

CABLINE®-UM

Fully-shielded and multi-point ground, Mechanical lock, High-data-rate transfer (40 Gbps/lane PAM3), 0.4 mm pitch, Right angle vertical mating type micro-coaxial

connector

Product Specifications:

| | | |
|--------------------|------------------------------|---------------------------------|
| Mating type | Right Angle Vertical | |
| Board Pitch (mm) | 0.4 | |
| Wiping Length (mm) | 0.65 | |
| Mated size (mm) | Height | With Lock Cover : 2.35 Max |
| | | Without Lock Cover : 2.15 Max |
| | | With Pull Tape Holder: 2.35 Max |
| Width | Formula: $5.0 + (0.4 * ? p)$ | |
| | Depth | 5.0 with lock cover |
| Pin Counts | Range | Up to 60 |
| | Available | 30, 40, 50, 60 |

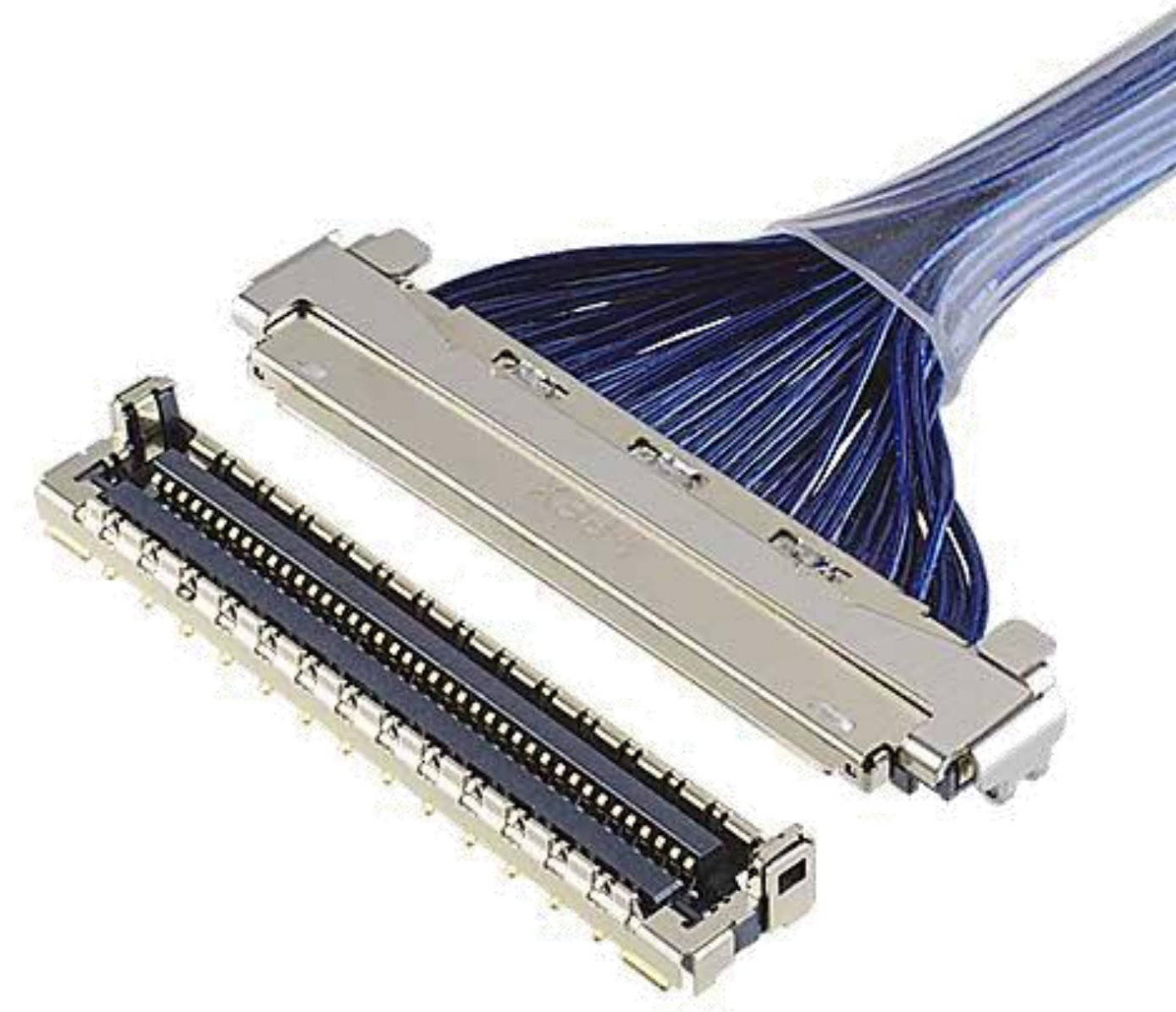
Applicable Cable Size:

| | |
|--------------------------------|--|
| Maximum O.D. (mm) | 0.4 |
| Micro-Coaxial for Signal (AWG) | 45 ohm: #38 or smaller 50 ohm: #40 or smaller |
| Twinax (AWG) | #40, #42 |
| Discrete (AWG) | #34 or smaller |

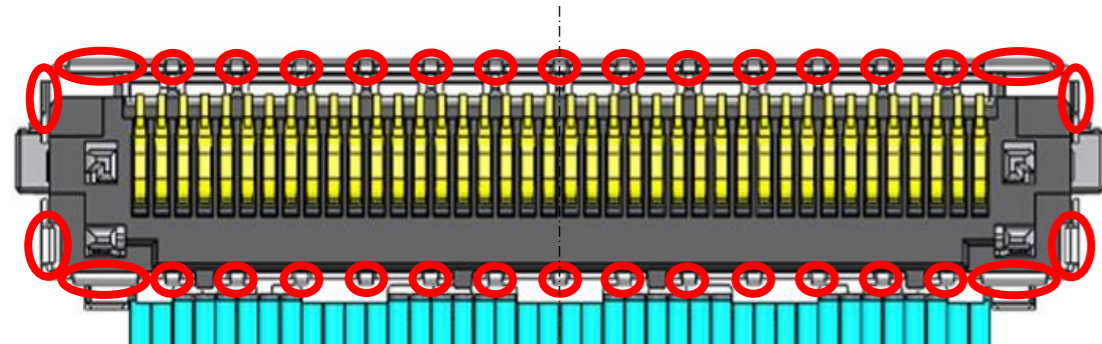
Applicable Standards (Reference Only):

USB4 Gen4 (40 Gbps/ Lane PAM3),
DisplayPort UHBR20 (20 Gbps/ Lane)

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

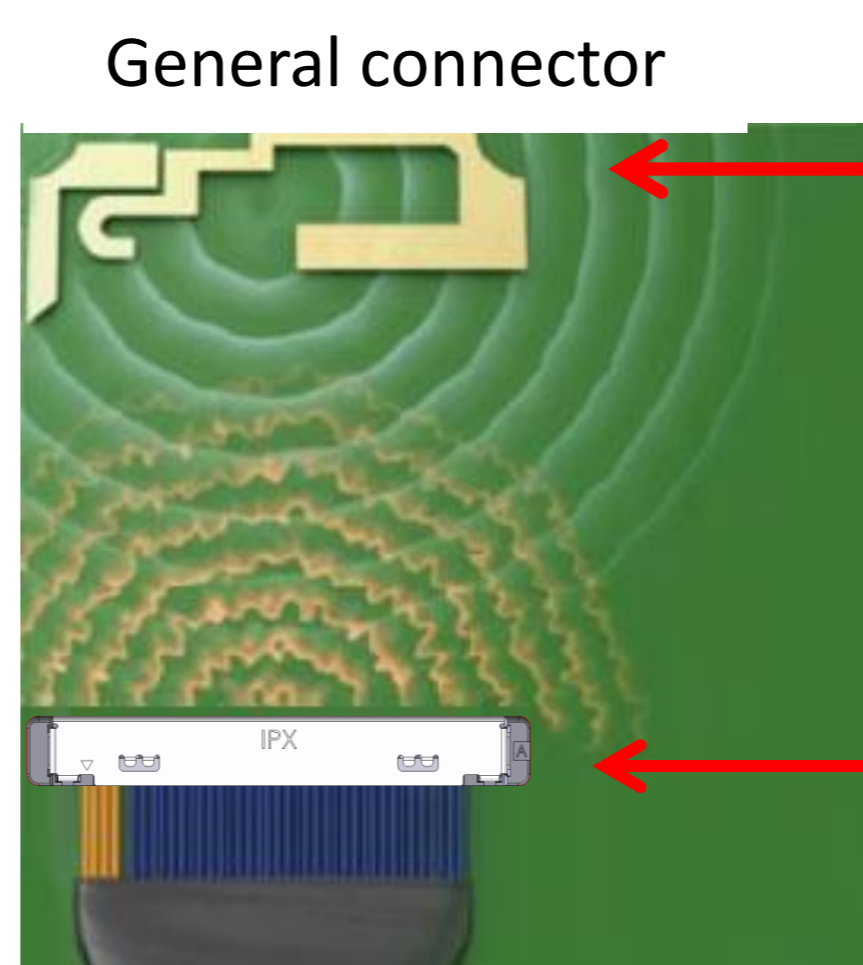


ZenShield® fully-shielded with multi-point grounds is ideal for EMC solutions



View From Underside

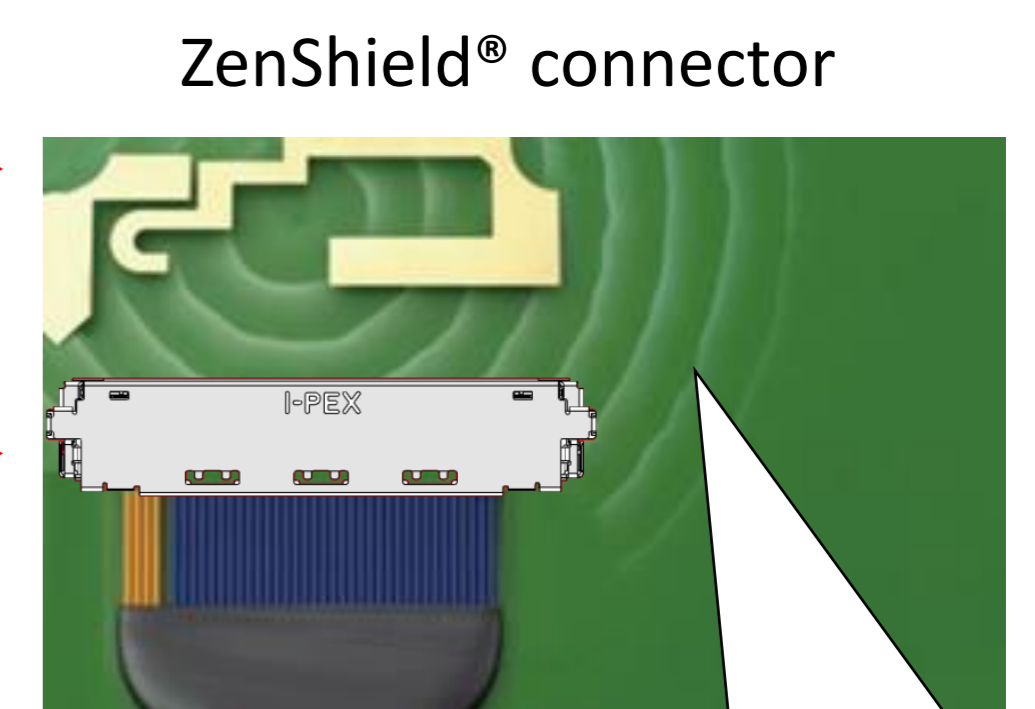
○ Ground SMT points



General connector

Wi-Fi Antenna

High-data-rate signal transfer

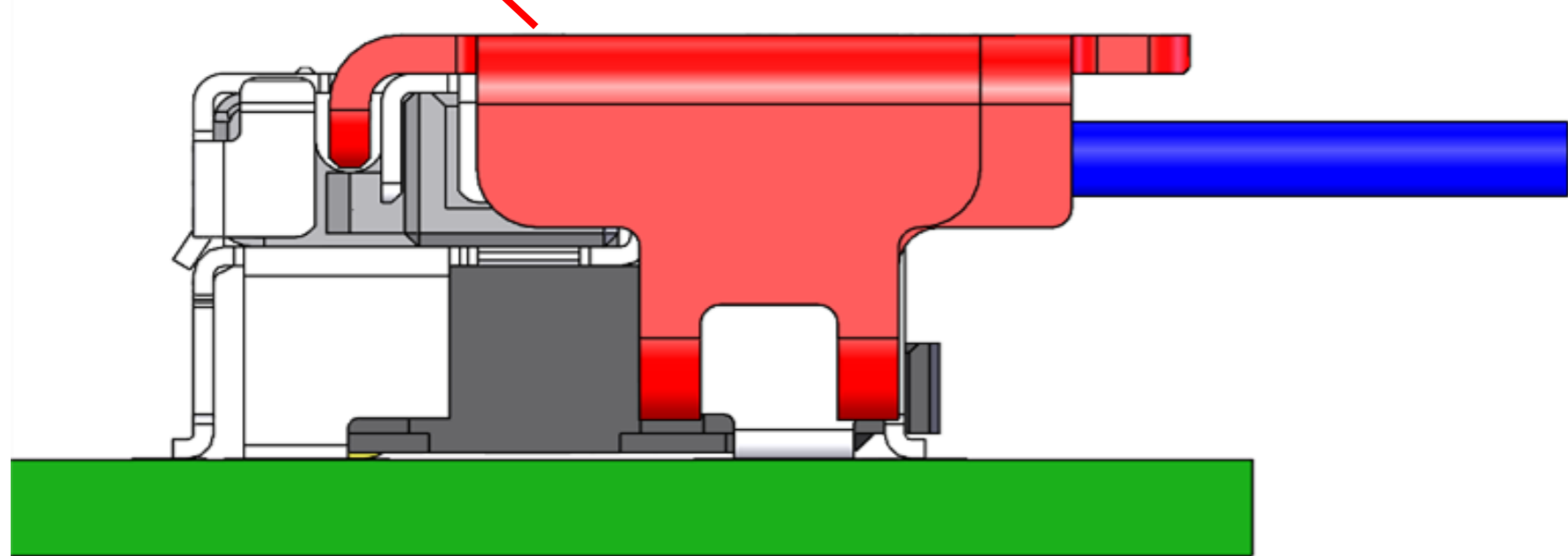


ZenShield® connector

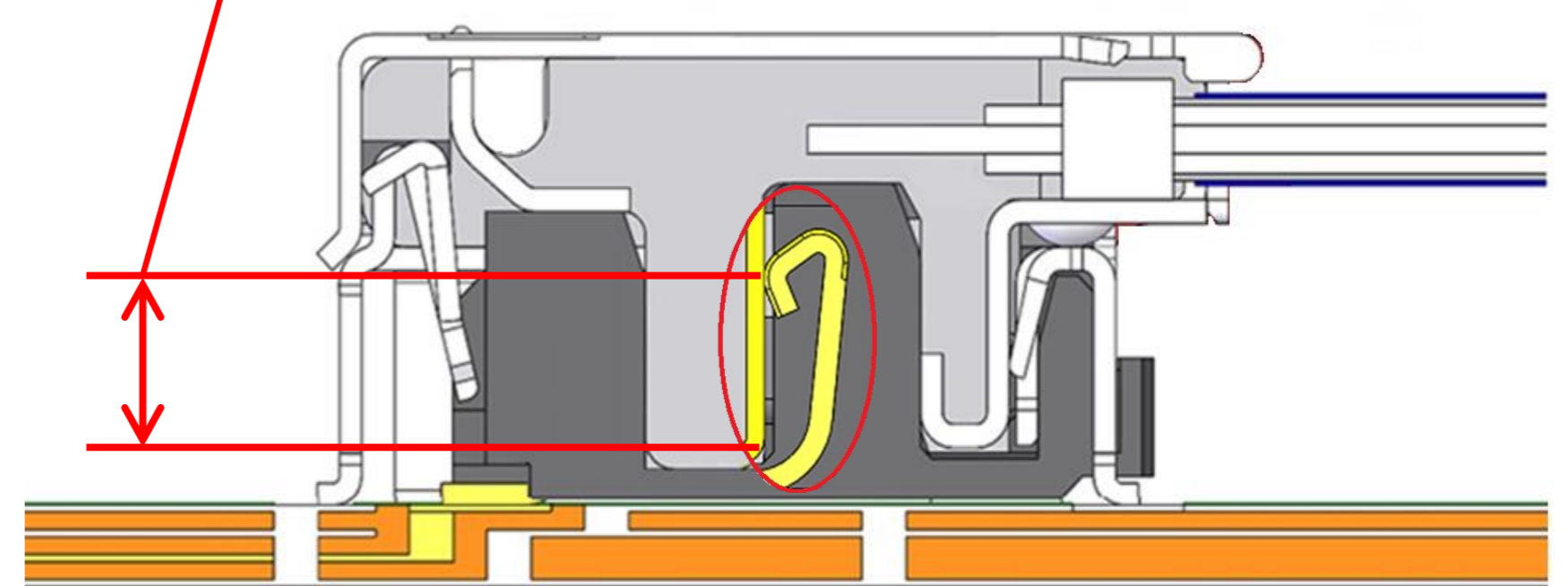
Connectors can be placed closer to antenna

Lock cover and 0.65 mm min. wiping length provides high contact reliability

With Lock Cover ---enhanced mating retention force



Wiping length : 0.65 mm min.



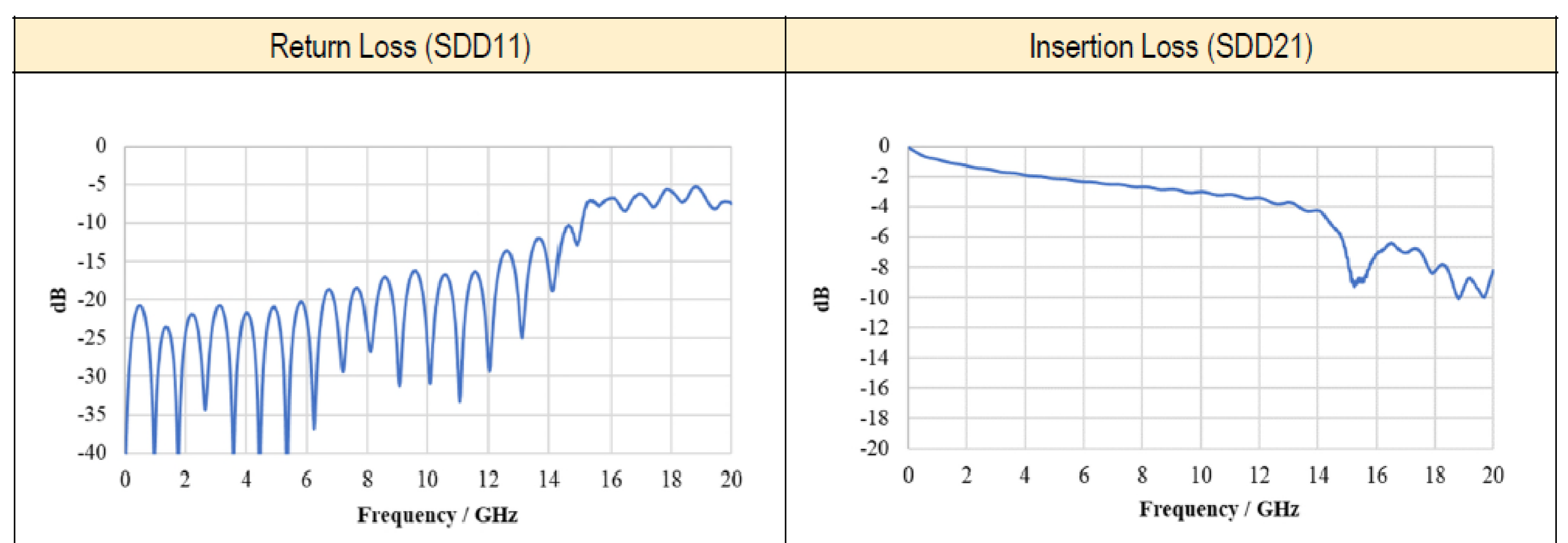
High-data-rate transfer, ideal for 40 Gbps/lane PAM3 applications

Measurement results

Connector: CABLINE-UM 40P

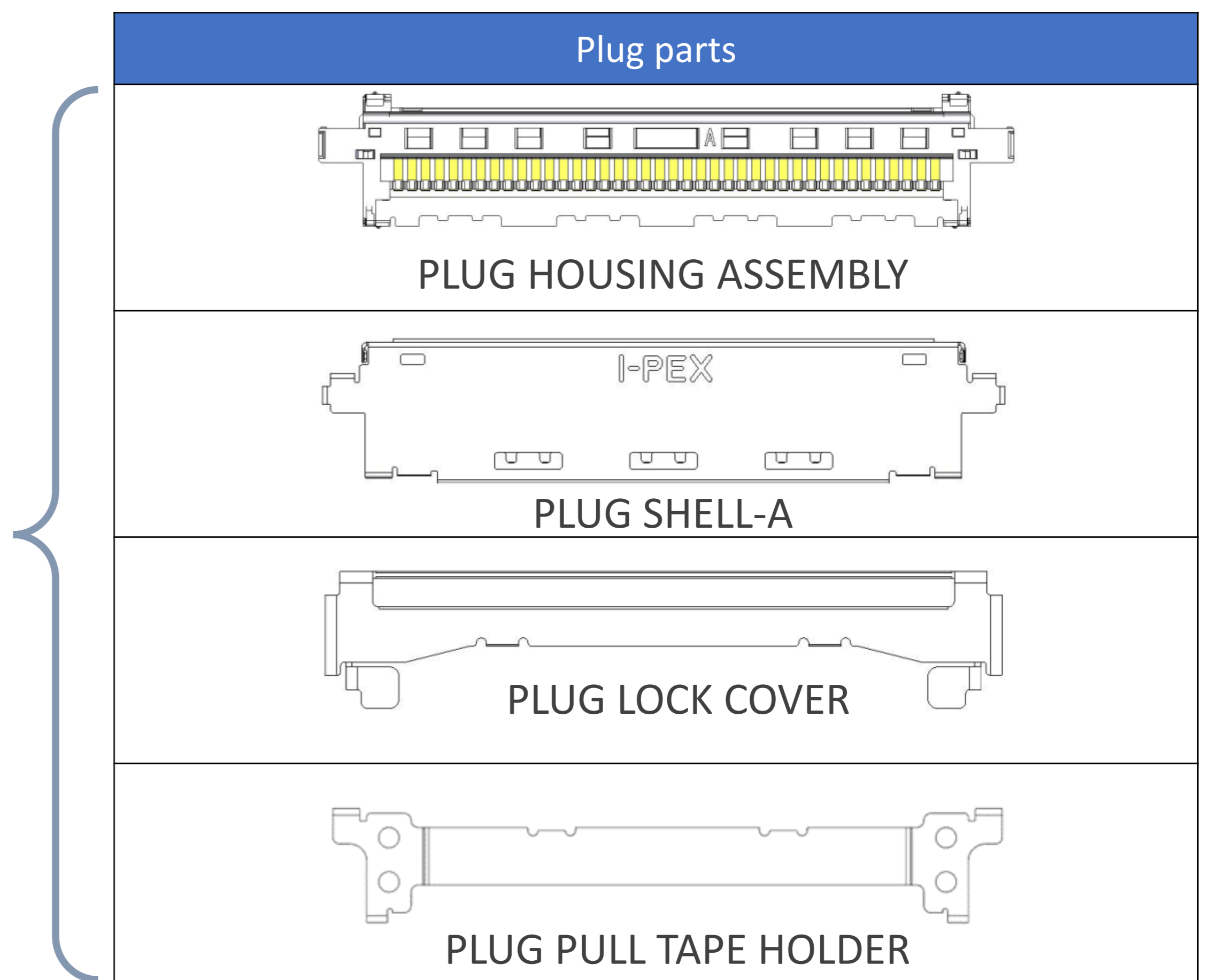
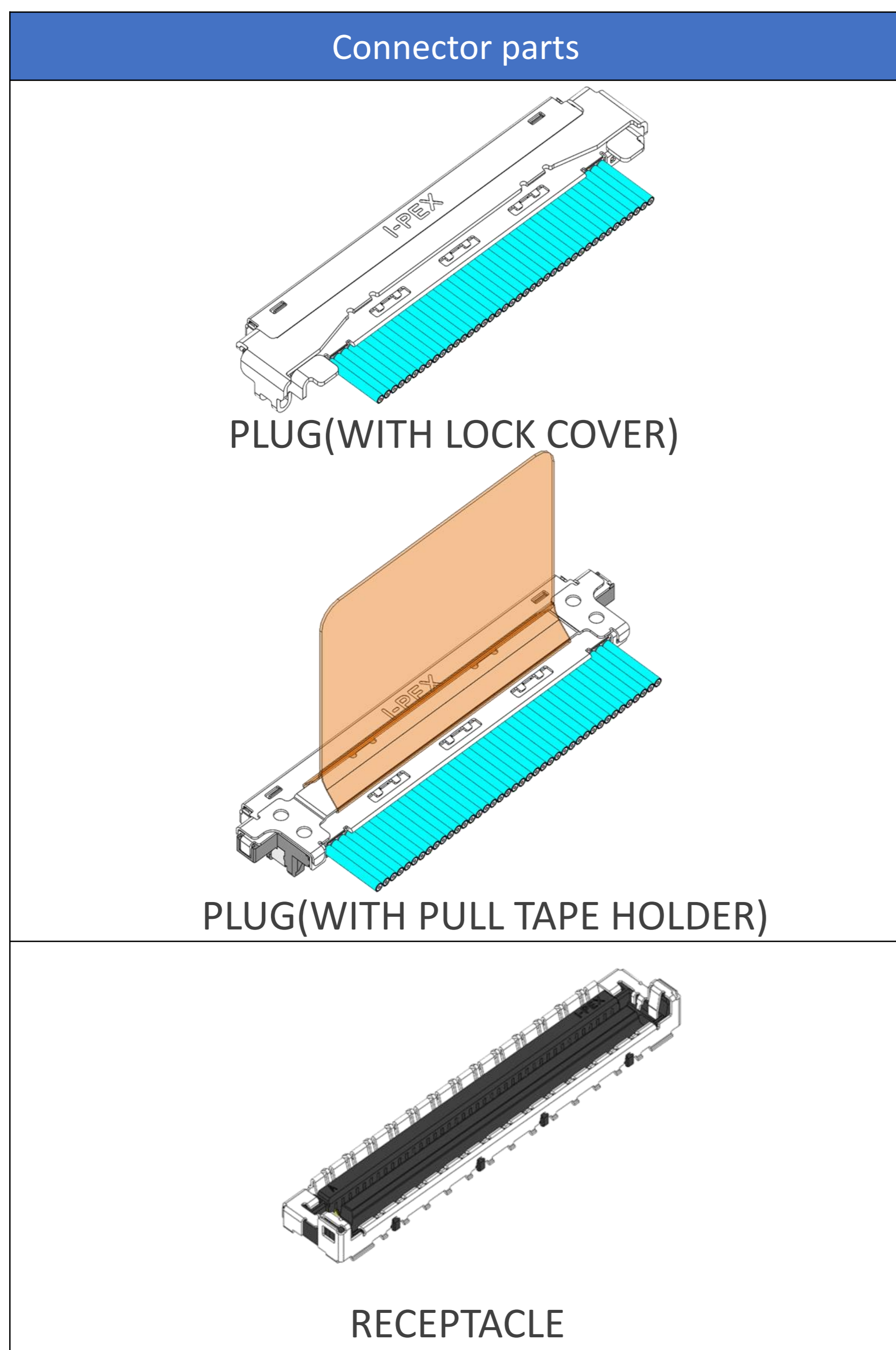
Cable: Micro-coaxial cable
AWG #40, 45ohm , Length : 100 mm

