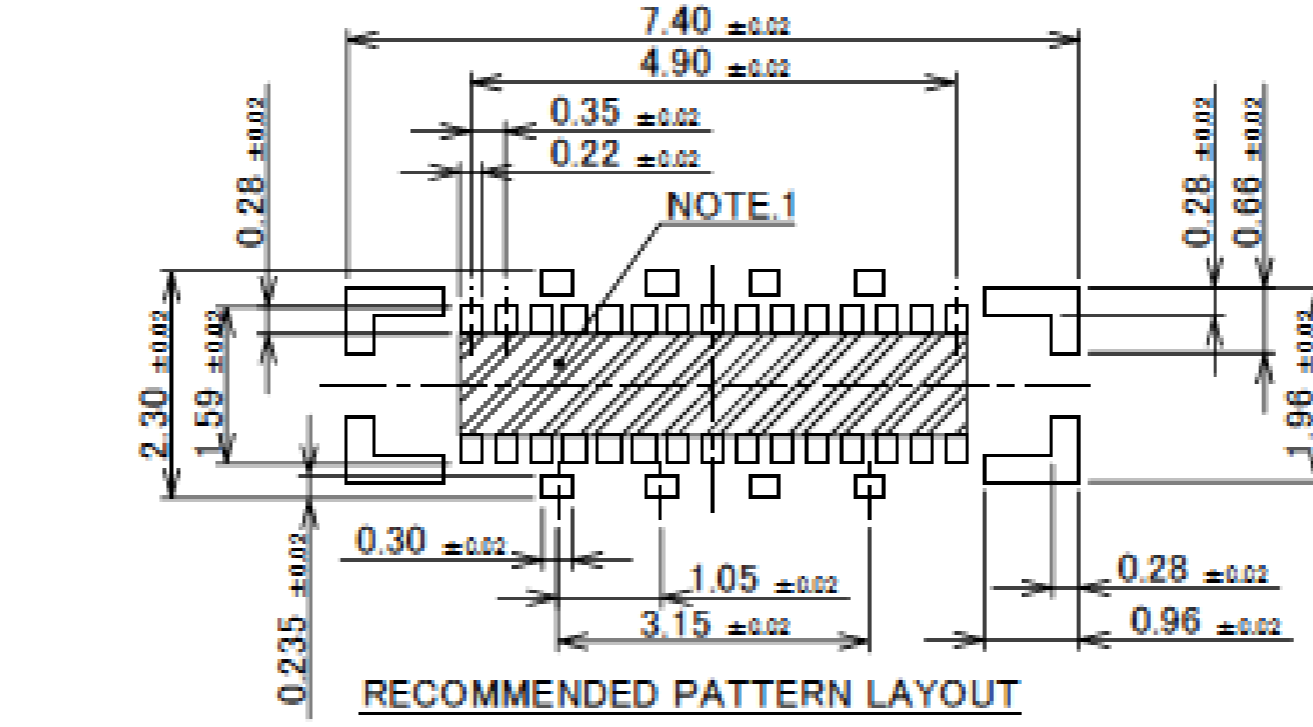
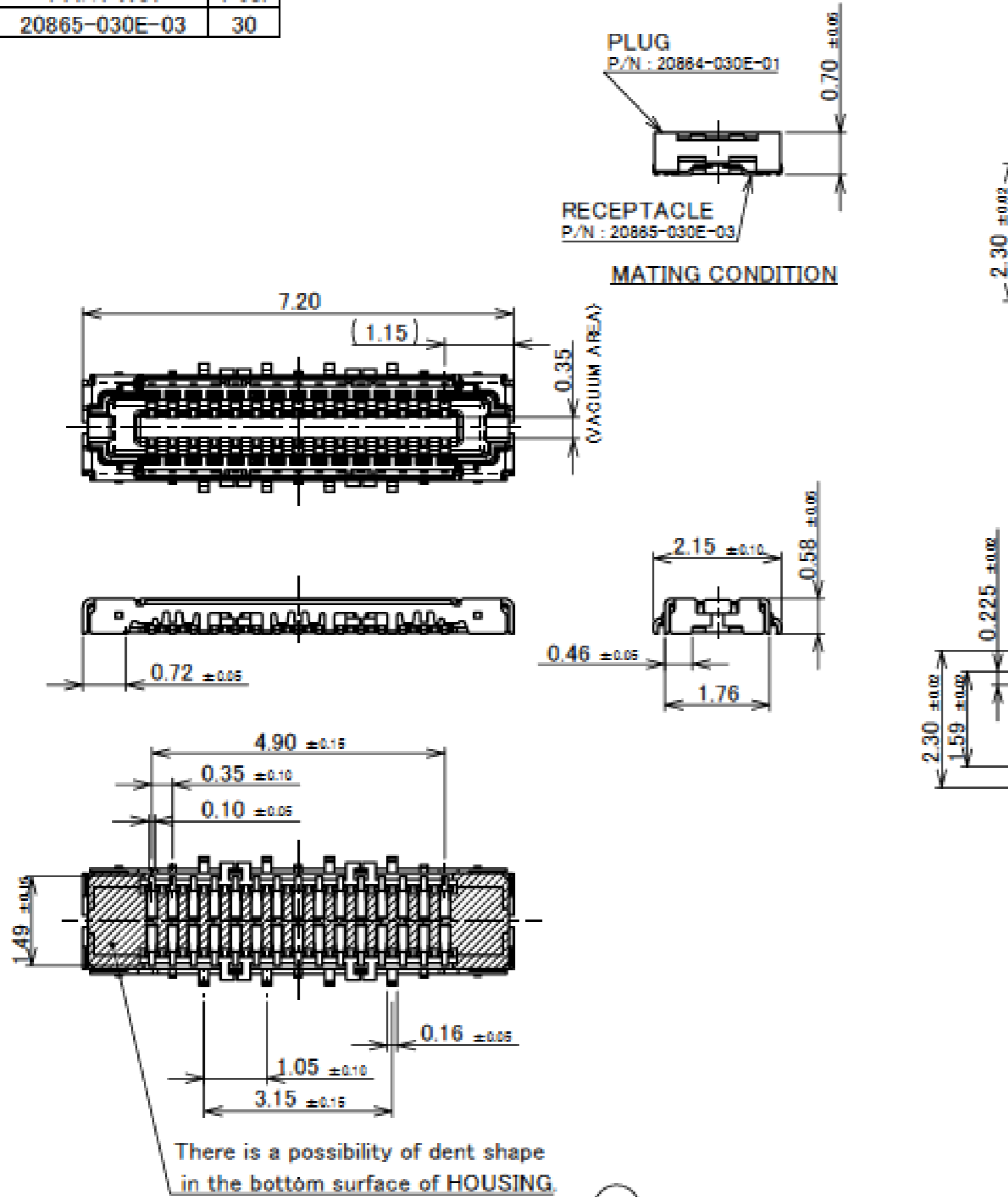
NOTES.  
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SOLDER RESIST MUST BE APPLIED TO THIS HATCHED AREA  
IF SURFACE TRACES ARE ROUNDED.

