

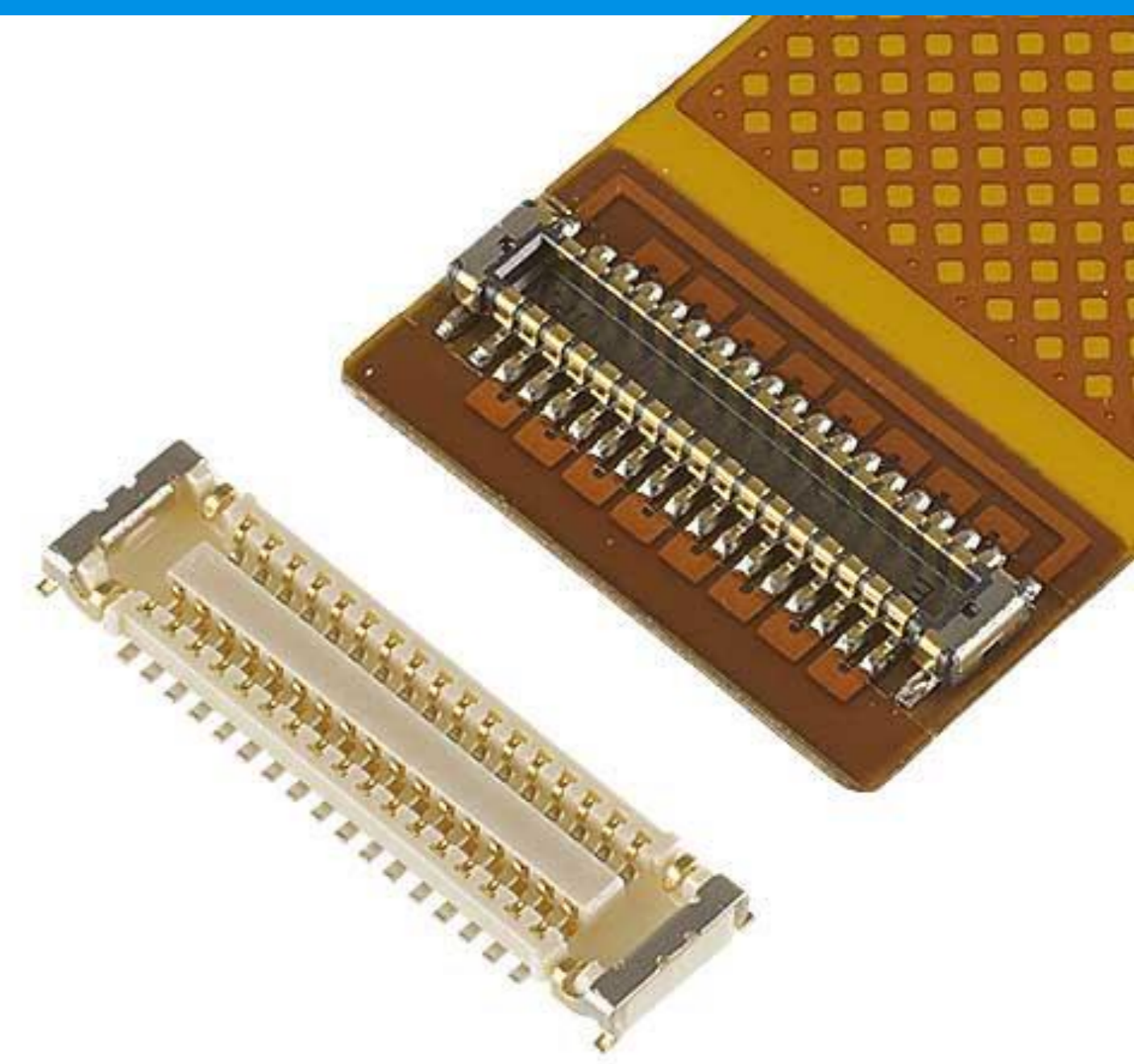
# NOVASTACK® 35-P

Robust connector with hold-down feature and Corson Alloy main contact to transmit power lines, 0.35 mm pitch, 0.7 mm height, 2.3 mm depth

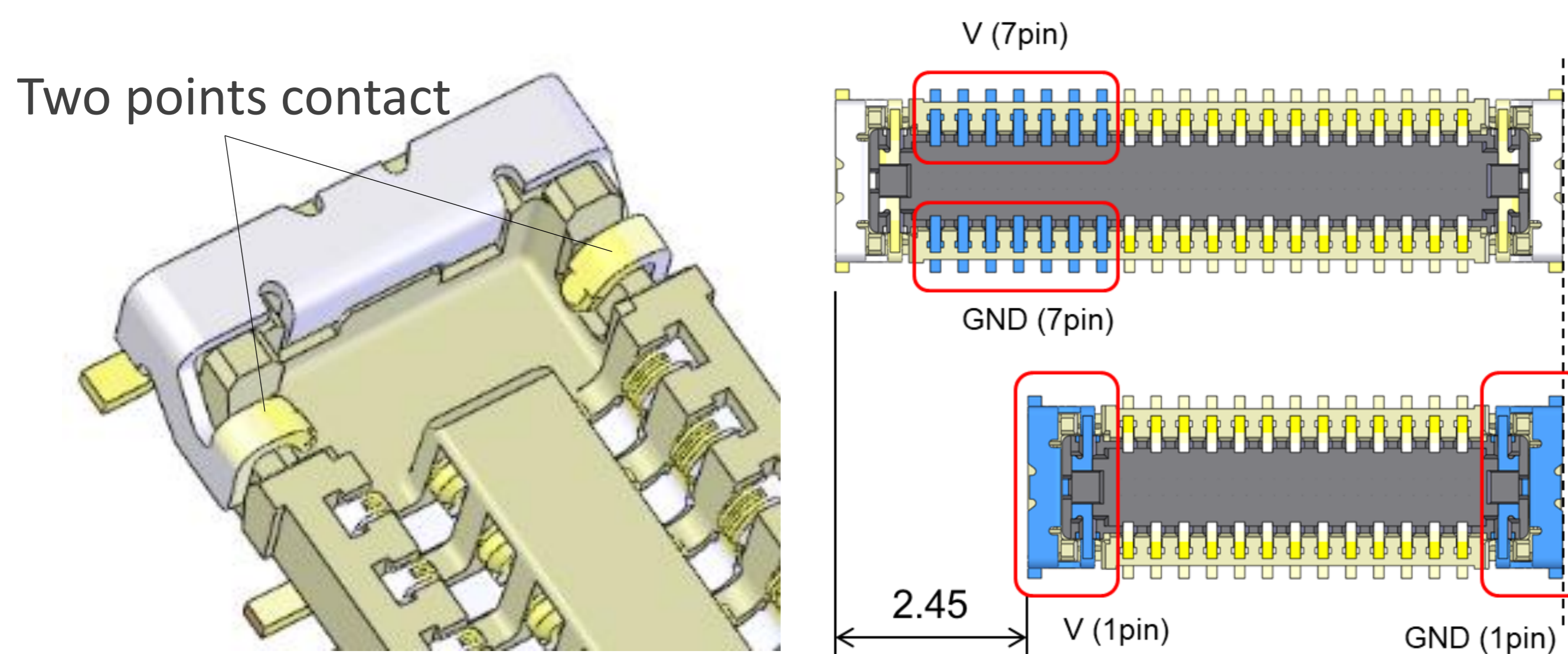
## Product Specifications:

|                    |                                |  |
|--------------------|--------------------------------|--|
| Board Pitch (mm)   | 0.35                           |  |
| Wiping Length (mm) | 0.19 (10~50 P), 0.13 (52~80 P) |  |
| Mated Size (mm)    | Height                         | 0.7+/-0.1                                  |
|                    | Width                          | Formula: $2.17 + (0.35 * ?p/2)$            |
|                    | Depth                          | 2.3  |
| Current Rating     | Signal                         | 0.3 A/pin                                  |
|                    | Power                          | 2.0 A/pin x 2                              |
| Pin Counts         | Range                          | 10 - 80 (signal) + 2 (power)               |
|                    | Available                      | 10, 14, 16, 18, 20, 24, 30, 34, 40, 50, 60 |

\* Please inquire for pin counts not listed or outside of the pin count range.