Pin Assignment: GSSGSSG



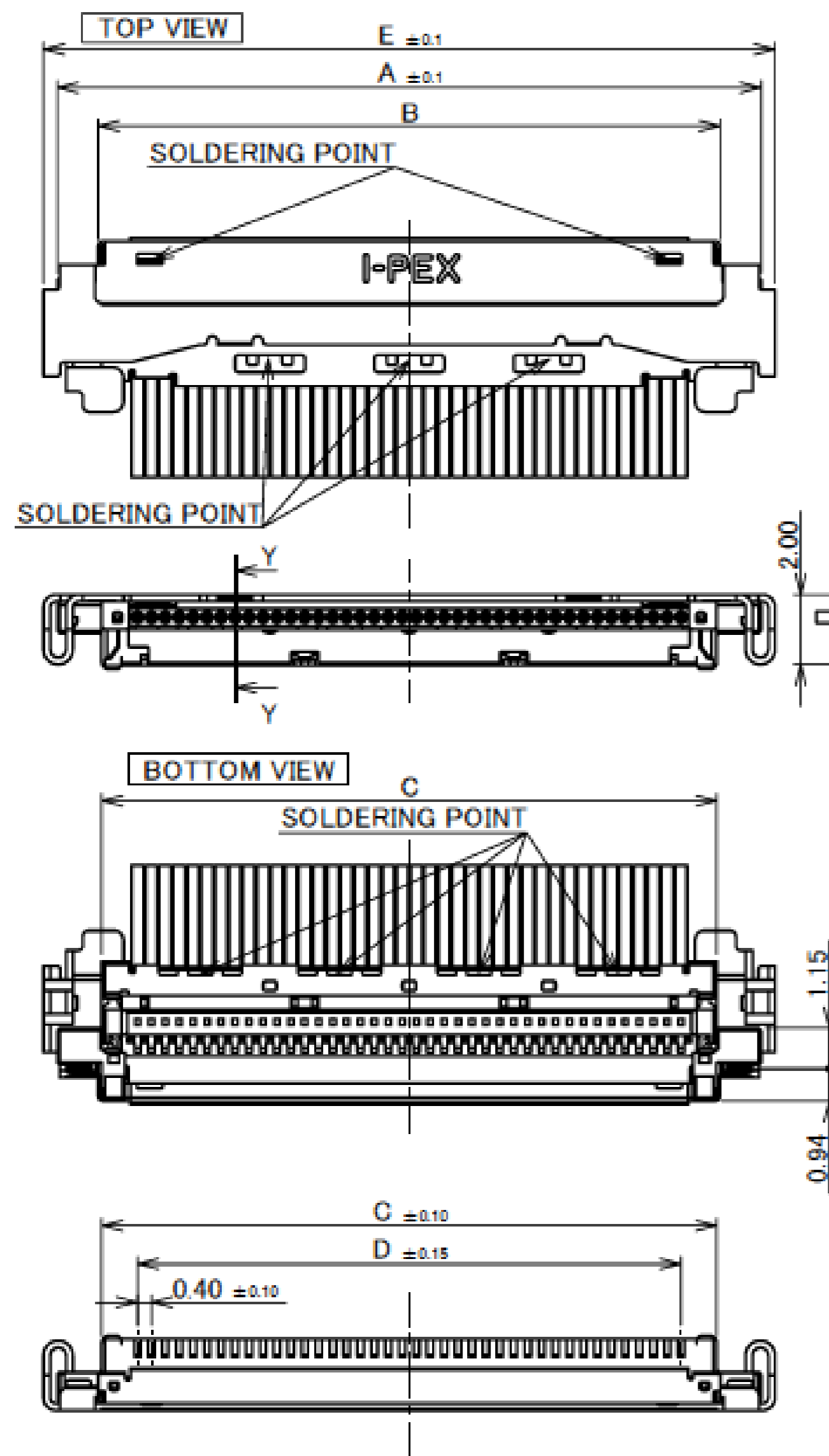
Component Parts Details

Component Parts

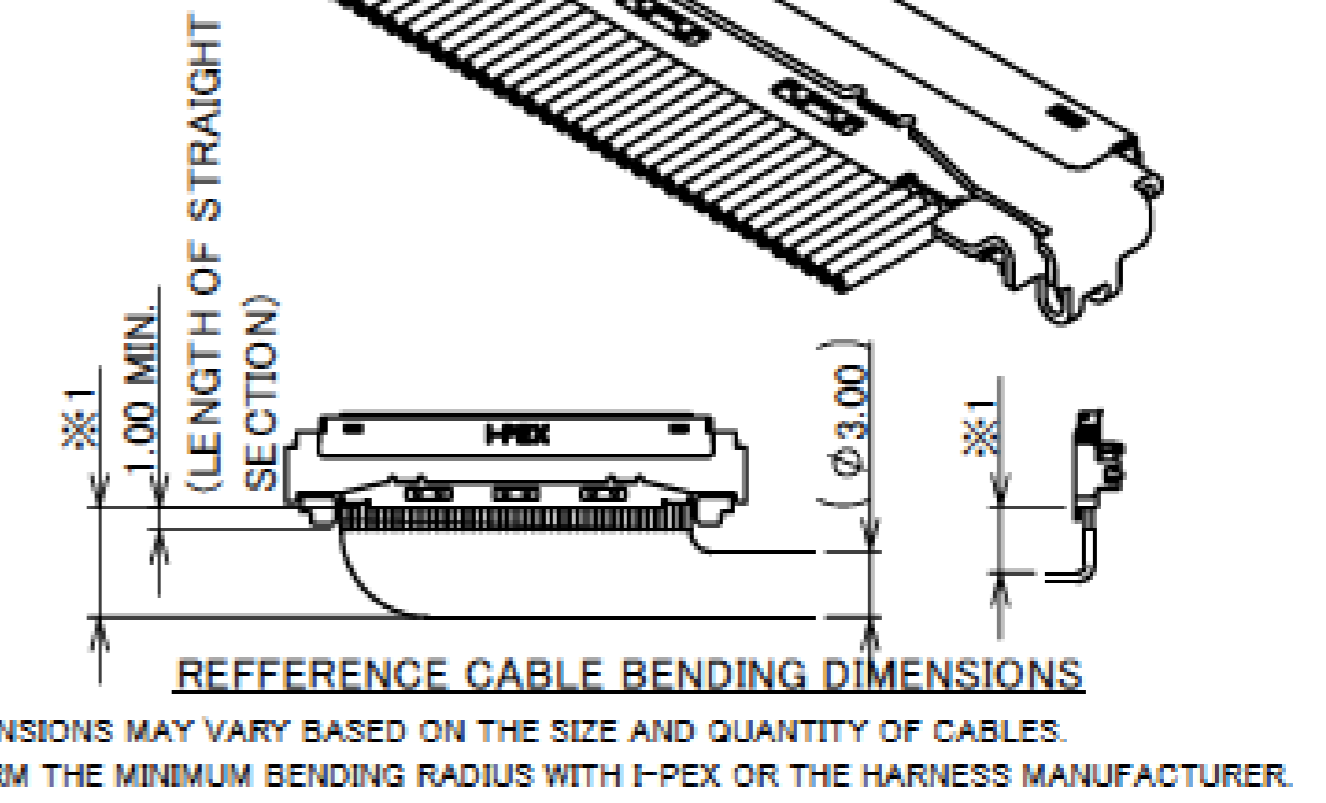
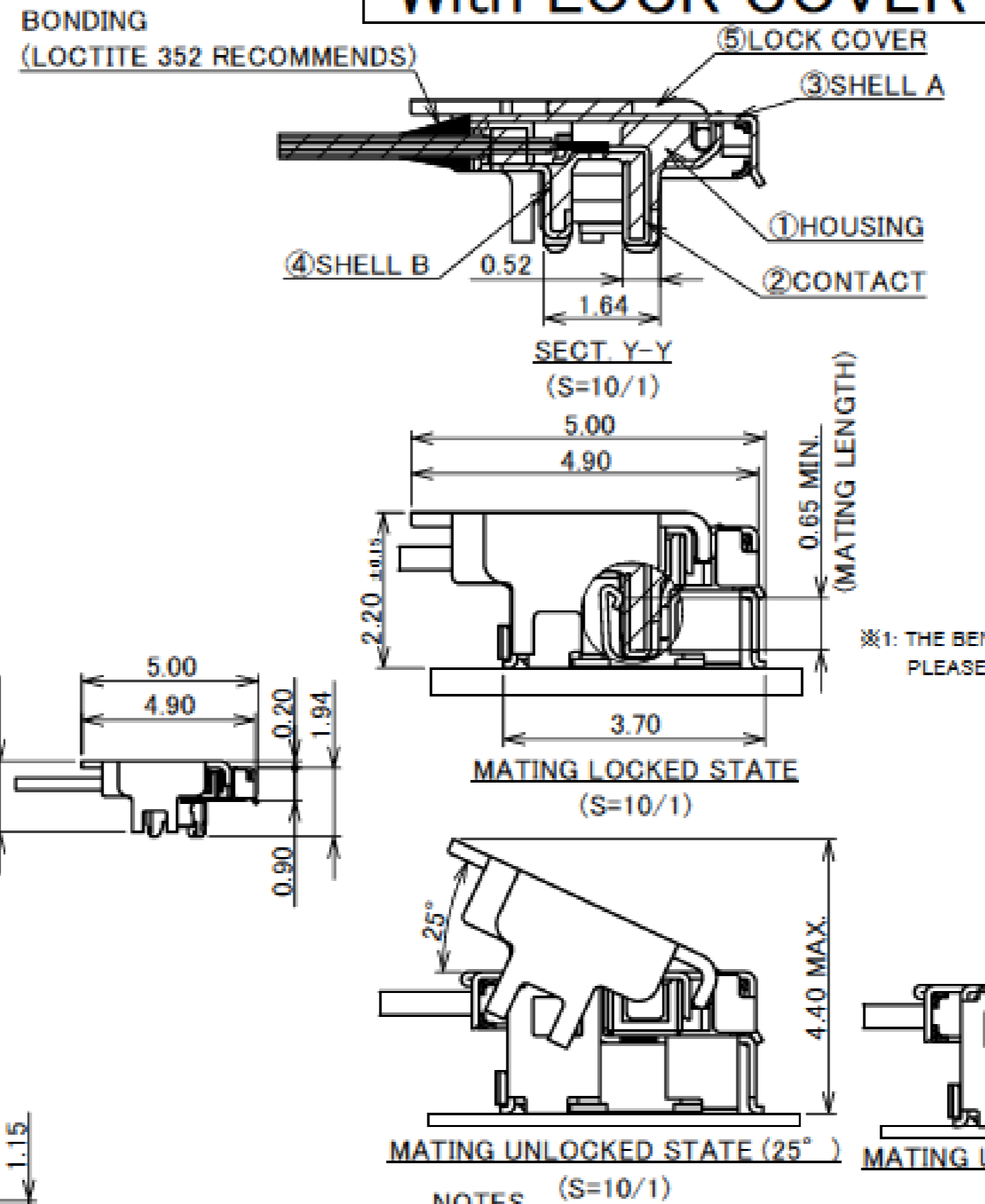


Plug for Cable Assembly

| Recommended P/N | | 20877-0**T-01 | | | | |
|-----------------|------|---------------|-------|-------|-------|-------|
| PART NO. | Pos. | A | B | C | D | E |
| 20877-030T-01 | 30 | 16.20 | 13.85 | 13.65 | 11.60 | 17.00 |
| 20877-040T-01 | 40 | 20.20 | 17.85 | 17.65 | 15.60 | 21.00 |
| 20877-050T-01 | 50 | 24.20 | 21.85 | 21.65 | 19.60 | 25.00 |
| 20877-060T-01 | 60 | 28.20 | 25.85 | 25.65 | 23.60 | 29.00 |



With LOCK COVER



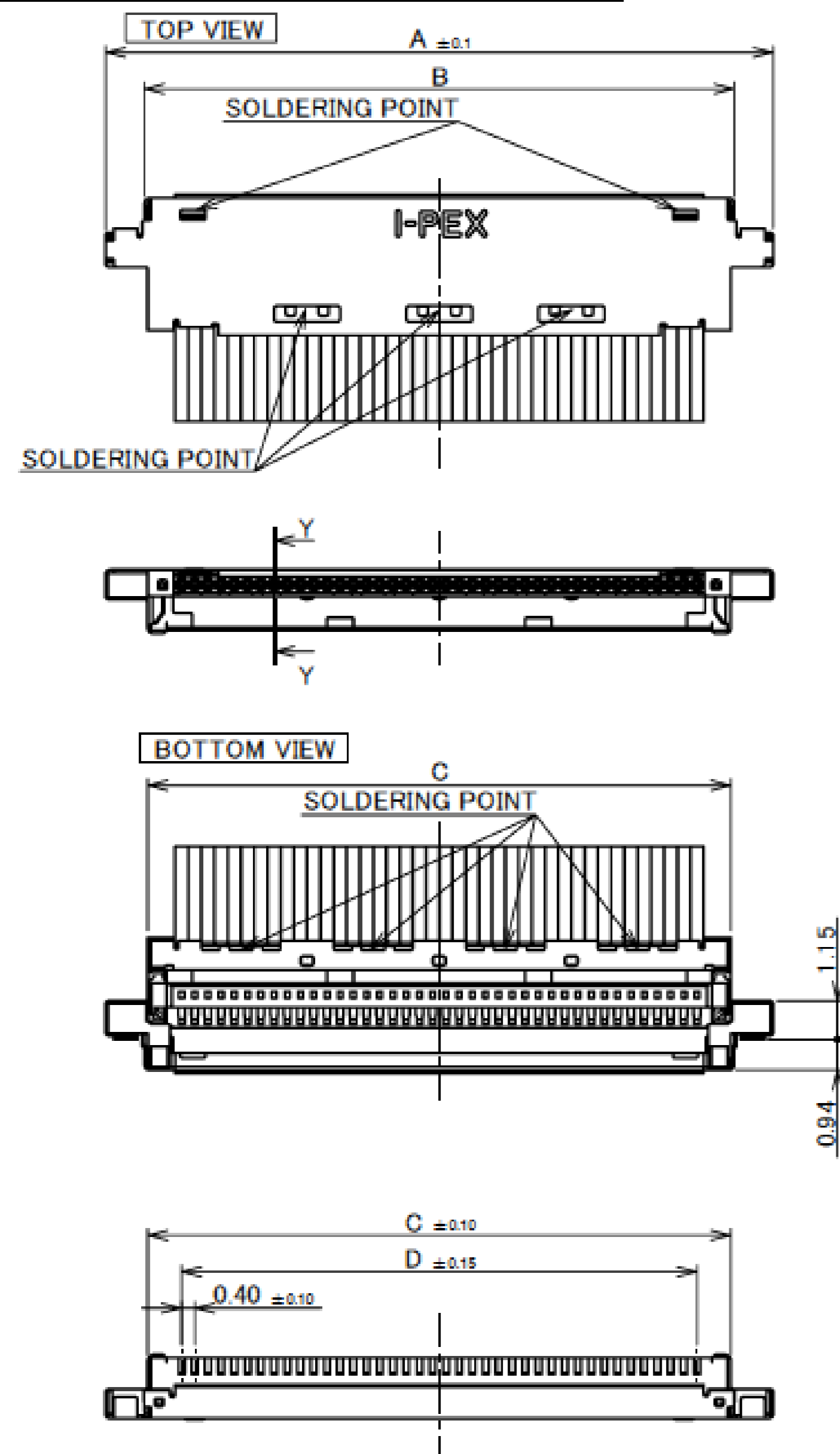
NOTES.

1. THE LOCK COVER MUST BE OPENED AT LEAST 25° TO PROPERLY UNMATE THE PLUG/HARNESS.

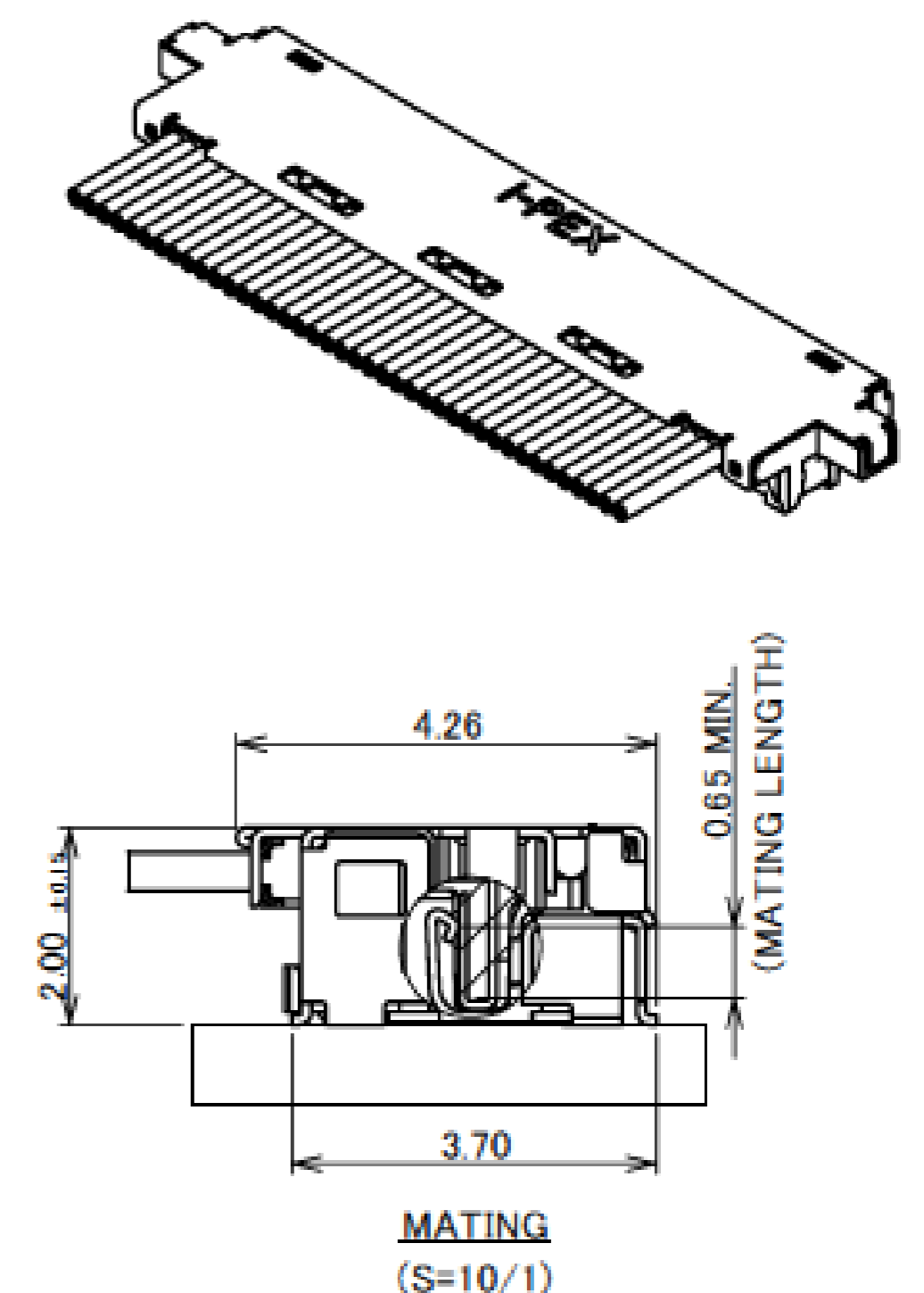
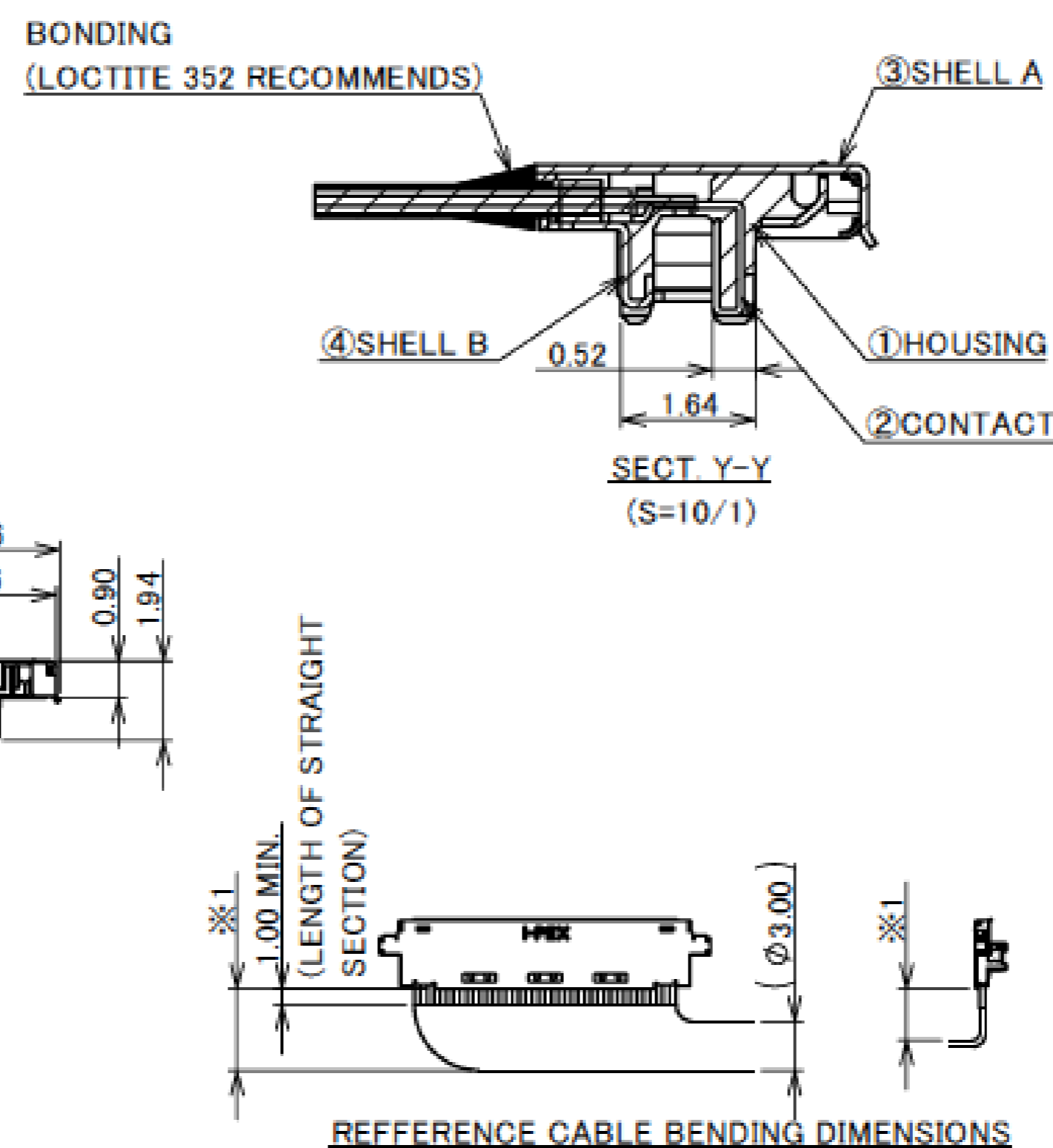
| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |
|-----|-------------|-----------------|--|
| 5 | LOCK COVER | PHOSPHOR BRONZE | ALL OVER Ni 1.0 μm MIN. |
| 4 | SHELL B | PHOSPHOR BRONZE | PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN. |
| 3 | SHELL A | PHOSPHOR BRONZE | PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN. |
| 2 | CONTACT | CORSON ALLOY | ALL OVER Ni 1.0 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN. |
| 1 | HOUSING | LCP | UL94V-0 ,BLACK |

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| Recommended P/N | | 20877-0**T-01 | | | |
|-----------------|------|---------------|-------|-------|-------|
| PART NO. | Pos. | A | B | C | D |
| 20877-030T-02 | 30 | 16.20 | 13.85 | 13.65 | 11.60 |
| 20877-040T-02 | 40 | 20.20 | 17.85 | 17.65 | 15.60 |
| 20877-050T-02 | 50 | 24.20 | 21.85 | 21.65 | 19.60 |
| 20877-060T-02 | 60 | 28.20 | 25.85 | 25.65 | 23.60 |



Without LOCK COVER



※1: THE BEND DIMENSIONS MAY VARY BASED ON THE SIZE AND QUANTITY OF CABLES. PLEASE CONFIRM THE MINIMUM BENDING RADIUS WITH I-PEX OR THE HARNESS MANUFACTURER.

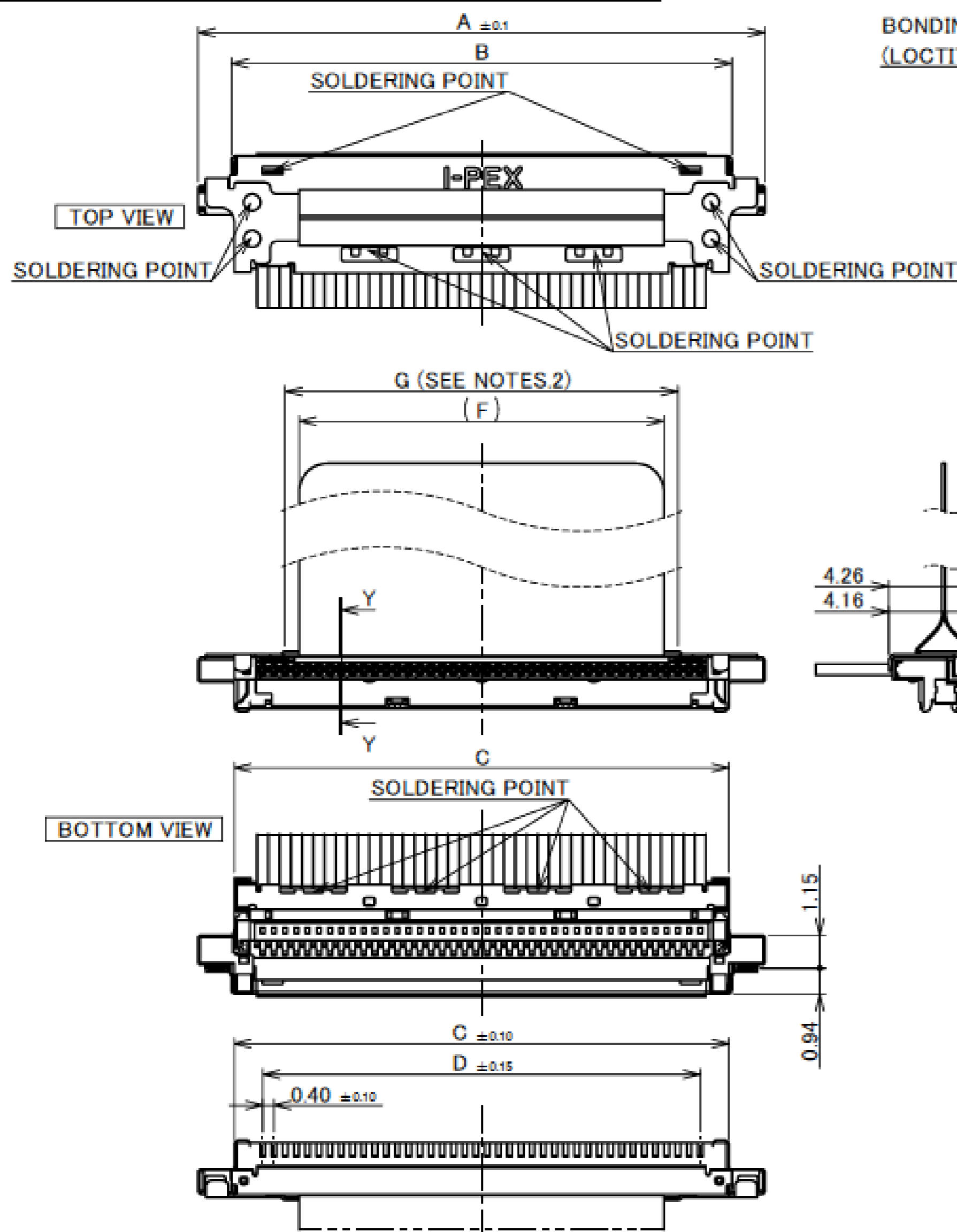
| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |
|-----|-------------|-----------------|--|
| 4 | SHELL B | PHOSPHOR BRONZE | PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN. |
| 3 | SHELL A | PHOSPHOR BRONZE | PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN. |
| 2 | CONTACT | CORSON ALLOY | ALL OVER Ni 1.0 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN. |
| 1 | HOUSING | LCP | UL94V-0 ,BLACK |

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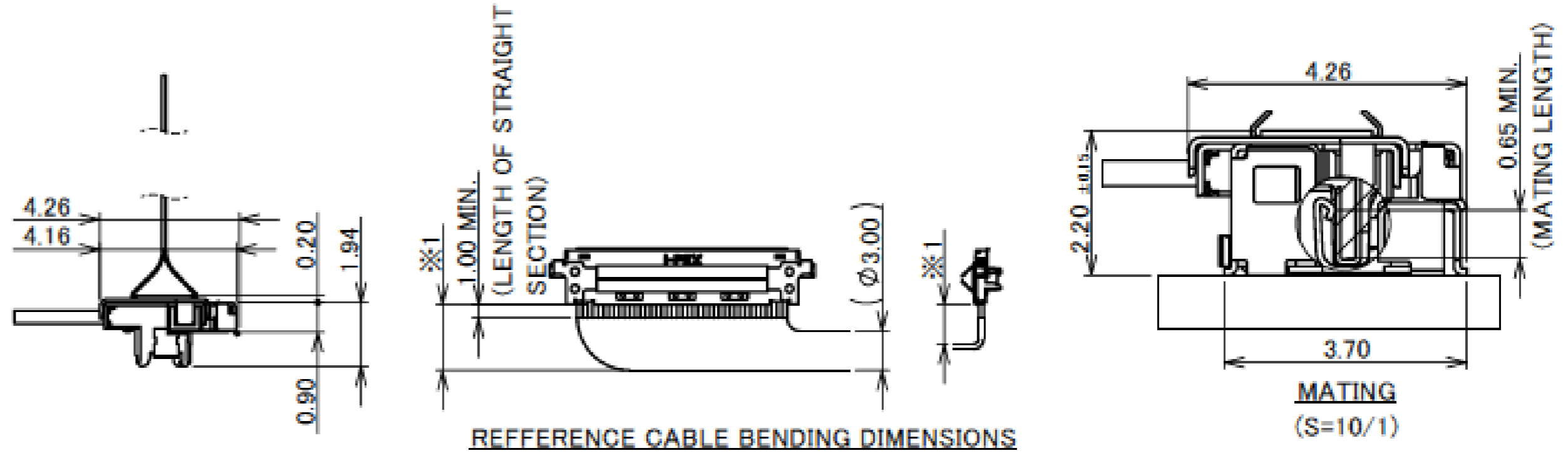
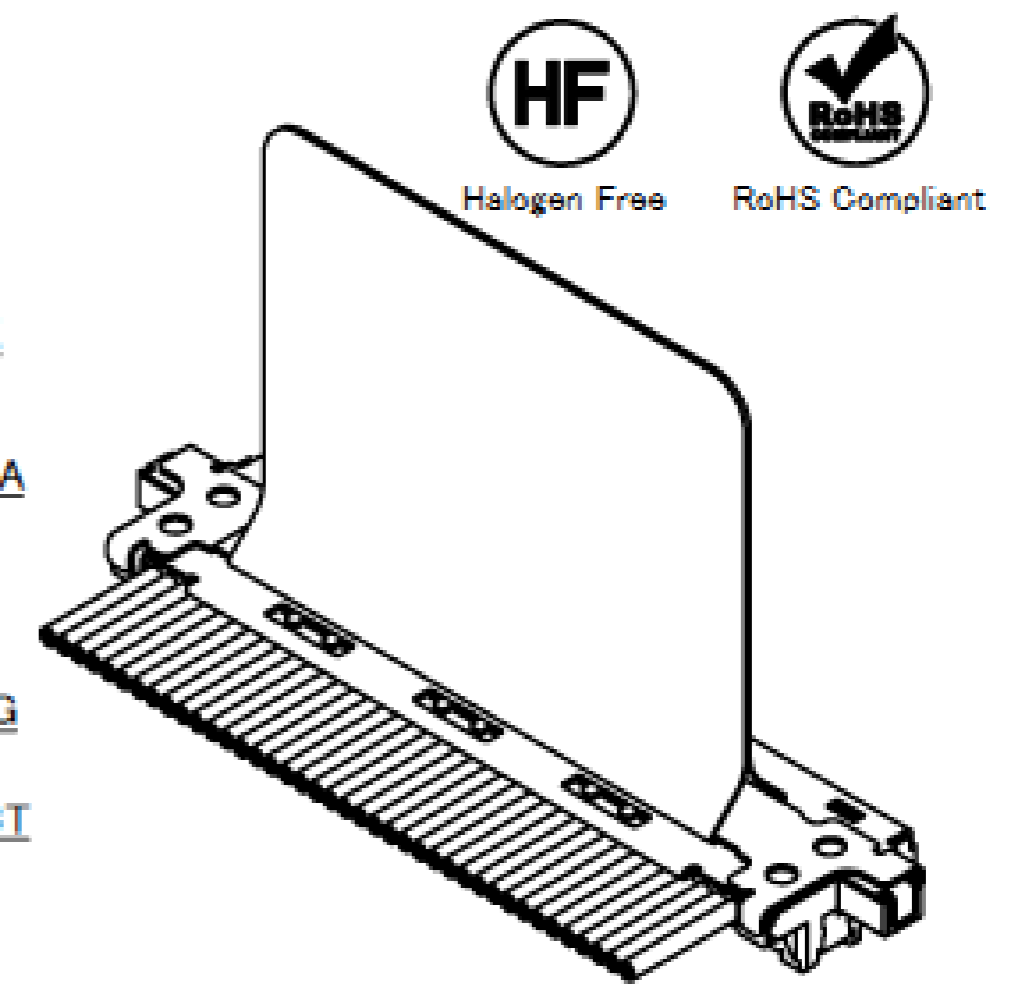
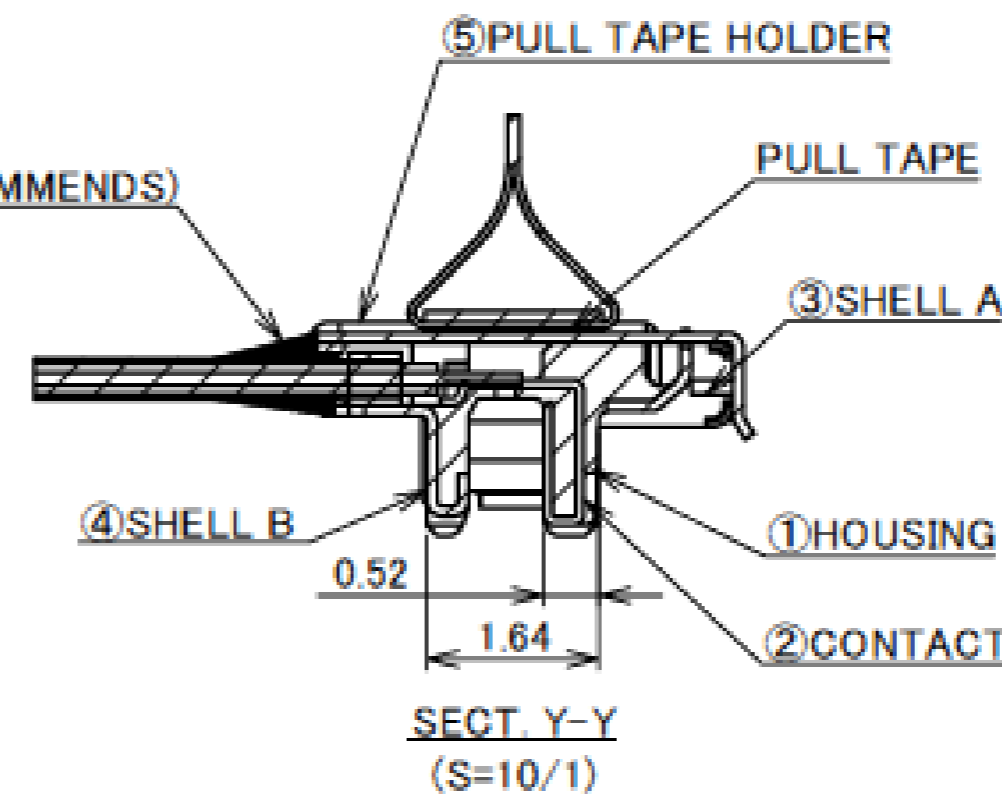
Plug for Cable Assembly

| Recommended P/N | | 20877-0**T-01 | | | | | |
|-----------------|------|---------------|-------|-------|-------|-------|-------|
| PART NO. | Pos. | A | B | C | D | F | G |
| 20877-030T-03 | 30 | 16.20 | 13.85 | 13.65 | 11.60 | 9.00 | 10.00 |
| 20877-040T-03 | 40 | 20.20 | 17.85 | 17.65 | 15.60 | 13.00 | 14.00 |
| 20877-050T-03 | 50 | 24.20 | 21.85 | 21.65 | 19.60 | 17.00 | 18.00 |
| 20877-060T-03 | 60 | 28.20 | 25.85 | 25.65 | 23.60 | 21.00 | 22.00 |