| NO. | DISCRIPTION | MATERIAL     | FINISH, REMARKS  |
|-----|-------------|--------------|--|
| 3   | SHELL       | COPPER ALLOY | SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN.  |
| 2   | CONTACT     | COPPER ALLOY | CONTACT PART Au 0.05 μm MIN. OVER Ni 1.27 μm MIN.<br>SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN. |
| 1   | HOUSING     | LCP          | UL94V-0 BLACK  |

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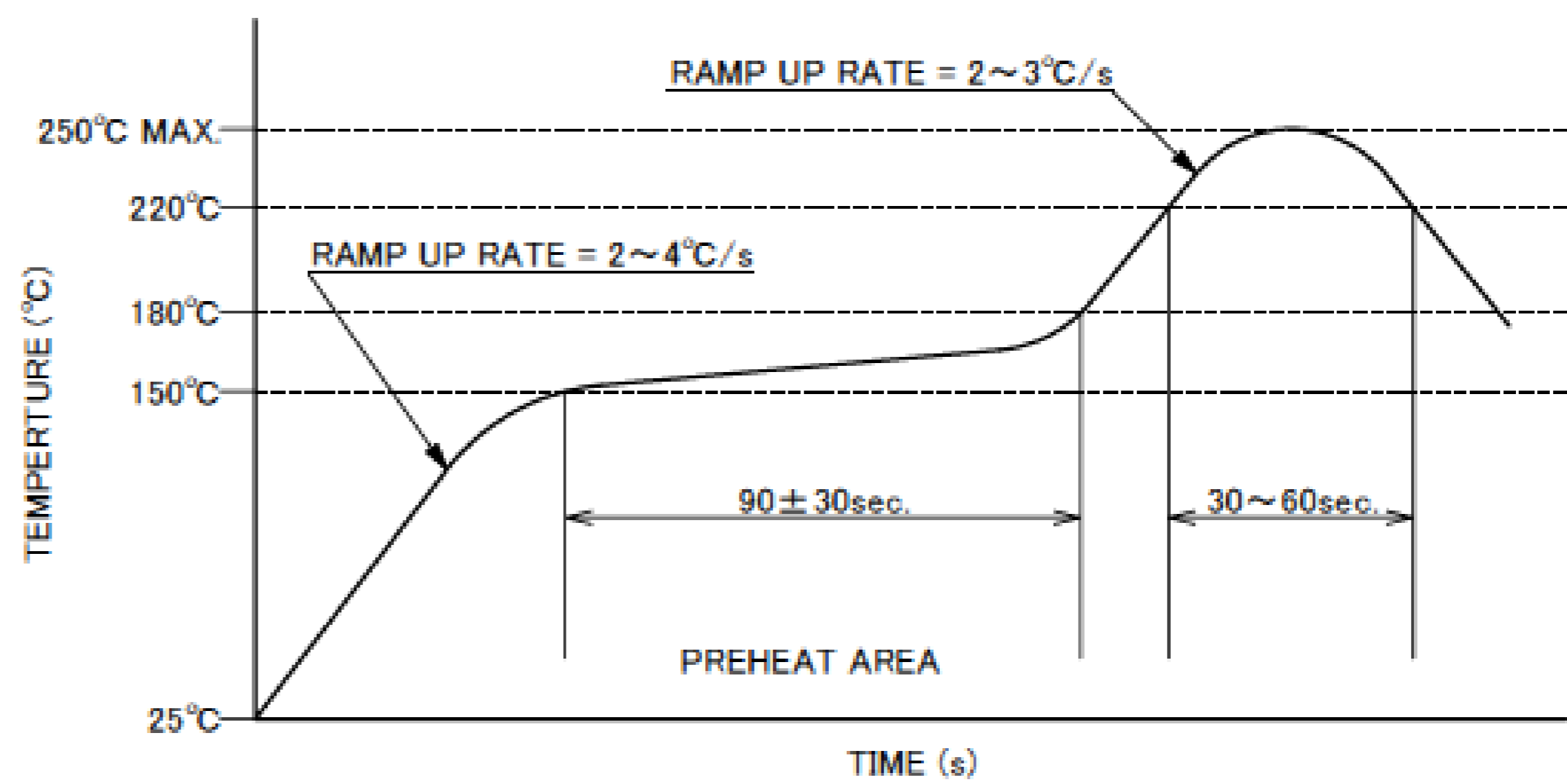
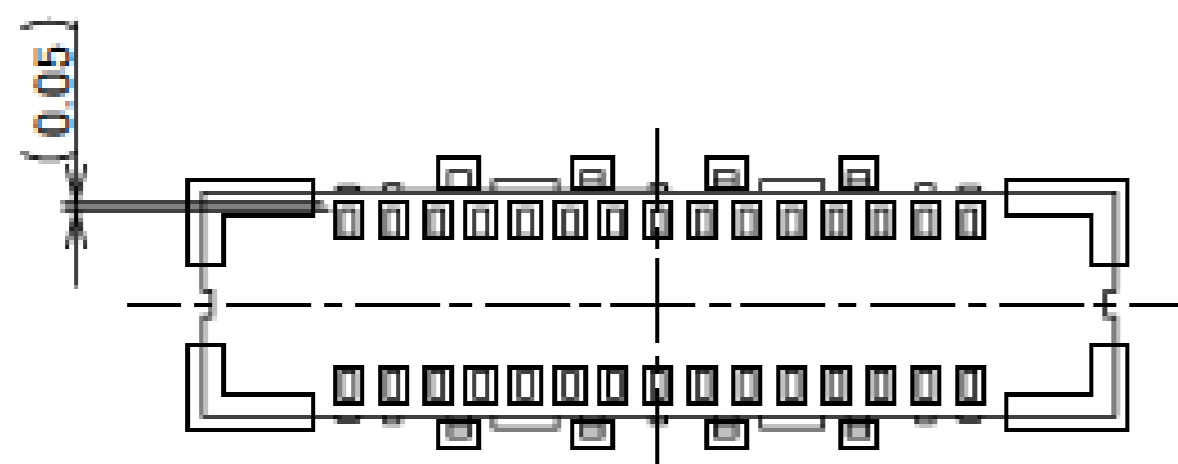
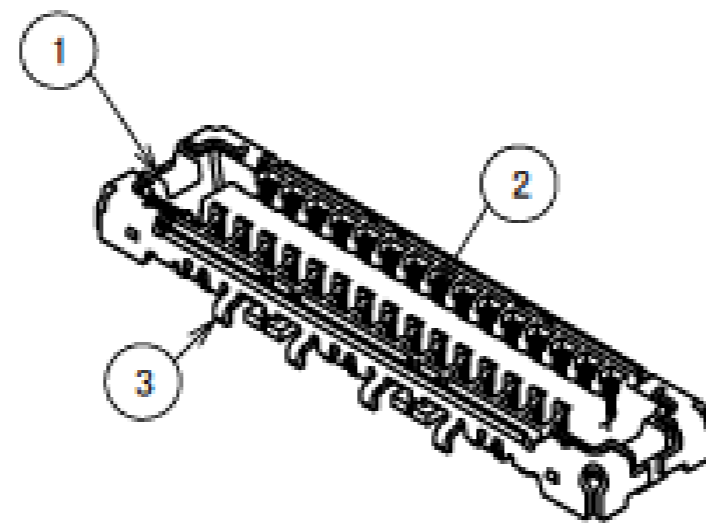
# Receptacle Assembly