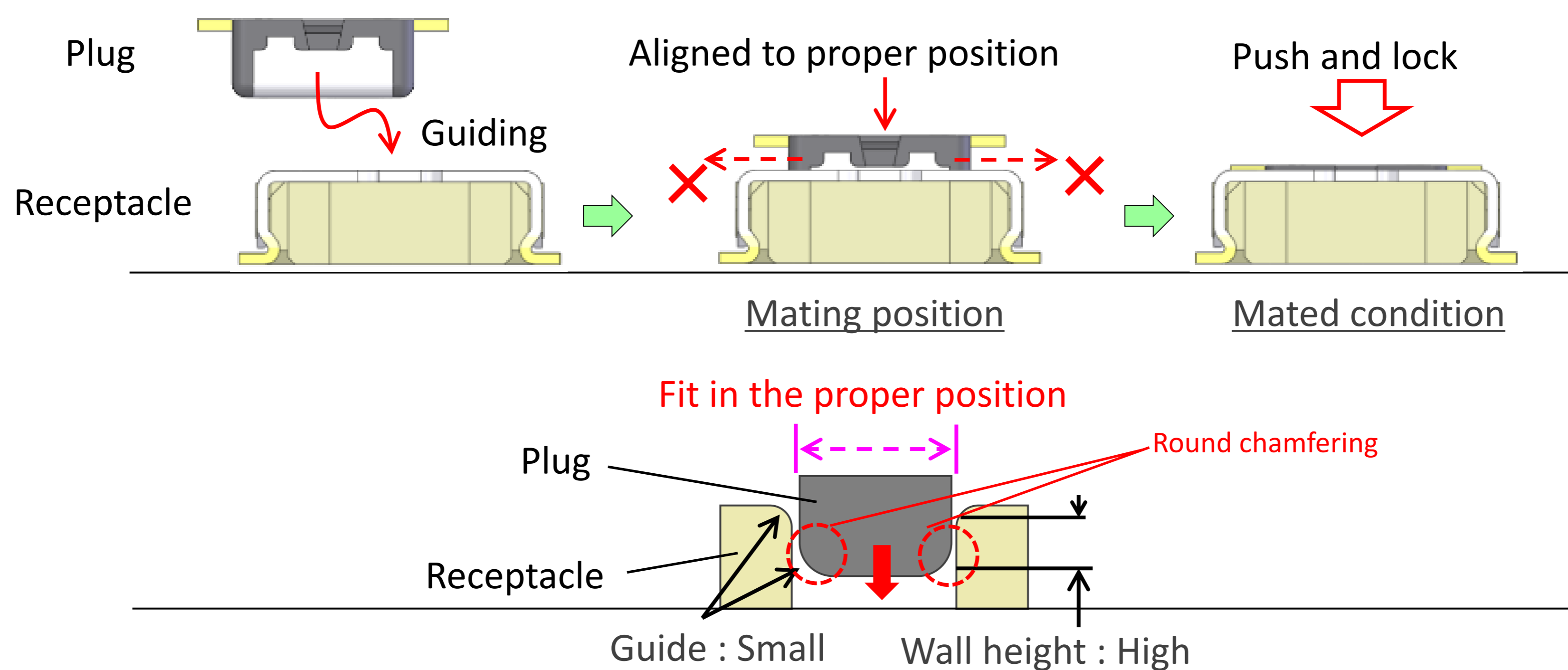


## ► Hold down feature can be a 2 A x 2 terminal for power supply

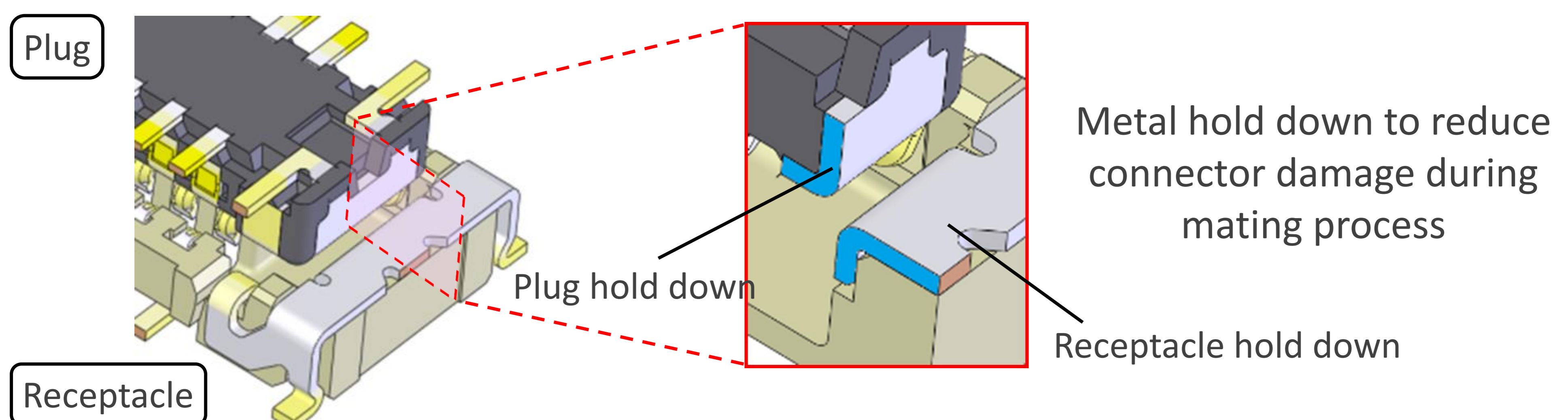


2 A/pin power pin minimizes total pin count and length

## ► Metal guide for easy operation



## ► High robustness with metal hold-down feature





# Component Parts Details

## Plug Assembly

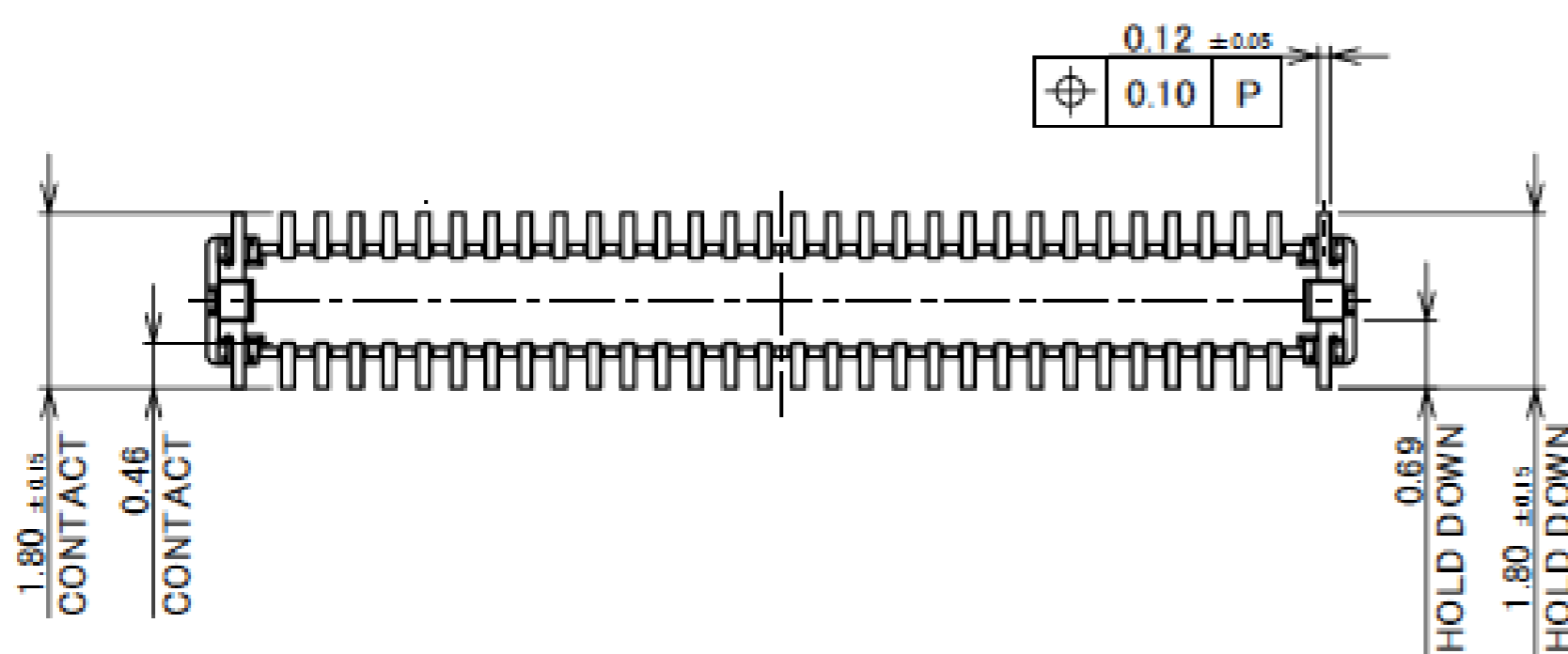
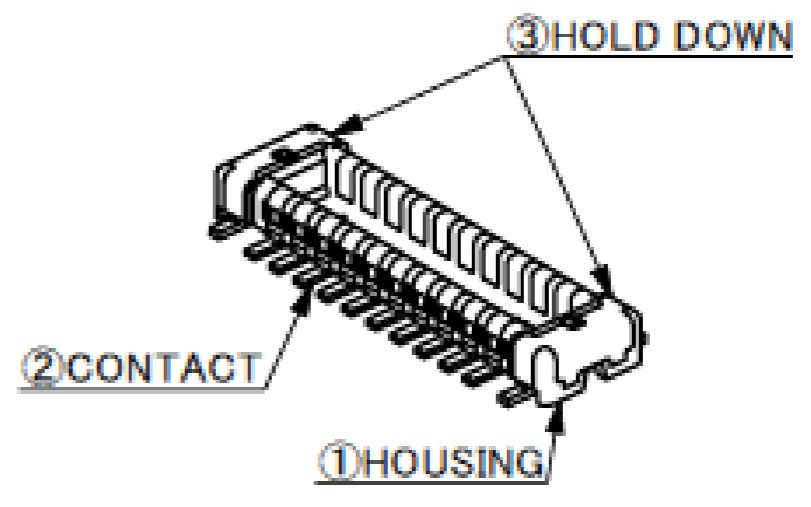
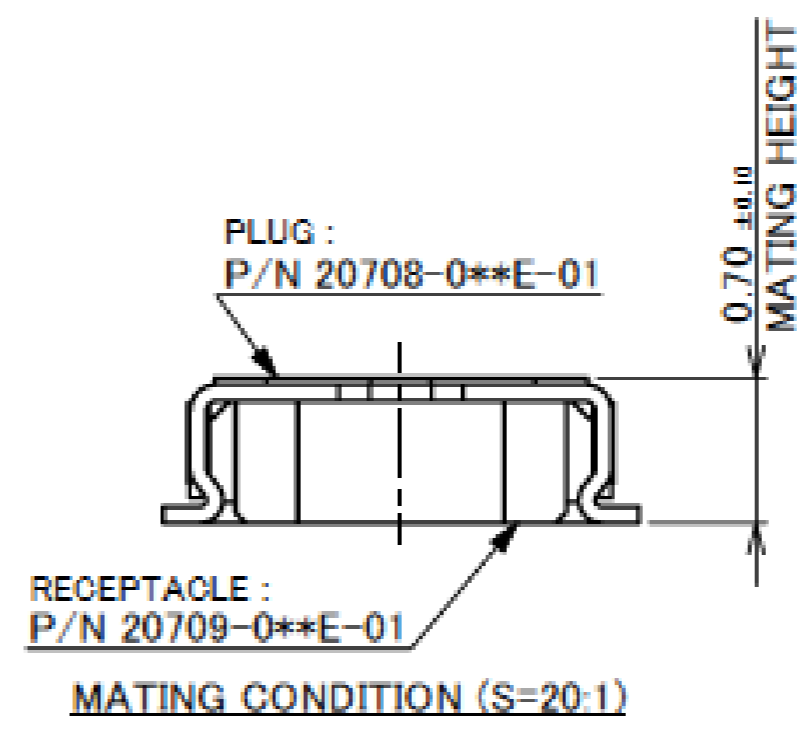
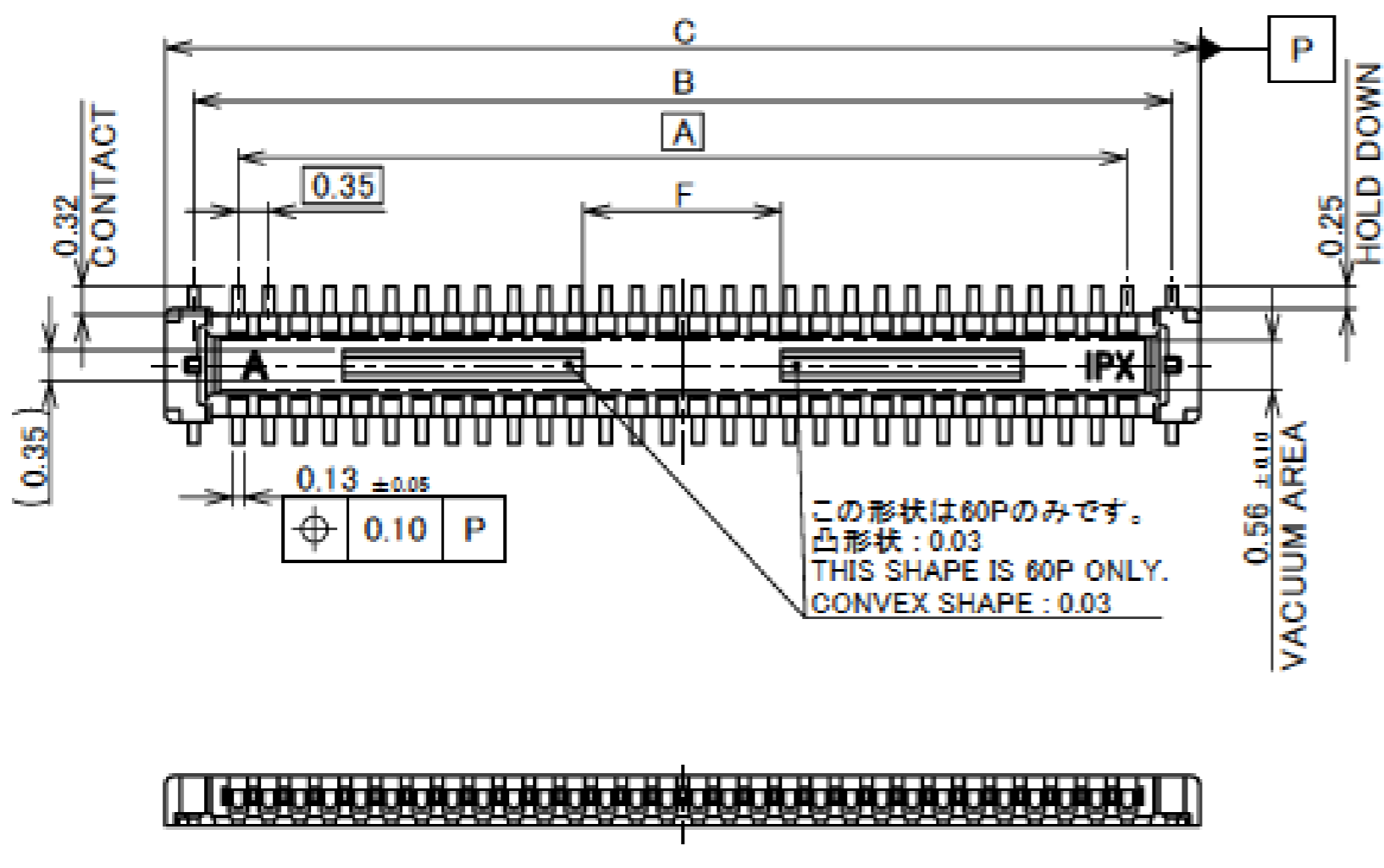
| Recommended P/N |      | 20708-0**E-01 |       |       |       |       |      |
|-----------------|------|---------------|-------|-------|-------|-------|------|
| PART No.        | Pos. | A             | B     | C     | D     | E     | F    |
| 20708-010E-01   | 10   | 1.40          | 2.42  | 3.06  | 3.92  | 4.10  | -    |
| 20708-014E-01   | 14   | 2.10          | 3.12  | 3.76  | 4.62  | 4.80  | -    |
| 20708-016E-01   | 16   | 2.45          | 3.47  | 4.11  | 4.97  | 5.15  | -    |
| 20708-018E-01   | 18   | 2.80          | 3.82  | 4.46  | 5.32  | 5.50  | -    |
| 20708-020E-01   | 20   | 3.15          | 4.17  | 4.81  | 5.67  | 5.85  | -    |
| 20708-024E-01   | 24   | 3.85          | 4.87  | 5.51  | 6.37  | 6.55  | -    |
| 20708-030E-01   | 30   | 4.90          | 5.92  | 6.56  | 7.42  | 7.60  | -    |
| 20708-034E-01   | 34   | 5.60          | 6.62  | 7.26  | 8.12  | 8.30  | -    |
| 20708-040E-01   | 40   | 6.65          | 7.67  | 8.31  | 9.17  | 9.35  | -    |
| 20708-050E-01   | 50   | 8.40          | 9.42  | 10.06 | 10.92 | 11.10 | -    |
| 20708-060E-01   | 60   | 10.15         | 11.17 | 11.81 | 12.67 | 12.85 | 2.26 |



