

CABLINE®-CX II With Cover

狭ピッチ(0.25 mmピッチ)、低背(高さ = 1.0 mm max.)、シールドカバー&多点グラウンド接点、水平嵌合タイプ細線同軸コネクタ

Product Specifications:

| | | |
|--------------------|------------|---------------------------|
| Mating type | Horizontal | |
| Board Pitch (mm) | 0.5 | |
| Wiping Length (mm) | 0.54 | |
| Mated size (mm) | Height | 1.0 max. with cover |
| | Width | Formula: 6.45 + (0.25*?p) |
| | Depth | 5.6 |
| Pin Counts | Range | Up to 40 |
| | Available | 40 |

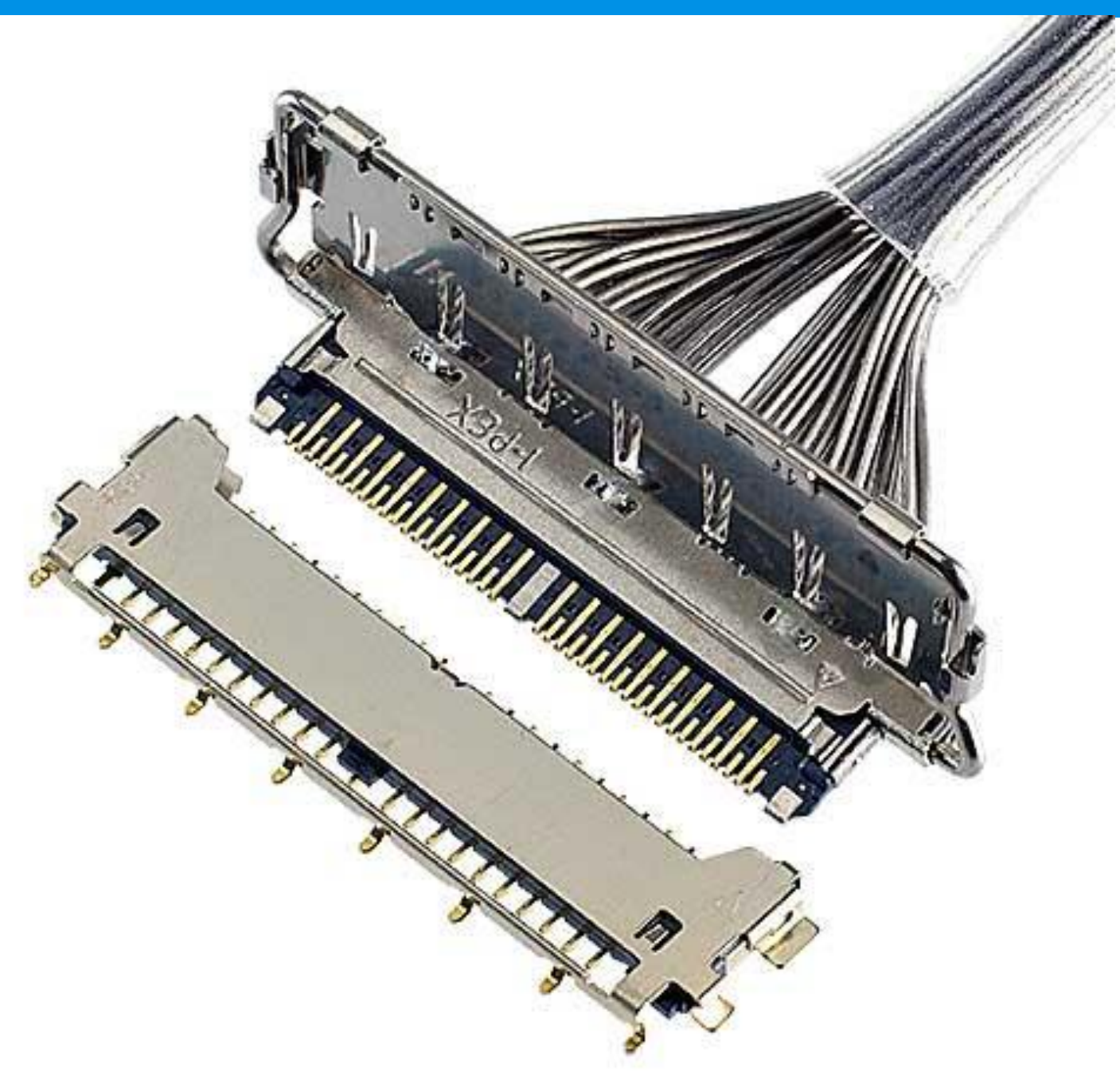
Applicable Cable Size:

| | |
|--------------------------------|--|
| Maximum O.D. (mm) | 0.25 |
| Micro-Coaxial for Signal (AWG) | 45 ohm: #44 or smaller 50 ohm: #46 or smaller |
| Twinax (AWG) | - |
| Discrete (AWG) | #39 or smaller |

Applicable Standards (Reference Only):