|                 |      |               |
|-----------------|------|---------------|
| Recommended P/N |      | 20865-030E-03 |
| PART NO.        | Pos. |               |
| 20865-030E-03   | 30   |               |



NOTES  
1. FOOT PRINT PATTERN PROHIBITION AREA :  
SOLDER RESIST MUST BE APPLIED TO THIS HATCHED AREA  
IF SURFACE TRACES ARE ROUNDED.

| 3   | SHELL       | COPPER ALLOY | SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN.  |
|-----|-------------|--------------|--|
| 2   | CONTACT     | COPPER ALLOY | CONTACT PART Au 0.05 μm MIN. OVER Ni 1.27 μm MIN.<br>SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN. |
| 1   | HOUSING     | LCP          | UL94V-0 BLACK  |
| NO. | DISCRIPTION | MATERIAL     | FINISH, REMARKS  |



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

Rev.9

# Receptacle Assembly

| ITEMS                                   | SPECIFICATION   |
|---|---|
| APPLICABLE CONNECTOR PART No.           | 20864-0**E-**   |
| RATING VOLTAGE                          | 60V AC(r.m.s) / DC (PER CONTACT PIN)  |
| RATING AMPERAGE (FOR SIGNAL CONTACT)    | 10P:1.0 A MAX. AC/DC x PIN COUNTS = 10.0 A (TOTAL)<br>12P AND OVER : 12.0 A AC/DC (TOTAL) |
| OPERATING TEMPERATURE                   | 233~358K(-40°C~85°C)  |
| OPERATING HUMIDITY                      | 85% MAX.(NON-CONDENDING)  |
| CONTACT RESISTANCE (FOR SIGNAL CONTACT) | INITIAL : 40mohm MAX. / AFTER TEST : $\Delta$ 40mohm MAX.                                 |
| CONTACT RESISTANCE (FOR GROUND)         | INITIAL : 20mohm MAX. / AFTER TEST : $\Delta$ 20mohm MAX.                                 |
| INSULATION RESISTANCE                   | INITIAL : 1,000Mohm MIN. / AFTER TEST : 500Mohm MIN.                                      |
| DIELECTRIC WITHSTANDING VOLTAGE         | AC250V 1min   |
| DURABILITY                              | 10 CYCLES   |
| MATING FORCE (INITIAL / AFTER TEST)     | INITIAL 2.0N/Pin MAX.   |
| UNMATING FORCE (INITIAL / AFTER TEST)   | 10 CYCLES 0.15N/Pin MIN.  |
| COPLANARITY                             | 0.08 MAX.   |
| PRODUCT SPECIFICATION                   | PRS-2607  |
| TEST REPORT                             | TR-19055  |
| PACKING STANDARD                        | PST-18023   |
| INSTRUCTION MANUAL                      | HIM-18019   |
| APPEARANCE CRITERIA No.                 | QLS-A***  |

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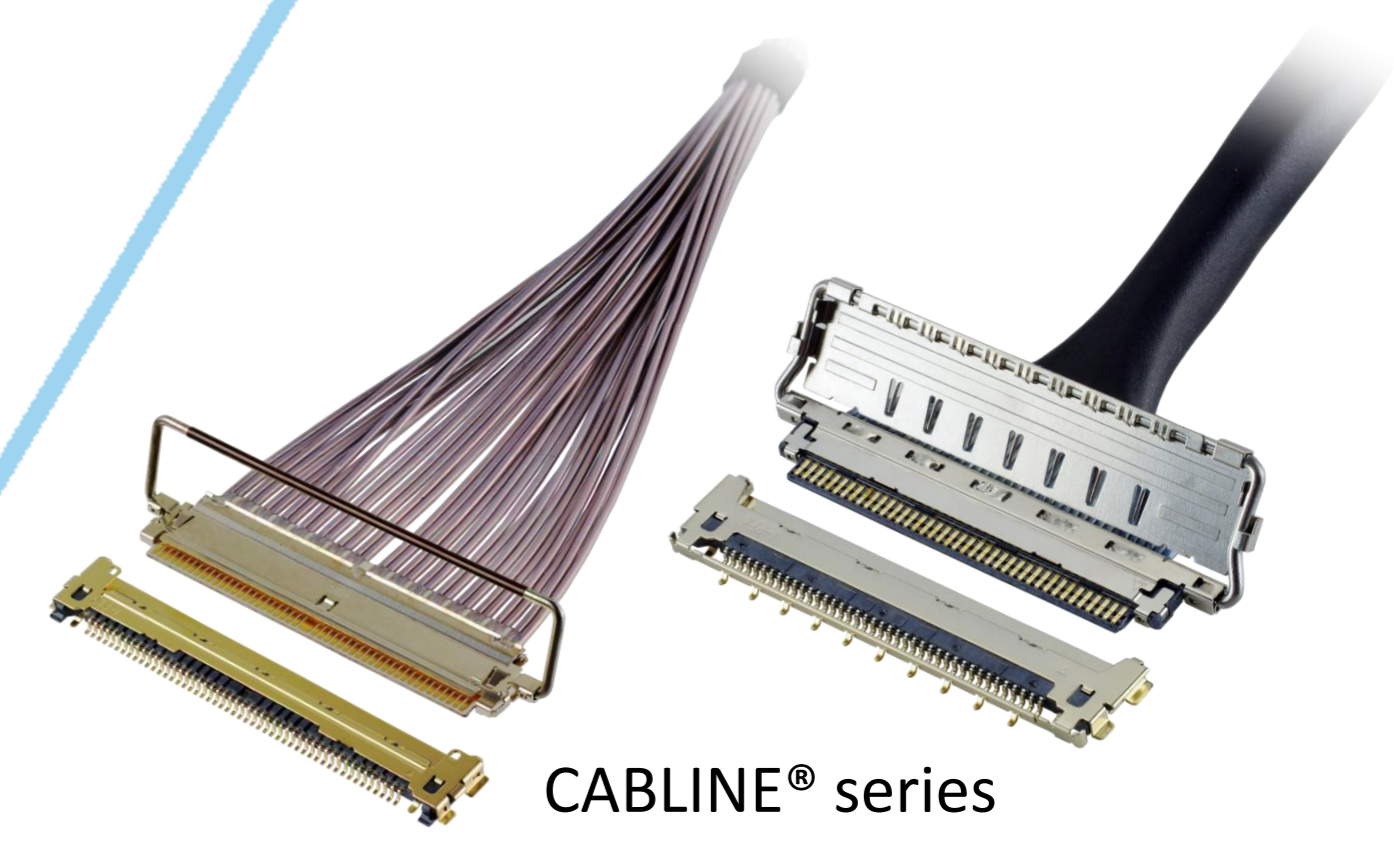
# Custom Connectors Available