Halogen Free

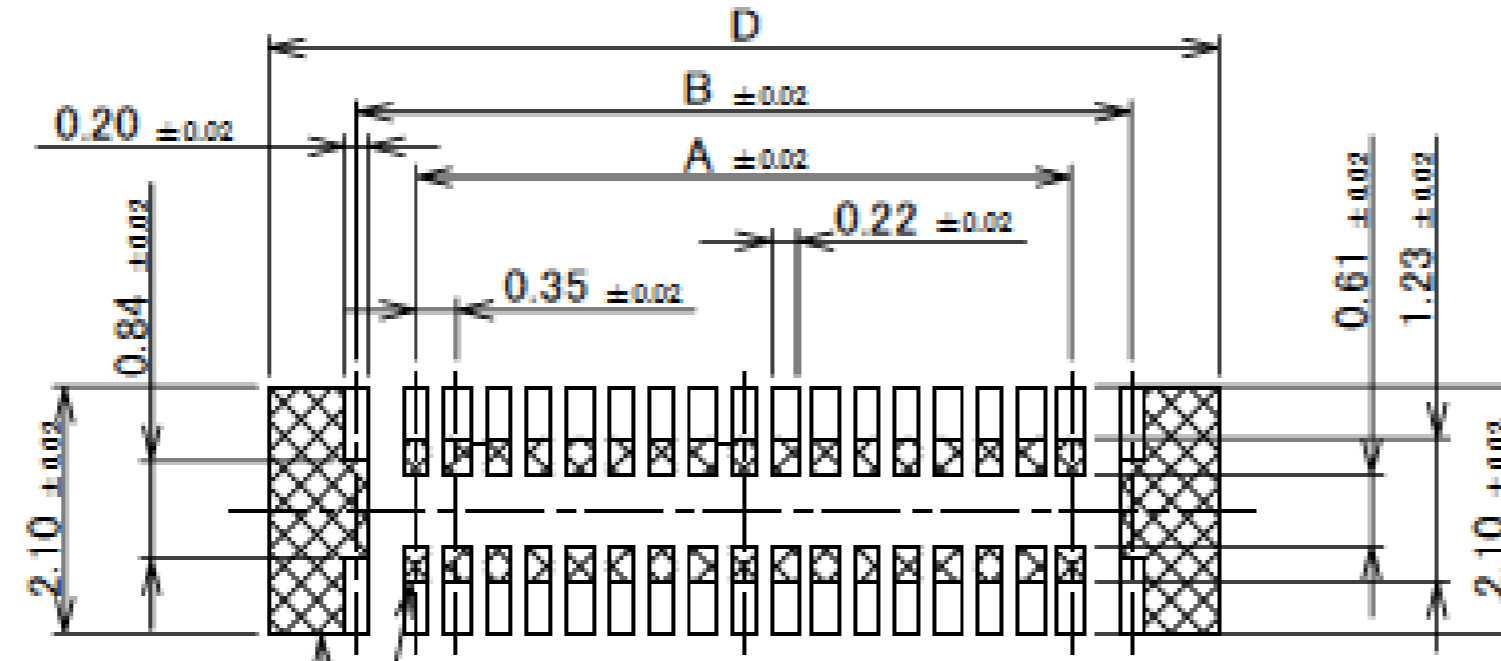


RoHS Compliant



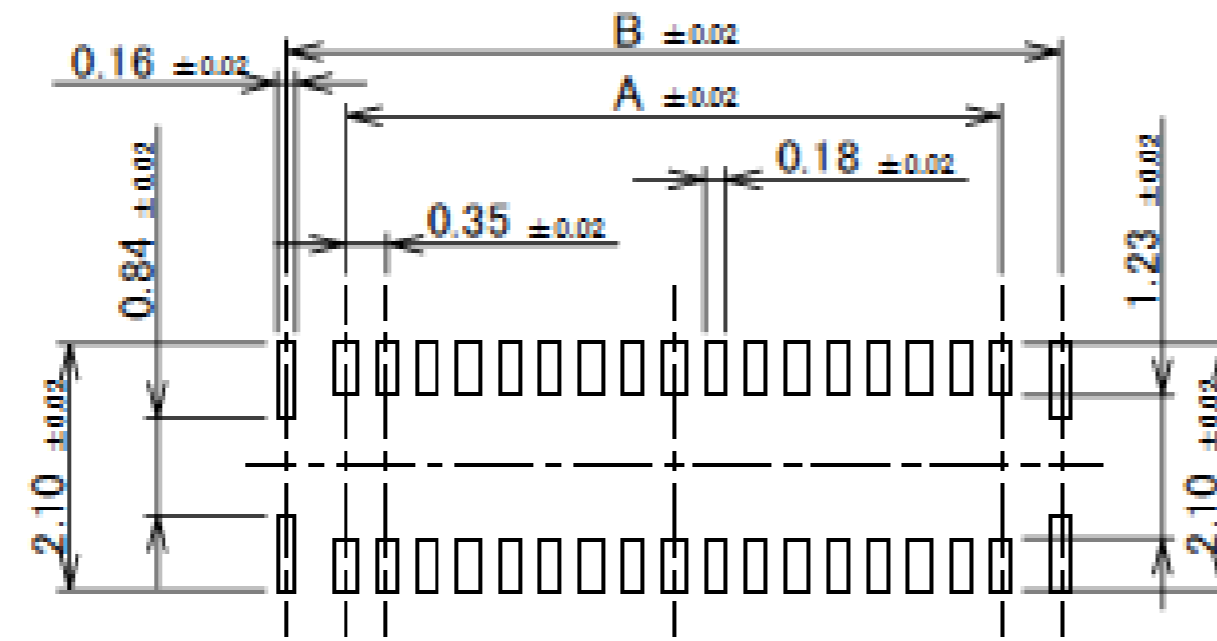
| NO. | DISCRIPTION | MATERIAL     | FINISH , REMARKS   |
|-----|-------------|--------------|--|
| 3   | HOLD DOWN   | CORSON ALLOY | ALL OVER Ni 1.27 $\mu$ m MIN.<br>CONTACT PART Au 0.1 $\mu$ m MIN.<br>SOLDERING PART Au 0.01 $\mu$ m MIN. |
| 2   | CONTACT     | CORSON ALLOY | ALL OVER Ni 1.27 $\mu$ m MIN.<br>CONTACT PART Au 0.1 $\mu$ m MIN.<br>SOLDERING PART Au 0.01 $\mu$ m MIN. |
| 1   | HOUSING     | LCP          | UL94V-0. BLACK   |