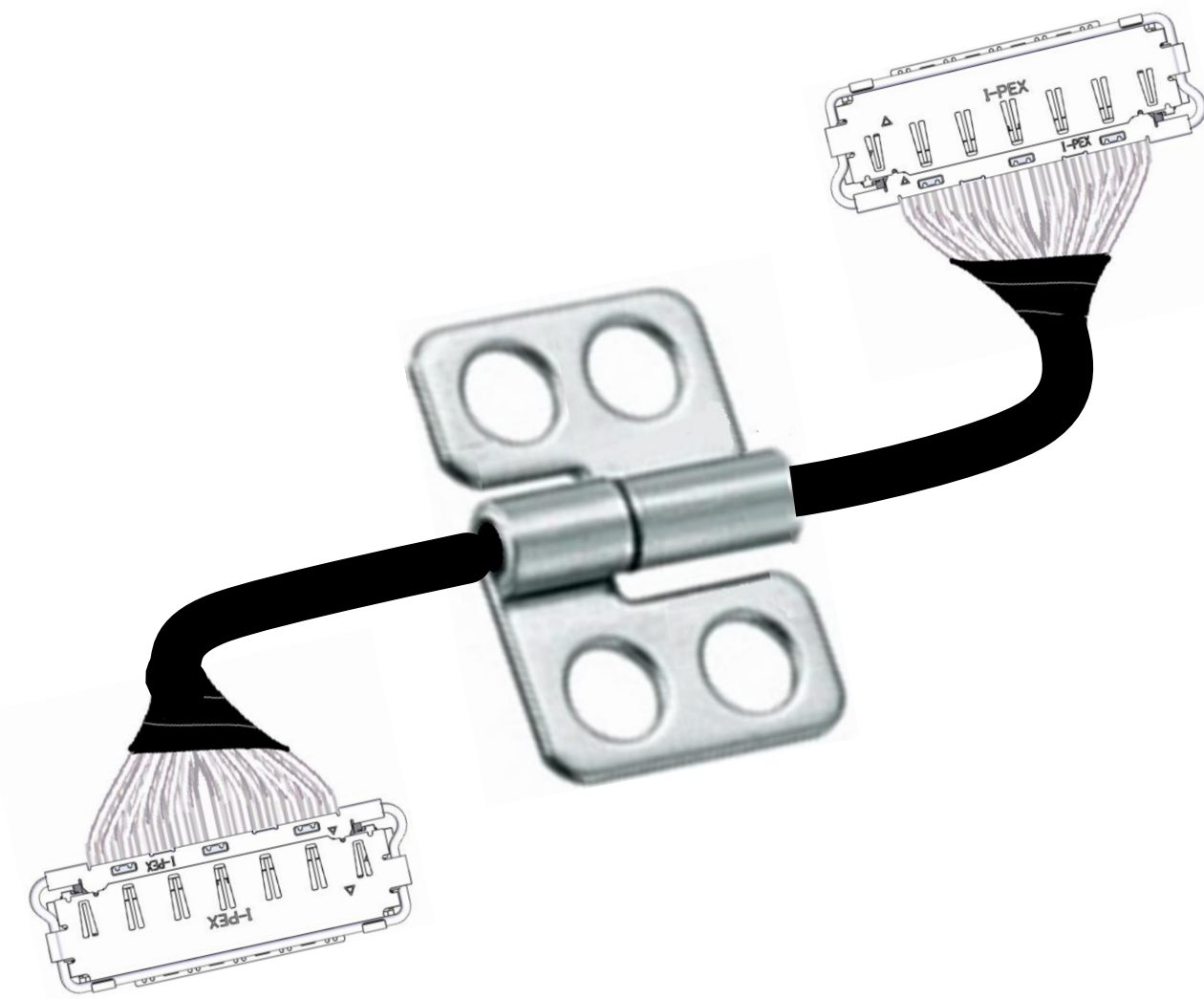
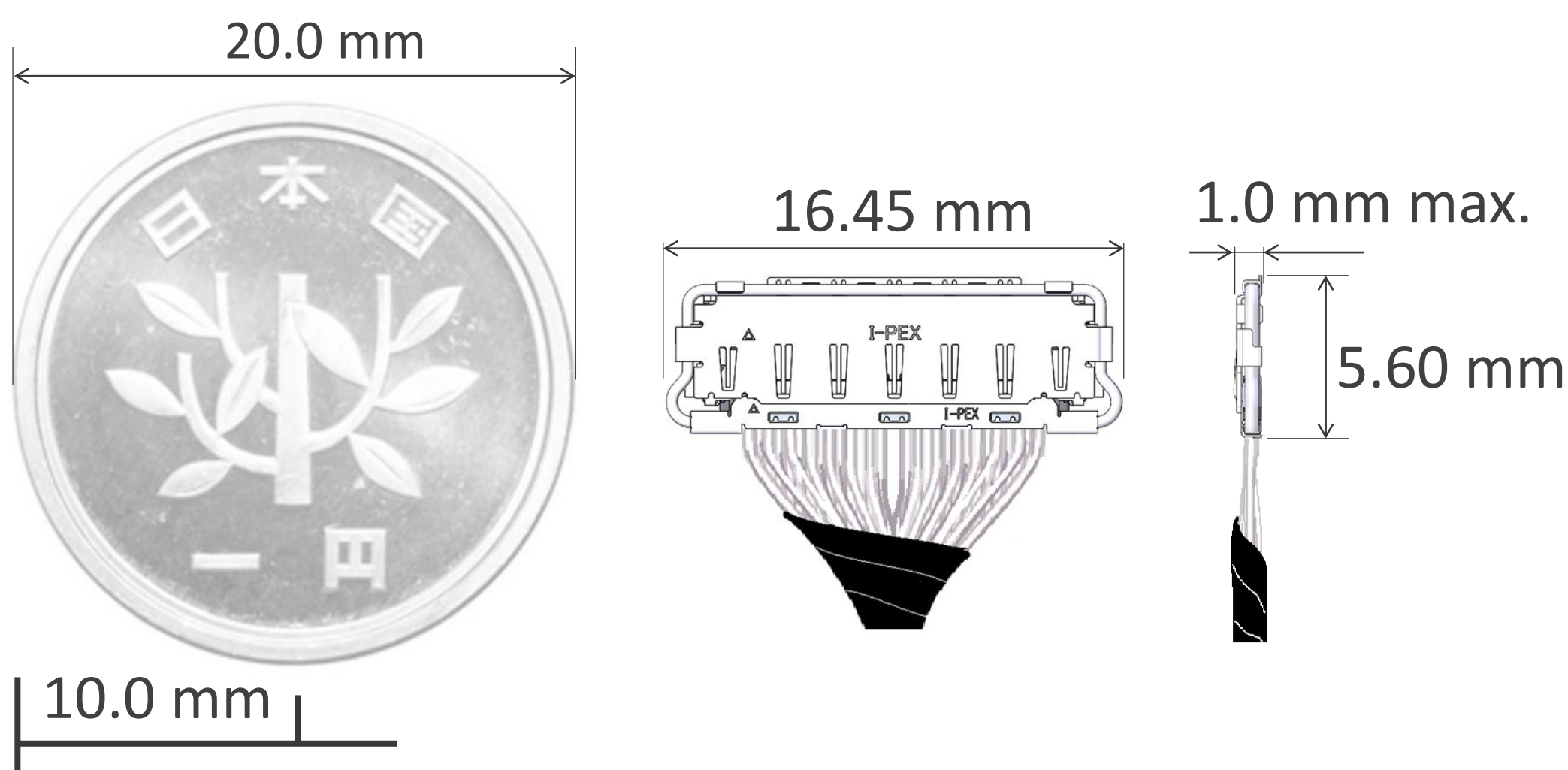
USB 3.1 Gen 1 (5 Gbps), V-By-One HS 1.4 (4 Gbps), HDMI 1.3 (3.4 Gbps) Gbps

*記載のない極数の対応状況についてはお問い合わせください。
CABLINE®-CX II Without Cover タイプ (嵌合高さ: 最大 0.78 mm) もございます。



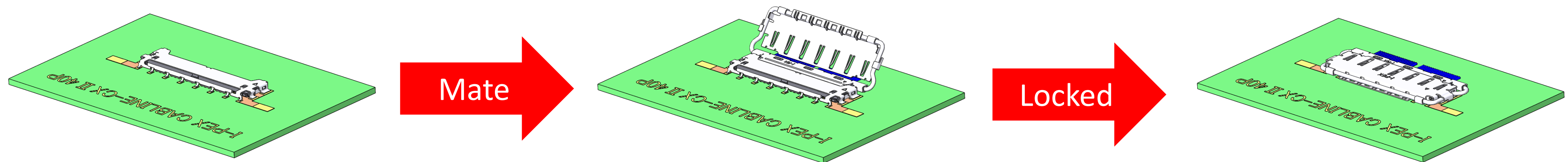
▶ 狭小スペースに最適

CABLINE-CX II 40p と 1円硬貨のサイズ比較
嵌合高さ: 1.0mm max.

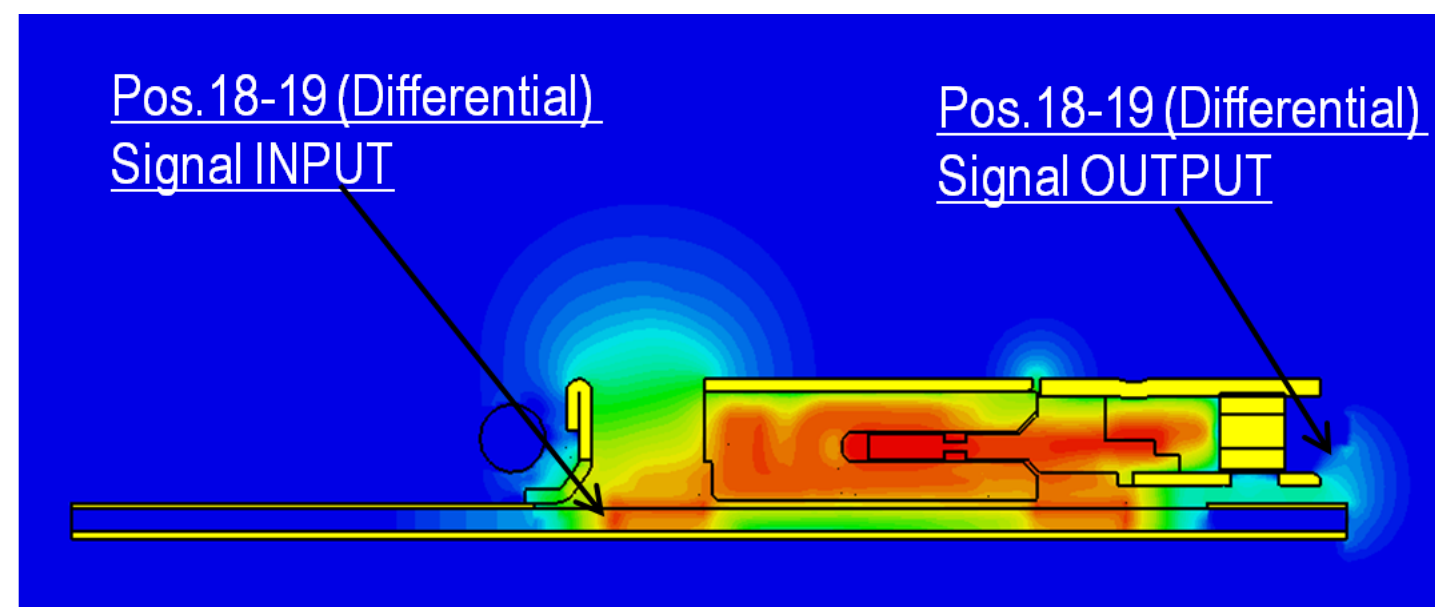
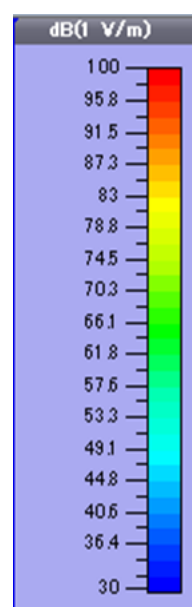