 RF Connector

MHF® series



CABLINÉ® series  
Micro-coaxial/Twinax/  
Discrete Wire Connector



Optical Module

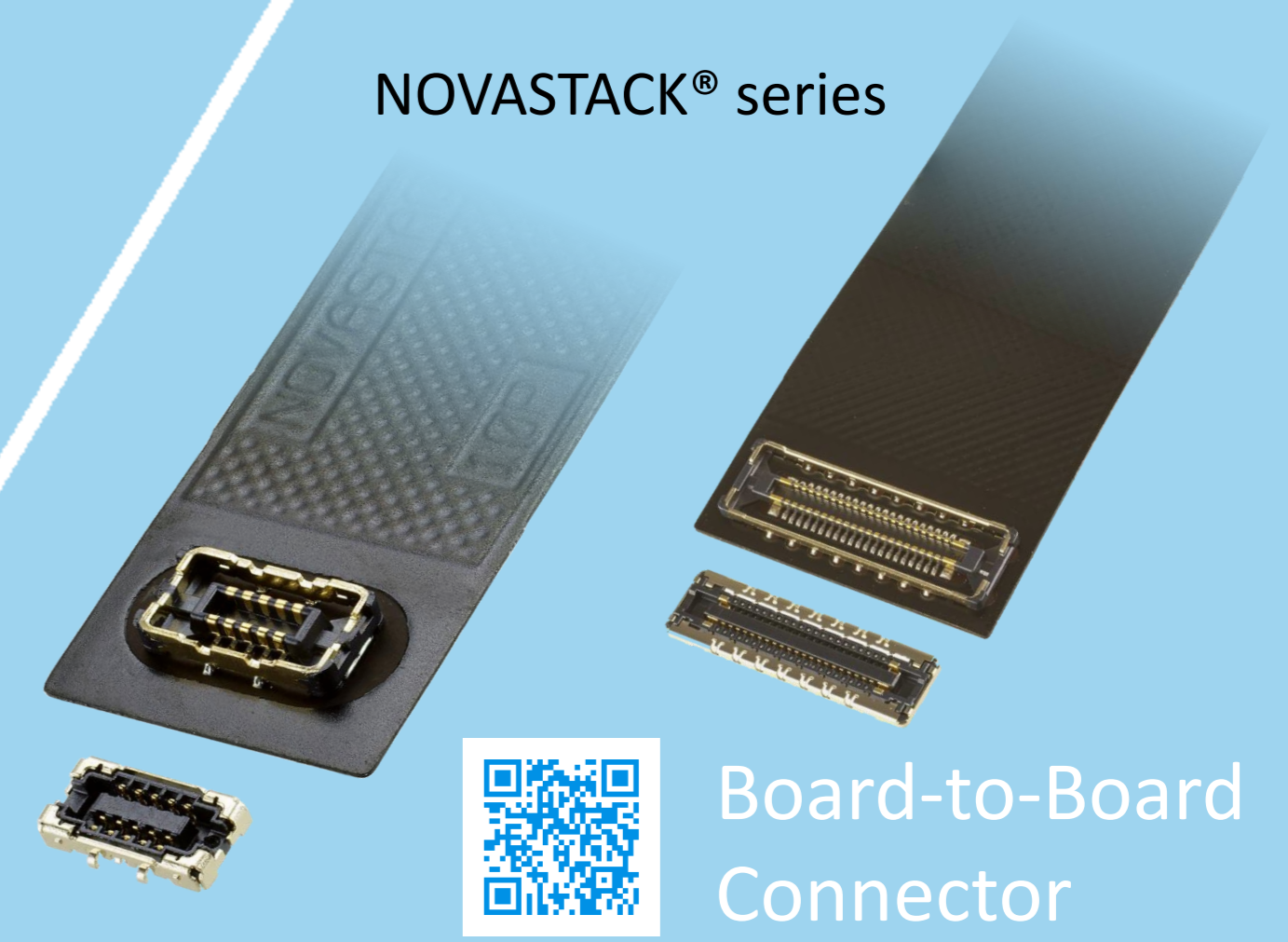
LIGHTPASS® series



NOVASTACK® series



Board-to-Board Connector



Power Connector/  
Terminal

AP series

ISH® series



MINIFLEX® series

EVAFLEX® series