# Plug Assembly



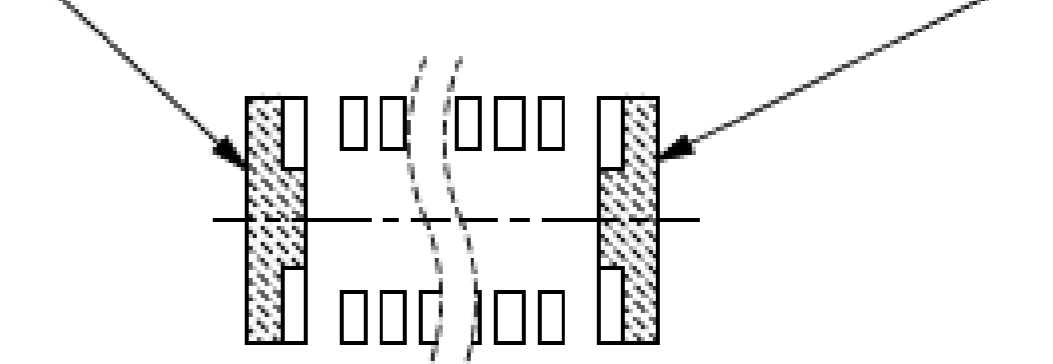
半田上がり防止の為、半田付けをしないで下さい。  
 パターンを設けるときは、レジストもしくはカバーレイを設けて下さい。  
 MUST BE NOT SOLDERING AREA FOR PREVENT FROM SOLDER WICKING.  
 MUST BE COVER LAY OR RESIST COATING ON THE PATTERN.

RECOMMENDED PATTERN LAYOUT

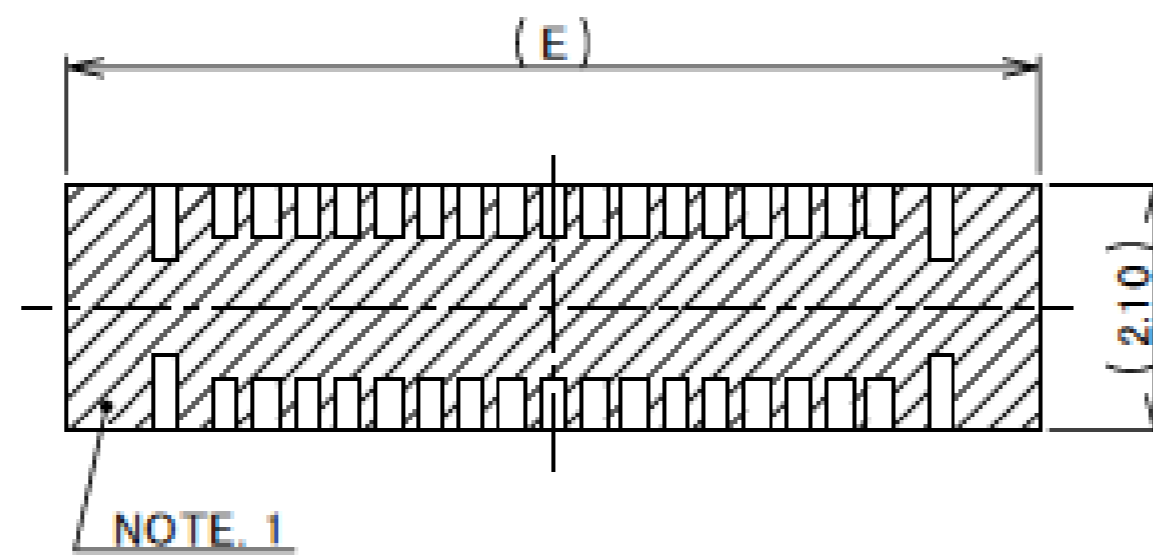


RECOMMENDED METAL MASK LAYOUT  
 THICKNESS : 0.10 mm

ホールドダウンを電源用としてご使用の場合は、  
 両パットを図のように繋げて下さい。  
 PAD IS CONNECTED LIKE FIGURE WHEN HOLD DOWN  
 IS USED FOR POWER SUPPLY.



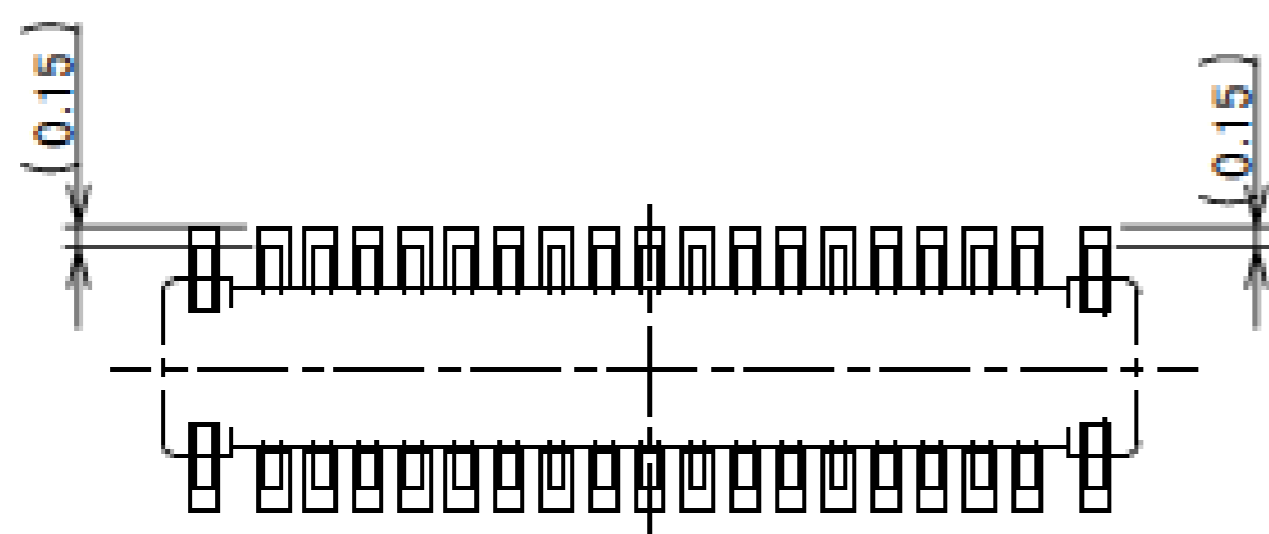
HOLD DOWN PAD LAYOUT  
 USED FOR POWER SUPPLY.



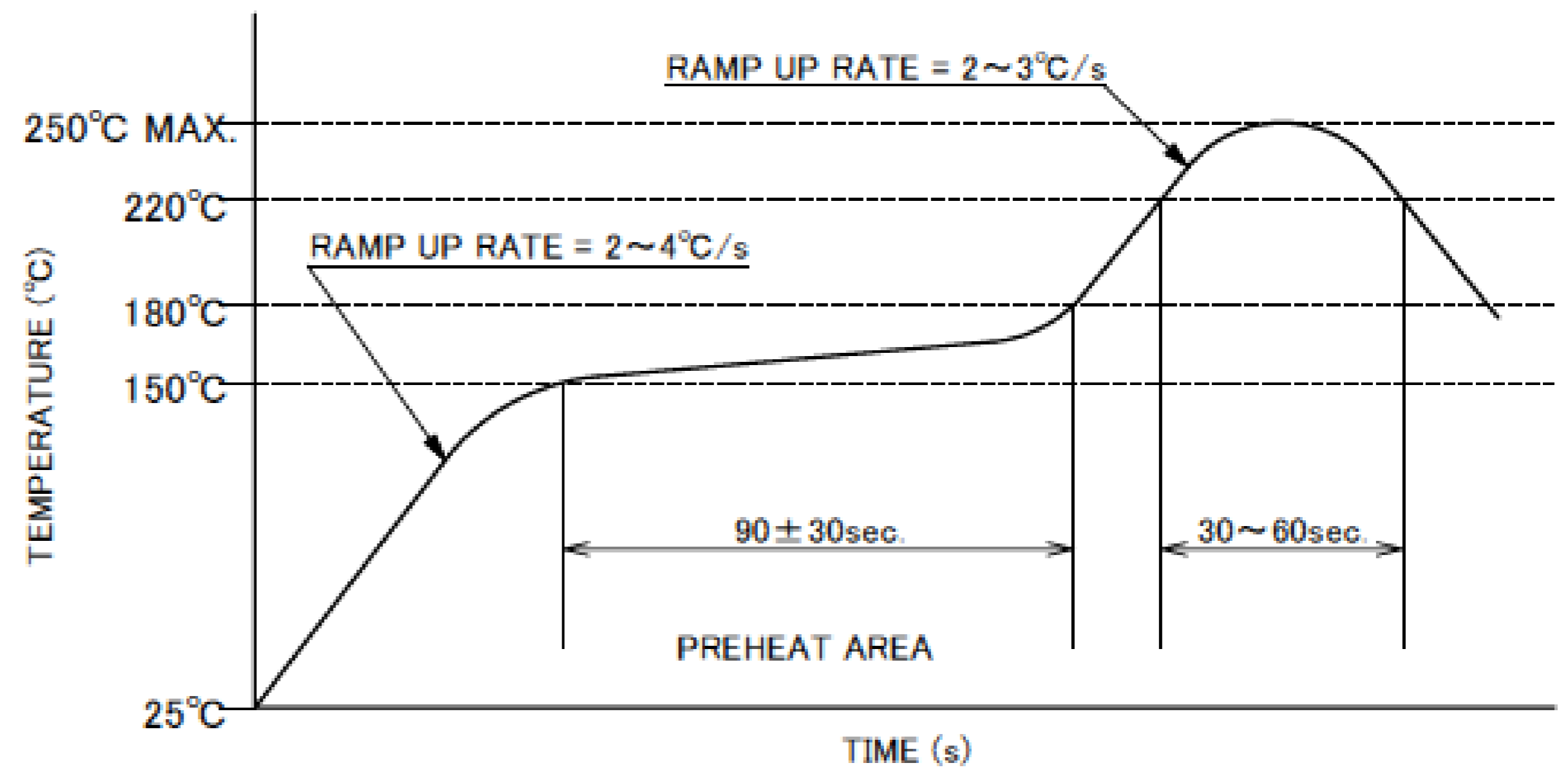
NOTE. 1

NOTES.  
 1. THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.