With PULL TAPE HOLDER



BONDING
(LOCTITE 352 RECOMMENDS)



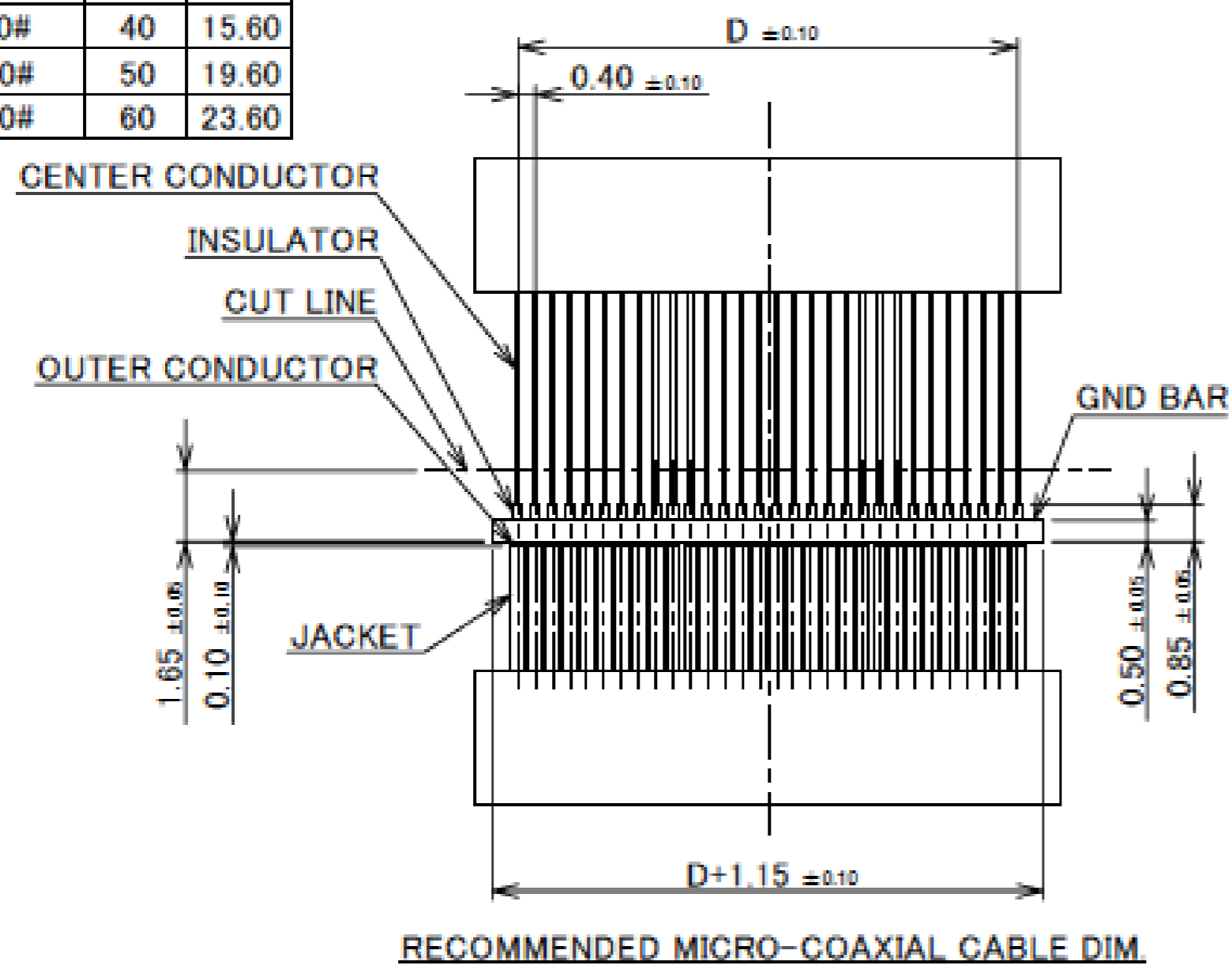
※1: THE BEND DIMENSIONS MAY VARY BASED ON THE SIZE AND QUANTITY OF CABLES.
PLEASE CONFIRM THE MINIMUM BENDING RADIUS WITH I-PEX OR THE HARNESS MANUFACTURER.

| NO | DISCRIPTION | MATERIAL | FINISH, REMARKS |
|----|------------------|-----------------|---|
| 5 | PULL TAPE HOLDER | PHOSPHOR BRONZE | PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN. |
| 4 | SHELL B | PHOSPHOR BRONZE | PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN. |
| 3 | SHELL A | PHOSPHOR BRONZE | PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN. |
| 2 | CONTACT | CORSON ALLOY | ALL OVER Ni 1.0 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN. |
| 1 | HOUSING | LCP | UL94V-0, BLACK |

NOTES.
2. RECOMMENDED PULL-TAPE
PULL-TAPE : TERAOKA's INSULATION TAPE No.650S(#50) t=0.08
3. PULL-TAPE CAN BE PUT WITHIN THE RANGE OF "G" STRIAIGHT AREA.

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| PART NO. | Pos. | D |
|---------------|------|-------|
| 20877-030T-0# | 30 | 11.60 |
| 20877-040T-0# | 40 | 15.60 |
| 20877-050T-0# | 50 | 19.60 |
| 20877-060T-0# | 60 | 23.60 |



CHARACTERISTIC IMPEDANCE MATCHING MICRO-COAXIAL CABLE

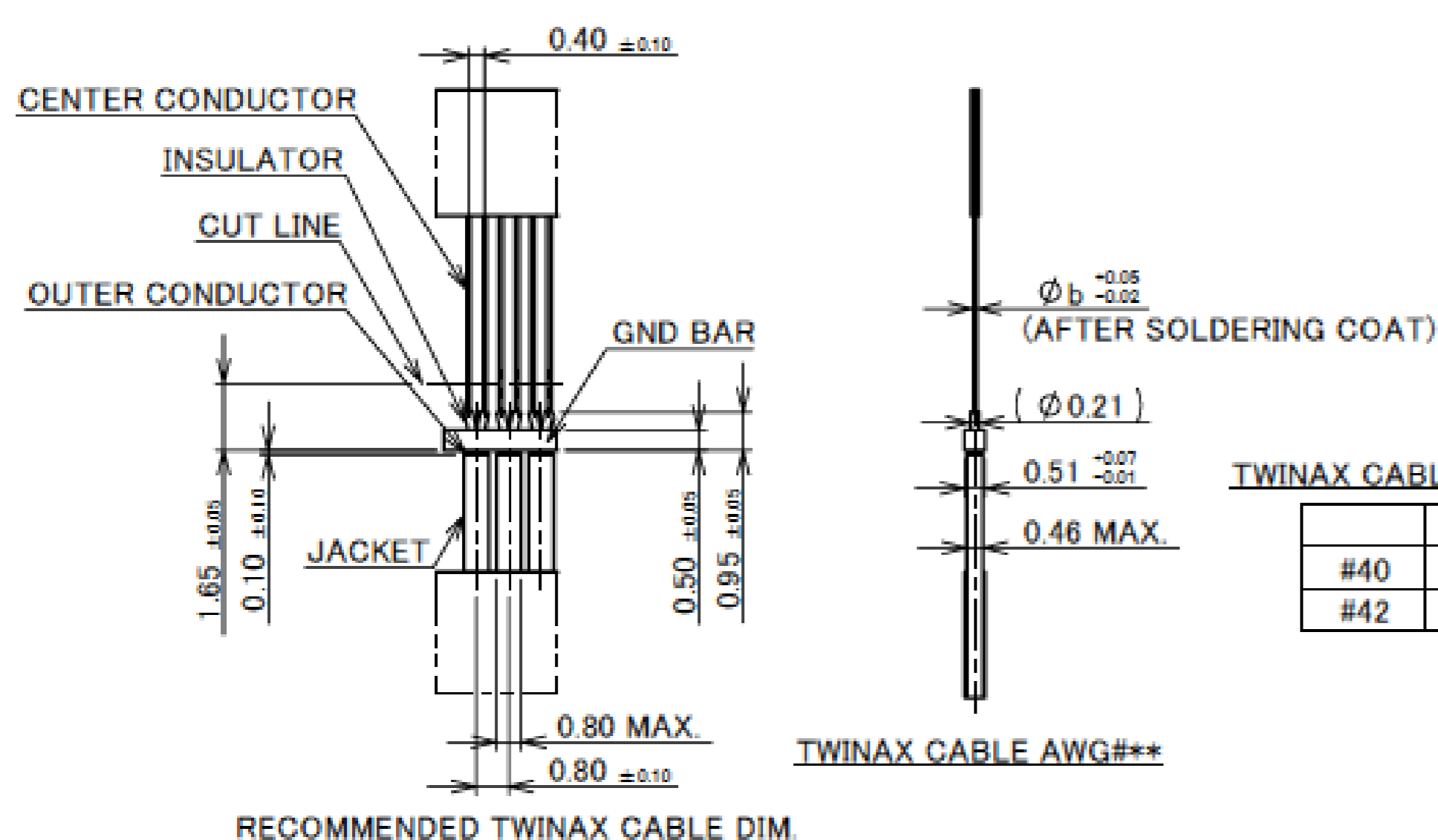
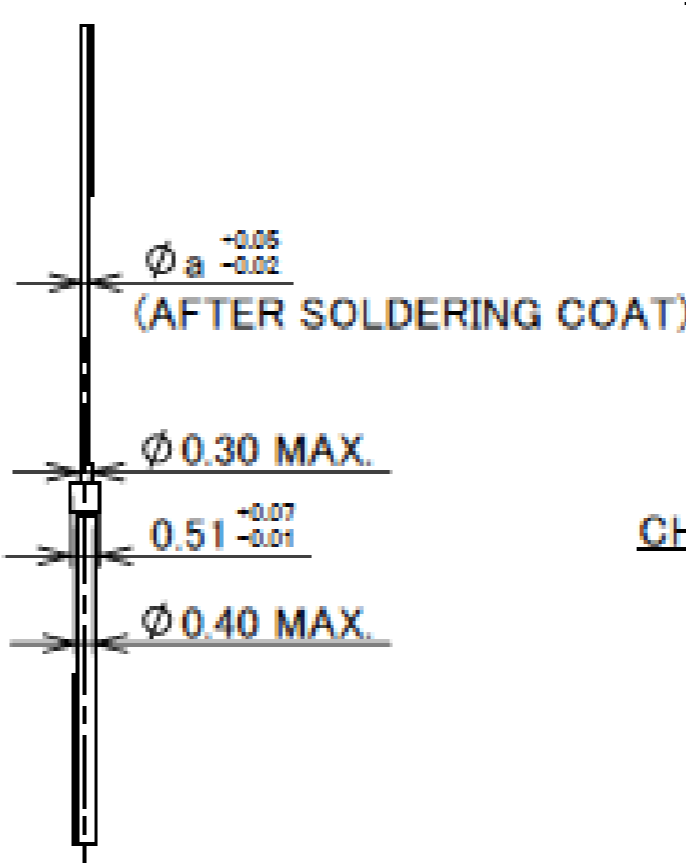
| | a |
|-----|-------|
| #38 | 0.12 |
| #40 | 0.09 |
| #42 | 0.075 |
| #44 | 0.063 |

CHARACTERISTIC IMPEDANCE UN-MATCHING MICRO-COAXIAL CABLE

| | a |
|-----|------|
| #36 | 0.15 |

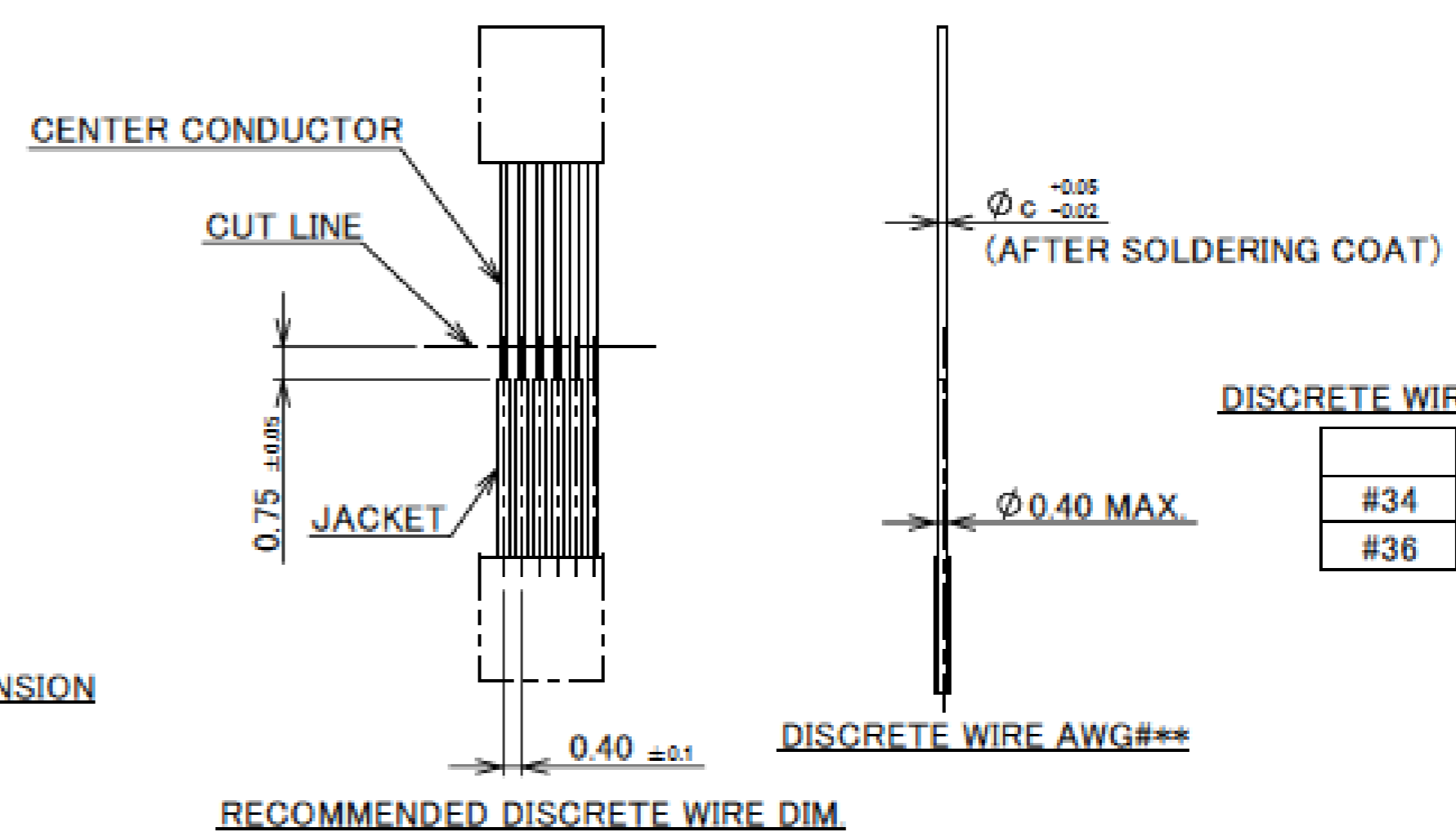
MICRO-COAXIAL CABLE #36 : NOT RECOMMENDED FOR HIGH SPEED SIGNAL TRANSFER

MICRO-COAXIAL CABLE AWG#**



TWINAX CABLE DIMENSION

| | b |
|-----|-------|
| #40 | 0.09 |
| #42 | 0.075 |



DISCRETE WIRE DIMENSION

| | c |
|-----|-------|
| #34 | 0.192 |
| #36 | 0.15 |

DISCRETE WIRE AWG#**

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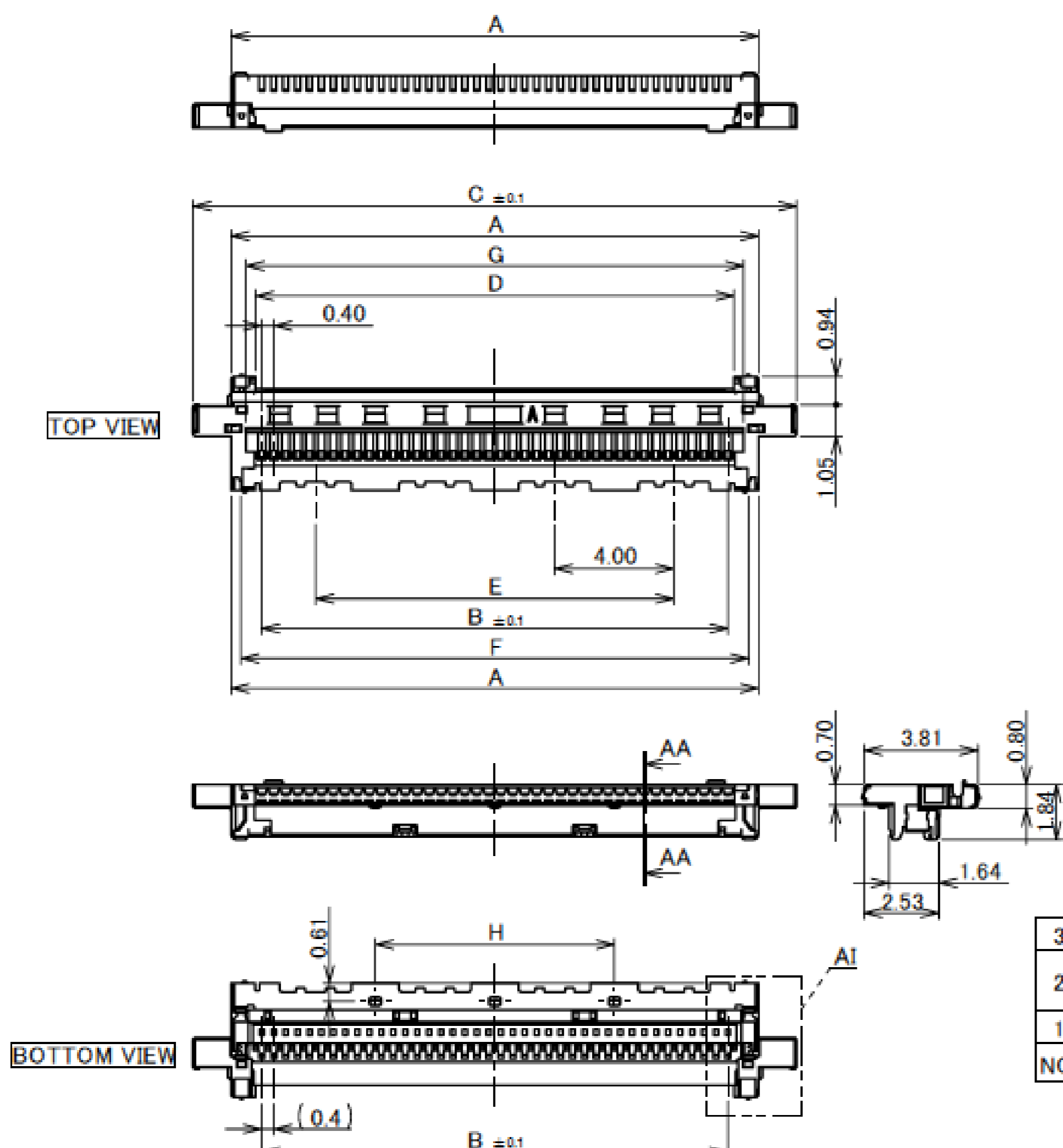
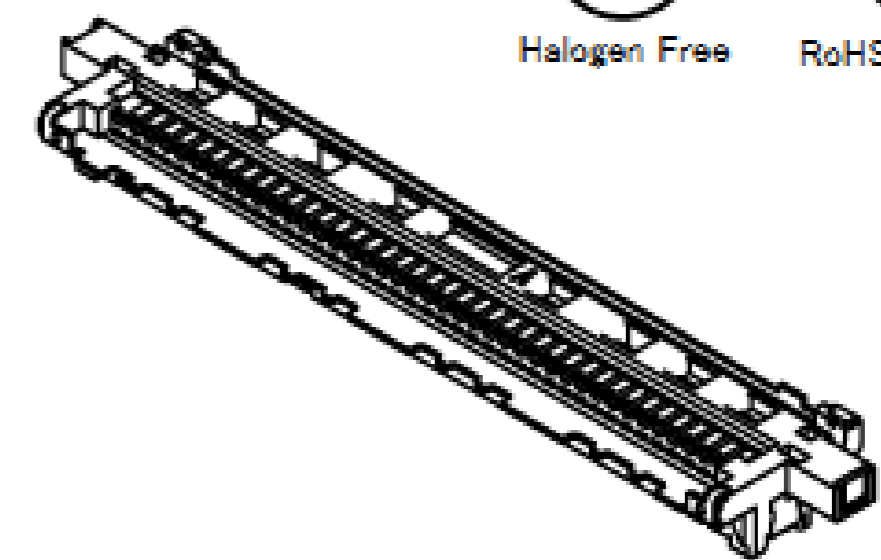
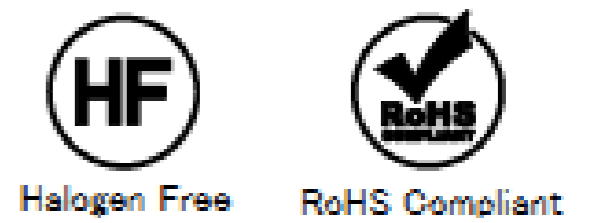
Plug for Cable Assembly

| ITEMS | SPECIFICATION |
|---------------------------------------|---|
| APPLICABLE CABLE | MICRO-COAXIAL CABLE : AWG# 44 , 42 , 40 , 38 , 36 DISCRETE WIRE : AWG# 36 , 34 TWINAX CABLE : AWG# 40 , 42 |
| RATING VOLTAGE | 100V AC (PER CONTACT PIN) ※THIS IS THE RATED VOLTAGE OF THE CONNECTOR. PLEASE NOTE THAT THE RATED VOLTAGE MAY VARY IN THE HARNESS DEPENDING ON THE CABLES USED. |
| RATING AMPERAGE (FOR CONTACT) | 0.15A AC/DC [AWG#44] PER CONTACT PIN/UP TO 60 CONTACTS 0.24A AC/DC [AWG#42] PER CONTACT PIN/UP TO 49 CONTACTS 0.3A AC/DC [AWG#40] PER CONTACT PIN/UP TO 38 CONTACTS 0.5A AC/DC [AWG#38] PER CONTACT PIN/UP TO 19 CONTACTS 0.8A AC/DC [AWG#36] PER CONTACT PIN/UP TO 12 CONTACTS 1.0A AC/DC [AWG#34] PER CONTACT PIN/UP TO 10 CONTACTS ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION. |
| OPERATING TEMPERATURE | 233~378K(-40°C~+105°C) |
| OPERATING HUMIDITY | 85% MAX. |
| CONTACT RESISTANCE | INITIAL : 180mohm MAX.(AWG#34) / AFTER TEST : \triangleleft40mohm MAX. 275mohm MAX.(AWG#36) 360mohm MAX.(AWG#38) 600mohm MAX.(AWG#40) 700mohm MAX.(AWG#42) 1080mohm MAX.(AWG#44) |
| GROUND SHELL RESISTANCE | INITIAL : 50mohm MAX. / AFTER TEST : \triangleleft40mohm MAX. |
| INSULATION RESISTANCE | INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN. |
| DIELECTRIC WITHSTANDING VOLTAGE | AC250V 1min |
| DURABILITY | 30 CYCLES |
| MATING FORCE (INITIAL / AFTER TEST) | 30P : 34.00N MAX. 50P : 46.00N MAX. 40P : 40.00N MAX. 60P : 52.00N MAX. |
| UNMATING FORCE (INITIAL / AFTER TEST) | 30P : 3.0N MIN. 50P : 5.0N MIN. 40P : 4.0N MIN. 60P : 6.0N MIN. |
| CABLE RETENTION FORCE | 30P : 14.70N MIN. 50P : 24.50N MIN. 40P : 19.60N MIN. 60P : 29.40N MIN. |
| PRODUCT SPECIFICATION | PRS-2514 |
| TEST REPORT | TR-18067 (RECEPTACLE:20879-0**E-01) TR-18088 (RECEPTACLE:20879-0**E-02) |
| INSTRUCTION MANUAL | HIM-18033 |
| ASSEMBLY MANUAL | ASM-18003 |
| APPEARANCE CRITERIA No. | QLS-A*** |

Rev.16

Plug Housing Assembly

| Recommended P/N | 20878-0**T-01 | | | | | | | | |
|-----------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|
| PART No. | Pos. | A | B | C | D | E | F | G | H |
| 20878-030T-01 | 30 | 13.65 | 11.60 | 16.20 | 12.01 | 8.00 | 13.00 | 12.65 | 4.00 |
| 20878-040T-01 | 40 | 17.65 | 15.60 | 20.20 | 16.01 | 12.00 | 17.00 | 16.65 | 8.00 |
| 20878-050T-01 | 50 | 21.65 | 19.60 | 24.20 | 20.01 | 16.00 | 21.00 | 20.65 | 12.00 |
| 20878-060T-01 | 60 | 25.65 | 23.60 | 28.20 | 24.01 | 20.00 | 25.00 | 24.65 | 16.00 |