FPC FFC Connector



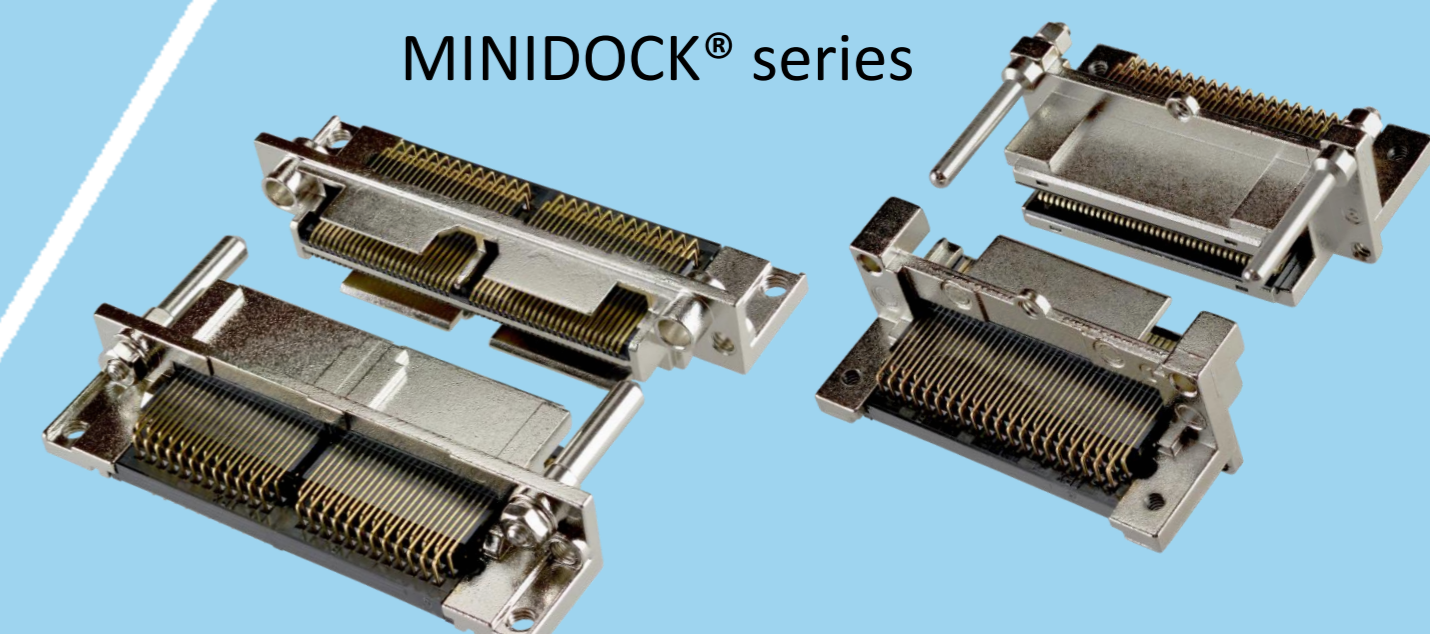
Inquiry



MINIDOCK® series



I/O Connector



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Contact your sales representative or more detailed information.

[www.i-pex.com](http://www.i-pex.com)



# I-PEX

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