Rev.16



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

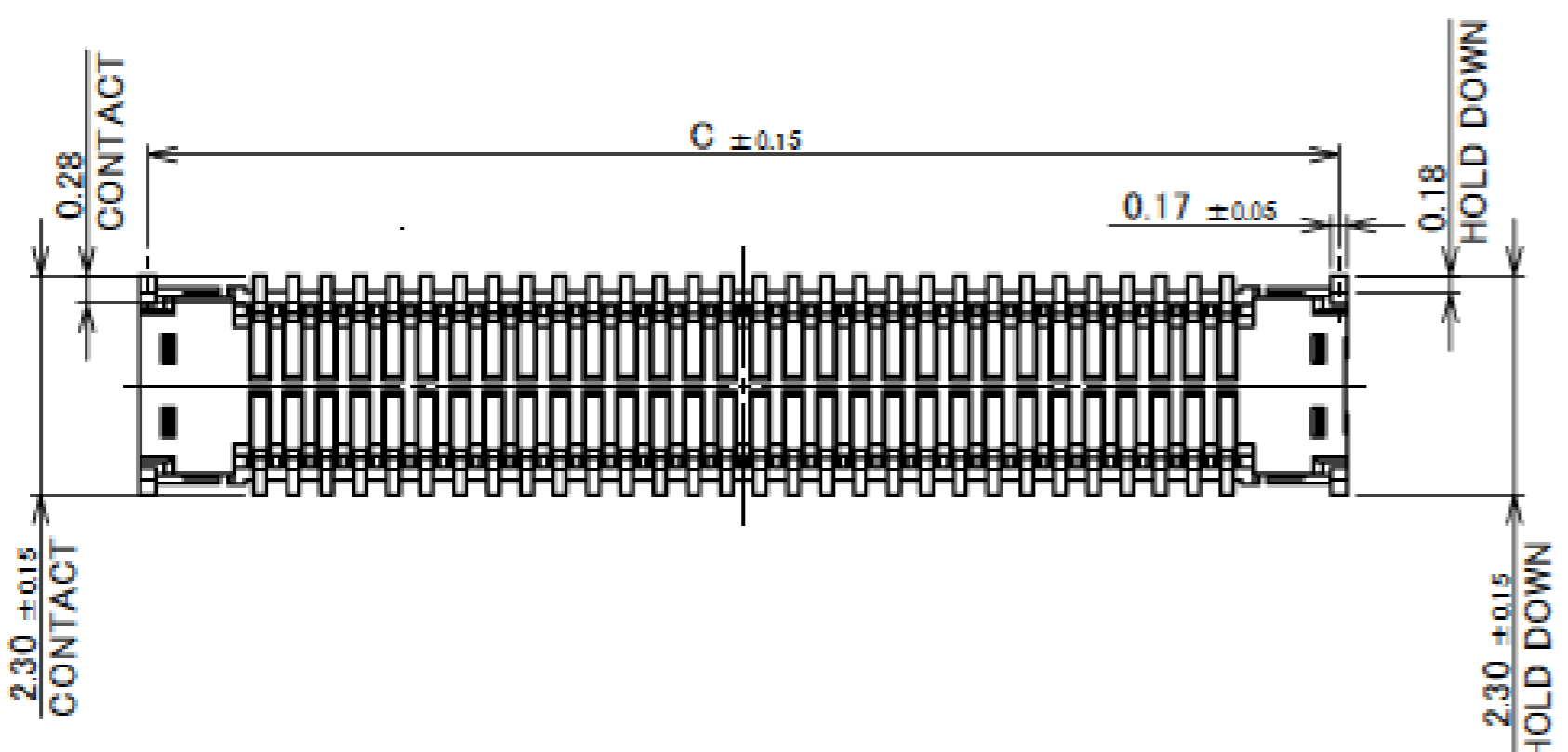
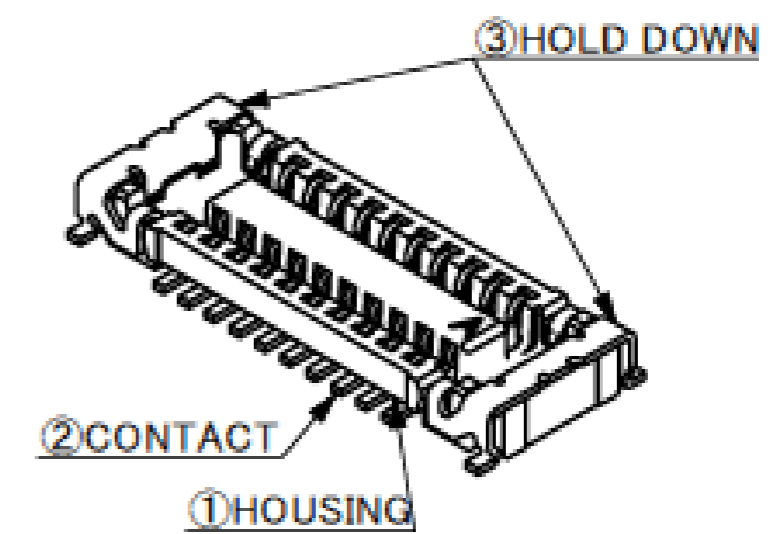
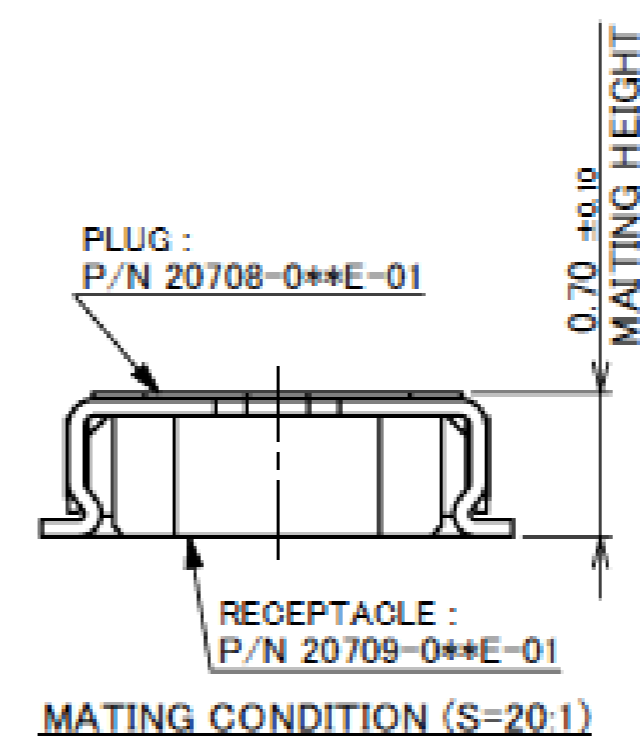
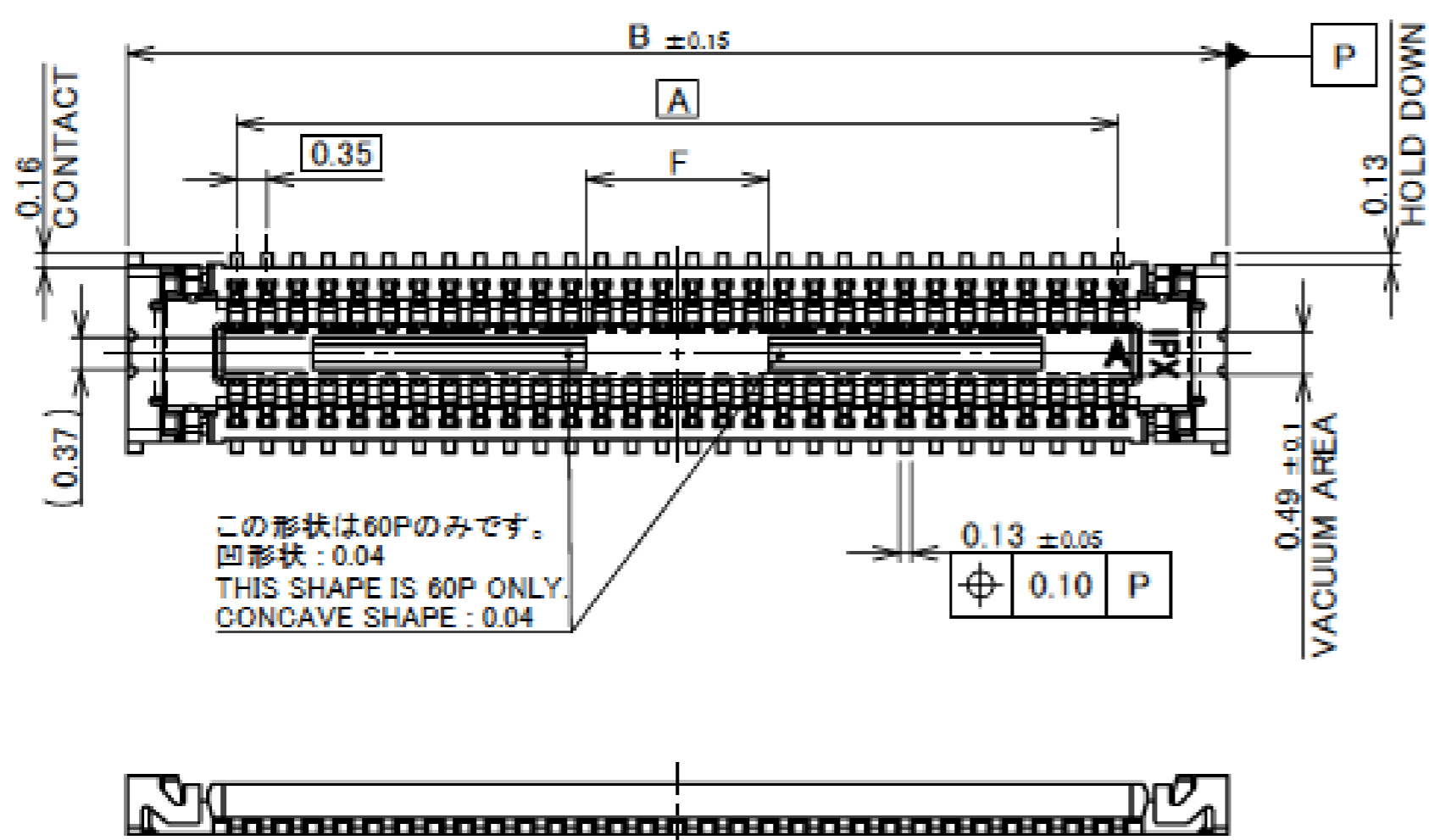
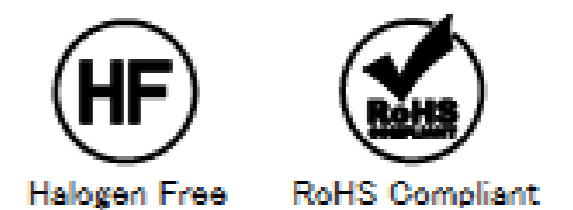
# Plug Assembly