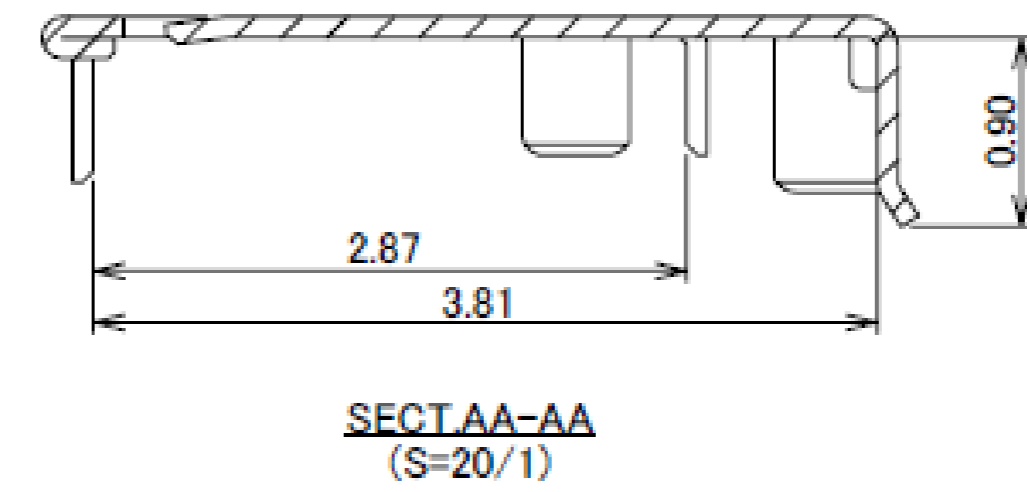
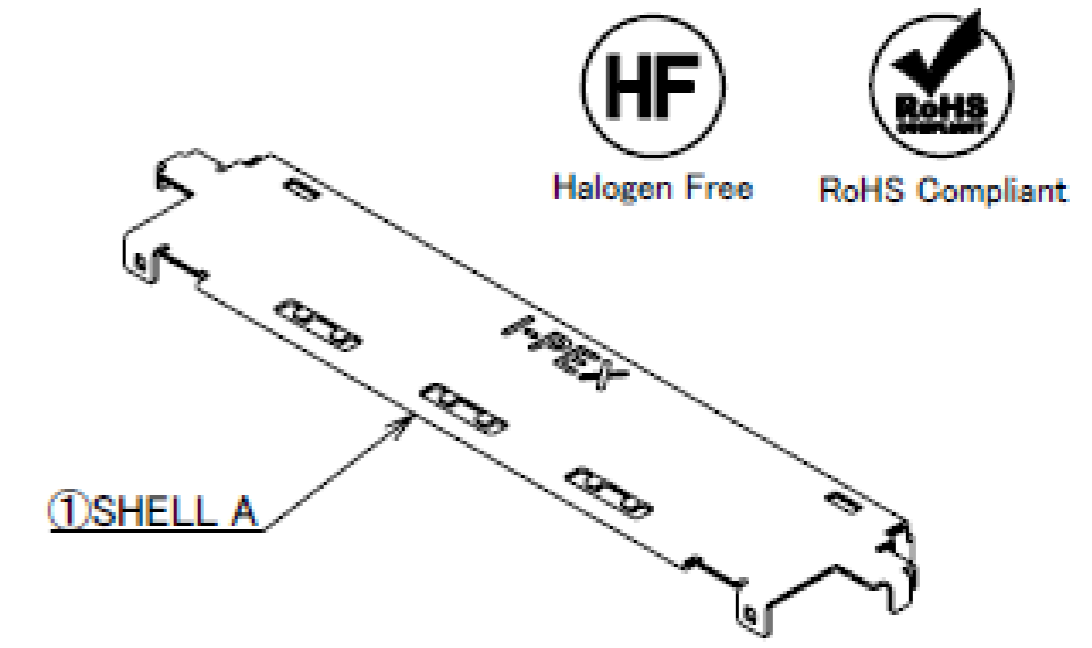
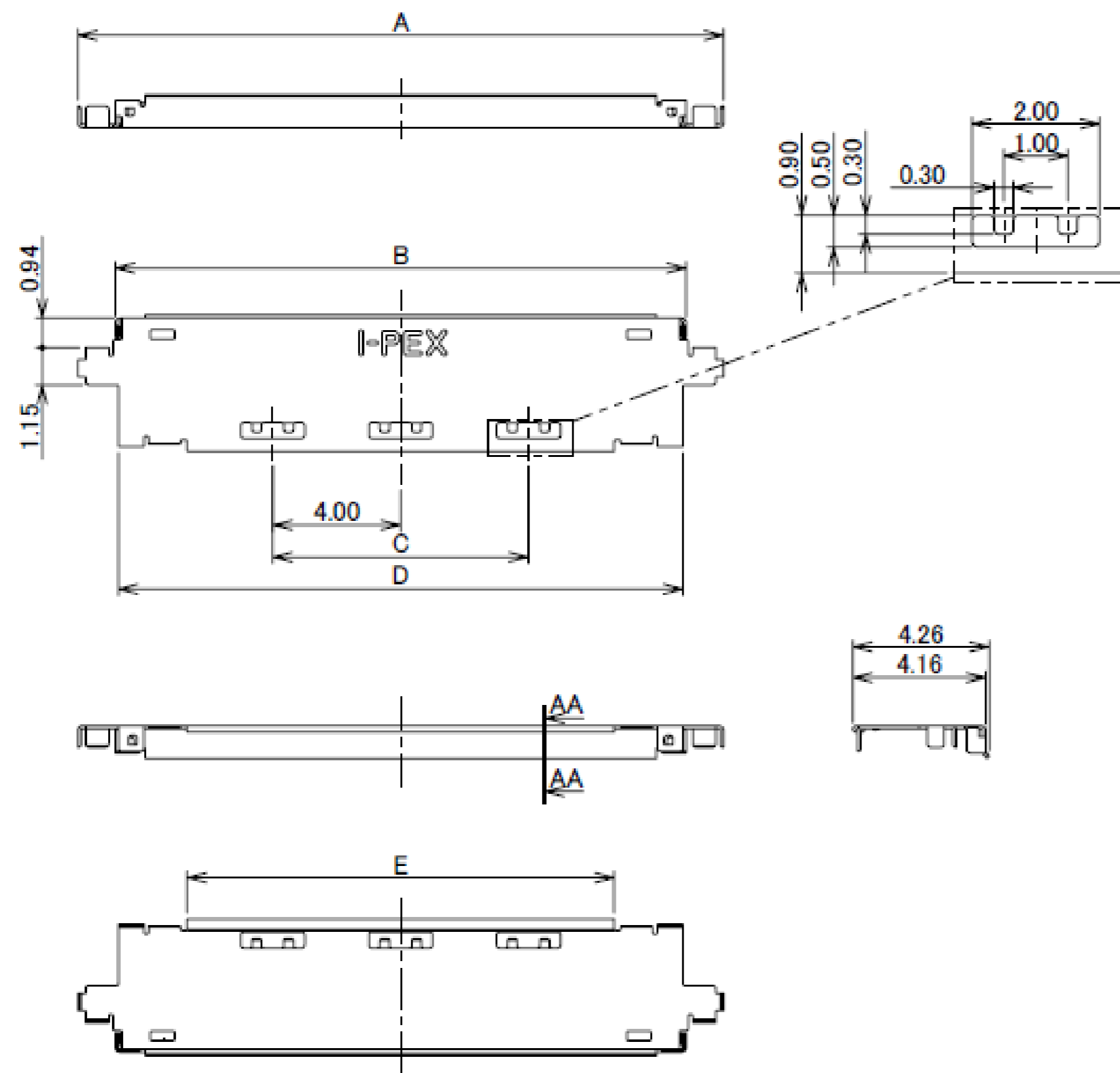


| NO. | DISCRPTION | MATERIAL | FINISH , REMARKS |
|-----|------------|-----------------|--|
| 3 | SHELL B | PHOSPHOR BRONZE | PARTIAL Au 0.003 μ m MIN. OVER Ni 1.00 μ m MIN. |
| 2 | CONTACT | CORSON ALLOY | ALL OVER Ni 1.00 μ m MIN. CONTACT & SOLDERING AREA : Au 0.03 μ m MIN. |
| 1 | HOUSING | LCP | UL94V-0 ,BLACK |

Rev.5

Plug Shell-A

| Recommended P/N | | 3488-0**1 | | | | |
|-----------------|------|-----------|-------|-------|-------|-------|
| PART No. | Pos. | A | B | C | D | E |
| 3488-0301 | 30 | 16.20 | 13.88 | 4.00 | 13.65 | 9.36 |
| 3488-0401 | 40 | 20.20 | 17.88 | 8.00 | 17.65 | 13.36 |
| 3488-0501 | 50 | 24.20 | 21.88 | 12.00 | 21.65 | 17.36 |
| 3488-0601 | 60 | 28.20 | 25.88 | 16.00 | 25.65 | 21.36 |

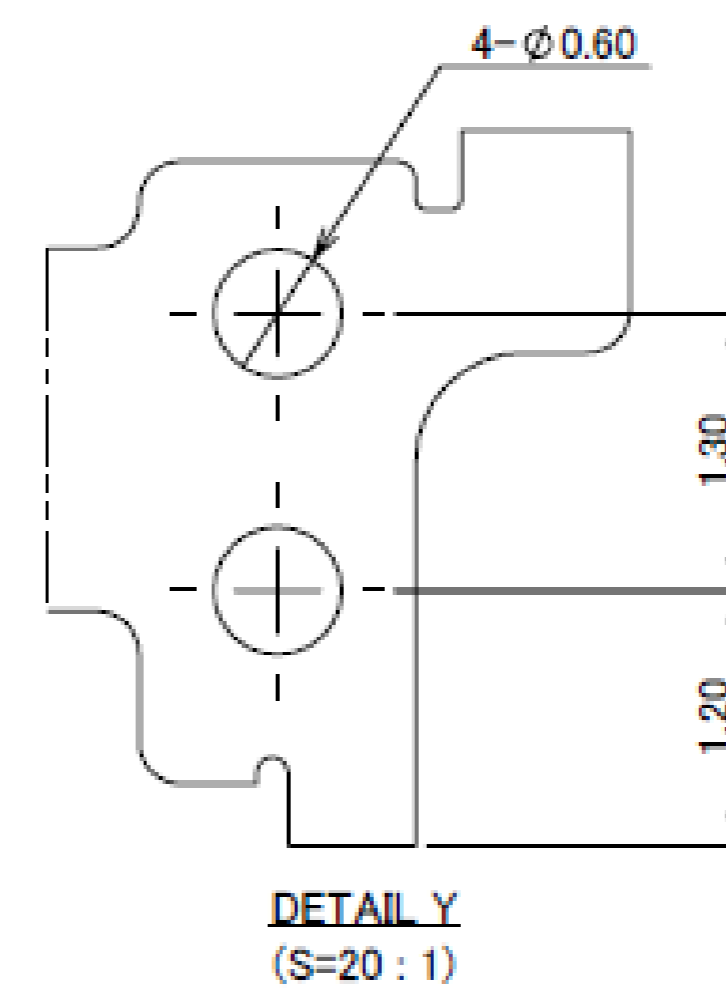
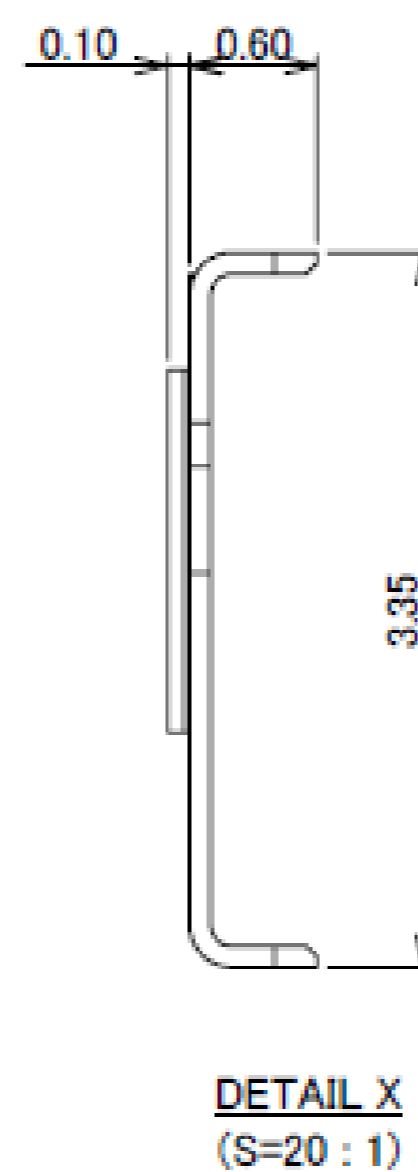
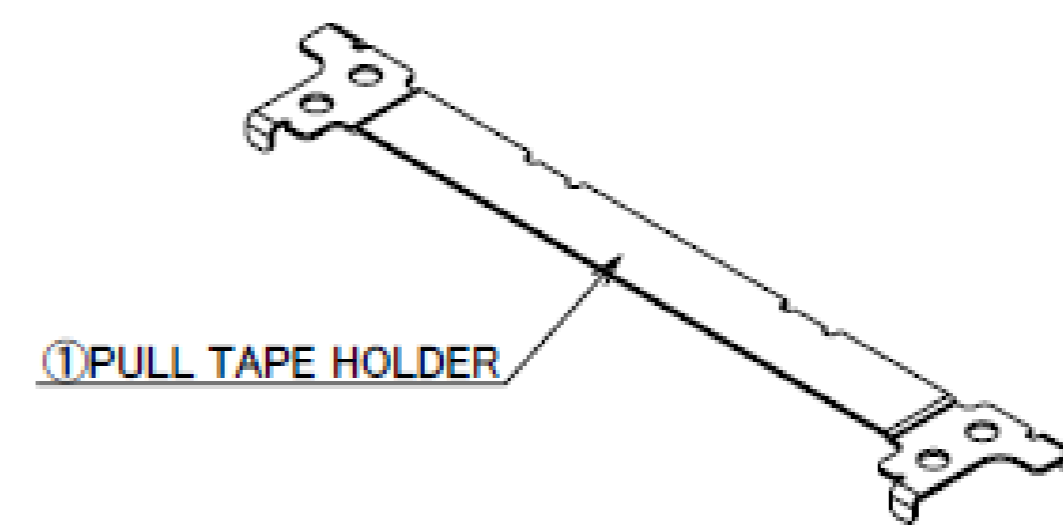
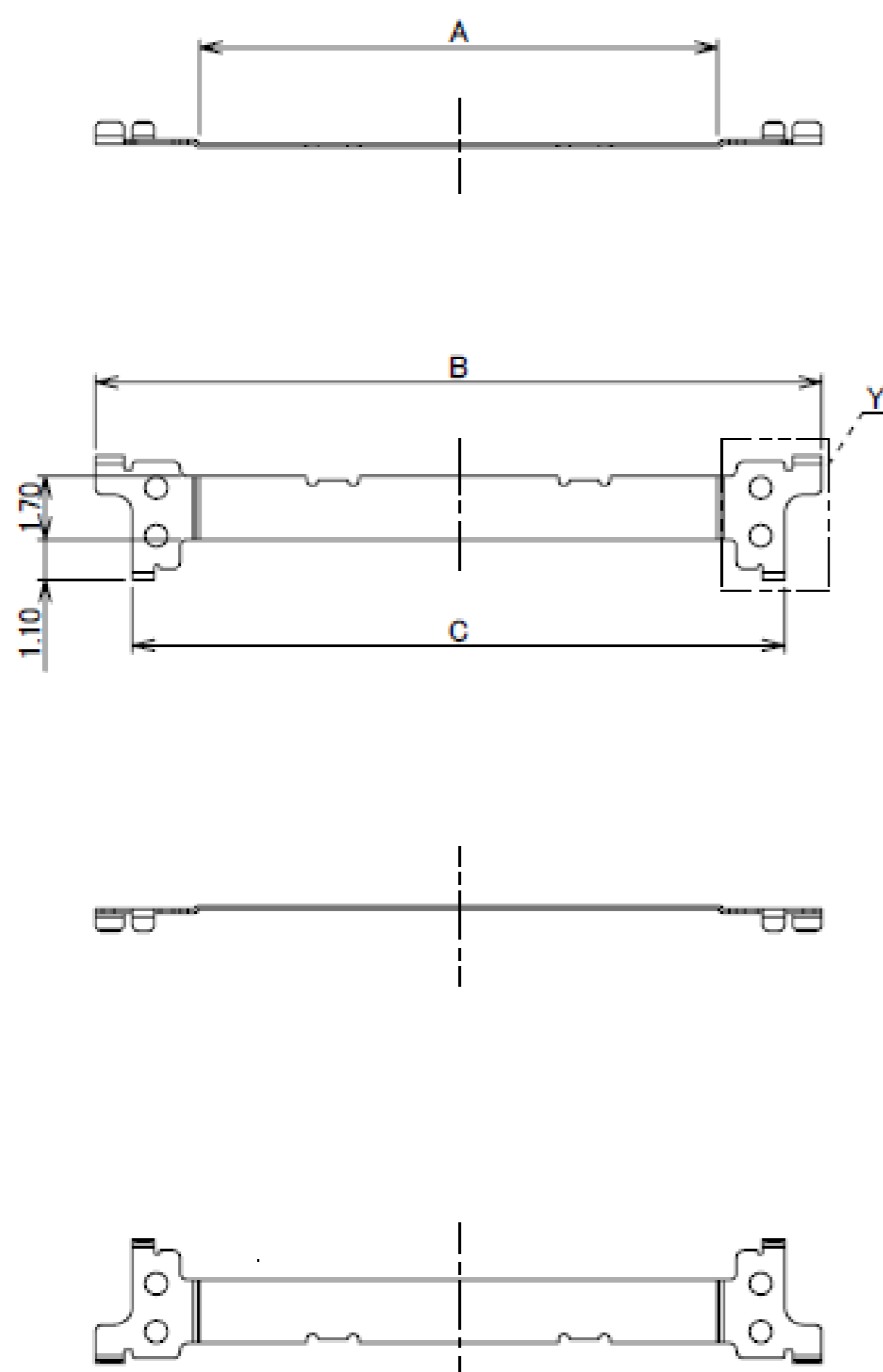


| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |
|-----|-------------|-----------------|---|
| 1 | SHELL A | PHOSPHOR BRONZE | PARTIAL Au 0.003 μ m MIN. OVER Ni 1.00 μ m MIN. |

Rev.4

Plug Pull Tape Holder

| Recommended P/N | | 3588-0**1 | | |
|-----------------|------|-----------|-------|-------|
| PART NO. | Pos. | A | B | C |
| 3588-0301 | 30 | 10.00 | 15.65 | 13.65 |
| 3588-0401 | 40 | 14.00 | 19.65 | 17.65 |
| 3588-0501 | 50 | 18.00 | 23.65 | 21.65 |
| 3588-0601 | 60 | 22.00 | 27.65 | 25.65 |



| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |
|-----|------------------|-----------------|---|
| 1 | PULL TAPE HOLDER | PHOSPHOR BRONZE | PARTIAL Au 0.003 μ m MIN. OVER Ni 1.00 μ m MIN. |

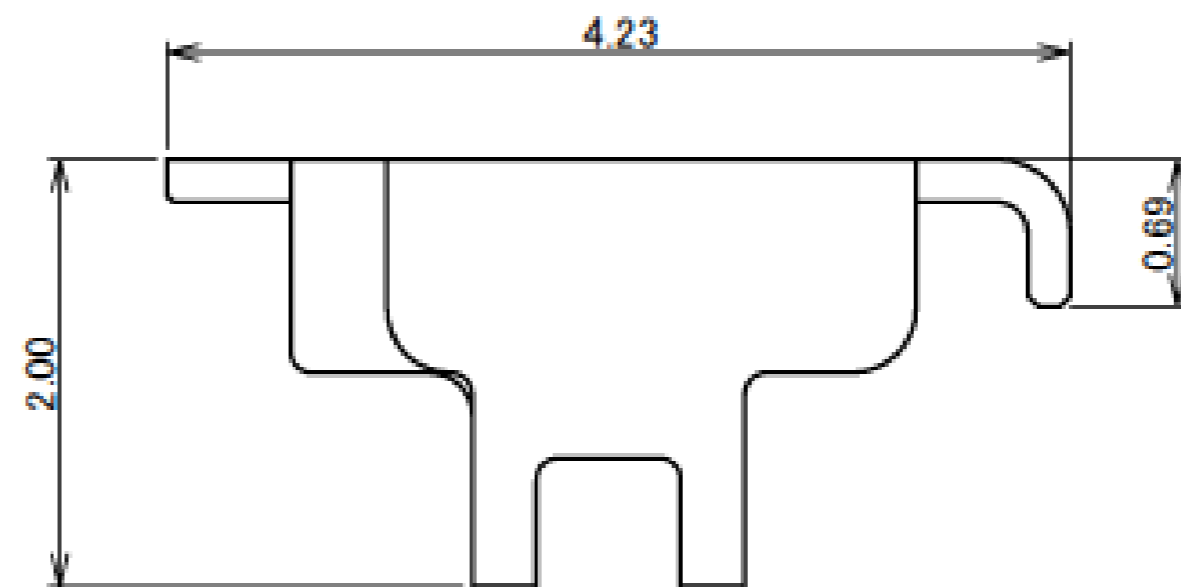
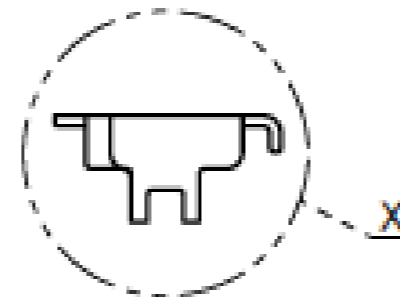
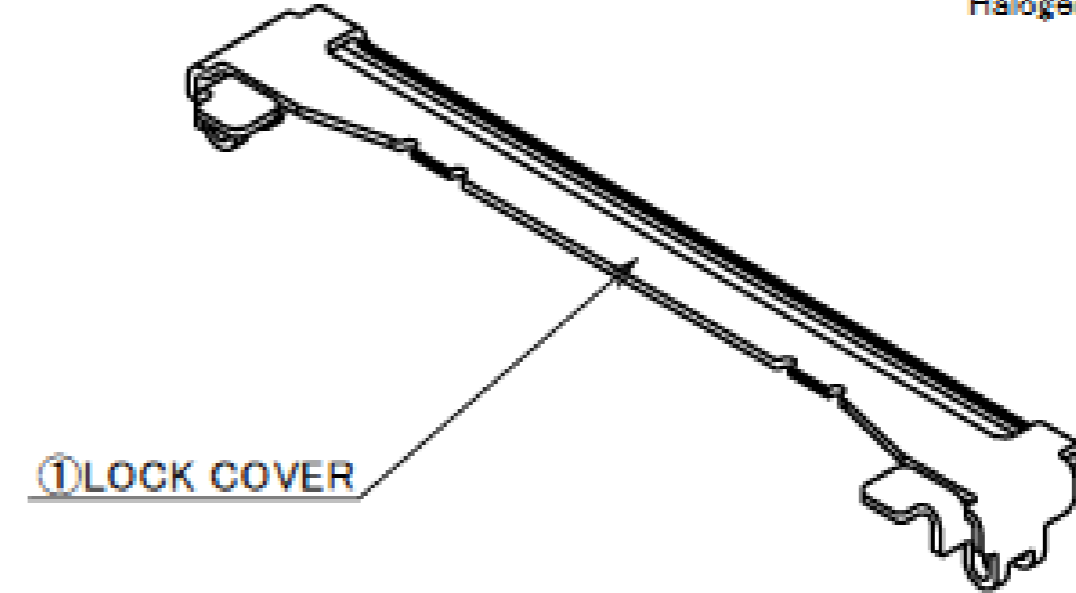
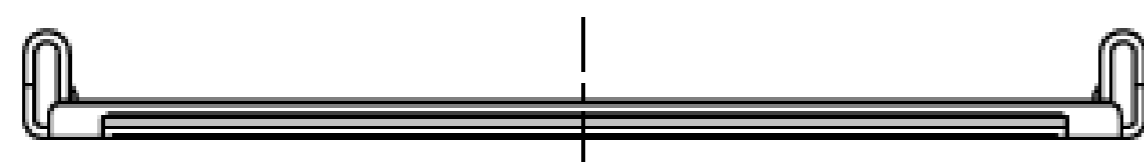
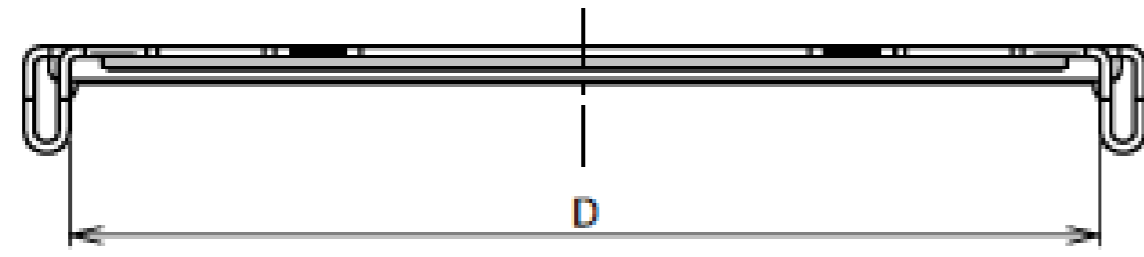
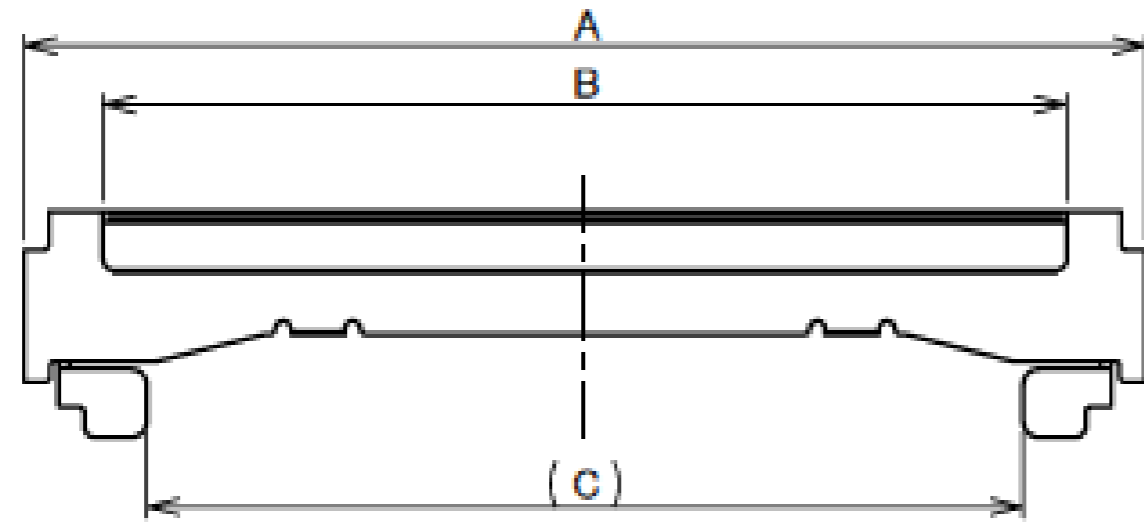
Rev.4

Lock Cover

| Recommended P/N | | 3493-0**1 | | | |
|-----------------|------|-----------|-------|-------|-------|
| PART NO. | Pos. | A | B | C | D |
| 3493-0301 | 30 | 17.00 | 14.05 | 12.40 | 15.30 |
| 3493-0401 | 40 | 21.00 | 18.05 | 16.40 | 19.30 |
| 3493-0501 | 50 | 25.00 | 22.05 | 20.40 | 23.30 |
| 3493-0601 | 60 | 29.00 | 26.05 | 24.40 | 27.30 |



Halogen Free RoHS Compliant



DETAIL X
(S=20 : 1)

| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |
|-----|-------------|-----------------|--------------------------|
| 1 | LOCK COVER | PHOSPHOR BRONZE | ALL OVER Ni 1.00 μm MIN. |

Rev.4

Receptacle Assembly

| Recommended P/N | | 20879-0**E-01 | | | | | | | |
|-----------------|------|---------------|-------|-------|-------|-------|-------|-------|-------|
| PART NO. | Pos. | A | B | C | D | E | F | G | H |
| 20879-030E-#1 | 30 | 15.27 | 13.01 | 11.60 | 9.60 | 12.07 | 12.88 | 15.27 | 19.66 |
| 20879-040E-#1 | 40 | 19.27 | 17.01 | 15.60 | 14.40 | 16.07 | 16.88 | 19.27 | 23.66 |
| 20879-050E-#1 | 50 | 23.27 | 21.01 | 19.60 | 17.60 | 20.07 | 20.88 | 23.27 | 27.66 |
| 20879-060E-#1 | 60 | 27.27 | 25.01 | 23.60 | 21.60 | 24.07 | 24.88 | 27.27 | 31.66 |

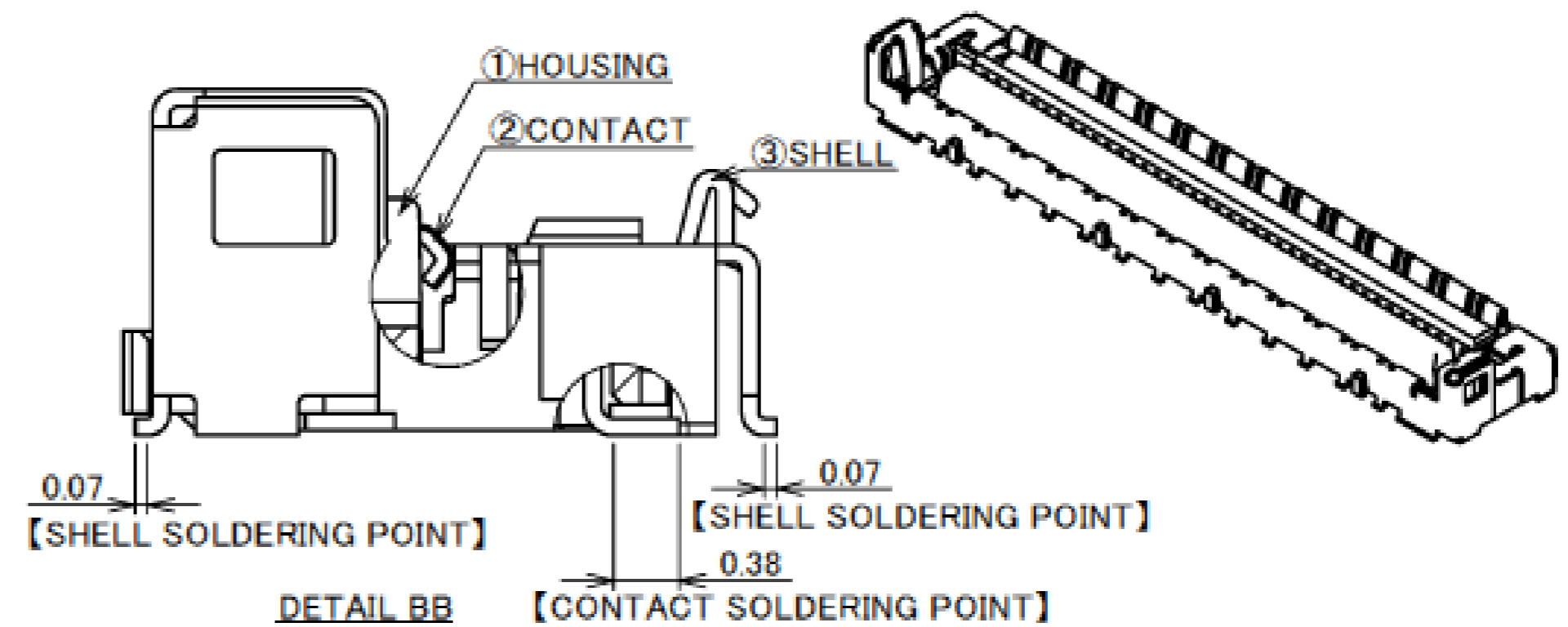
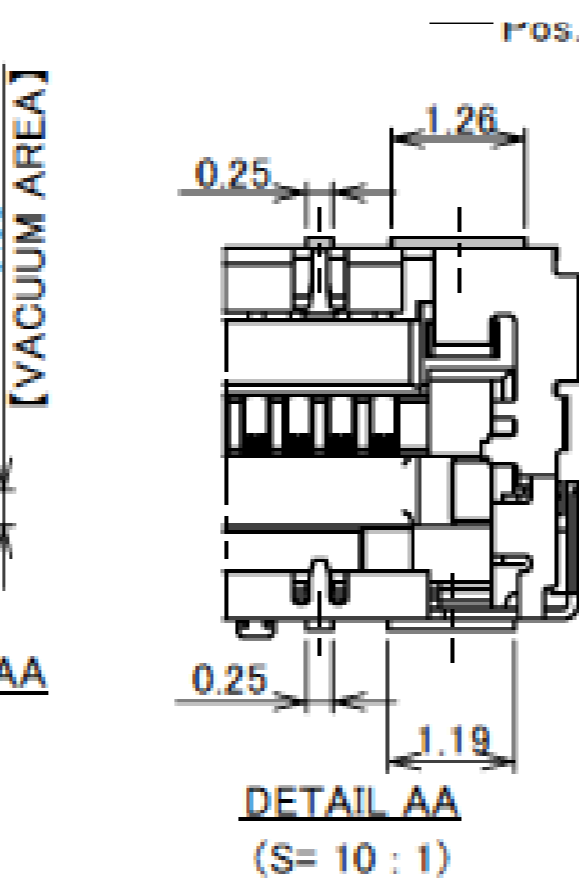
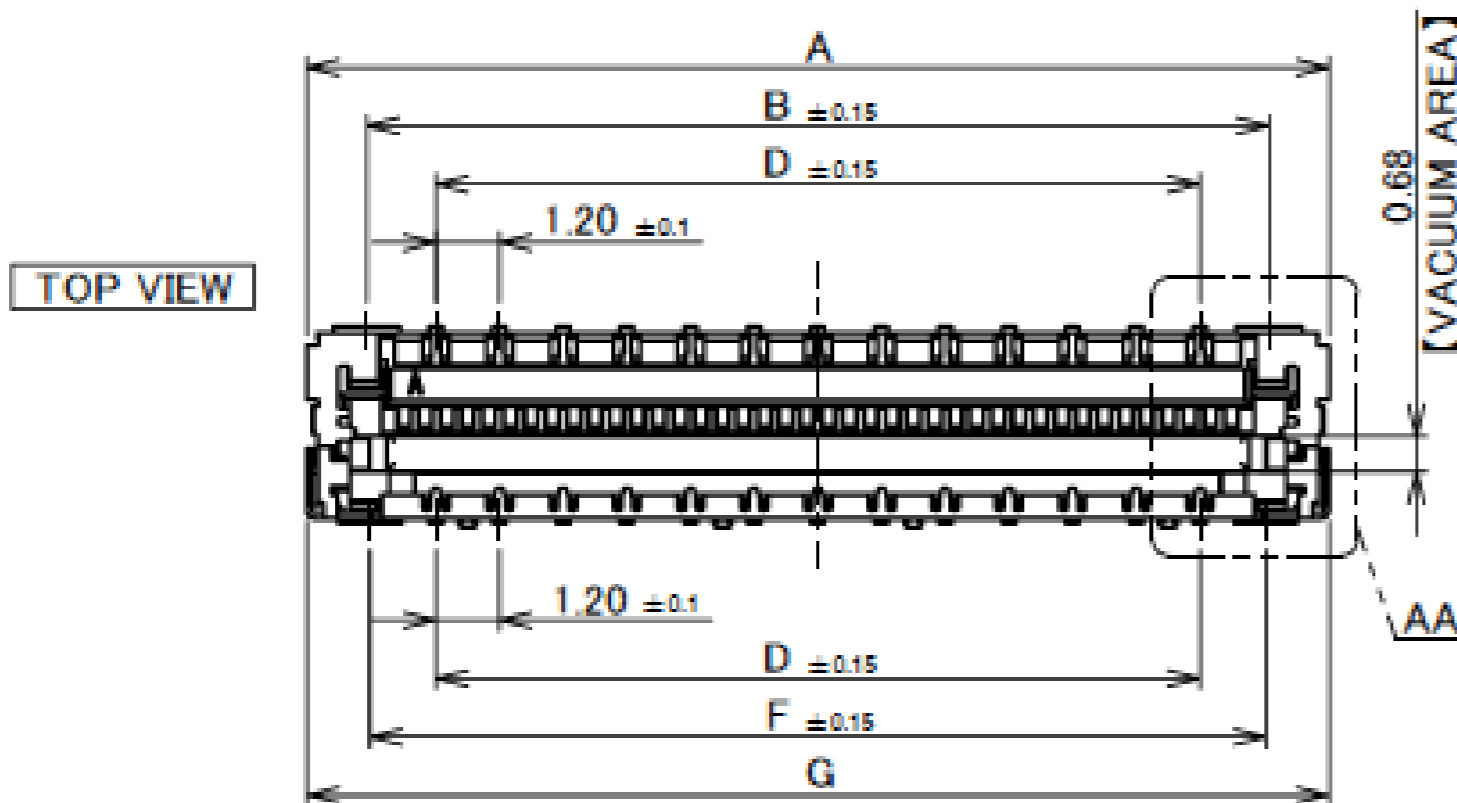
P/N : 20879-0**E-##