柔軟な細線同軸ケーブルハーネスは
ヒンジのある小型アプリケーションに適応

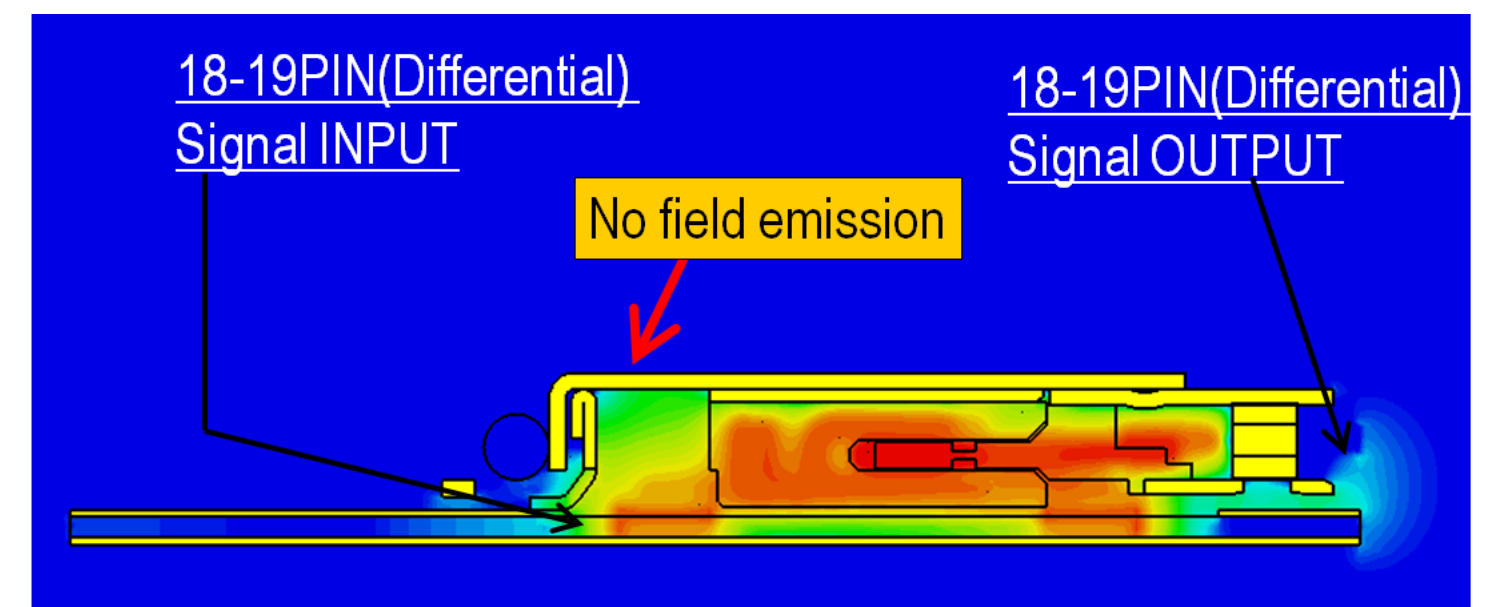
▶ メカニカルロックカバーによるシールド構造のEMI対策



EMIシミュレーション
(2.4GHz)