| ITEMS                                   | SPECIFICATION  |
|---|--|
| APPLICABLE CONNECTOR PART No.           | 20709-0**E-01  |
| RATING VOLTAGE                          | 50V AC (r.m.s) / DC  |
| RATING AMPERAGE (FOR SIGNAL CONTACT)    | 0.3A AC/DC (PER CONTACT PIN), 12.0A AC/DC(TOTAL)<br>1.0A AC/DC (PER CONTACT OF UP TO 8 PINS) |
| RATING AMPERAGE (FOR POWER CONTACT)     | 2.0A AC/DC (PER A CONTACT)/ 4.0A AC/DC(TOTAL)  |
| OPERATING TEMPERATURE                   | 233~358K(-40°C~+85°C)  |
| OPERATING HUMIDITY                      | 85% MAX.(NON-CONDENSING)   |
| CONTACT RESISTANCE (FOR SIGNAL CONTACT) | INITIAL : 30mohm MAX. / AFTER TEST : $\Delta$ 20mohm MAX.                                    |
| CONTACT RESISTANCE (FOR POWER CONTACT)  | INITIAL : 30mohm MAX. / AFTER TEST : $\Delta$ 20mohm MAX.                                    |
| INSULATION RESISTANCE                   | INITIAL : 1,000Mohm MIN. / AFTER TEST : 500Mohm MIN.   |
| DIELECTRIC WITHSTANDING VOLTAGE         | AC200V 1min  |
| DURABILITY                              | 20 CYCLES  |
| MATING FORCE (INITIAL)                  | ~28P 2.0 N/Pin MAX. 30P~ 1.0 N/Pin MAX.  |
| UNMATING FORCE (AFTER TEST)             | ~28P 0.30 N/Pin MIN. 30P~ 0.15 N/Pin MIN.  |
| COPLANARITY                             | 0.08 MAX.  |
| PRODUCT SPECIFICATION                   | PRS-2334   |
| TEST REPORT                             | TR-16143   |
| PACKING STANDARD                        | PST-15076  |
| INSTRUCTION MANUAL                      | HIM-15014  |
| APPEARANCE CRITERIA No.                 | QLS-A***   |

Rev.16

# Receptacle Assembly

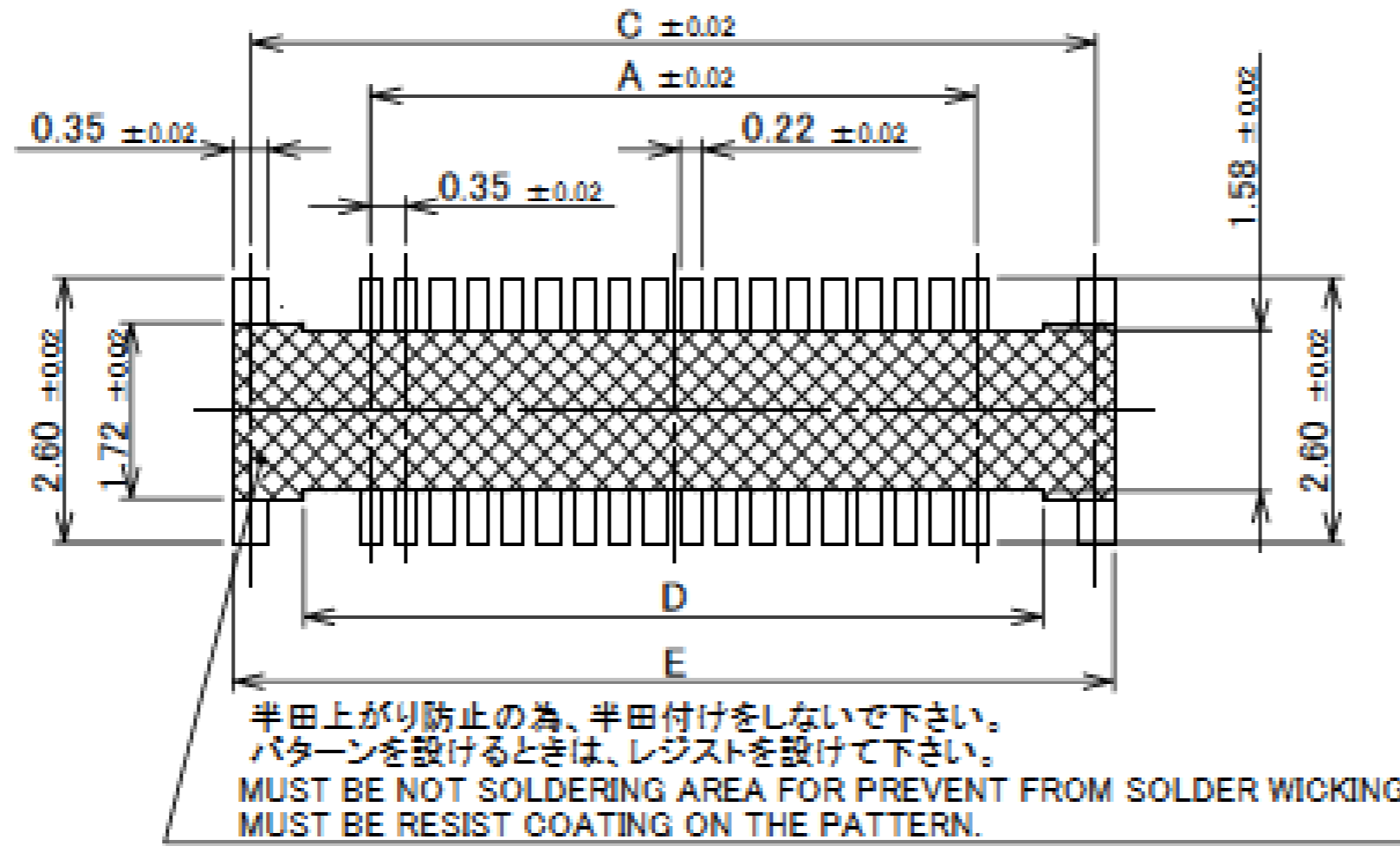
| Recommended P/N | 20709-0**E-01 |       |       |       |       |       |      |
|-----------------|---------------|-------|-------|-------|-------|-------|------|
| PART No.        | Pos           | A     | B     | C     | D     | E     | F    |
| 20709-010E-01   | 10            | 1.40  | 3.92  | 3.75  | 2.70  | 4.10  | -    |
| 20709-014E-01   | 14            | 2.10  | 4.62  | 4.45  | 3.40  | 4.80  | -    |
| 20709-016E-01   | 16            | 2.45  | 4.97  | 4.80  | 3.75  | 5.15  | -    |
| 20709-018E-01   | 18            | 2.80  | 5.32  | 5.15  | 4.10  | 5.50  | -    |
| 20709-020E-01   | 20            | 3.15  | 5.67  | 5.50  | 4.45  | 5.85  | -    |
| 20709-024E-01   | 24            | 3.85  | 6.37  | 6.20  | 5.15  | 6.55  | -    |
| 20709-030E-01   | 30            | 4.90  | 7.42  | 7.25  | 6.20  | 7.60  | -    |
| 20709-034E-01   | 34            | 5.60  | 8.12  | 7.95  | 6.90  | 8.30  | -    |
| 20709-040E-01   | 40            | 6.65  | 9.17  | 9.00  | 7.95  | 9.35  | -    |
| 20709-050E-01   | 50            | 8.40  | 10.92 | 10.75 | 9.70  | 11.10 | -    |
| 20709-060E-01   | 60            | 10.15 | 12.67 | 12.50 | 11.45 | 12.85 | 2.10 |



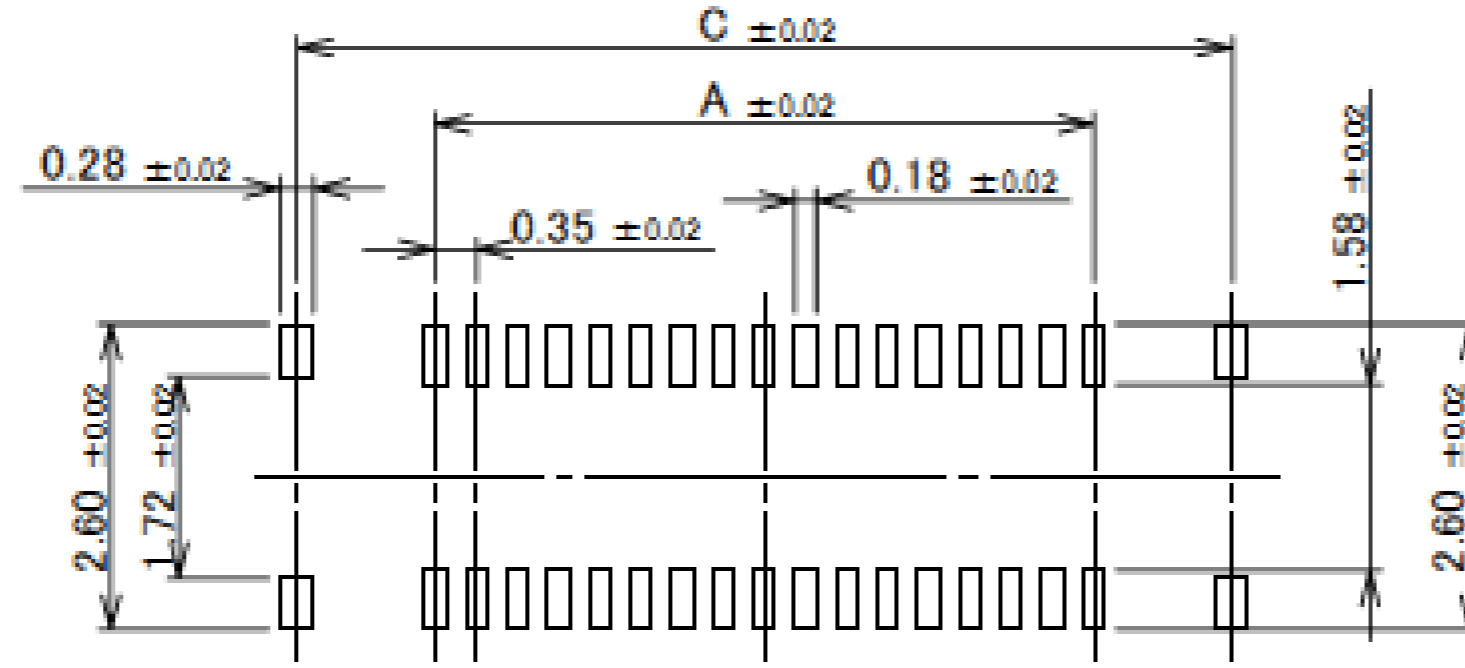
| NO. | DISCRIPTION | MATERIAL     | FINISH , REMARKS  |
|-----|-------------|--------------|---|
| 3   | HOLD DOWN   | CORSON ALLOY | ALL OVER Ni 1.27 $\mu$ m MIN.<br>CONTACT PART Au 0.1 $\mu$ m MIN./<br>SOLDERING PART Au 0.01 $\mu$ m MIN. |
| 2   | CONTACT     | CORSON ALLOY | ALL OVER Ni 1.27 $\mu$ m MIN.<br>CONTACT PART Au 0.1 $\mu$ m MIN./<br>SOLDERING PART Au 0.01 $\mu$ m MIN. |
| 1   | HOUSING     | LCP          | UL94V-0, BEIGE  |