TYPE
/PE

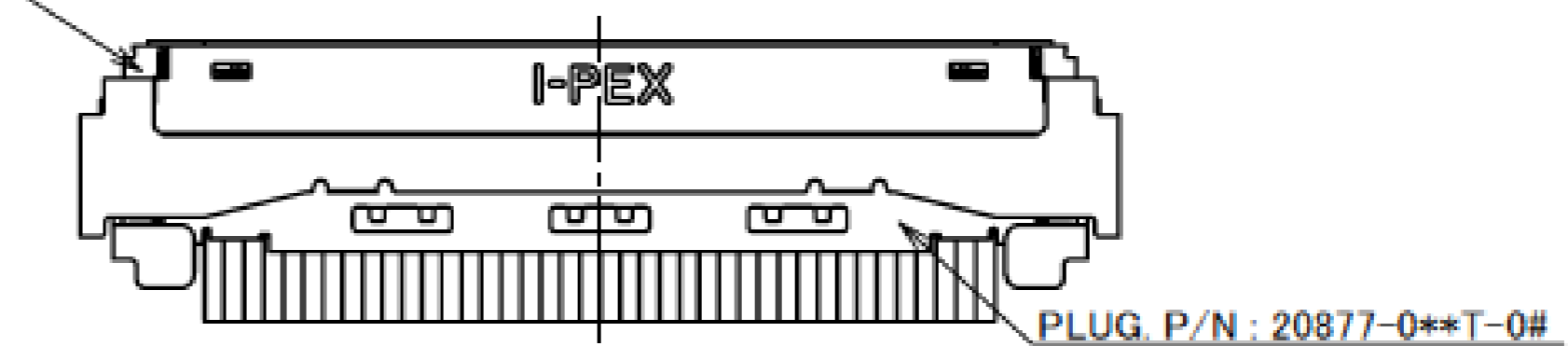
#1 TYPE



Halogen Free RoHS Compliant

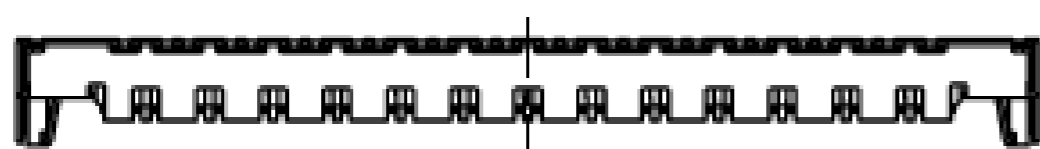
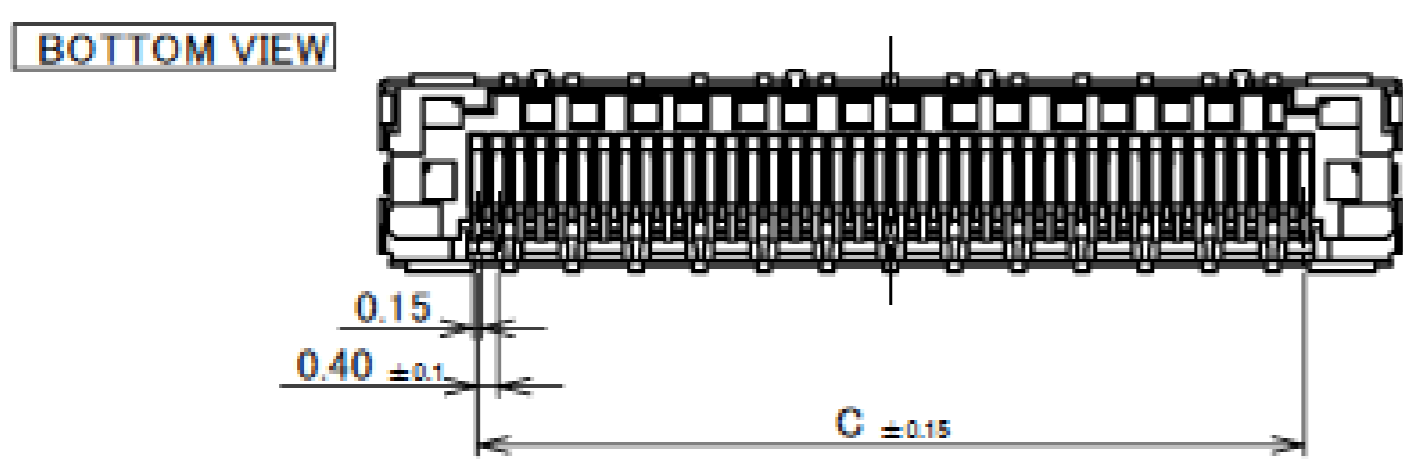


RECEPTACLE P/N : 20879-0**E-#1



MATING CONDITION

| PART NO. | CONTACT FINISH |
|---------------|---|
| 20879-0**E-01 | ALL OVER Ni 1.00 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN. |
| 20879-0**E-11 | ALL OVER Ni 1.27 μm MIN. CONTACT AREA : Au 0.254 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. |

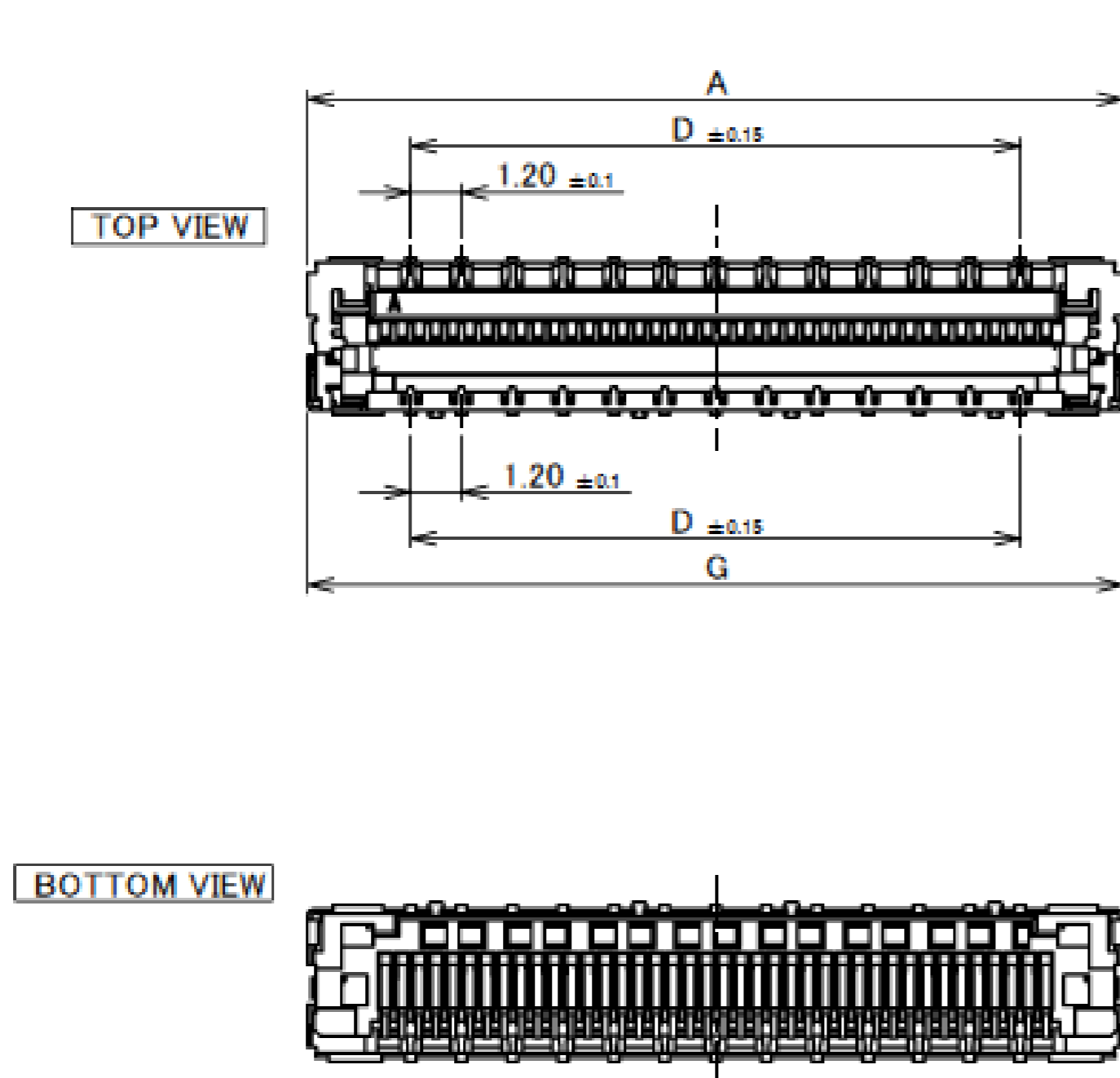


| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |
|-----|-------------|-----------------|--|
| 3 | SHELL | PHOSPHOR BRONZE | ALL OVER : Ni 1.00 μm MIN. SOLDERING AREA : Au 0.02 μm MIN. |
| 2 | CONTACT | CORSON ALLOY | SEE TABLE.1 |
| 1 | HOUSING | LCP | UL94V-0, BLACK |

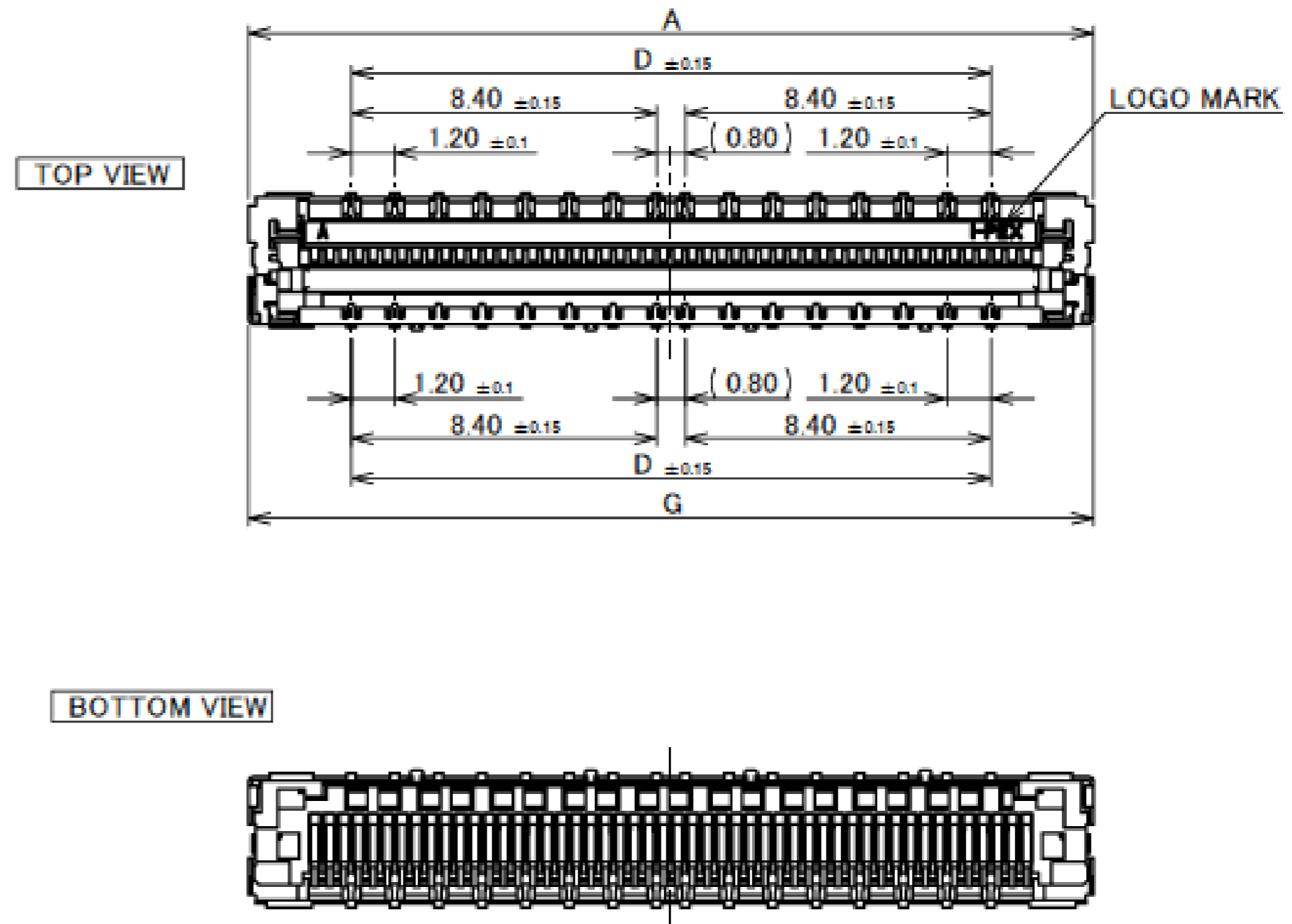
Rev.15

Receptacle Assembly

| Recommended P/N | | 20879-0**E-01 | | | |
|-----------------|------|---------------|-------|-------|--|
| PART NO. | Pos. | A | D | G | |
| 20879-030E-#1 | 30 | 15.27 | 9.60 | 15.27 | |
| 20879-040E-#1 | 40 | 19.27 | 14.40 | 19.27 | |
| 20879-050E-#1 | 50 | 23.27 | 17.60 | 23.27 | |
| 20879-060E-#1 | 60 | 27.27 | 21.60 | 27.27 | |



30P, 40P, 60P



50P

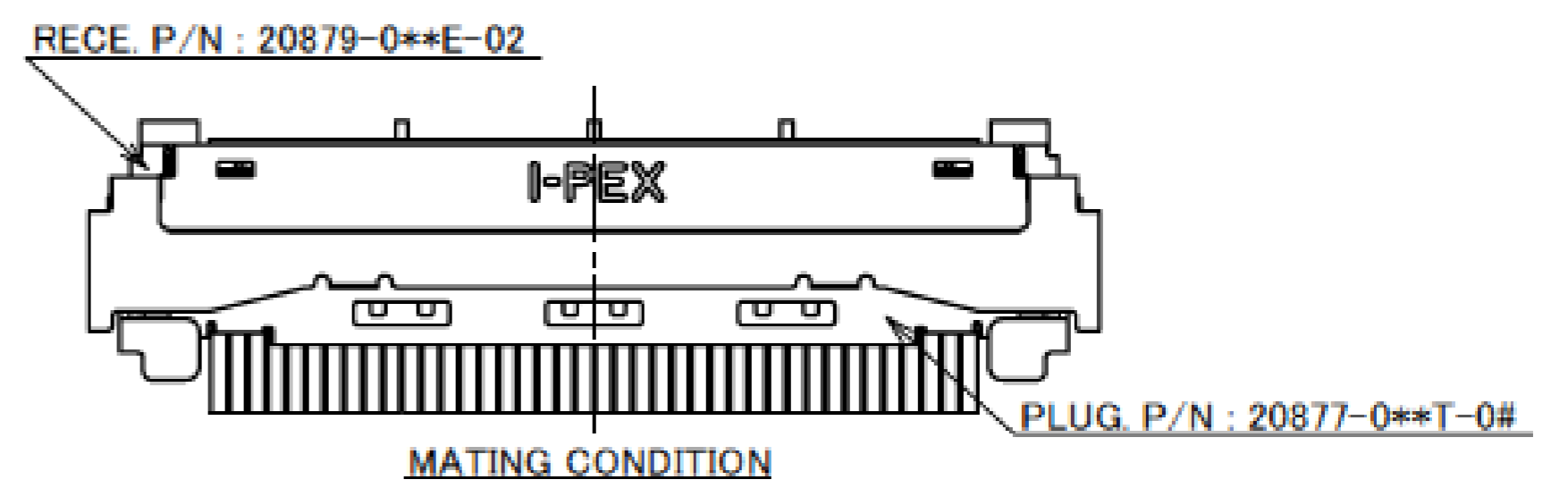
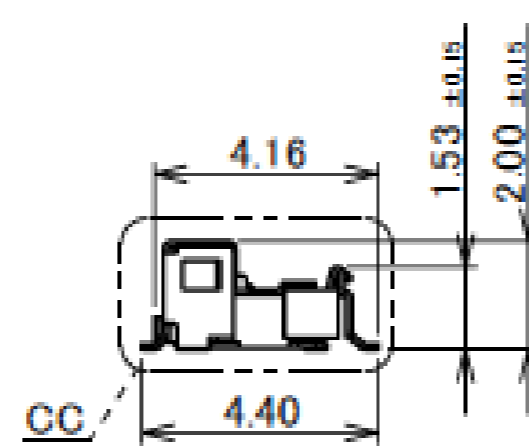
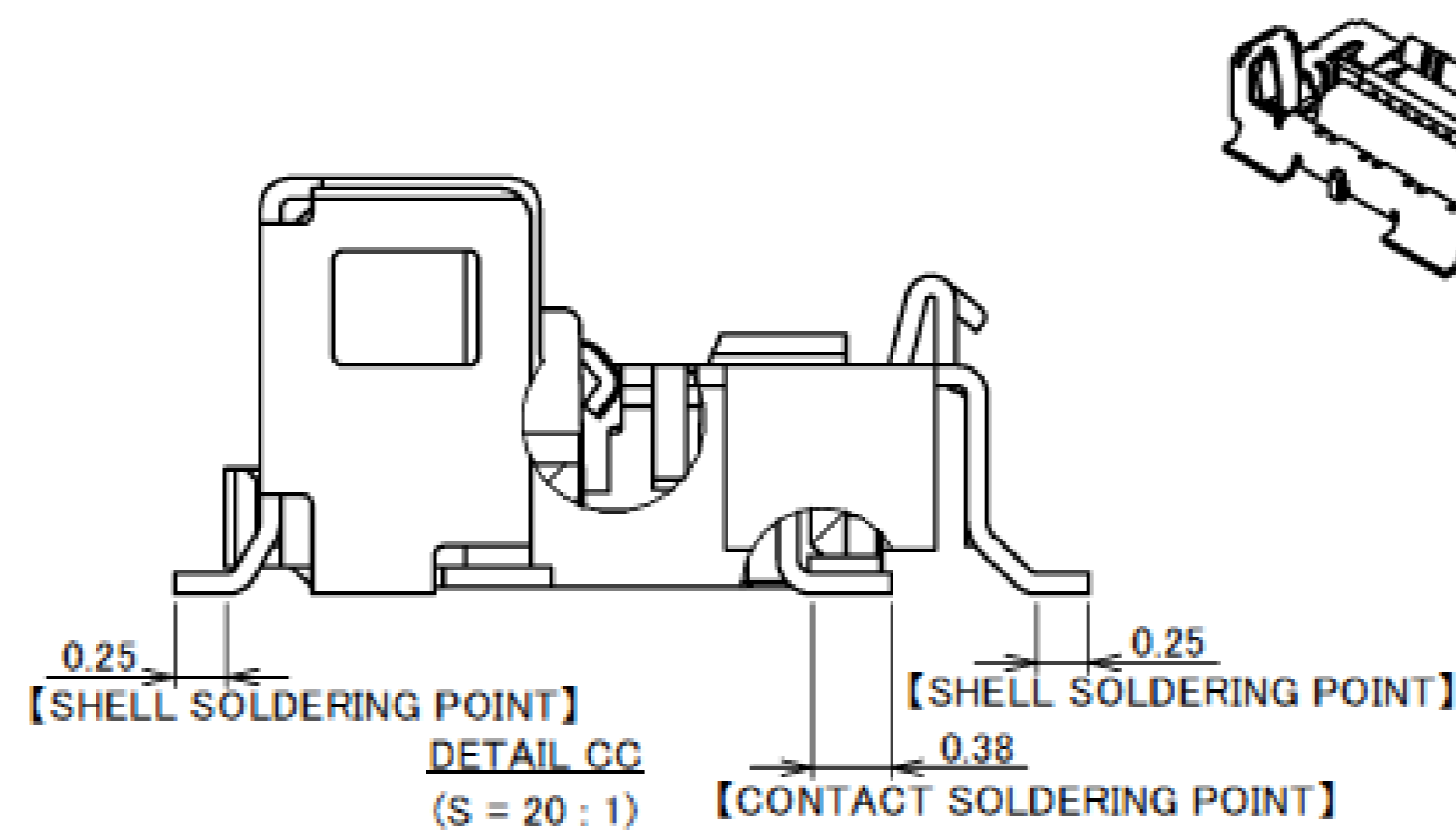
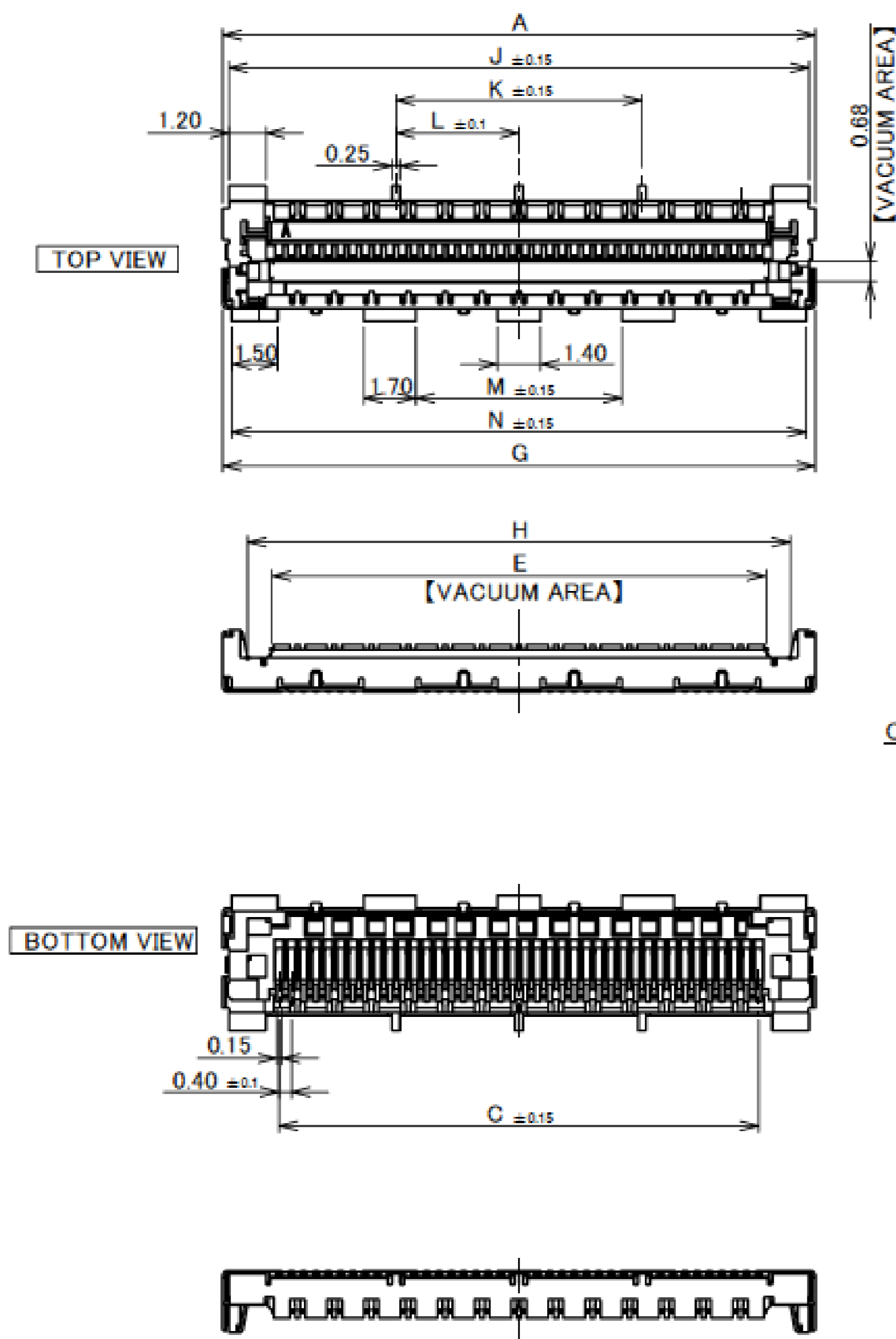
Rev.15

| Recommended P/N | | 20879-0**E-01 | | | | | | | | | | |
|-----------------|------|---------------|-------|-------|-------|-------|-------|-------|------|-------|-------|--|
| PART NO. | Pos. | A | C | E | G | H | J | K | L | M | N | |
| 20879-030E-02 | 30 | 15.27 | 11.60 | 12.07 | 15.27 | 13.65 | 14.87 | 4.00 | - | 7.09 | 14.69 | |
| 20879-040E-02 | 40 | 19.27 | 15.60 | 16.07 | 19.27 | 17.65 | 18.87 | 8.00 | 4.00 | 6.70 | 18.69 | |
| 20879-050E-02 | 50 | 23.27 | 19.60 | 20.07 | 23.27 | 21.65 | 22.87 | 14.40 | 3.60 | 8.70 | 22.69 | |
| 20879-060E-02 | 60 | 27.27 | 23.60 | 24.07 | 27.27 | 25.65 | 26.87 | 17.60 | - | 10.70 | 26.69 | |

02 TYPE



Halogen Free RoHS Compliant



Rev.15

Receptacle Assembly

Recommended P/N 20879-0**E-01

| PART NO. | Pos. | A | C | E | G | H | J | K | L | M | N | P | AD |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|
| 20879-030E-02 | 30 | 15.27 | 11.60 | 12.07 | 15.27 | 13.65 | 14.87 | 4.00 | - | 7.09 | 14.69 | - | - |
| 20879-040E-02 | 40 | 19.27 | 15.60 | 16.07 | 19.27 | 17.65 | 18.87 | 8.00 | 4.00 | 6.70 | 18.69 | - | - |
| 20879-050E-02 | 50 | 23.27 | 19.60 | 20.07 | 23.27 | 21.65 | 22.87 | 14.40 | 3.60 | 8.70 | 22.69 | 7.20 | - |
| 20879-060E-02 | 60 | 27.27 | 23.60 | 24.07 | 27.27 | 25.65 | 26.87 | 17.60 | - | 10.70 | 26.69 | 11.20 | 3.20 |