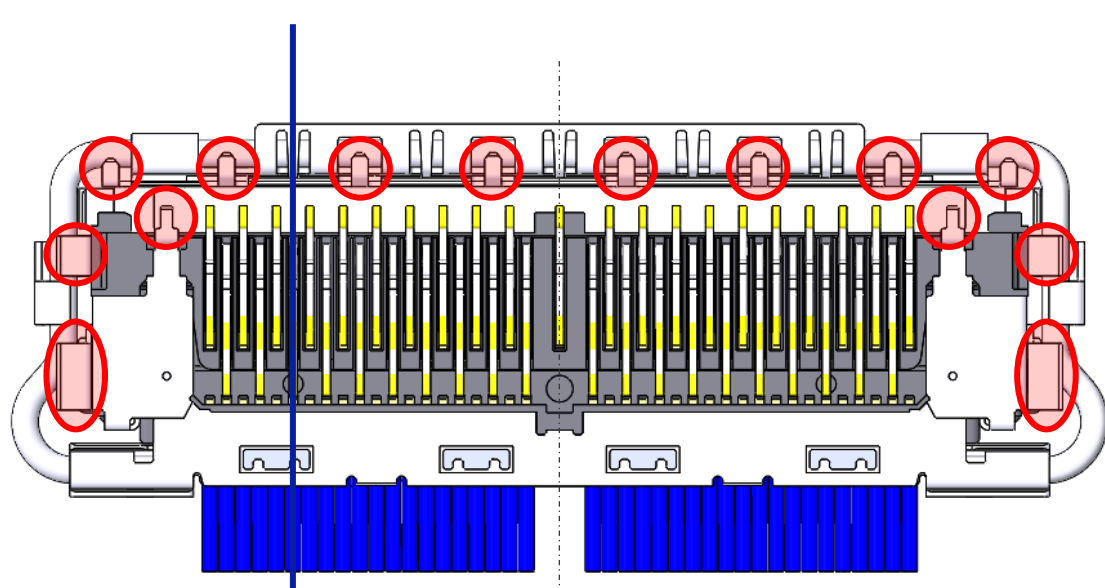


EMIカバーなし

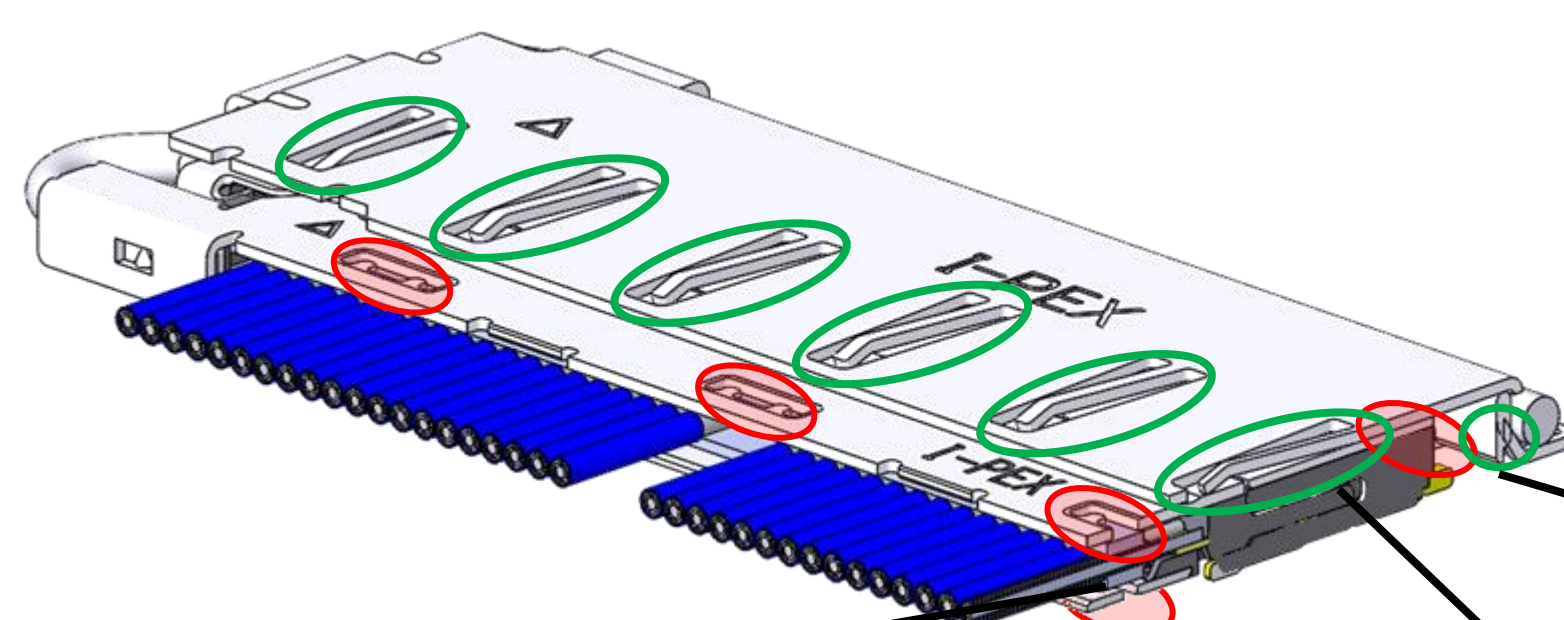


EMIカバーあり

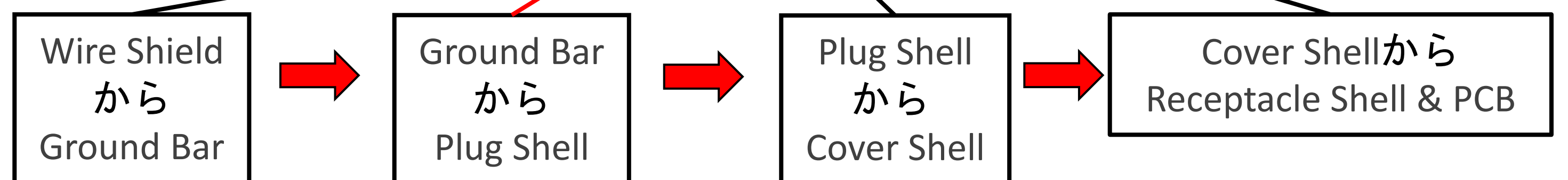
▶ EMIシールドと多点グラウンド接点設計



下から見たコネクタ

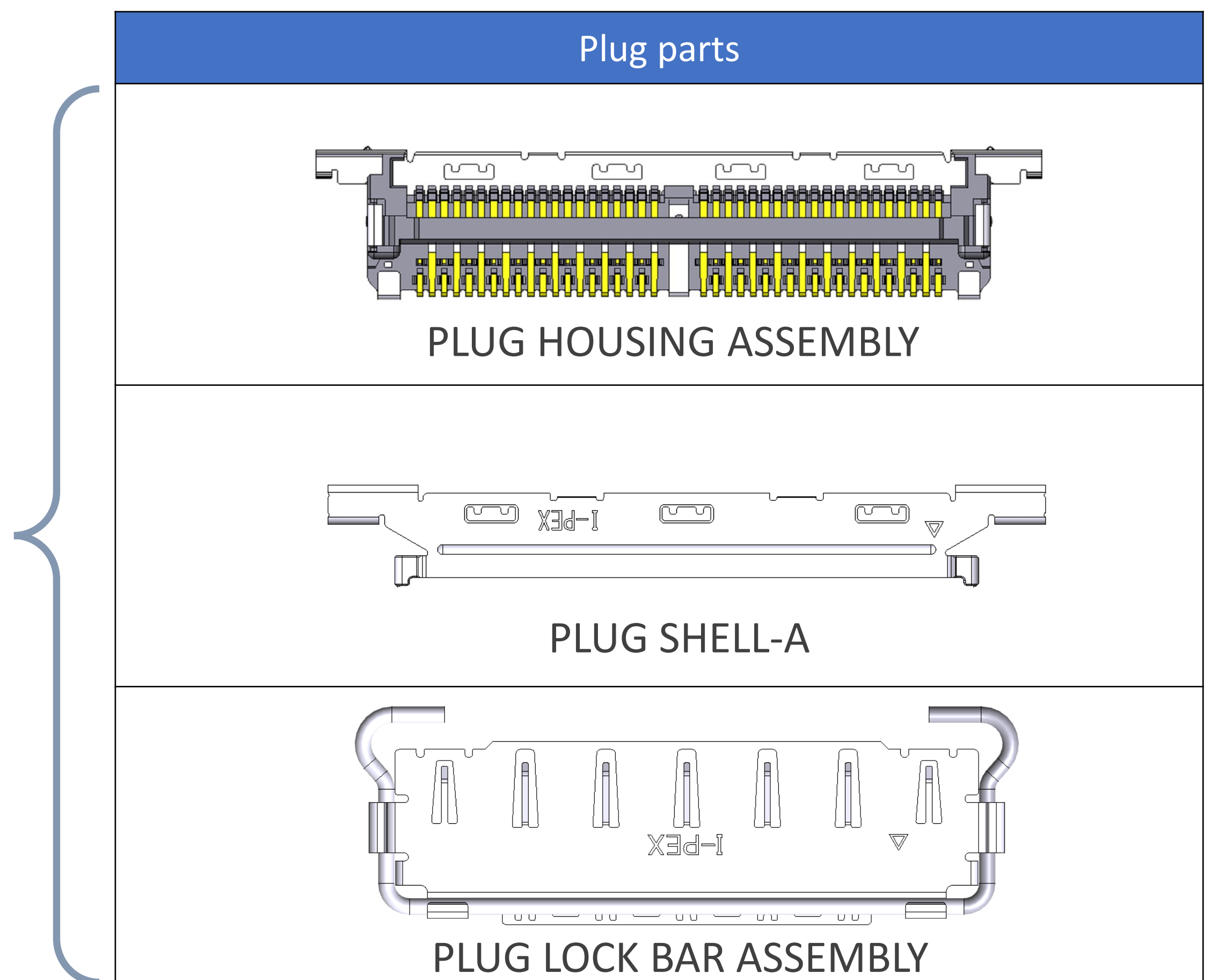
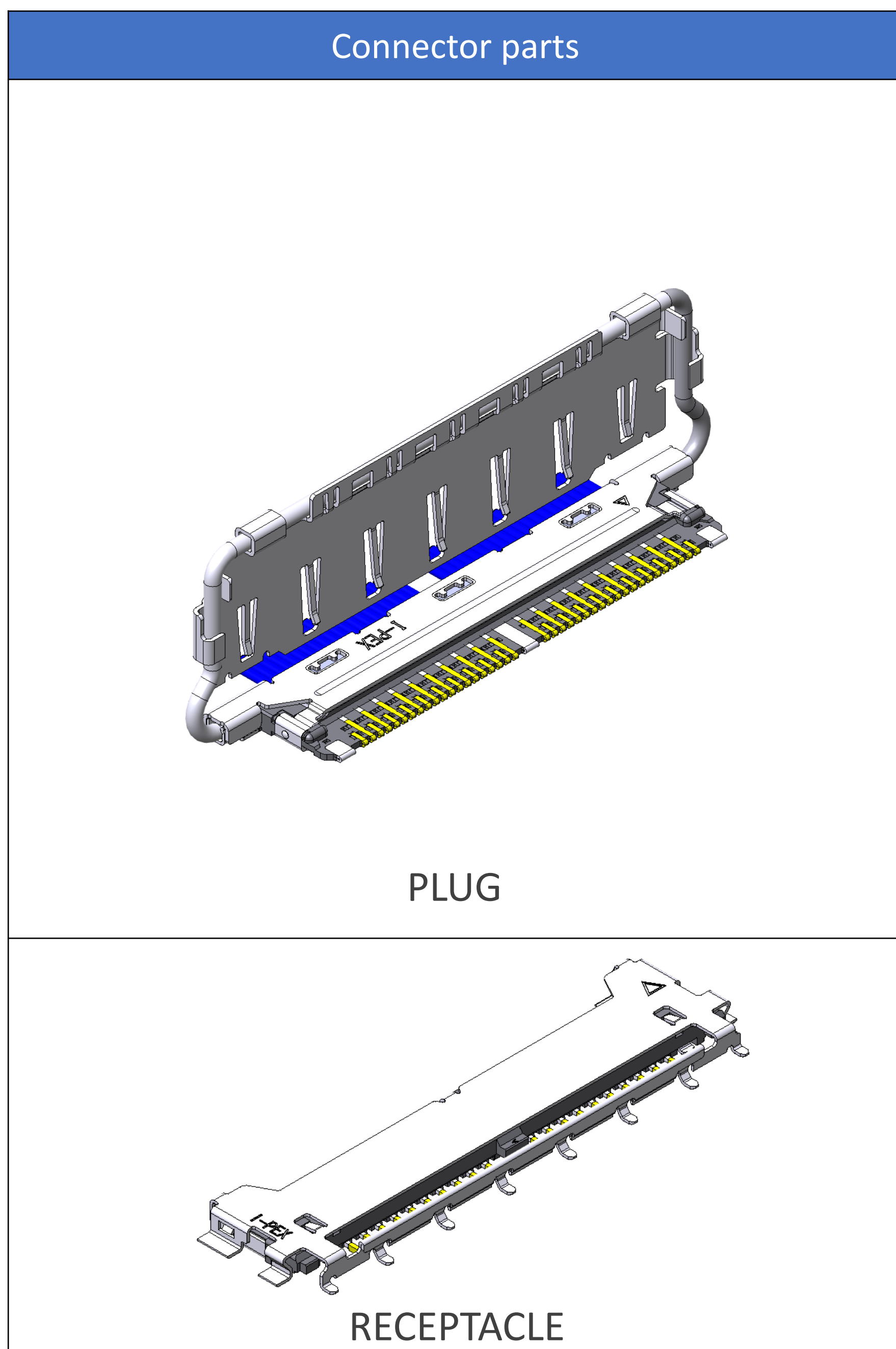