Rev.17

# Receptacle Assembly

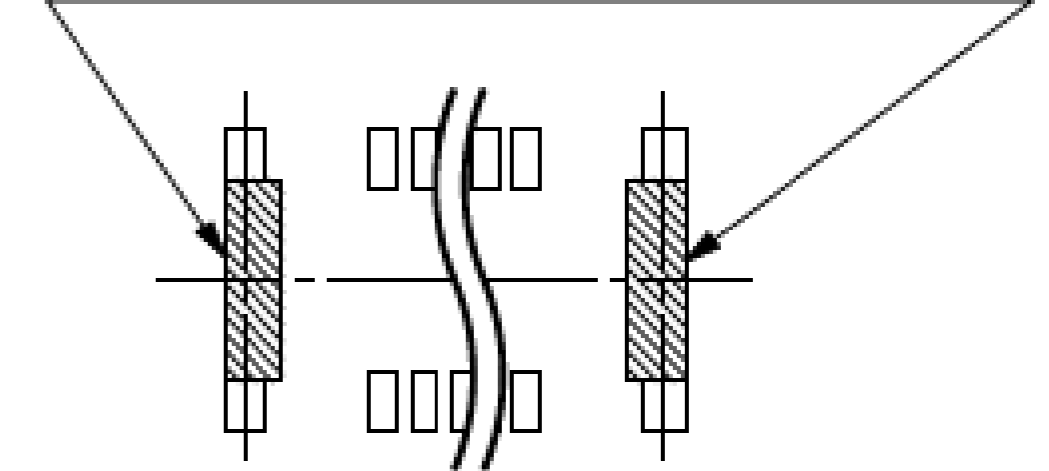


RECOMMENDED PATTERN LAYOUT

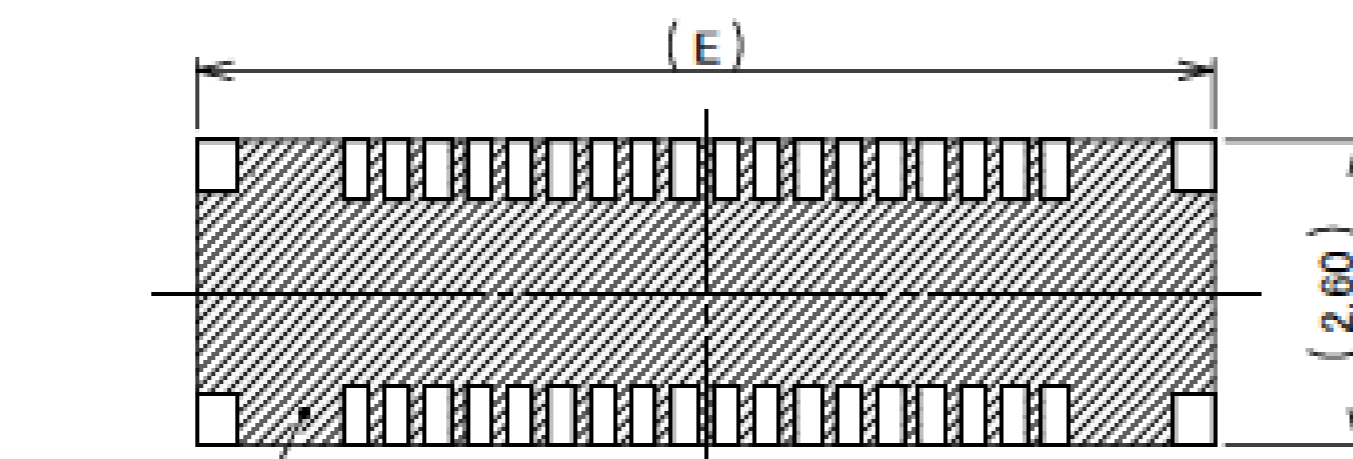


RECOMMENDED METAL MASK LAYOUT  
 THICKNESS : 0.10 mm

ホールドダウンを電源用としてご使用の場合は、  
 両パットを図のように繋げて下さい。  
 PAD IS CONNECTED LIKE FIGURE WHEN HOLD DOWN  
 IS USED FOR POWER SUPPLY.



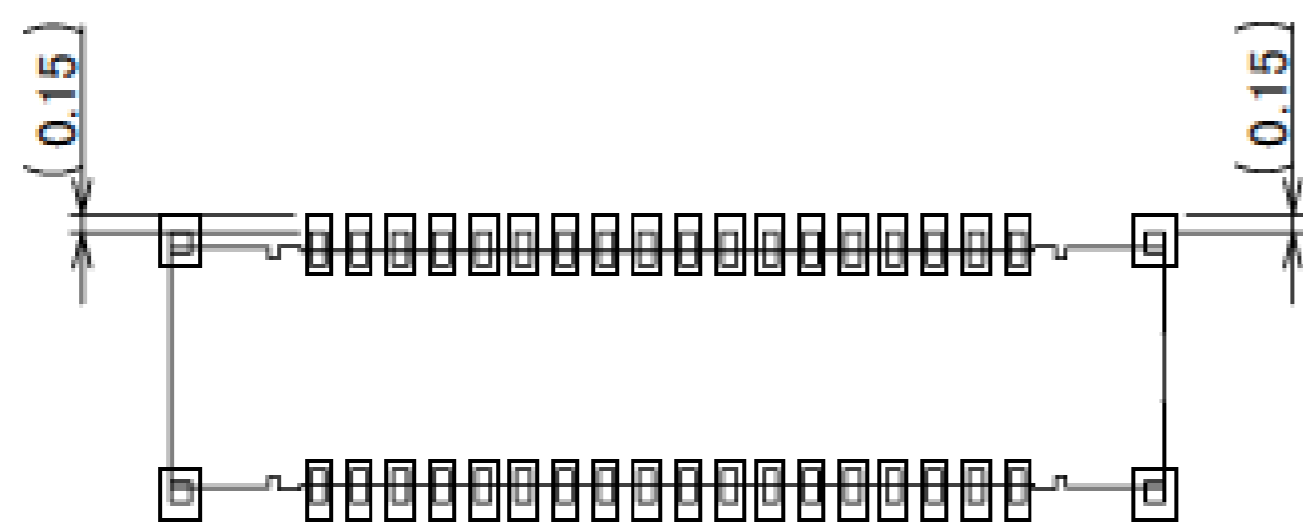
HOLD DOWN PAD LAYOUT  
 USED FOR POWER SUPPLY