02 TYPE

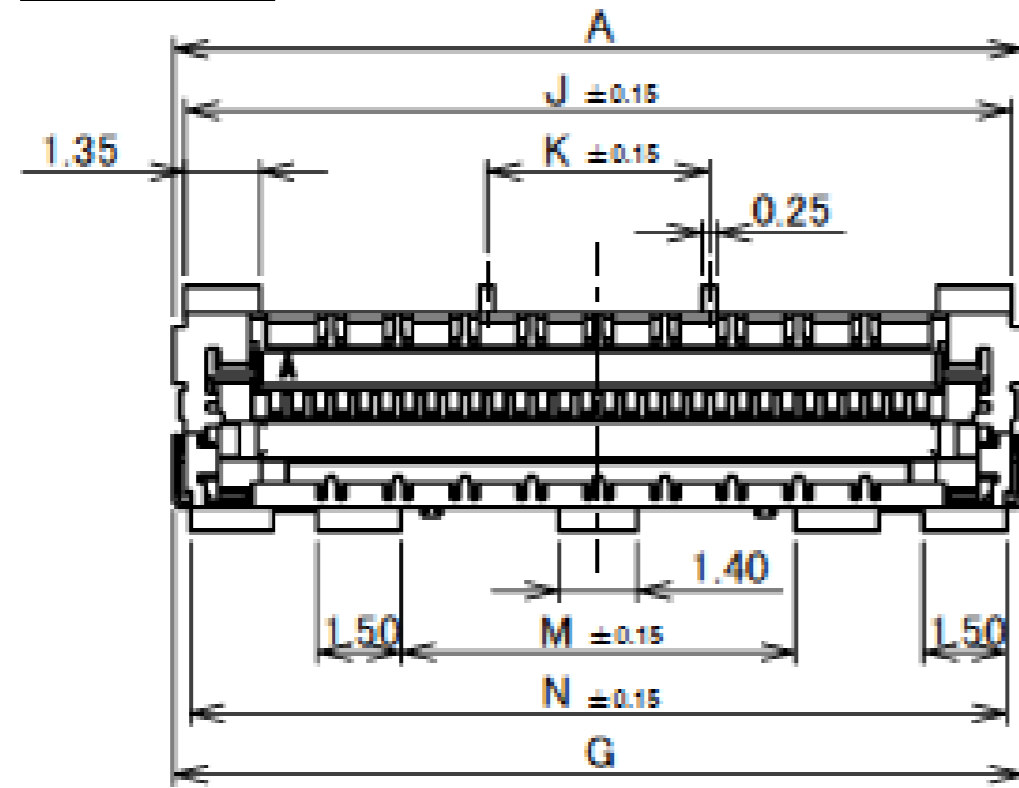


Halogen Free



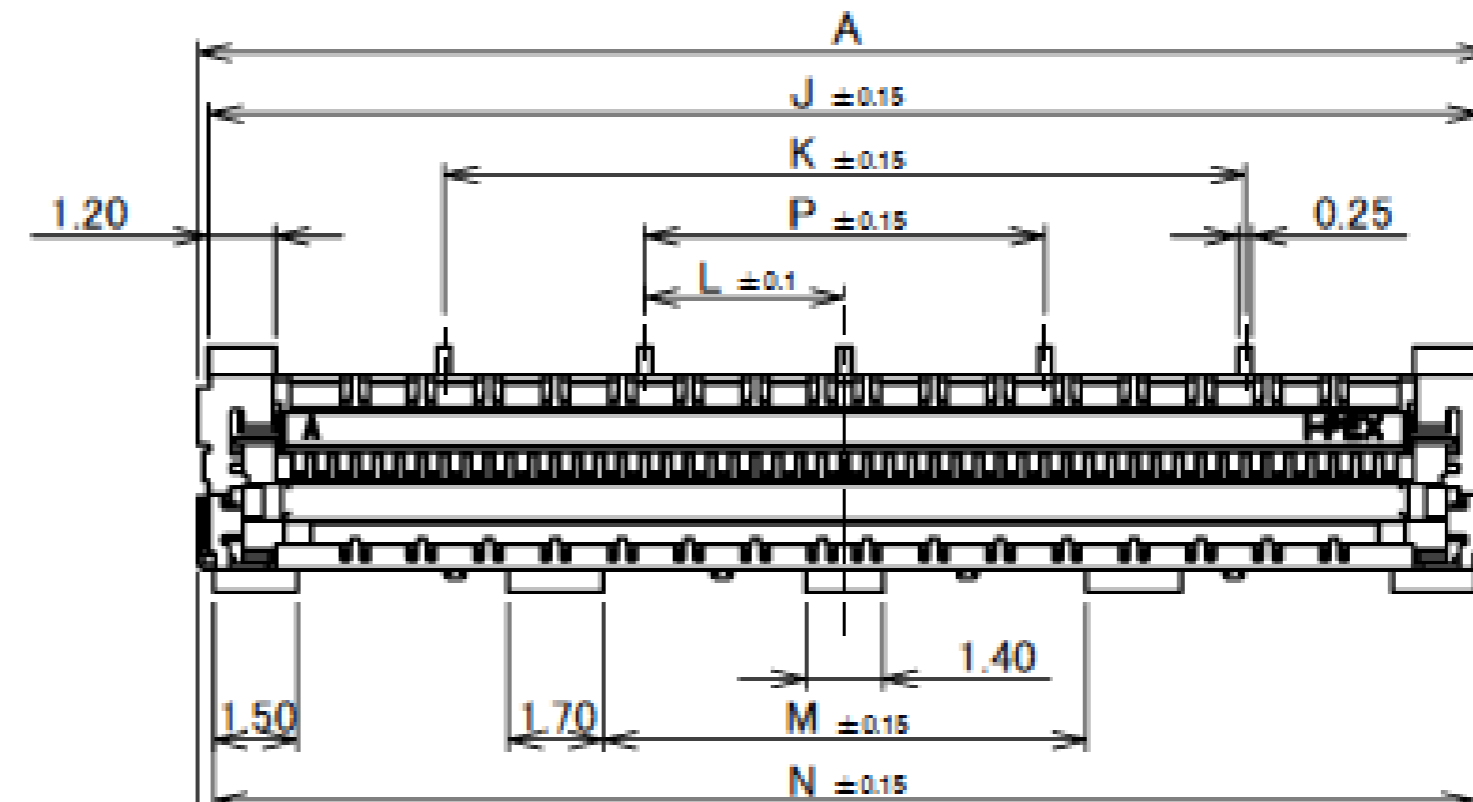
RoHS Compliant

TOP VIEW



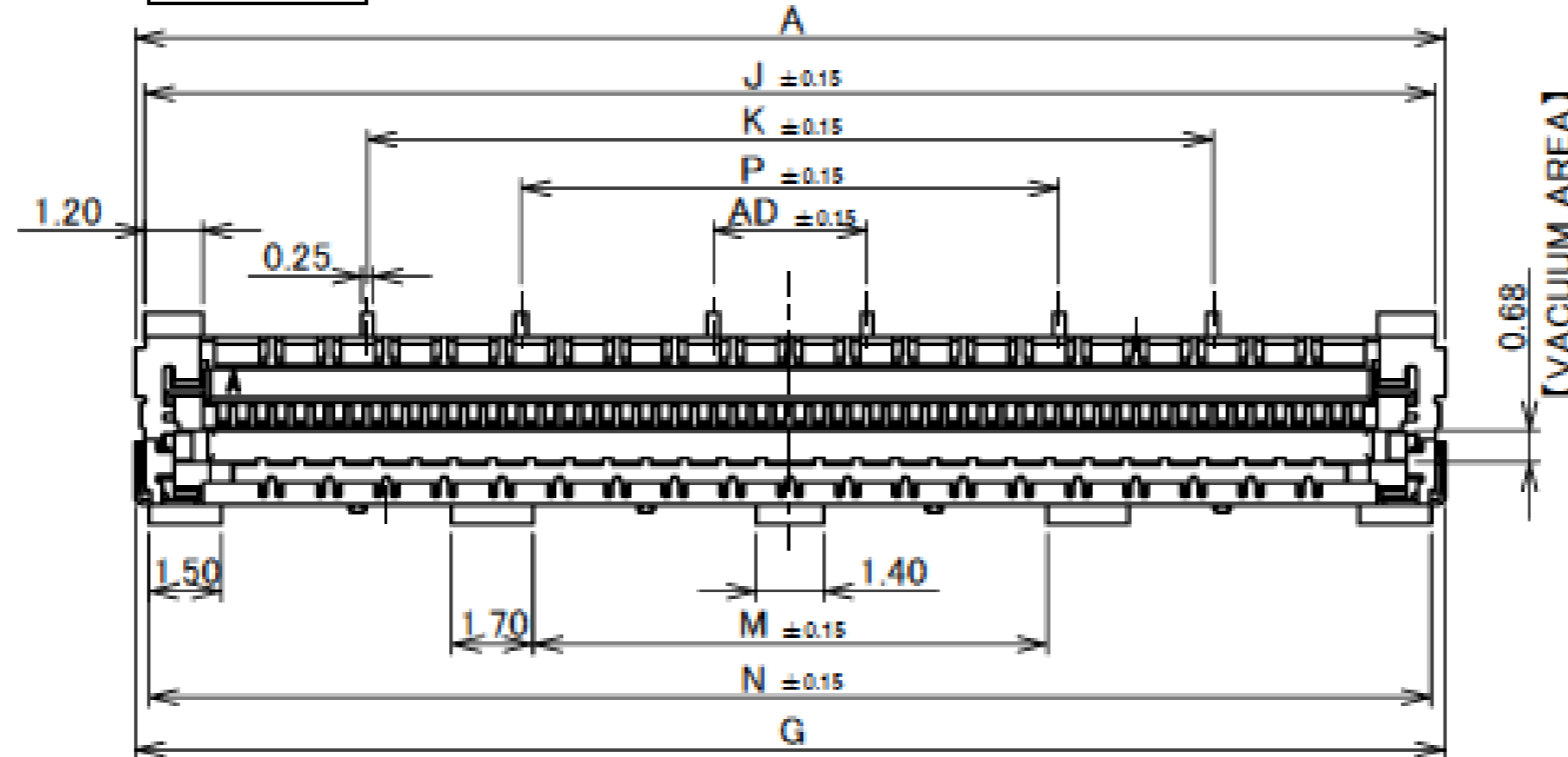
30P SHAPE
(S = 5 : 1)

TOP VIEW



50P SHAPE
(S=5/1)

TOP VIEW

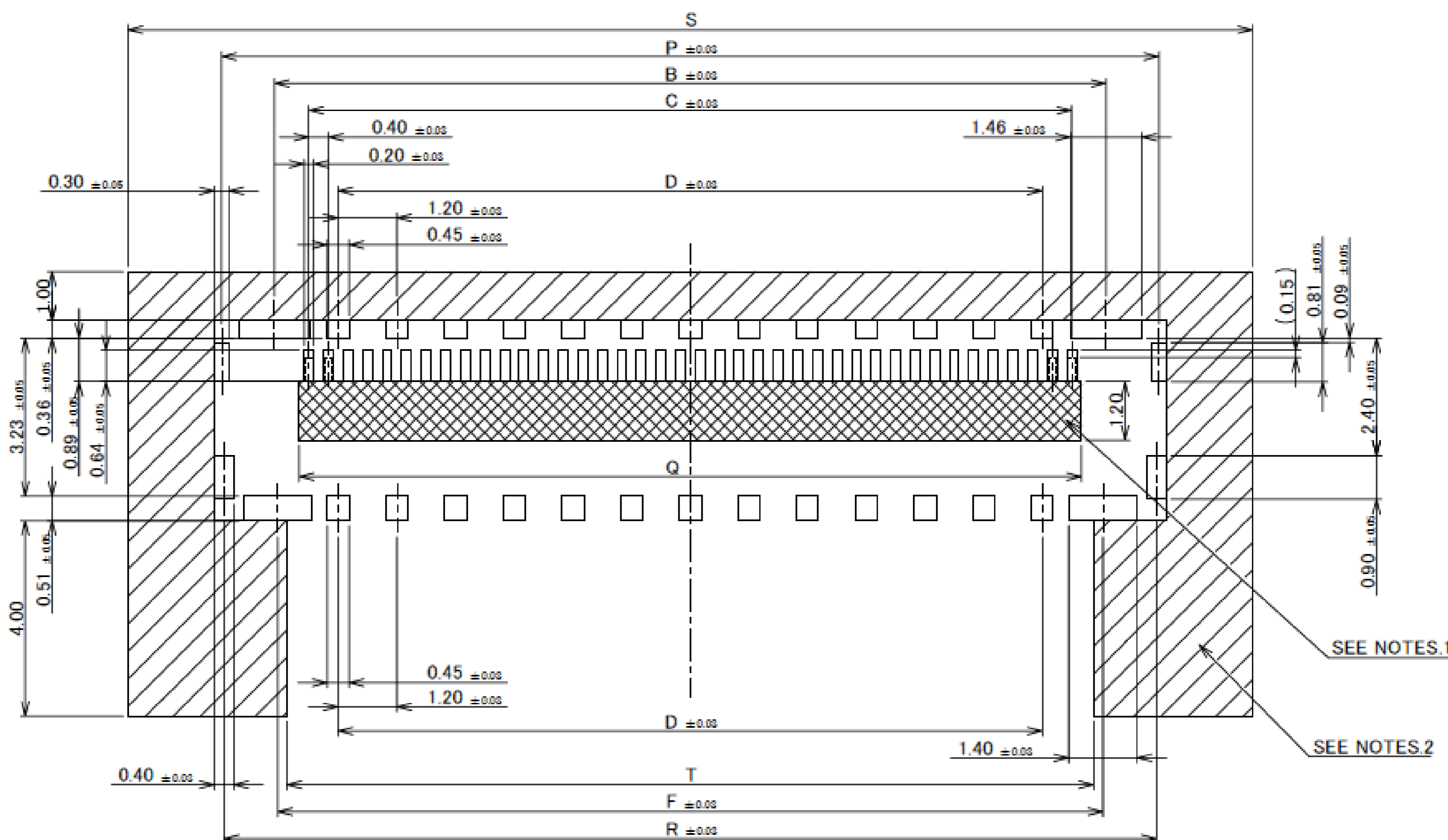


60P SHAPE
(S = 5 : 1)

Rev.15

| PART No. | Pos. | B | C | D | F | P | Q | R | S | T |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 20879-030E-#1 | 30 | 13.01 | 11.60 | 9.60 | 12.88 | 15.17 | 12.00 | 15.07 | 19.00 | 12.50 |
| 20879-040E-#1 | 40 | 17.01 | 15.60 | 14.40 | 16.88 | 19.17 | 16.00 | 19.07 | 23.00 | 16.50 |
| 20879-060E-#1 | 60 | 25.01 | 23.60 | 21.60 | 24.88 | 27.17 | 24.00 | 27.07 | 31.00 | 24.50 |

#1 TYPE



#1 TYPE 30P, 40P, 60P RECOMMENDED PCB LAYOUT
(S = 10 : 1)

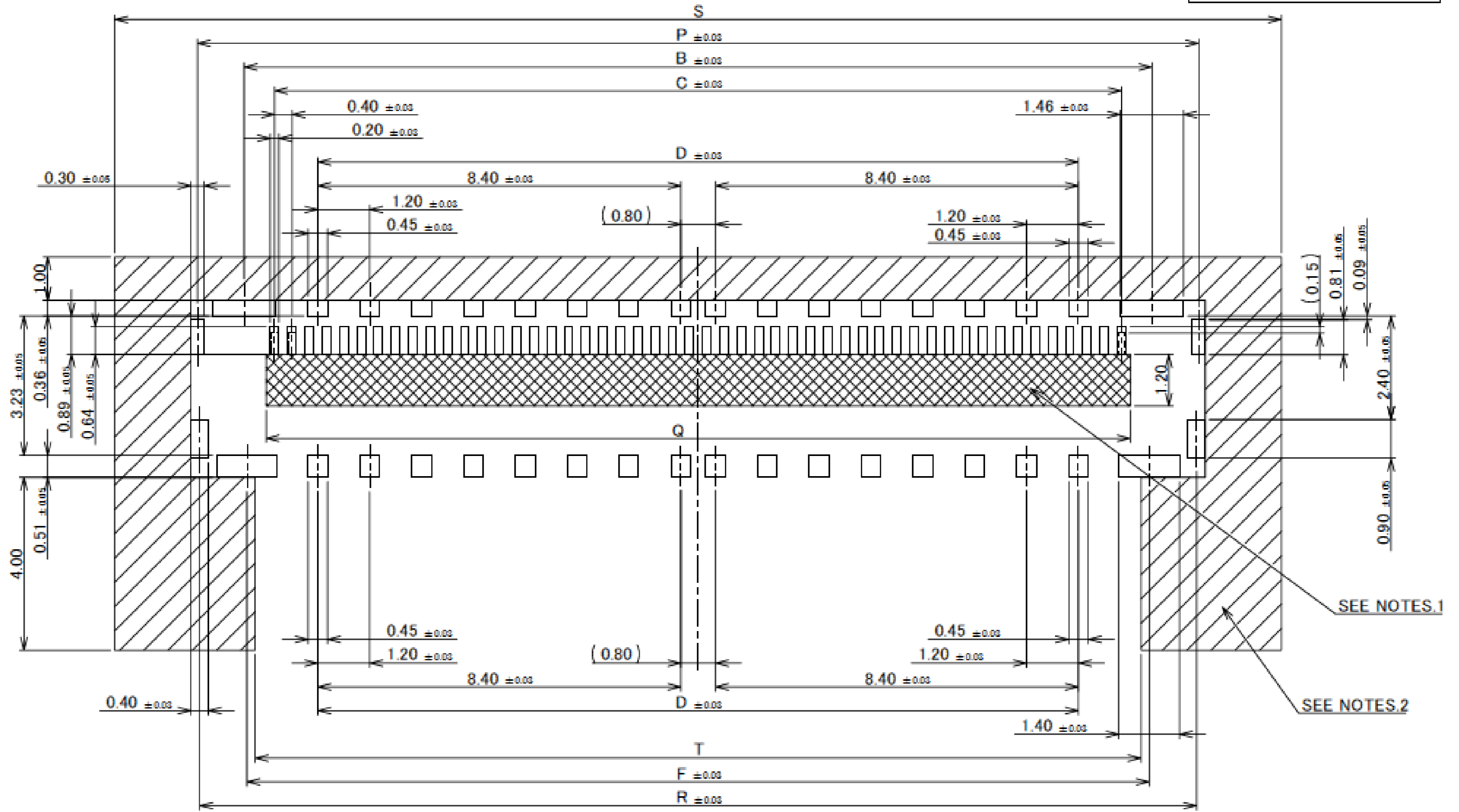
- NOTES.
1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.
2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.

Rev.15

Receptacle Assembly

| PART No. | Pos. | B | C | D | F | P | Q | R | S | T |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 20879-050E-#1 | 50 | 21.01 | 19.60 | 17.60 | 20.88 | 23.17 | 20.00 | 23.07 | 27.00 | 20.50 |

#1 TYPE



#1 TYPE 50P RECOMMENDED PCB LAYOUT
(S=10/1)

- NOTES.
1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.
2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.

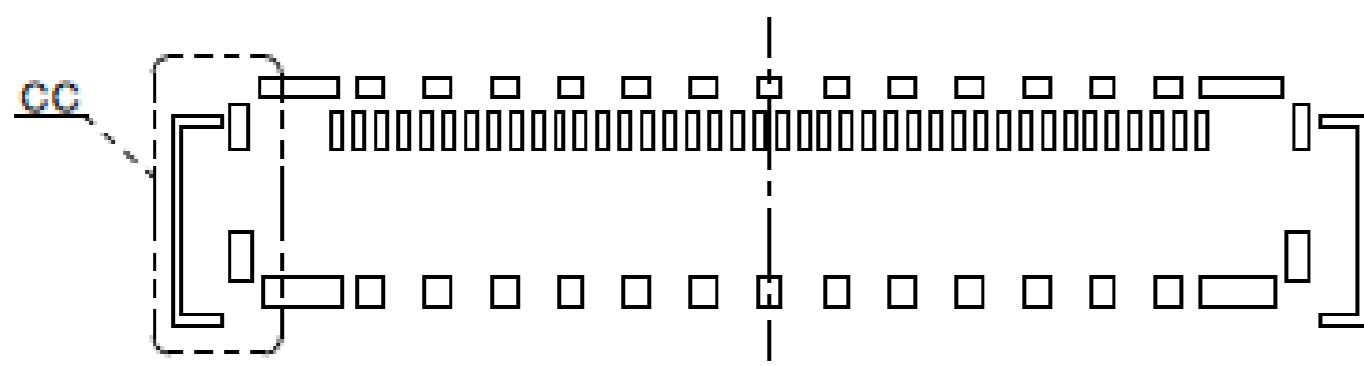
Rev.15

| PART No. | Pos. |
|---------------|------|
| 20879-030E-#1 | 30 |
| 20879-040E-#1 | 40 |
| 20879-050E-#1 | 50 |
| 20879-060E-#1 | 60 |

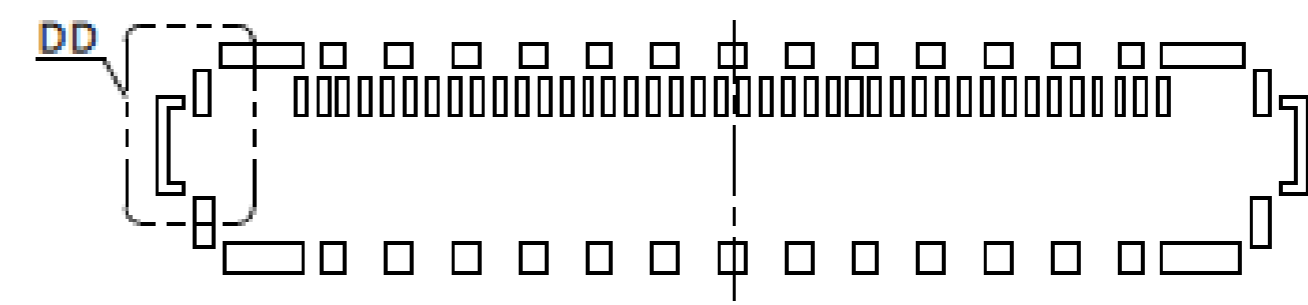
#1 TYPE

With LOCK COVER

With PULL TAPE HOLDER

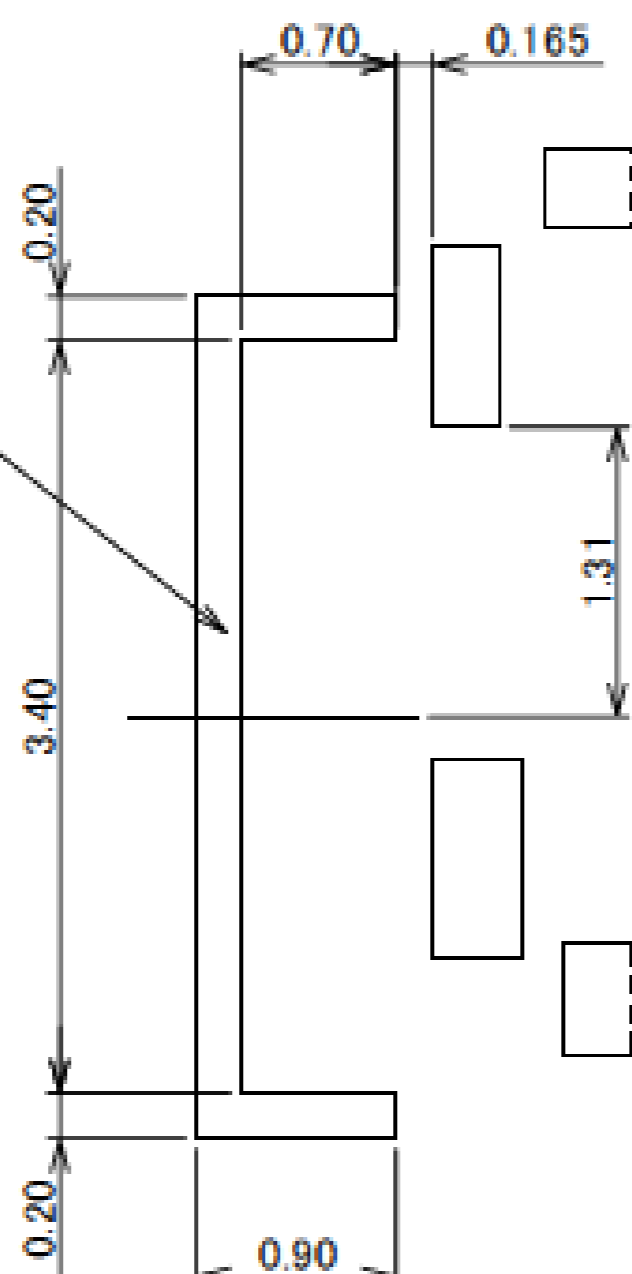


RECOMMENDED SILK PRINT For With LOCK COVER
(S = 5 : 1)



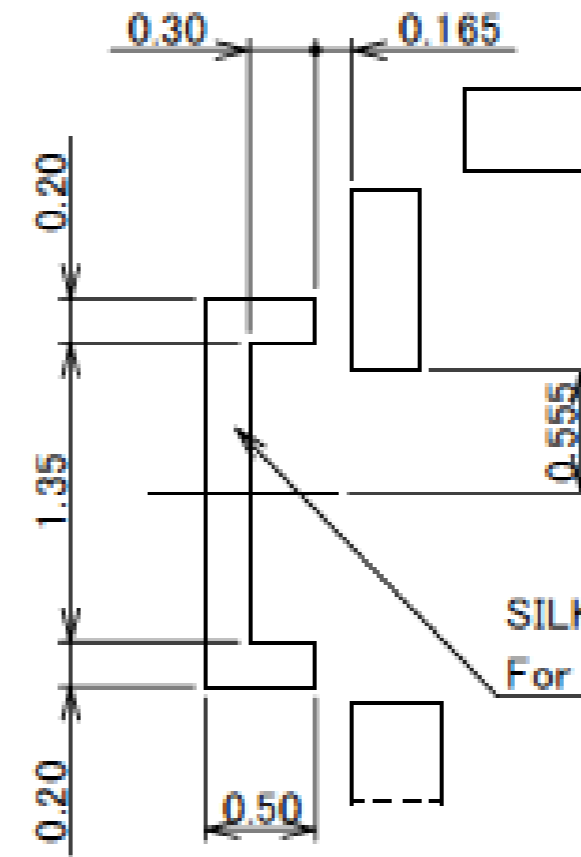
RECOMMENDED SILK PRINT For Without LOCK COVER
(S = 5 : 1)

SILK PRINT
For PLUG INSERTION CHECK



DETAIL CC
(S = 20 : 1)

SILK PRINT
For PLUG INSERTION CHECK



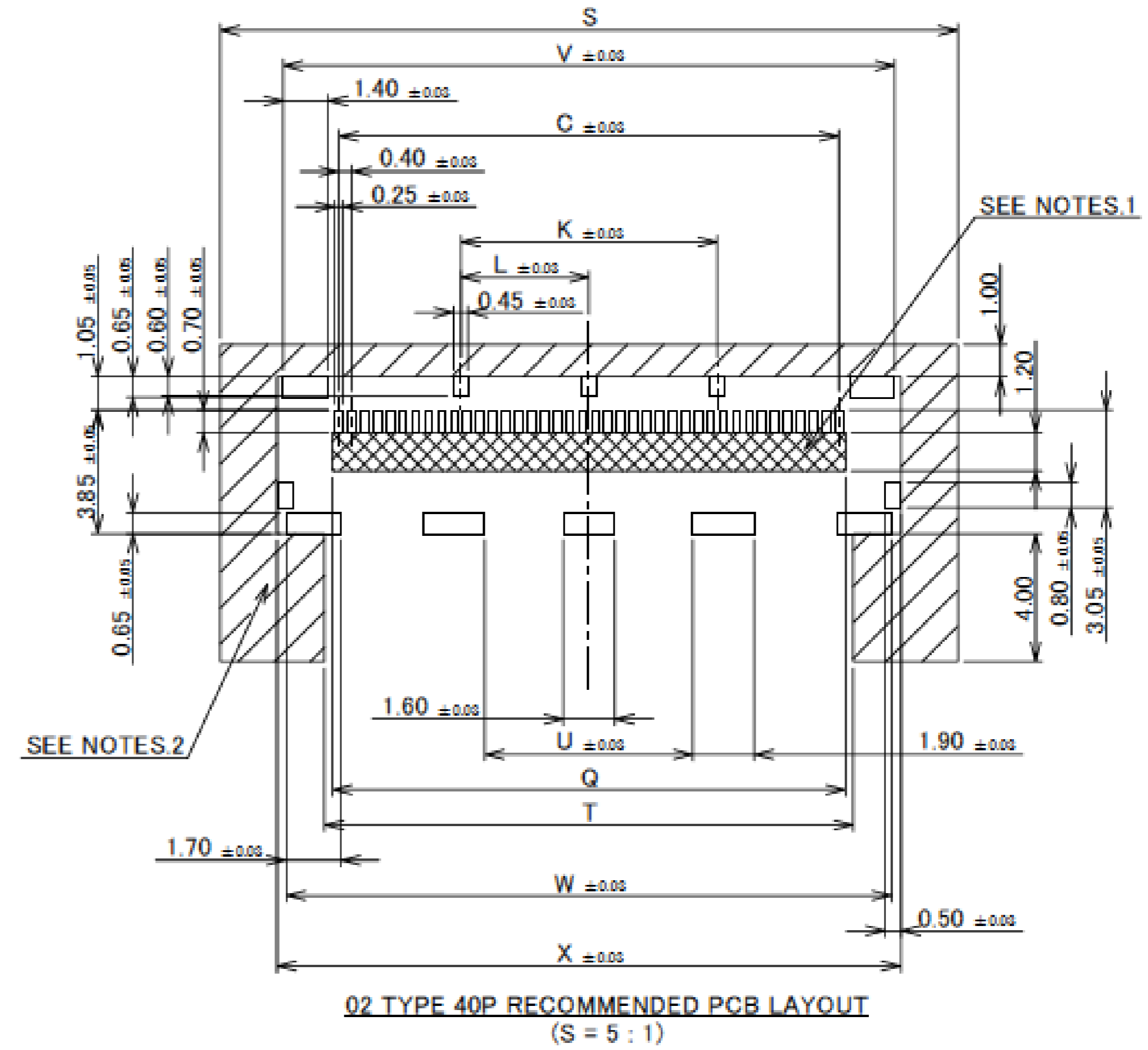
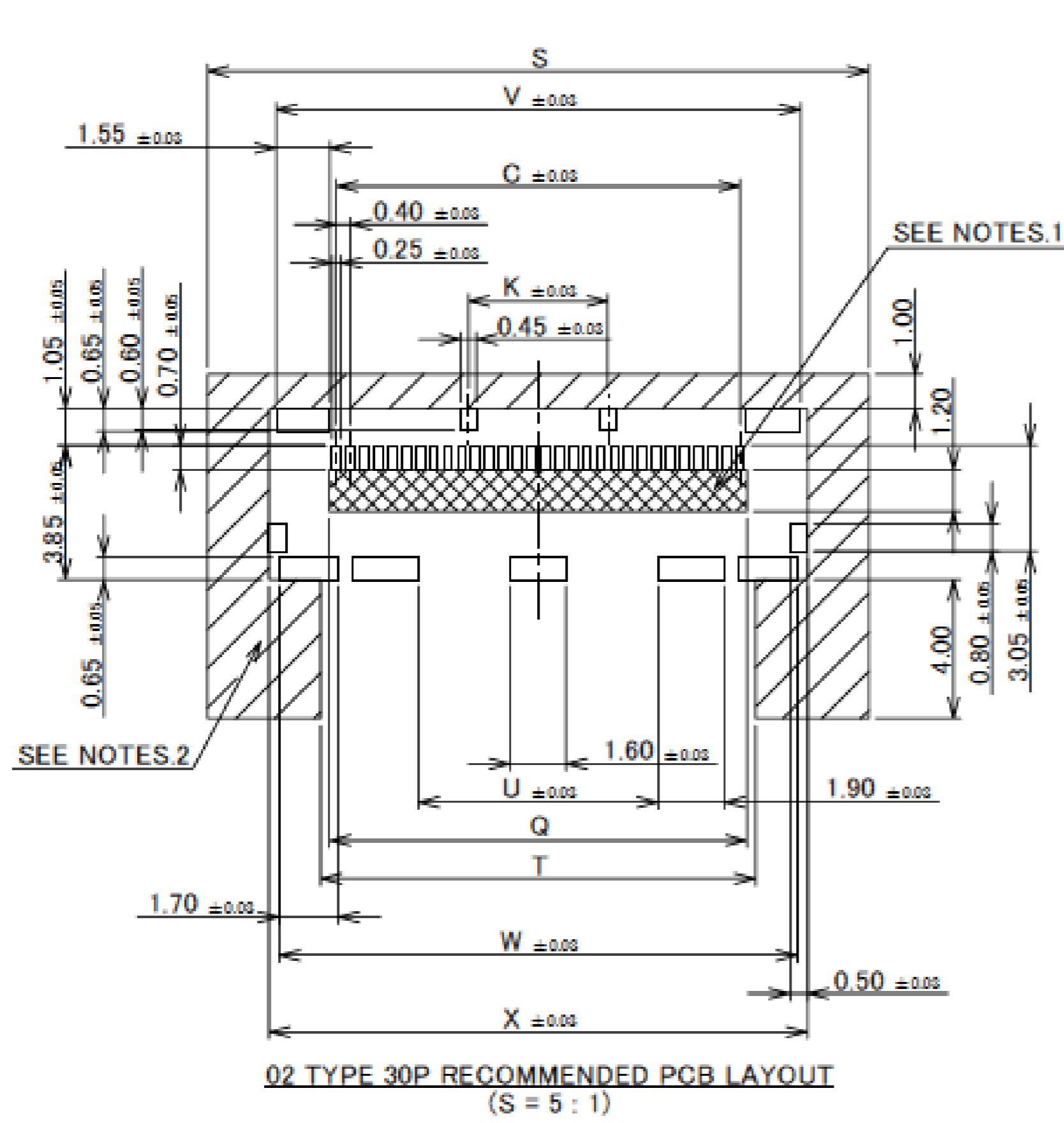
DETAIL DD
(S = 20 : 1)