○ はんだ付け接点部
○ メカニカル接点部



Component Parts Details

Component Parts

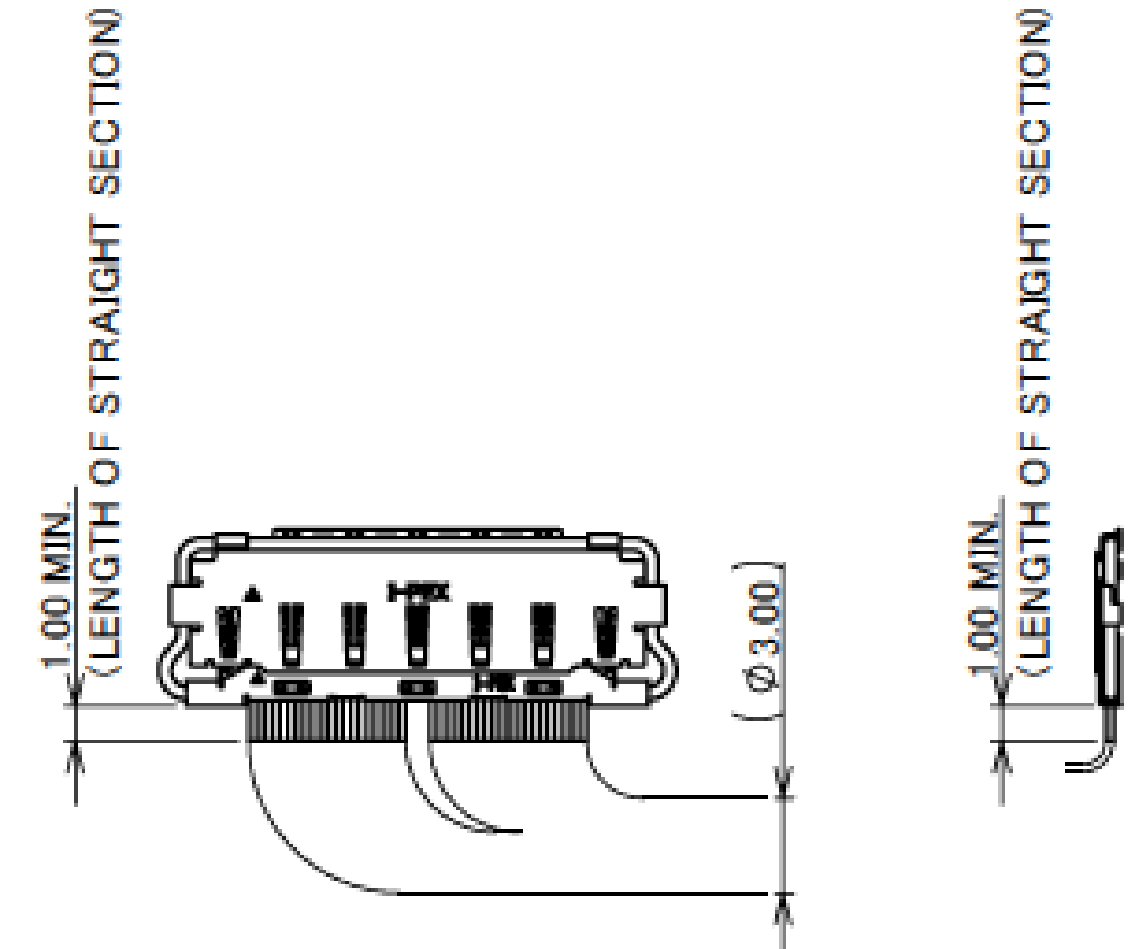
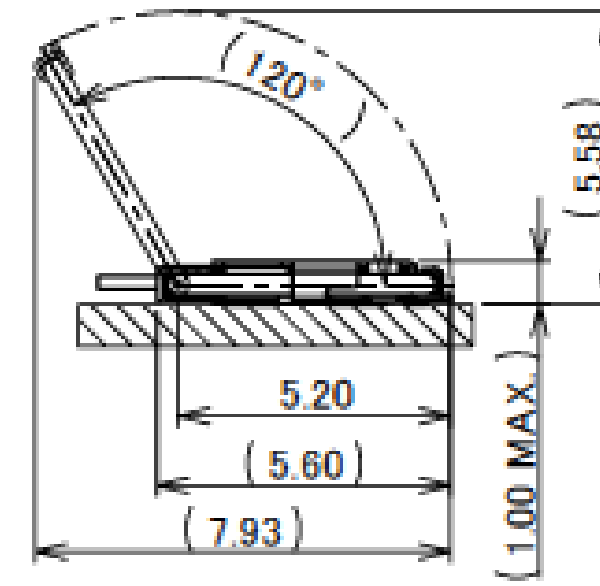
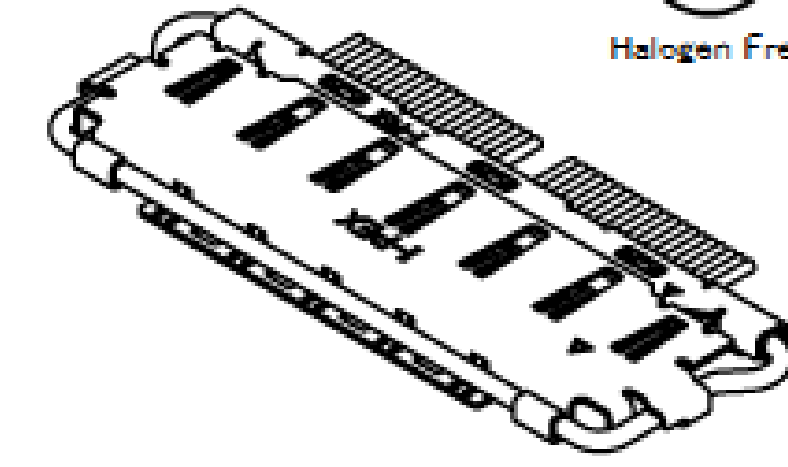
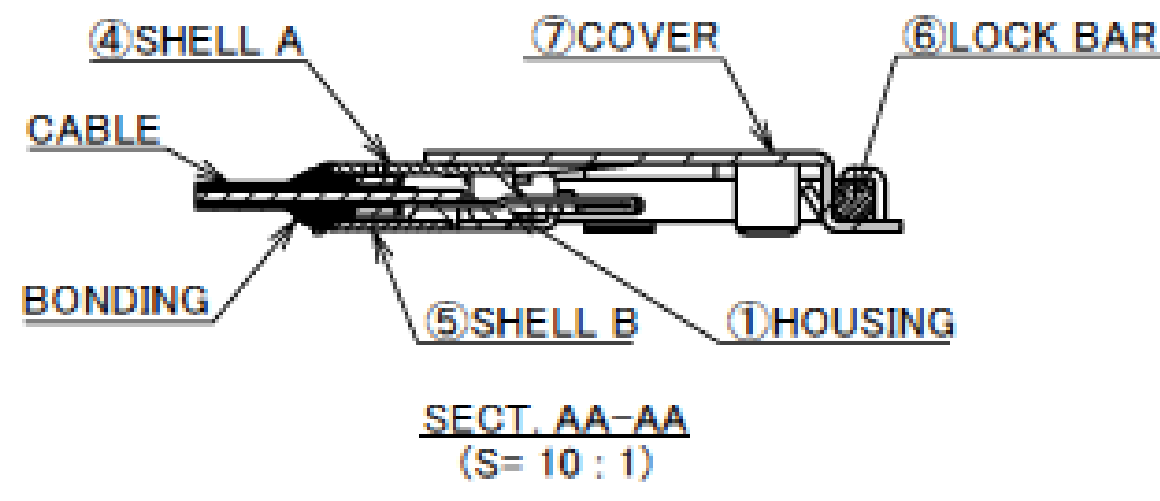
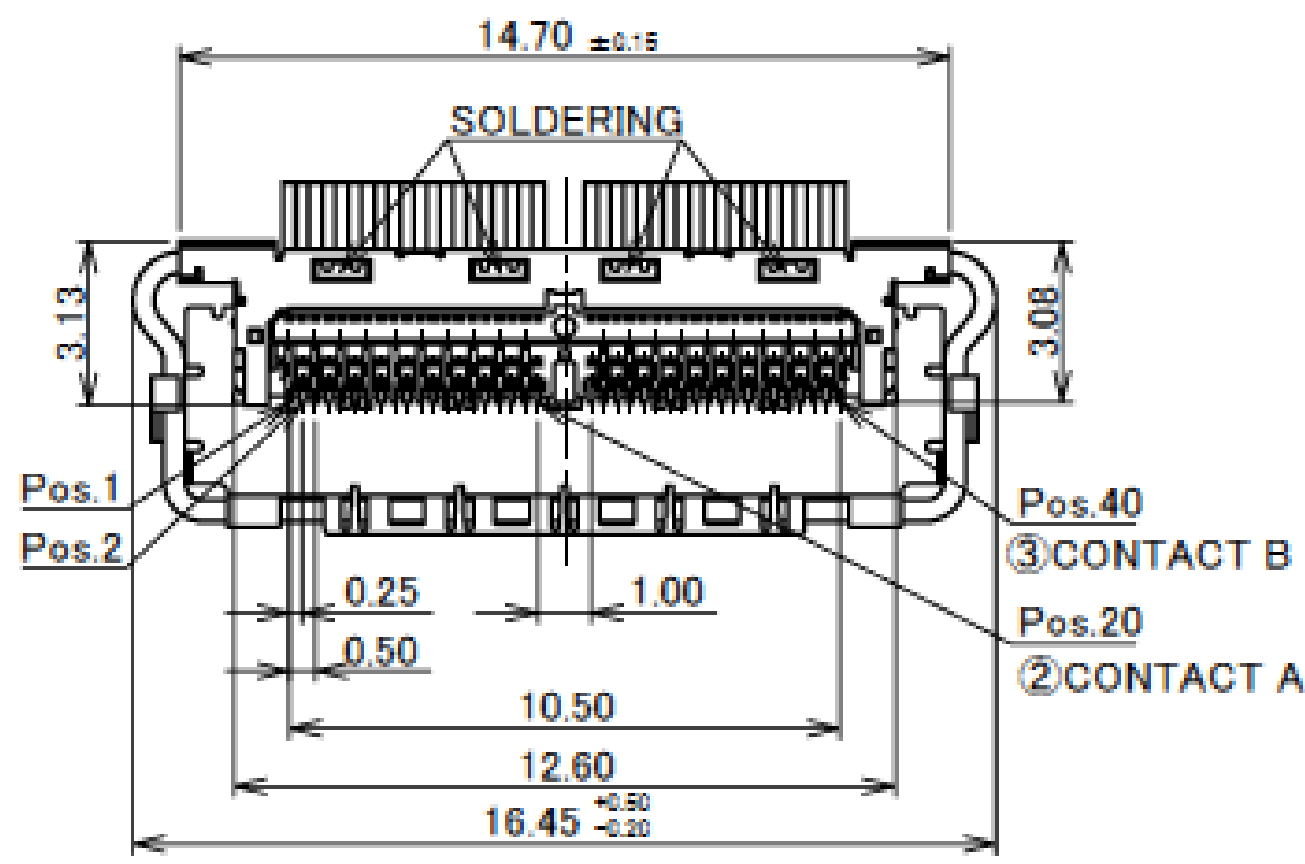