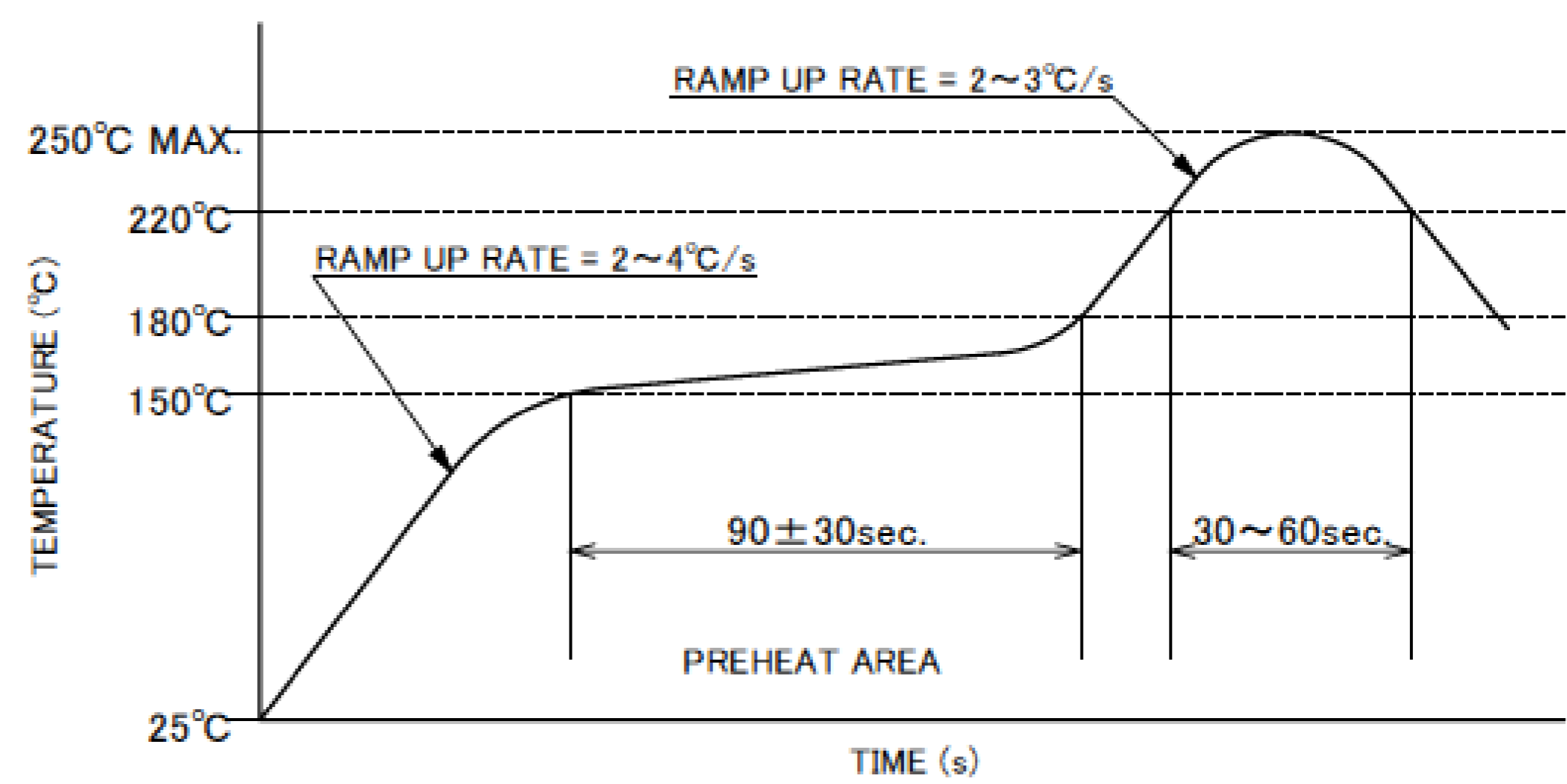
NOTE. 1

NOTES.  
 1. THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.

Rev.17



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

# Receptacle Assembly

| ITEMS                                   | SPECIFICATION  |
|---|--|
| APPLICABLE CONNECTOR PART No.           | 20708-0**E-01  |
| RATING VOLTAGE                          | 50V AC (r.m.s) / DC  |
| RATING AMPERAGE (FOR SIGNAL CONTACT)    | 0.3A AC/DC (PER CONTACT PIN), 12.0A AC/DC(TOTAL)<br>1.0A AC/DC (PER CONTACT OF UP TO 8 PINS) |
| RATING AMPERAGE (FOR POWER CONTACT)     | 2.0A AC/DC (PER CONTACT PIN), 4.0A AC/DC(TOTAL)  |
| OPERATING TEMPERATURE                   | 233~358K(-40°C~+85°C)  |
| OPERATING HUMIDITY                      | 85% MAX.(NON-CONDENSING)   |
| CONTACT RESISTANCE (FOR SIGNAL CONTACT) | INITIAL : 30mohm MAX. / AFTER TEST : $\triangle$ 20mohm MAX.                                 |
| CONTACT RESISTANCE (FOR POWER CONTACT)  | INITIAL : 30mohm MAX. / AFTER TEST : $\triangle$ 20mohm MAX.                                 |
| INSULATION RESISTANCE                   | INITIAL : 1,000Mohm MIN. / AFTER TEST : 500Mohm MIN.   |
| DIELECTRIC WITHSTANDING VOLTAGE         | AC200V 1min  |
| DURABILITY                              | 20 CYCLES  |
| MATING FORCE (INITIAL)                  | ~28P 2.0 N/Pin MAX. 30P~ 1.0 N/Pin MAX.  |
| UNMATING FORCE (AFTER TEST)             | ~28P 0.30 N/Pin MIN. 30P~ 0.15 N/Pin MIN.  |
| COPLANARITY                             | 0.08 MAX.  |
| PRODUCT SPECIFICATION                   | PRS-2334   |
| TEST REPORT                             | TR-16143   |
| PACKING STANDARD                        | PST-15077  |
| INSTRUCTION MANUAL                      | HIM-15014  |
| APPEARANCE CRITERIA No.                 | QLS-A***   |

Rev.17



# Custom Connectors Available

 RF Connectors

MHF® series



CABLINA® series



Micro-coaxial/Twinax Connectors

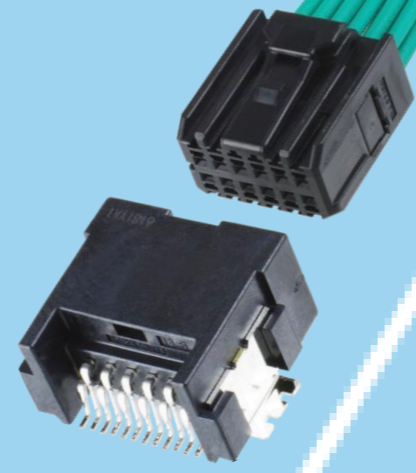


Wire-to-Board Connectors/Terminals

AP series



ISH® series



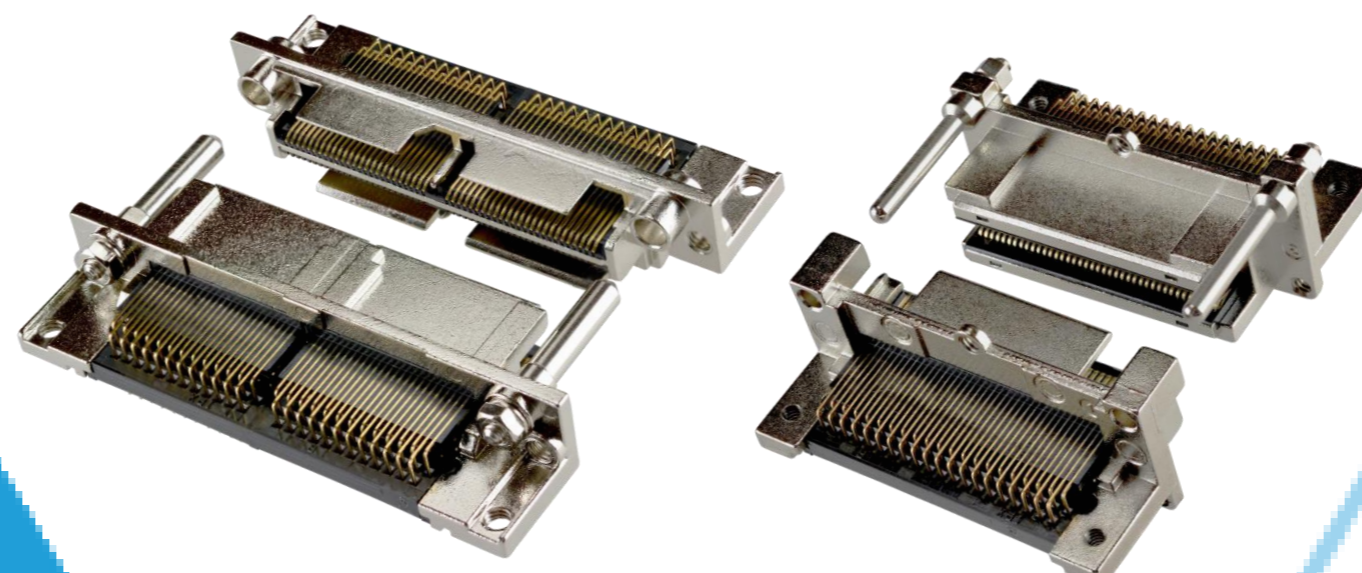
NOVASTACK® series



Board-to-Board Connectors



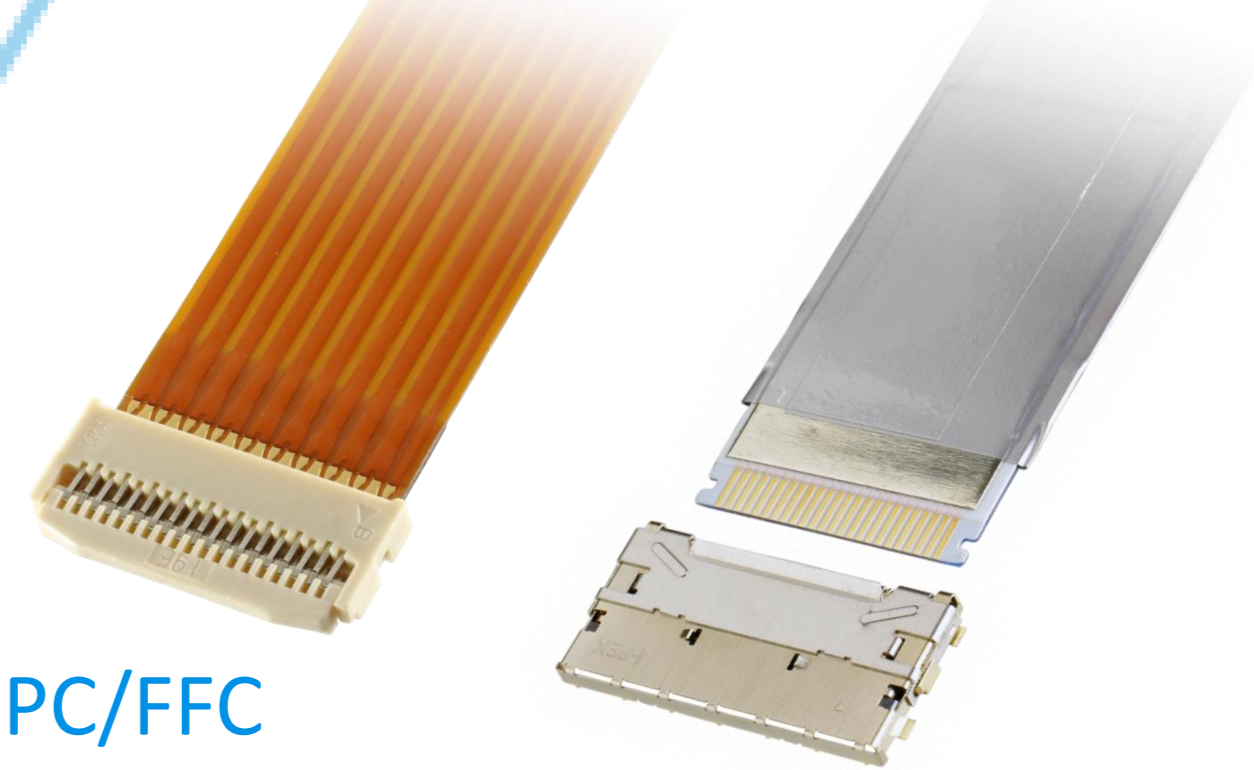
I/O Connectors



MINIDOCK™ series

MINIFLEX® series

EVAFLEX® series



FPC/FFC Connectors



Inquiry



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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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