Rev.15

Receptacle Assembly

| PART No. | Pos. | C | K | L | Q | S | T | U | V | W | X |
|---------------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| 20879-030E-02 | 30 | 11.60 | 4.00 | - | 12.00 | 19.00 | 12.50 | 6.89 | 15.07 | 14.89 | 15.47 |
| 20879-040E-02 | 40 | 15.60 | 8.00 | 4.00 | 16.00 | 23.00 | 16.50 | 6.50 | 19.07 | 18.89 | 19.47 |
| 20879-050E-02 | 50 | 19.60 | 14.40 | 3.60 | 20.00 | 27.00 | 20.50 | 8.50 | 23.07 | 22.89 | 23.47 |
| 20879-060E-02 | 60 | 23.60 | 17.60 | - | 24.00 | 31.00 | 24.50 | 10.50 | 27.07 | 26.89 | 27.47 |

02 TYPE

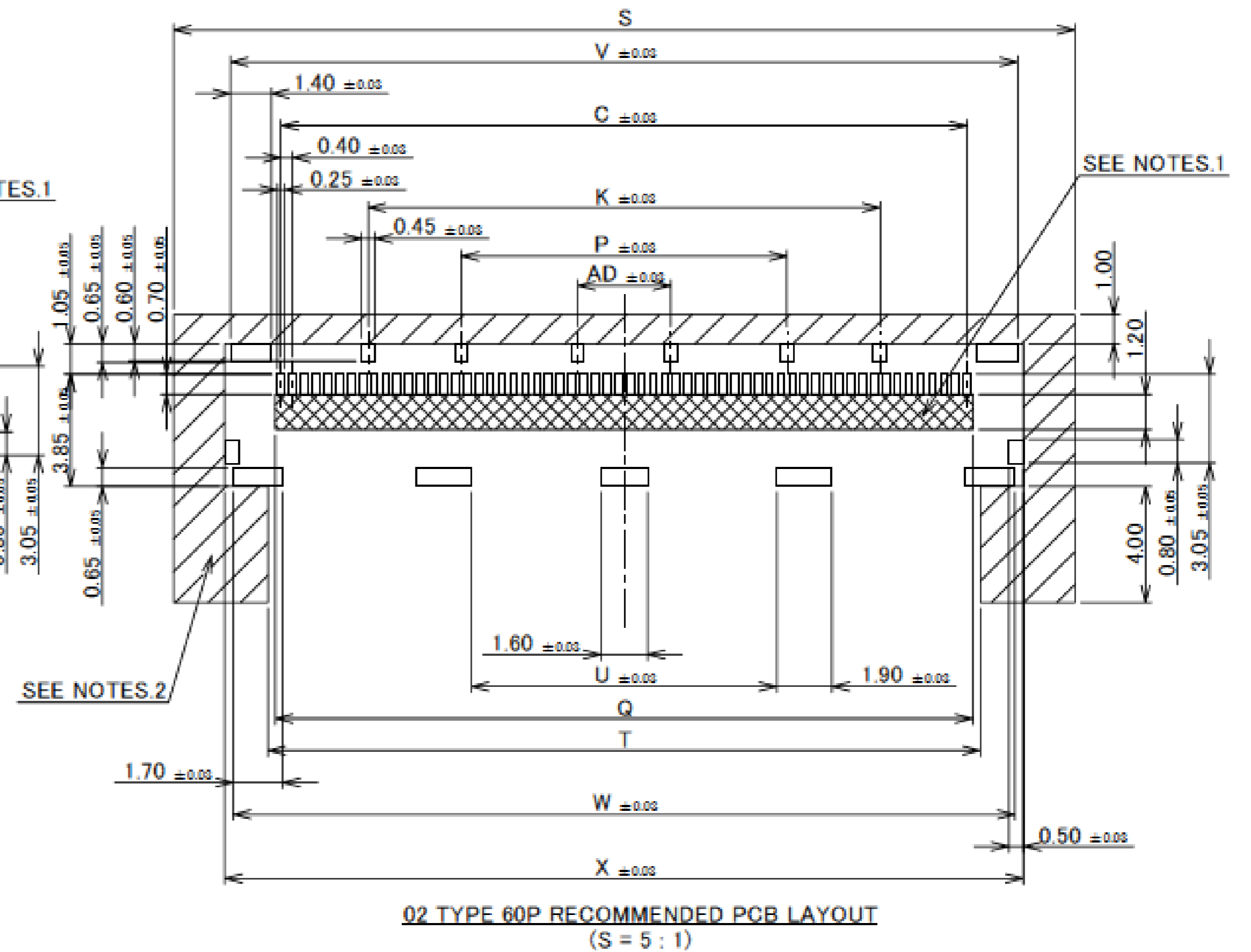
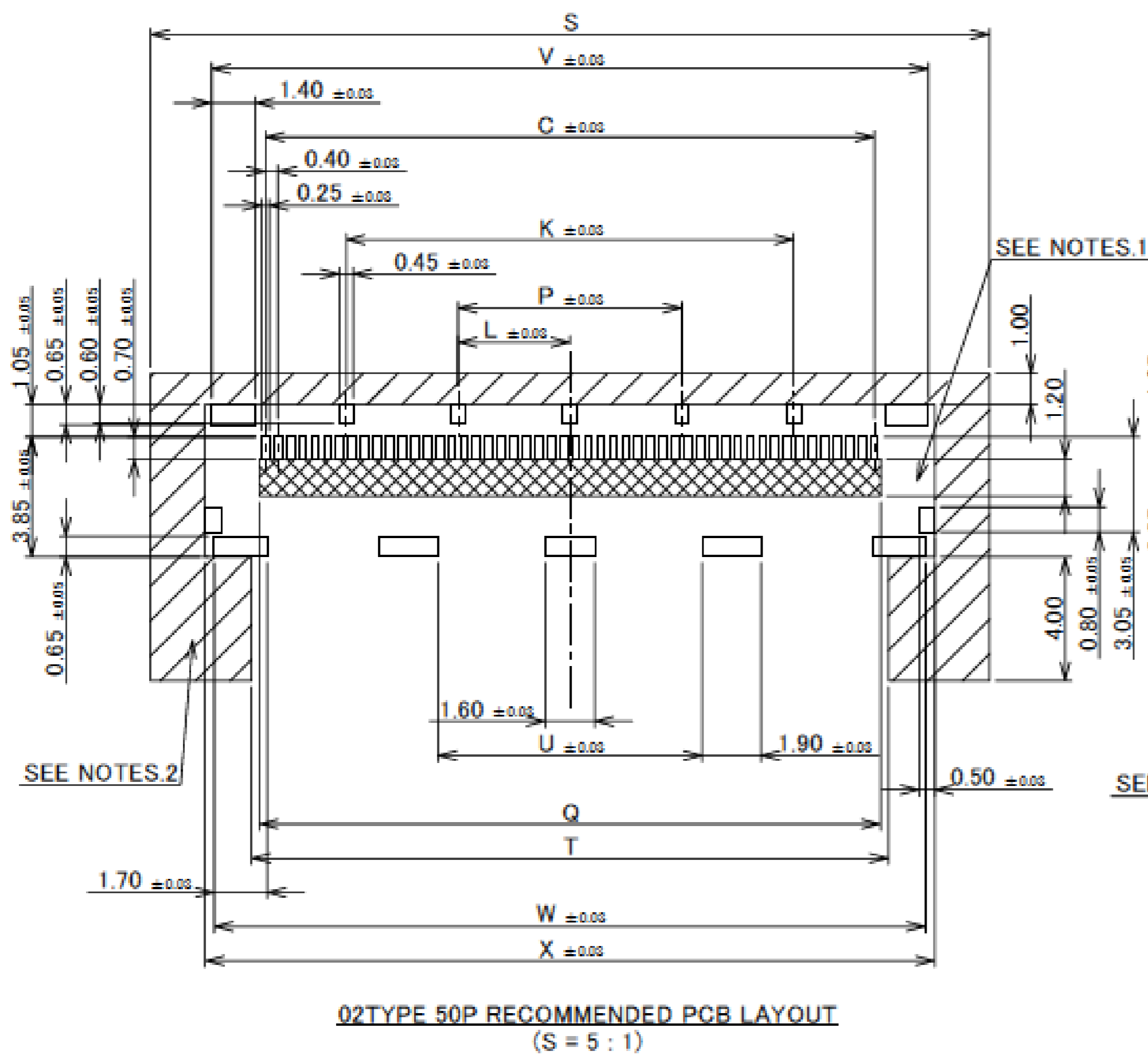


- NOTES.
1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.
2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.

Rev.15

| PART No. | Pos. | C | K | L | P | Q | S | T | U | V | W | X | AD |
|---------------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 20879-030E-02 | 30 | 11.60 | 4.00 | - | - | 12.00 | 19.00 | 12.50 | 6.89 | 15.07 | 14.89 | 15.47 | - |
| 20879-040E-02 | 40 | 15.60 | 8.00 | 4.00 | - | 16.00 | 23.00 | 16.50 | 6.50 | 19.07 | 18.89 | 19.47 | - |
| 20879-050E-02 | 50 | 19.60 | 14.40 | 3.60 | 7.20 | 20.00 | 27.00 | 20.50 | 8.50 | 23.07 | 22.89 | 23.47 | - |
| 20879-060E-02 | 60 | 23.60 | 17.60 | - | 11.20 | 24.00 | 31.00 | 24.50 | 10.50 | 27.07 | 26.89 | 27.47 | 3.20 |

02 TYPE



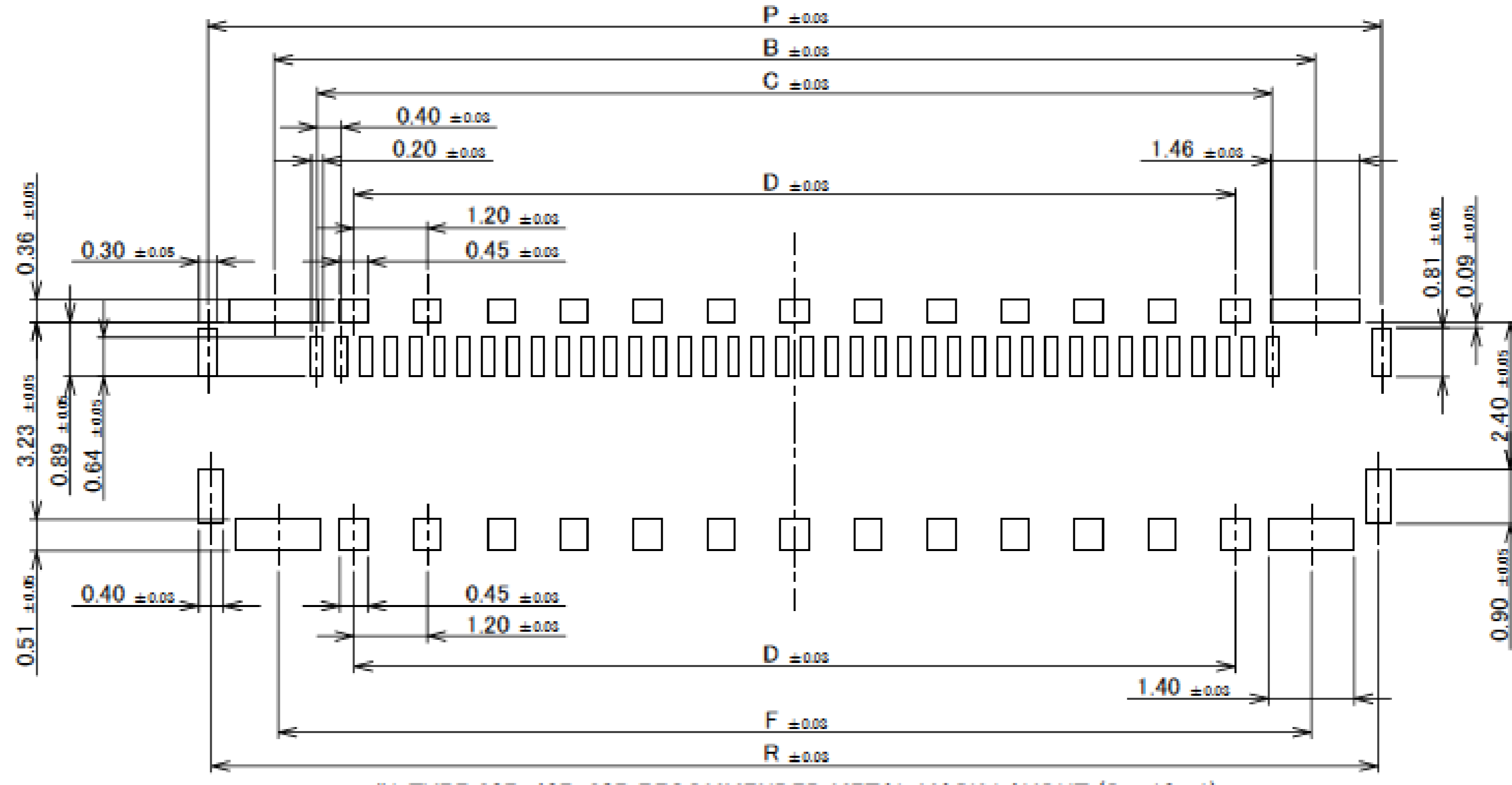
- NOTES.
1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.
2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.

Rev.15

Receptacle Assembly

| PART No. | Pos. | B | C | D | F | P | R |
|---------------|------|-------|-------|-------|-------|-------|-------|
| 20879-030E-#1 | 30 | 13.01 | 11.60 | 9.60 | 12.88 | 15.17 | 15.07 |
| 20879-040E-#1 | 40 | 17.01 | 15.60 | 14.40 | 16.88 | 19.17 | 19.07 |
| 20879-060E-#1 | 60 | 25.01 | 23.60 | 21.60 | 24.88 | 27.17 | 27.07 |

#1 TYPE

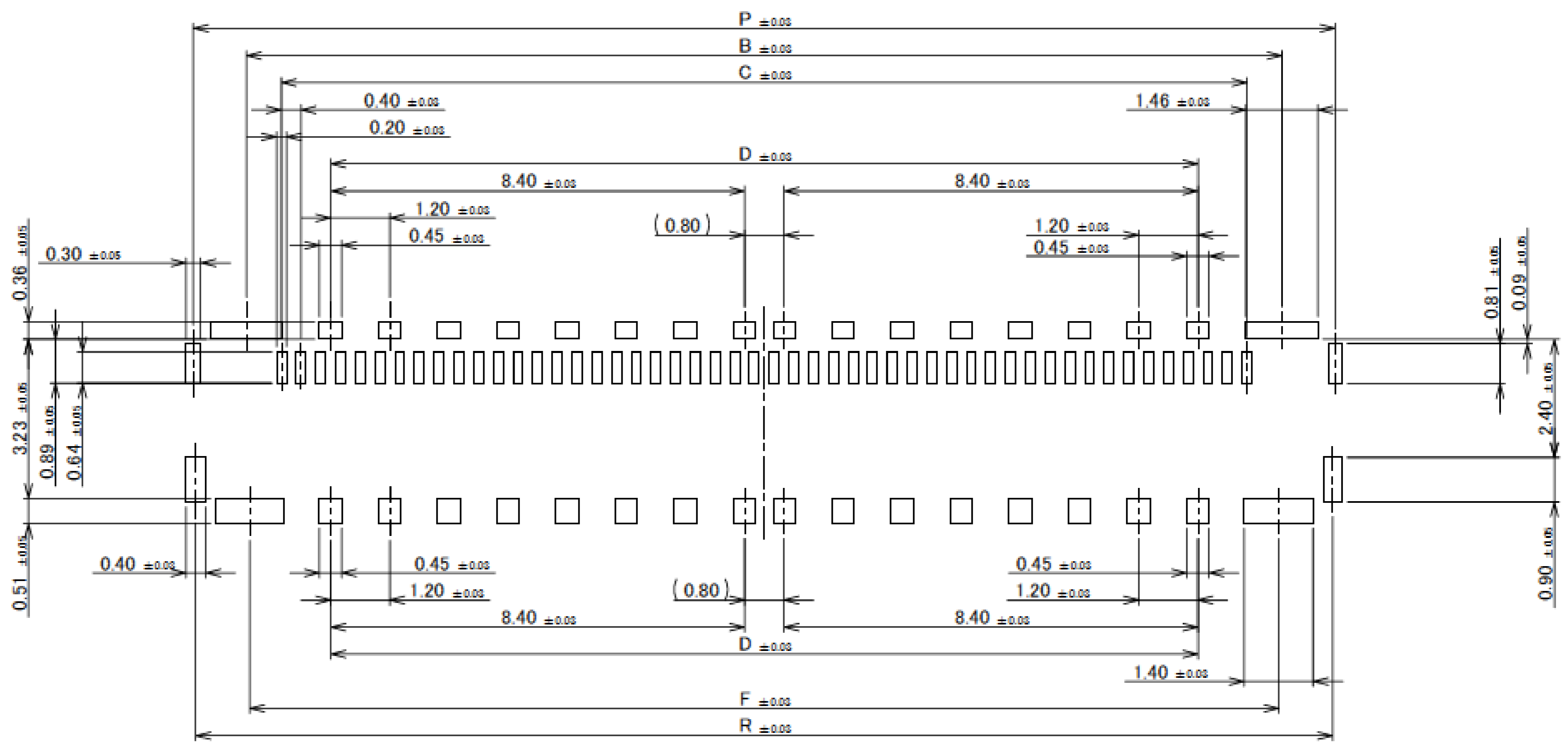


#1 TYPE 30P, 40P, 60P RECOMMENDED METAL MASK LAYOUT (S = 10 : 1)
※ METAL MASK THICKNESS : t = 0.10

Rev.15

| PART No. | Pos. | B | C | D | F | P | R |
|---------------|------|-------|-------|-------|-------|-------|-------|
| 20879-050E-#1 | 50 | 21.01 | 19.60 | 17.60 | 20.88 | 23.17 | 23.07 |

#1 TYPE



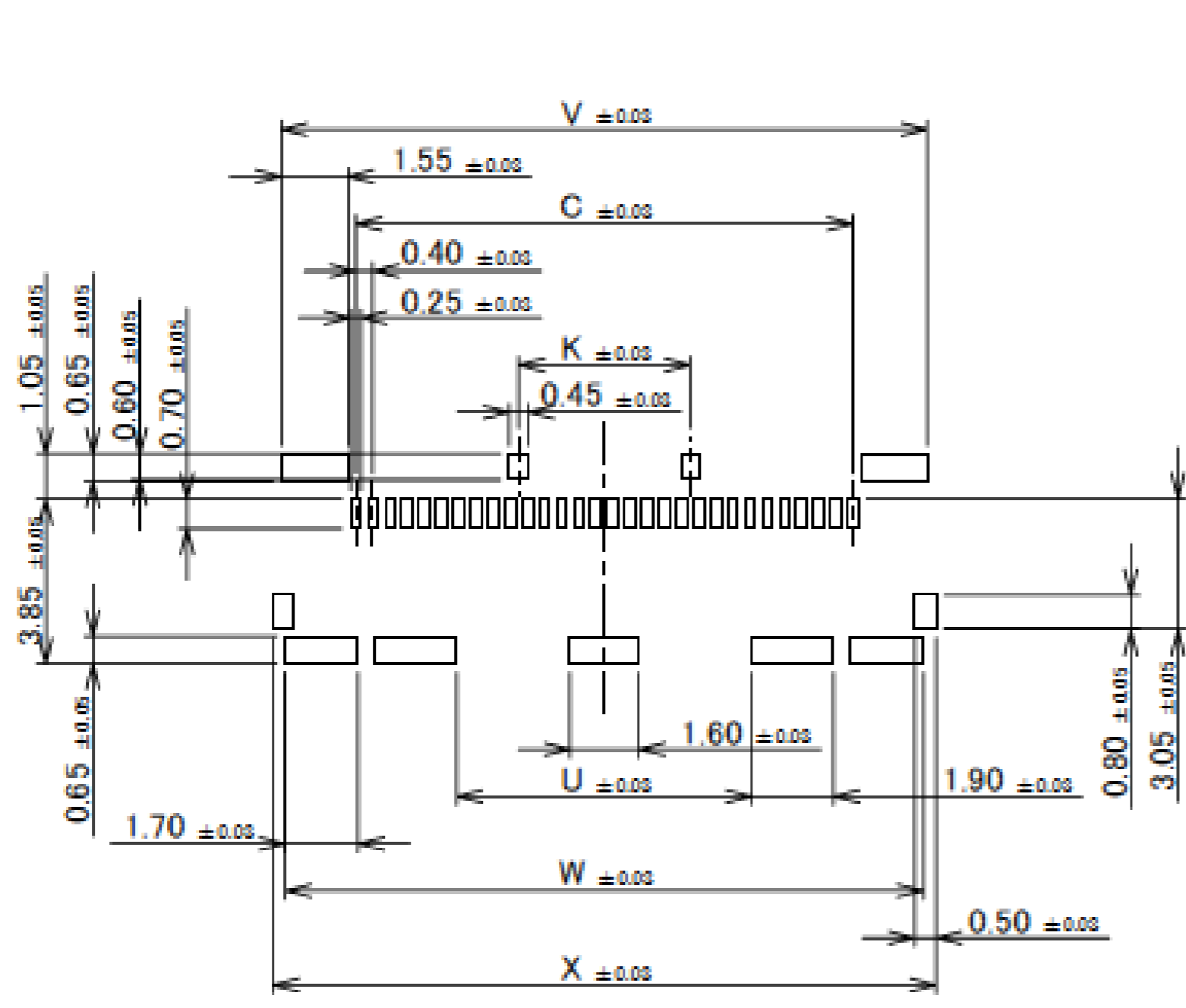
#1 TYPE 50P RECOMMENDED METAL MASK LAYOUT (S = 10 : 1)
※ METAL MASK THICKNESS : t = 0.10

Rev.15

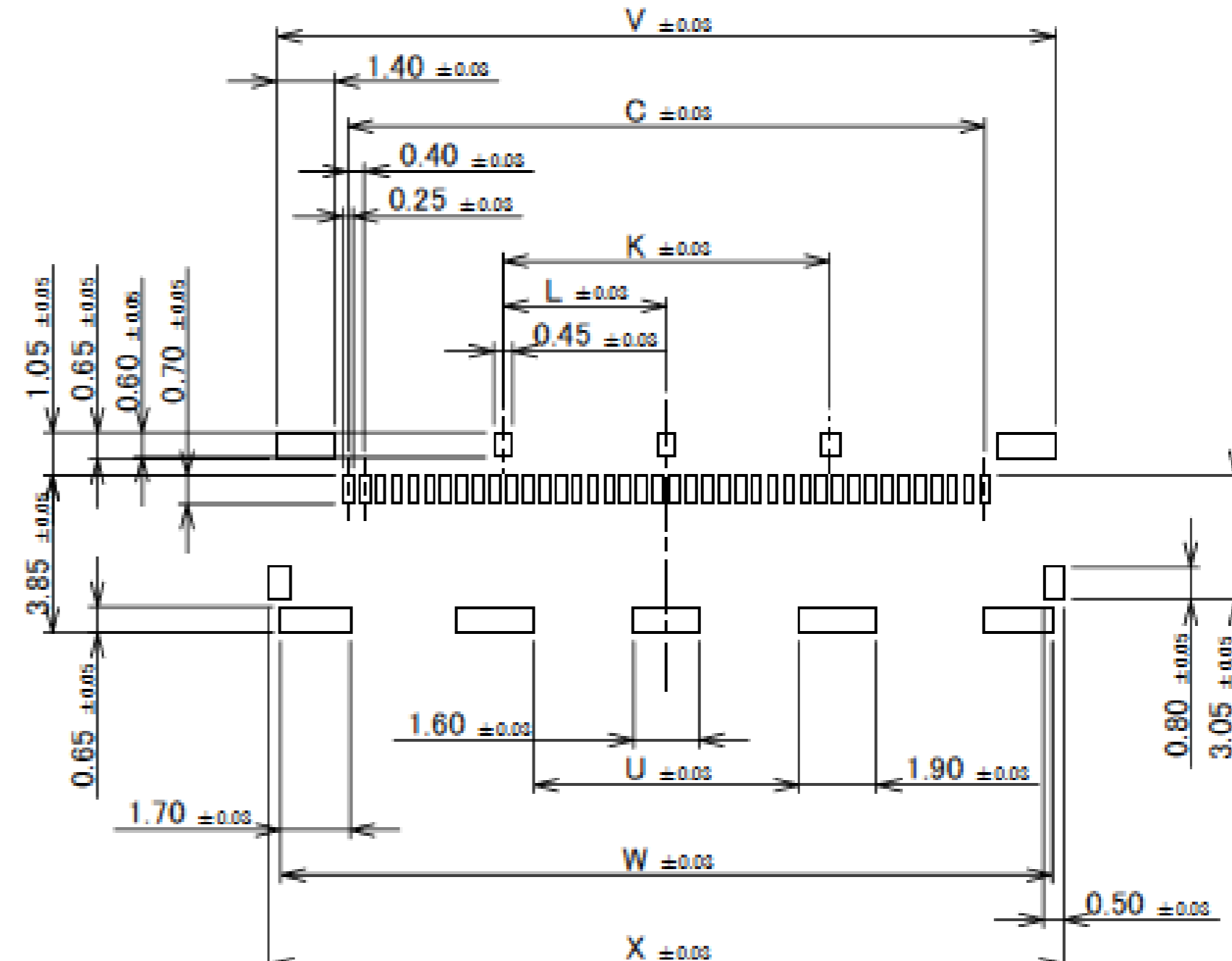
Receptacle Assembly

| PART No. | Pos. | C | K | L | U | V | W | X |
|---------------|------|-------|-------|------|-------|-------|-------|-------|
| 20879-030E-02 | 30 | 11.60 | 4.00 | - | 6.89 | 15.07 | 14.89 | 15.47 |
| 20879-040E-02 | 40 | 15.60 | 8.00 | 4.00 | 6.50 | 19.07 | 18.89 | 19.47 |
| 20879-050E-02 | 50 | 19.60 | 14.40 | 3.60 | 8.50 | 23.07 | 22.89 | 23.47 |
| 20879-060E-02 | 60 | 23.60 | 17.60 | - | 10.50 | 27.07 | 26.89 | 27.47 |