Plug for Cable Assembly

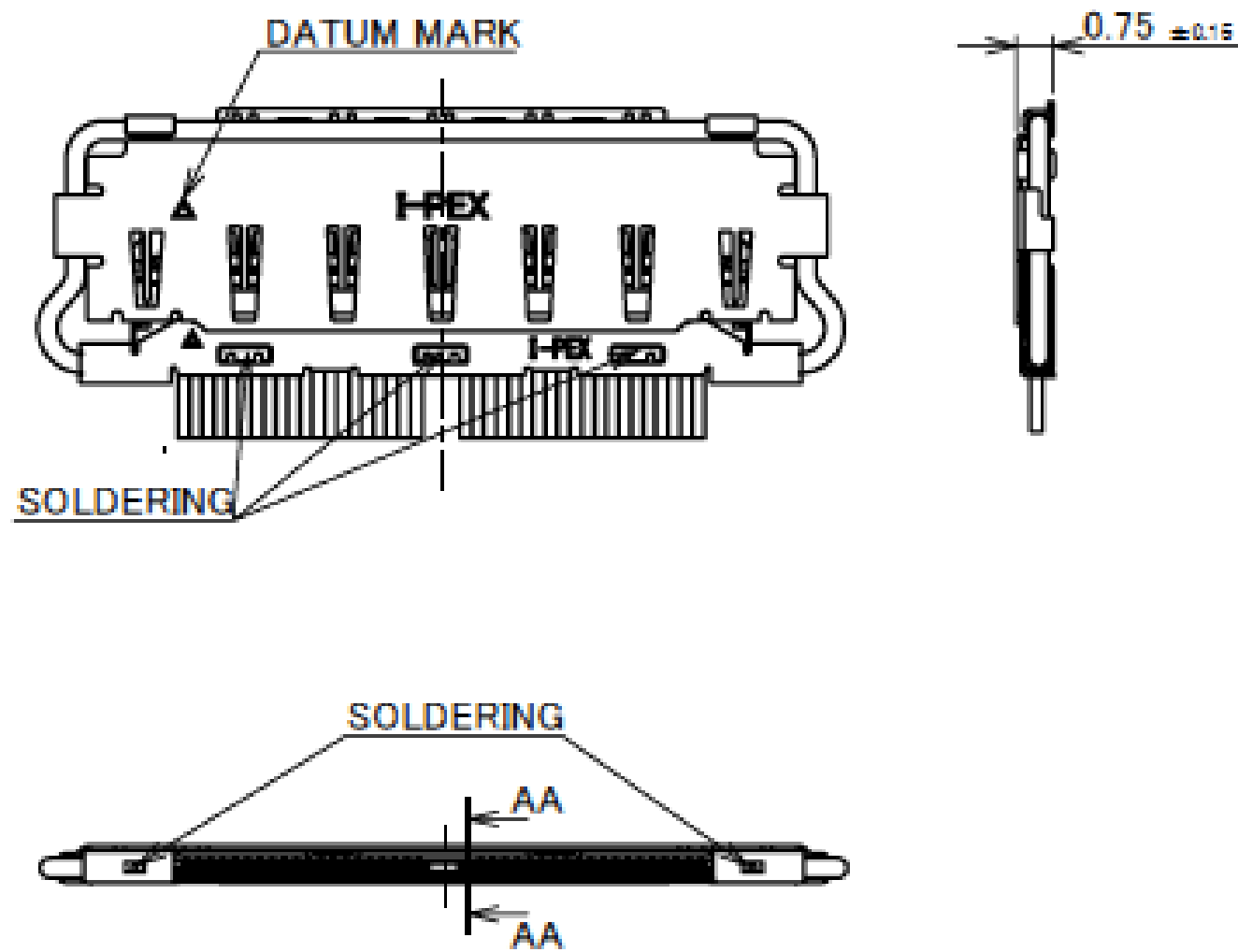
| | | |
|-----------------|------|---------------|
| Recommended P/N | | 20977-040T-01 |
| PART NO. | Pos. | |
| 20977-040T-01 | 40 | |