02 TYPE



02 TYPE 30P RECOMMENDED METAL MASK LAYOUT (S = 5 : 1)
※ METAL MASK THICKNESS : t = 0.12

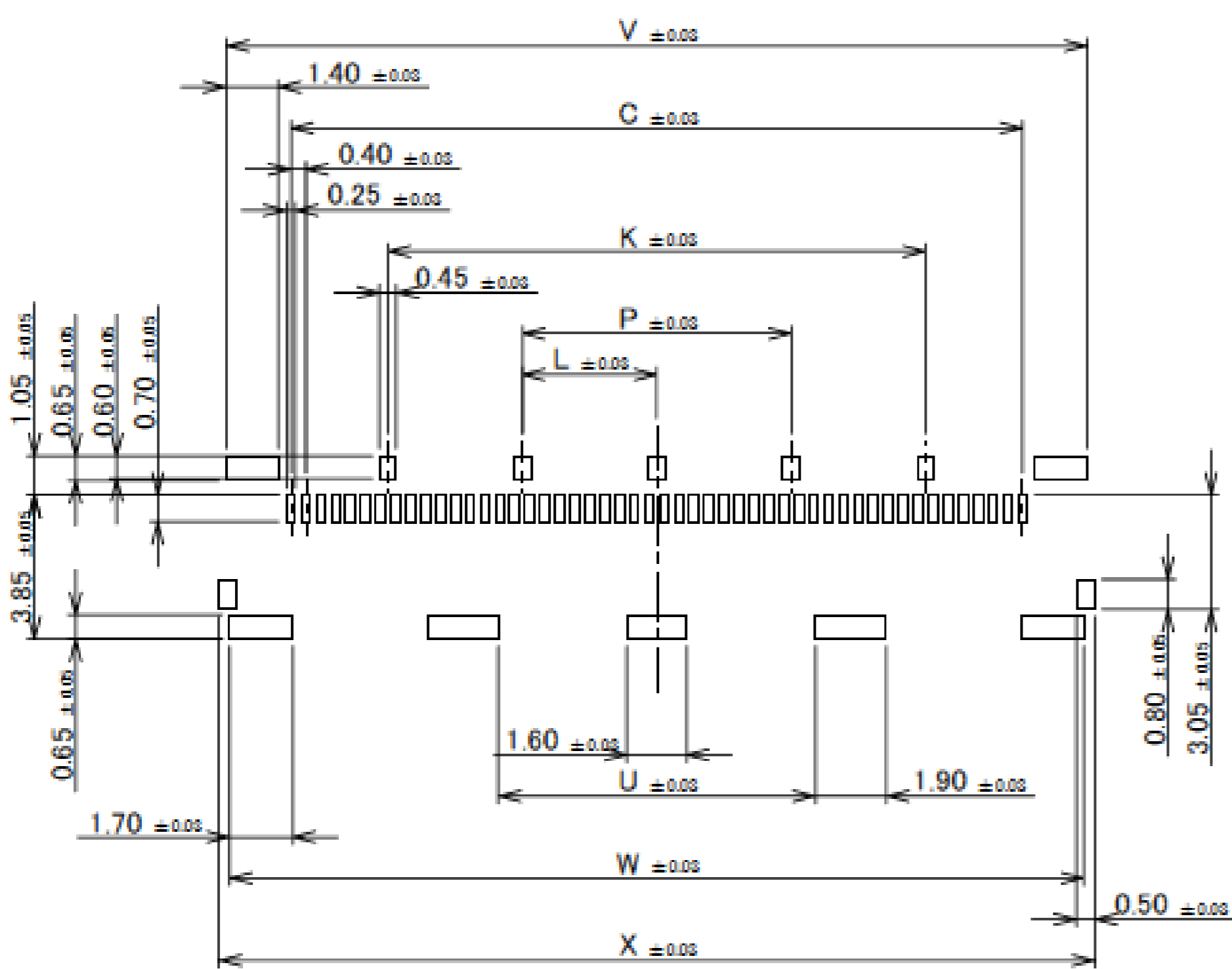


02 TYPE 40P RECOMMENDED METAL MASK LAYOUT (S = 5 : 1)
※ METAL MASK THICKNESS : t = 0.12

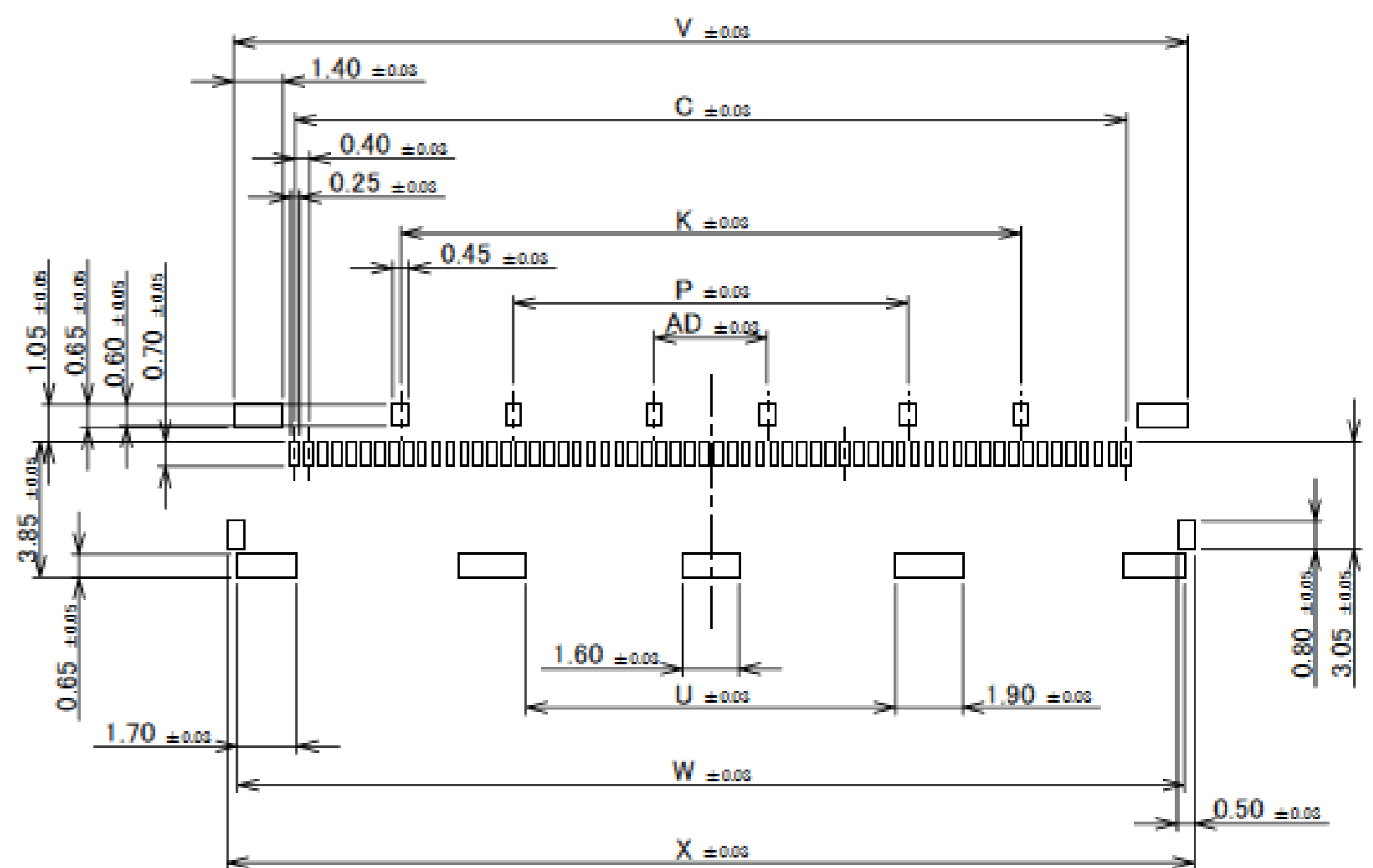
Rev.15

| PART No. | Pos. | C | K | L | P | U | V | W | X | AD |
|---------------|------|-------|-------|------|-------|-------|-------|-------|-------|------|
| 20879-030E-02 | 30 | 11.60 | 4.00 | - | - | 6.89 | 15.07 | 14.89 | 15.47 | - |
| 20879-040E-02 | 40 | 15.60 | 8.00 | 4.00 | - | 6.50 | 19.07 | 18.89 | 19.47 | - |
| 20879-050E-02 | 50 | 19.60 | 14.40 | 3.60 | 7.20 | 8.50 | 23.07 | 22.89 | 23.47 | - |
| 20879-060E-02 | 60 | 23.60 | 17.60 | - | 11.20 | 10.50 | 27.07 | 26.89 | 27.47 | 3.20 |

02 TYPE



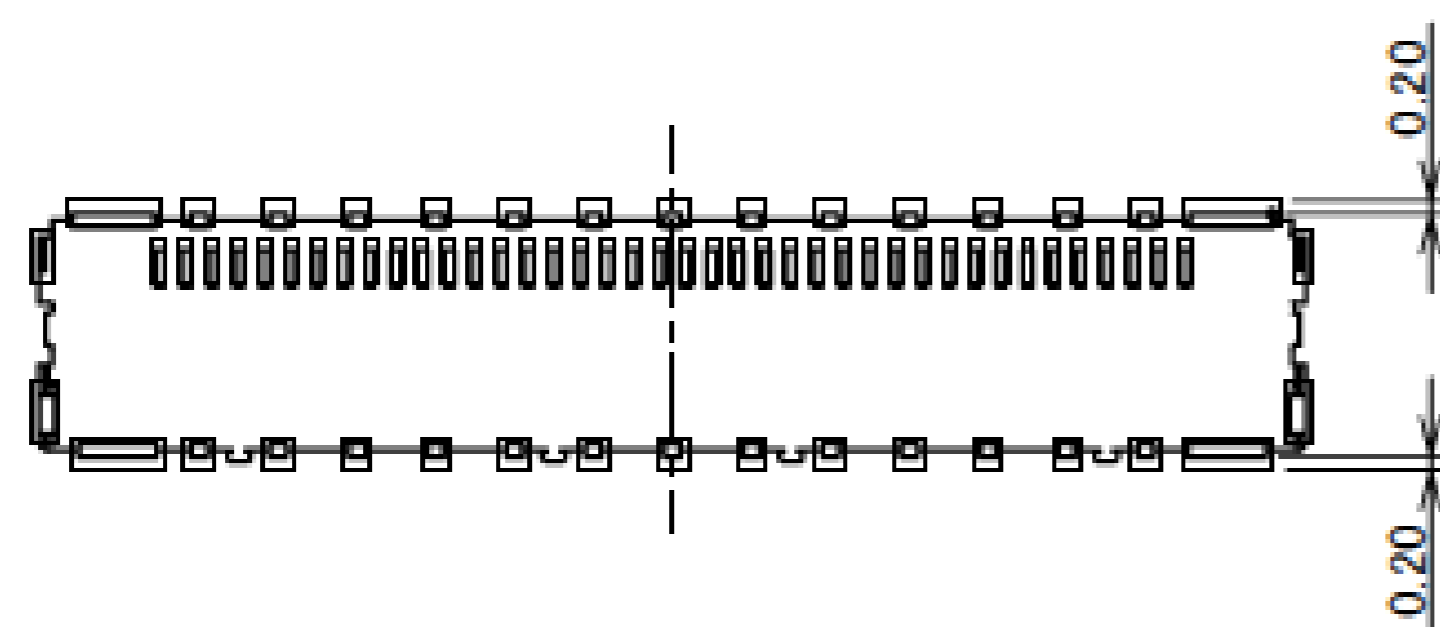
02 TYPE 50P RECOMMENDED METAL MASK LAYOUT (S = 5 : 1)
※ METAL MASK THICKNESS : t = 0.12



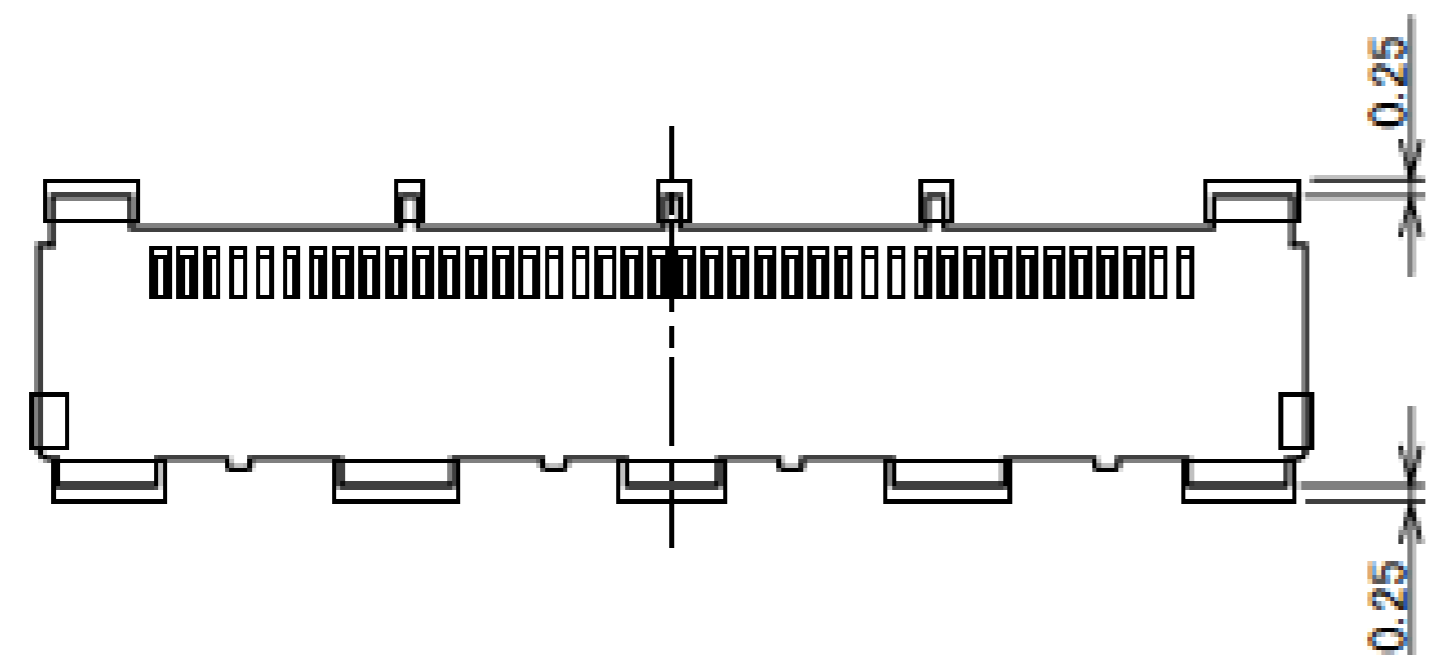
02 TYPE 60P RECOMMENDED METAL MASK LAYOUT (S = 5 : 1)
※ METAL MASK THICKNESS : t = 0.12

Rev.15

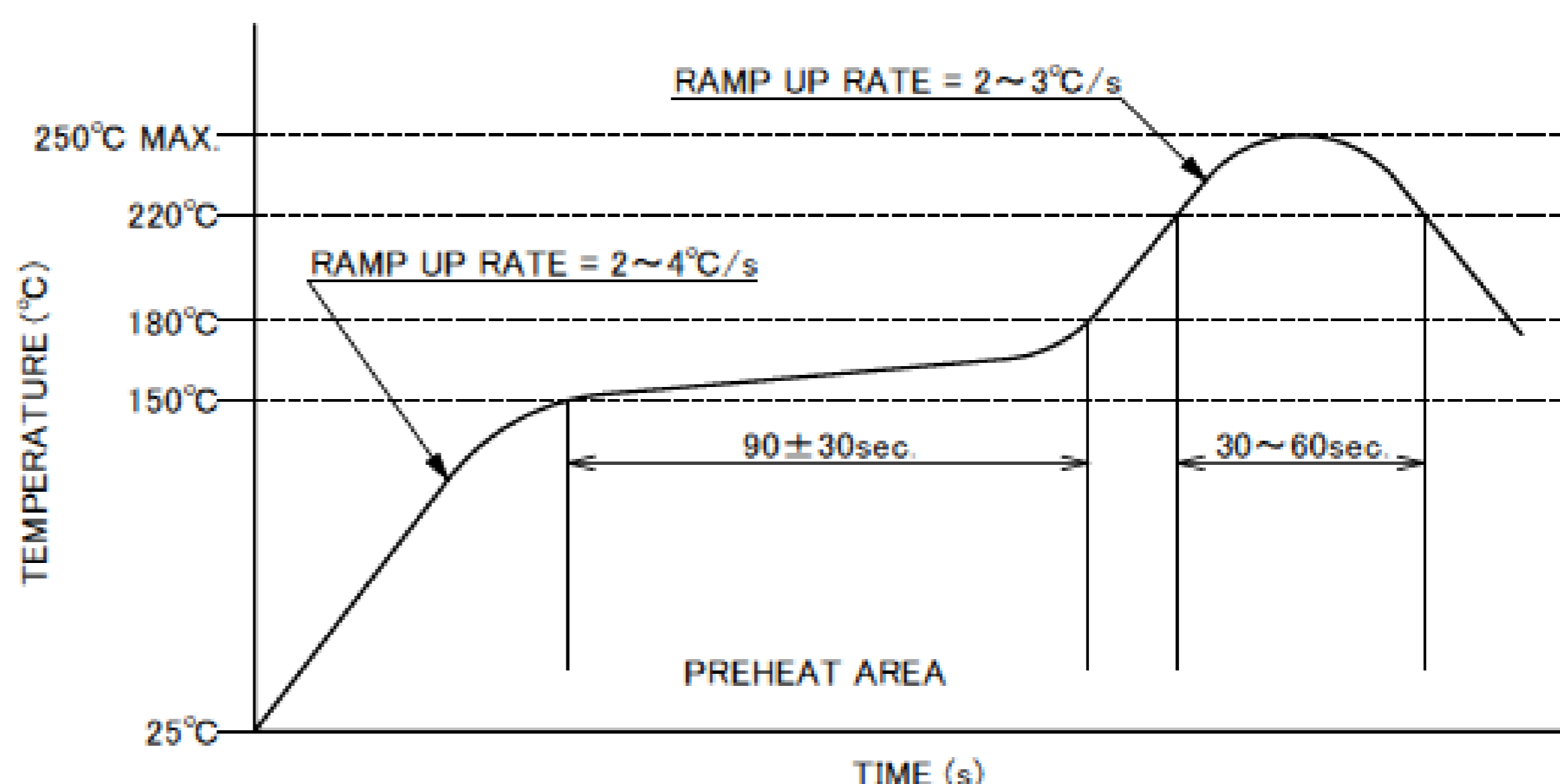
Receptacle Assembly



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN
※#1 TYPE



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN
※#2 TYPE



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

Rev.15

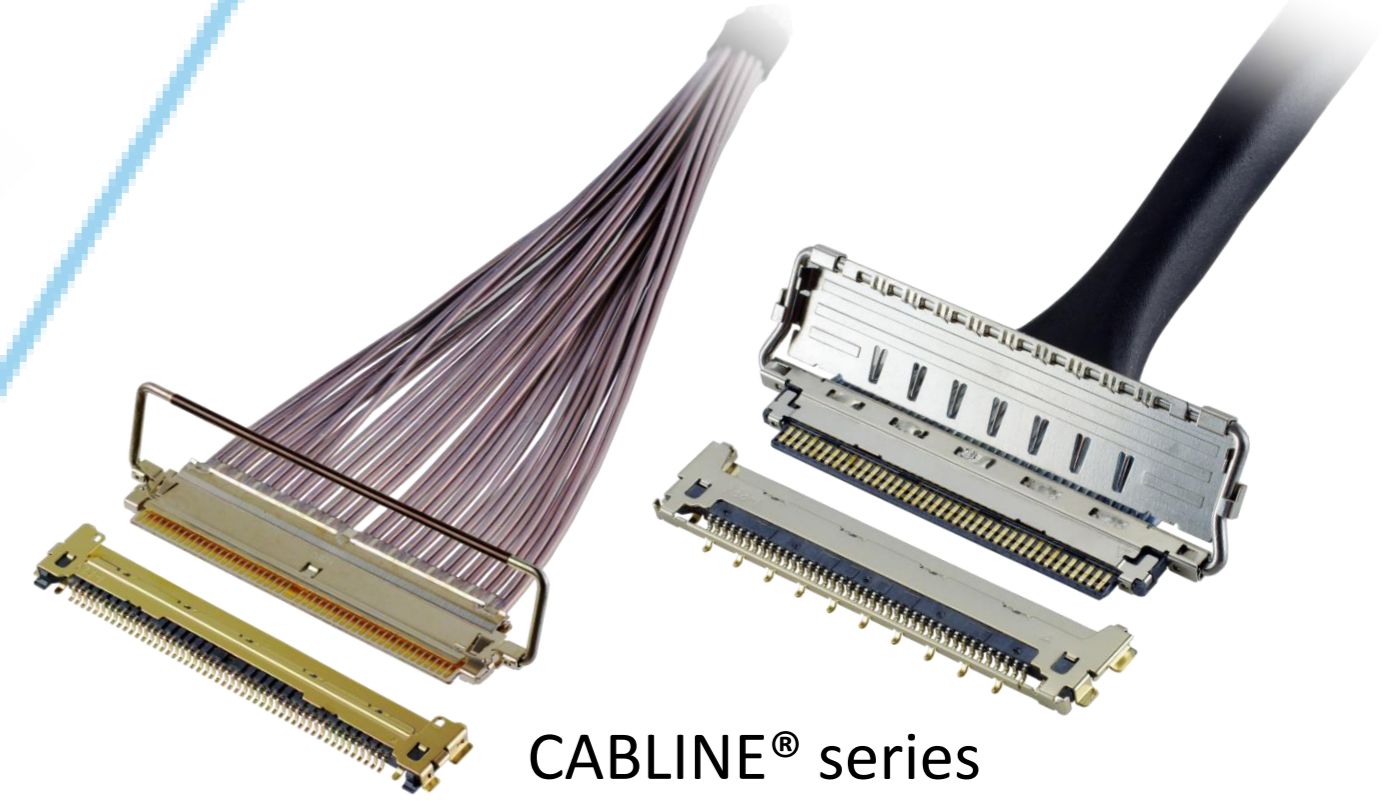
| ITEMS | SPECIFICATION |
|---------------------------------------|---|
| APPLICABLE CABLE | MICRO-COAXIAL CABLE : AWG# 44 , 42 , 40 , 38 , 36 DISCRETE WIRE : AWG# 36 , 34 TWINAX CABLE : AWG# 40 , 42 |
| RATING VOLTAGE | 100V AC (PER CONTACT PIN) ※THIS IS THE RATED VOLTAGE OF THE CONNECTOR. PLEASE NOTE THAT THE RATED VOLTAGE MAY VARY IN THE HARNESS DEPENDING ON THE CABLES USED. |
| RATING AMPERAGE (FOR CONTACT) | 0.15A AC/DC [AWG#44] PER CONTACT PIN/UP TO 60 CONTACTS 0.24A AC/DC [AWG#42] PER CONTACT PIN/UP TO 49 CONTACTS 0.3A AC/DC [AWG#40] PER CONTACT PIN/UP TO 38 CONTACTS 0.5A AC/DC [AWG#38] PER CONTACT PIN/UP TO 19 CONTACTS 0.8A AC/DC [AWG#36] PER CONTACT PIN/UP TO 12 CONTACTS 1.0A AC/DC [AWG#34] PER CONTACT PIN/UP TO 10 CONTACTS ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION. |
| OPERATING TEMPERATURE | 233~378K(-40°C~+105°C) |
| OPERATING HUMIDITY | 85% MAX. |
| CONTACT RESISTANCE | INITIAL : 180mohm MAX.(AWG#34) / AFTER TEST : ≦140mohm MAX. 275mohm MAX.(AWG#36) 360mohm MAX.(AWG#38) 600mohm MAX.(AWG#40) 700mohm MAX.(AWG#42) 1080mohm MAX.(AWG#44) |
| GROUND SHELL RESISTANCE | INITIAL : 50mohm MAX. / AFTER TEST : ≦40mohm MAX. |
| INSULATION RESISTANCE | INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN. |
| DIELECTRIC WITHSTANDING VOLTAGE | AC250V 1min |
| DURABILITY | 30 CYCLES |
| MATING FORCE (INITIAL / AFTER TEST) | 30P : 34.00N MAX. 50P : 46.00N MAX. 40P : 40.00N MAX. 60P : 52.00N MAX. |
| UNMATING FORCE (INITIAL / AFTER TEST) | 30P : 3.0N MIN. 50P : 5.0N MIN. 40P : 4.0N MIN. 60P : 6.0N MIN. |
| CABLE RETENTION FORCE | 30P : 14.70N MIN. 50P : 24.50N MIN. 40P : 19.60N MIN. 60P : 29.40N MIN. |
| COPLANARITY | 0.10 MAX. |
| PRODUCT SPECIFICATION | PRS-2514 |
| TEST REPORT | TR-18067 (PLUG:20877-0**T-0#, RECEPTACLE:20879-0**E-01) TR-18088 (PLUG:20877-0**T-0#, RECEPTACLE:20879-0**E-02) TR-24001 (PLUG:20877-0**T-0#, RECEPTACLE:20879-0**E-11) TR-24002 (PLUG:20877-0**T-1#, RECEPTACLE:20879-0**E-01) TR-24003 (PLUG:20877-0**T-1#, RECEPTACLE:20879-0**E-02) TR-24004 (PLUG:20877-0**T-1#, RECEPTACLE:20879-0**E-11) |
| PACKING STANDARD | PST-18043 |
| INSTRUCTION MANUAL | HIM-18033 |
| APPEARANCE CRITERIA No. | QLS-A*** |

Rev.15

Custom Connectors Available

 RF Connectors

MHF® series



CABLINE® series

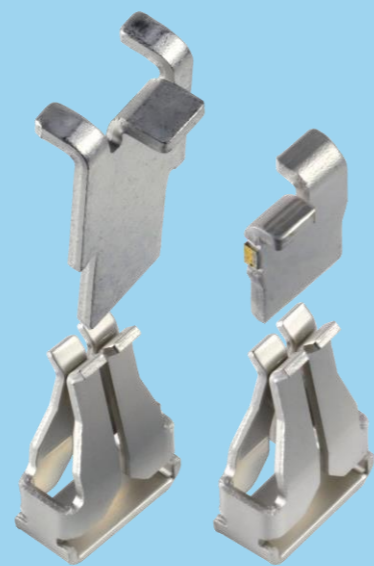


Micro-coaxial/Twinax Connectors

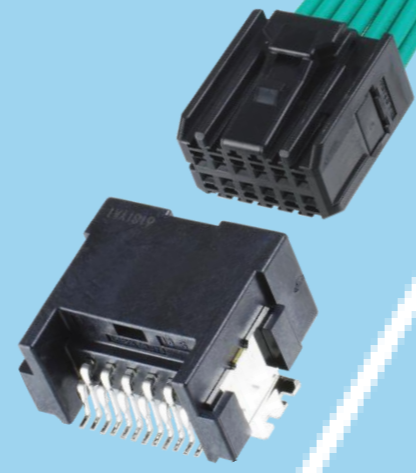


Wire-to-Board Connectors/Terminals

AP series



ISH® series



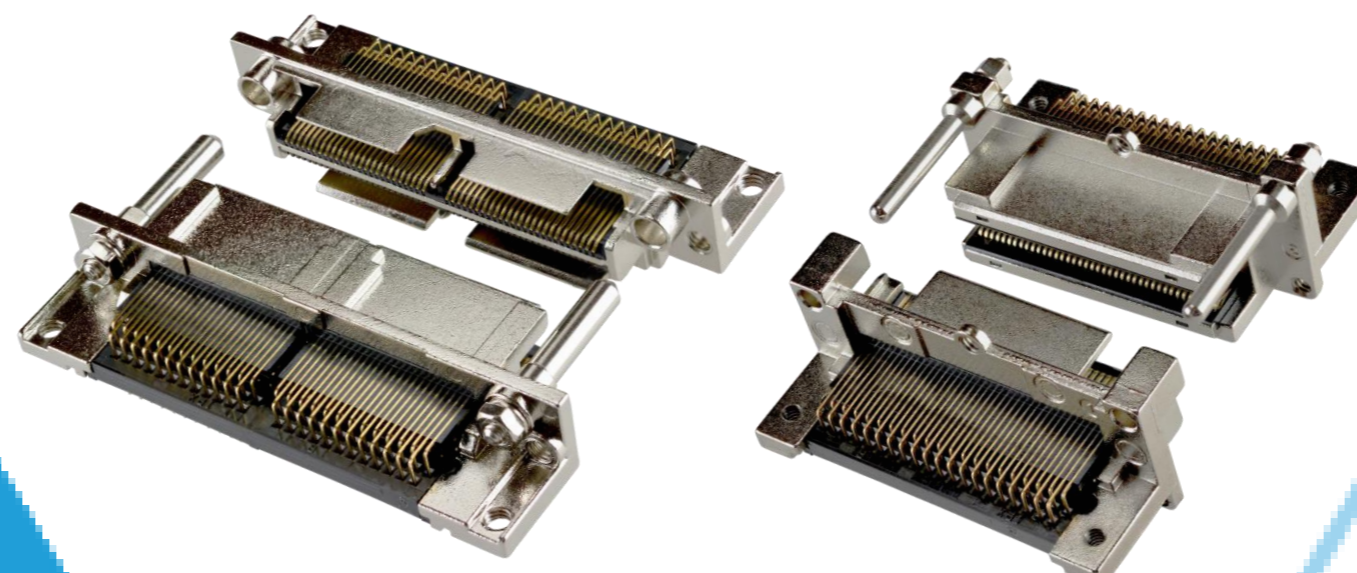
NOVASTACK® series



Board-to-Board Connectors



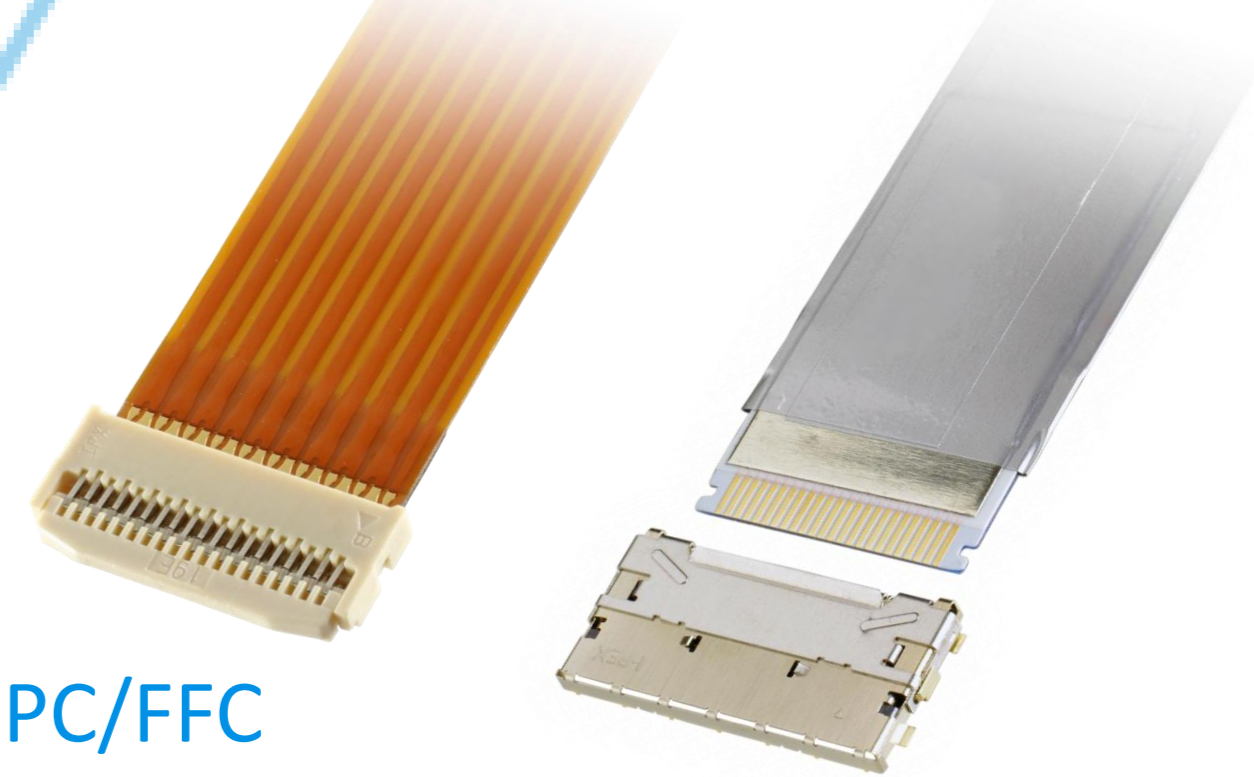
I/O Connectors



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



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