BOTTOM VIEW

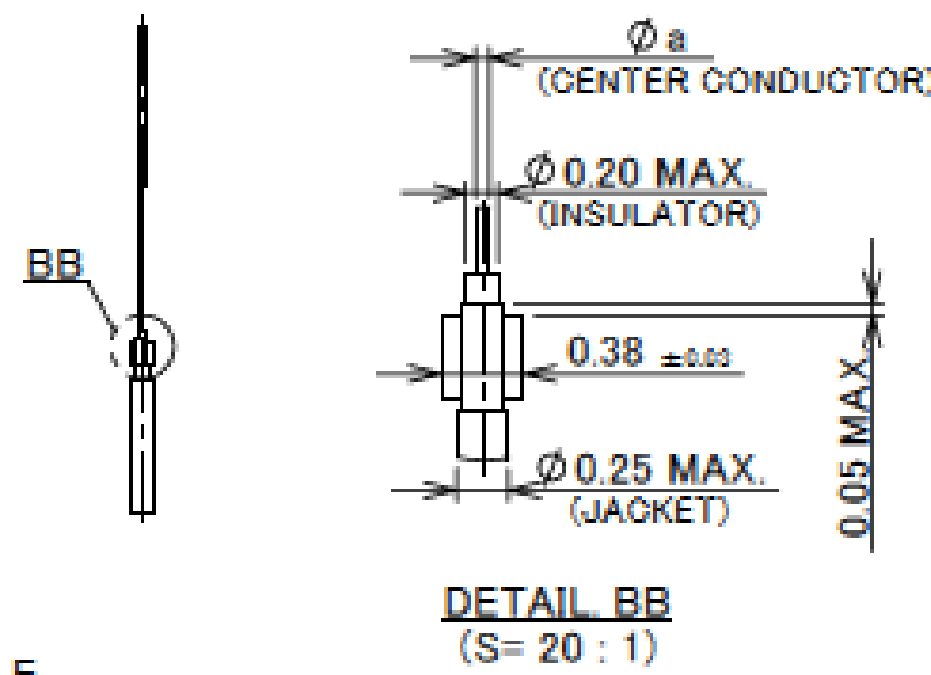
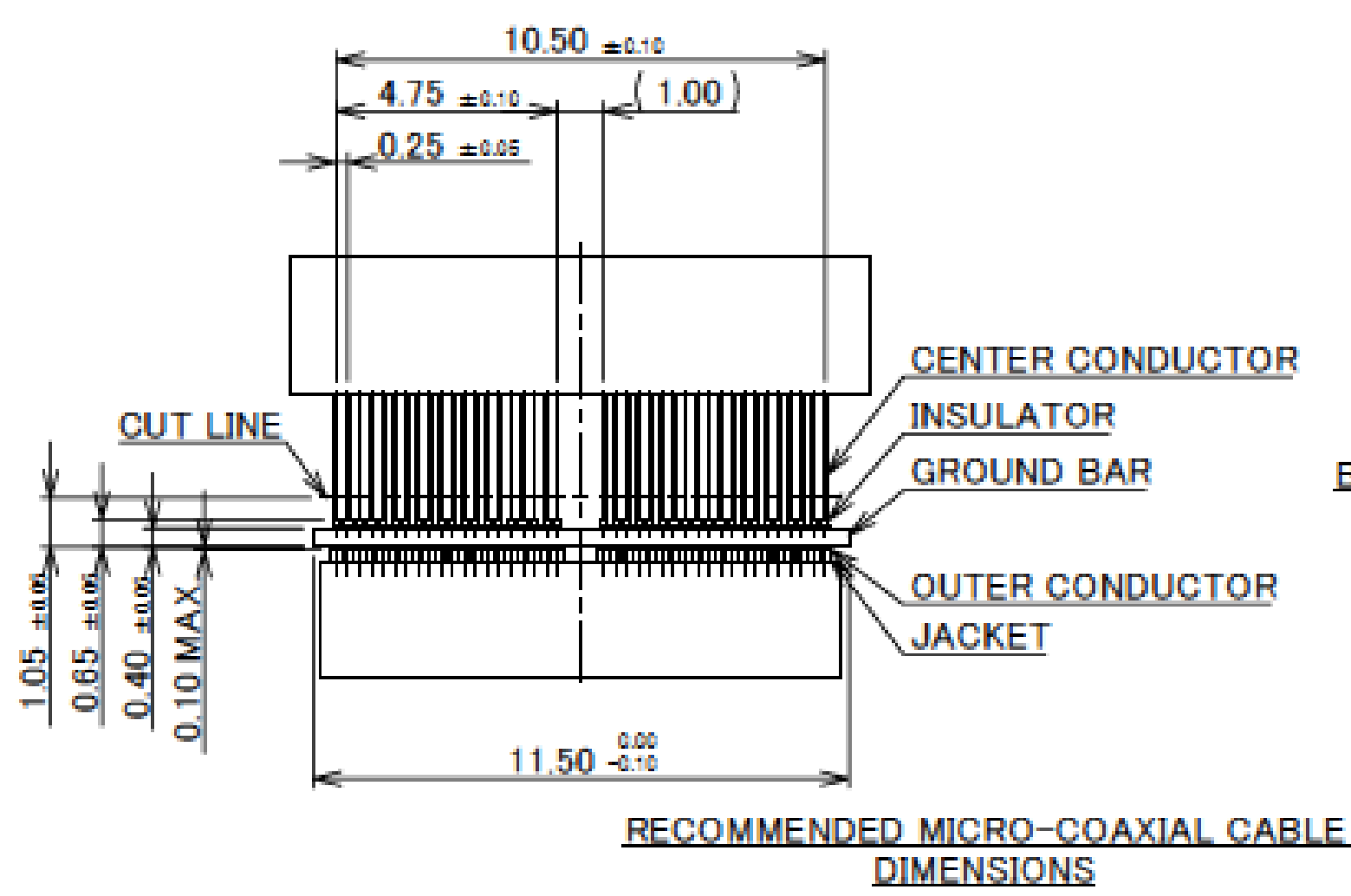


TOP VIEW



| NO. | DISCRIPTION | MATERIAL | FINISH, REMARKS |
|-----|-------------|-----------------|---|
| 7 | COVER | PHOSPHOR BRONZE | ALL OVER Ni 1.00 μm MIN. |
| 6 | LOCK BAR | SUS | - |
| 5 | SHELL B | SUS | PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN. |
| 4 | SHELL A | SUS | PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN. |
| 3 | CONTACT B | CORSON ALLOY | CONTACT AREA : Au 0.25 μm MIN. OVER Ni 2.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN. |
| 2 | CONTACT A | CORSON ALLOY | CONTACT AREA : Au 0.25 μm MIN. OVER Ni 2.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN. |
| 1 | HOUSING | LCP | UL94V-0, BLACK |

Rev.2



CHARACTERISTIC IMPEDANCE MATCHING MICRO-COAXIAL CABLE

| | a |
|-----|-------|
| #44 | 0.063 |
| #46 | 0.048 |

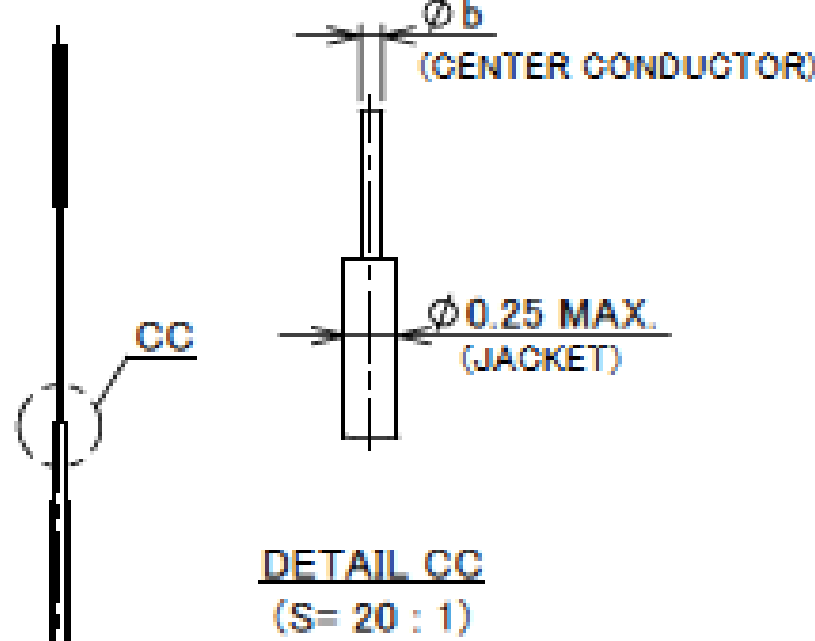
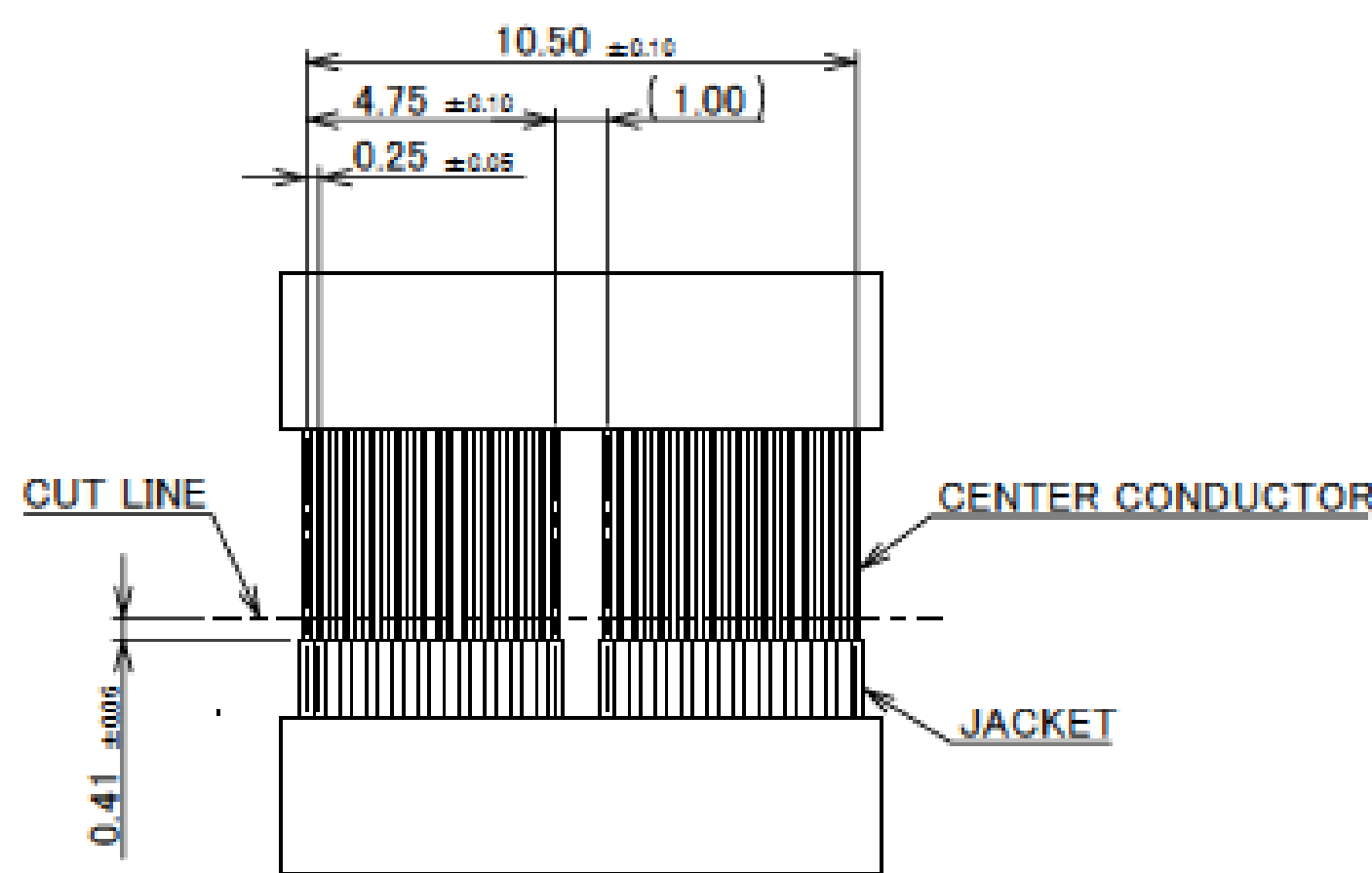
CHARACTERISTIC IMPEDANCE UN-MATCHING MICRO-COAXIAL CABLE

| | a |
|-----|-------|
| #39 | 0.102 |

MICRO-COAXIAL CABLE #39 : NOT RECOMMENDED FOR HIGH SPEED SIGNAL TRANSFER

DISCRETE WIRE DIMENSION

| | b |
|-----|-------|
| #39 | 0.102 |



Rev.2

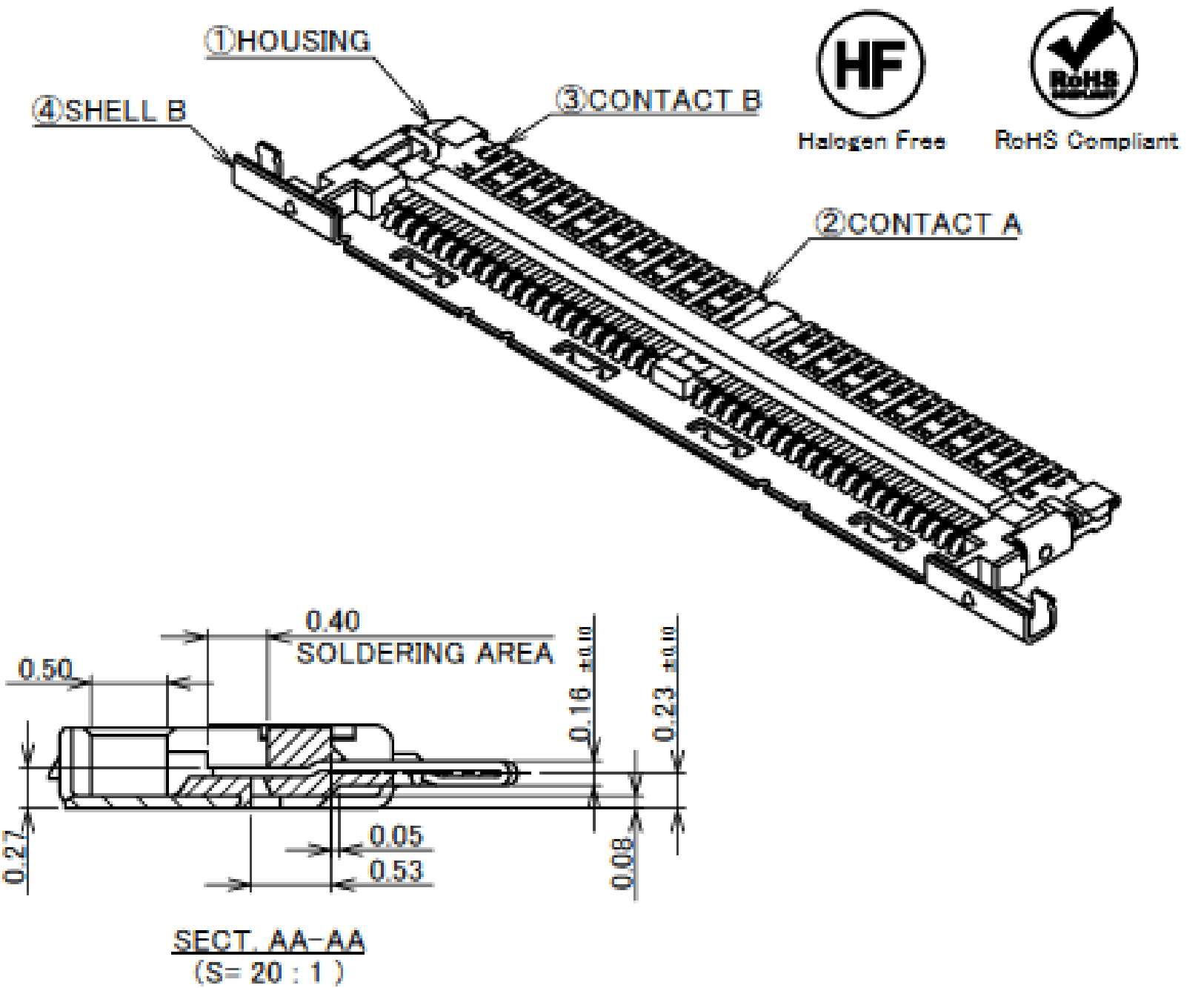
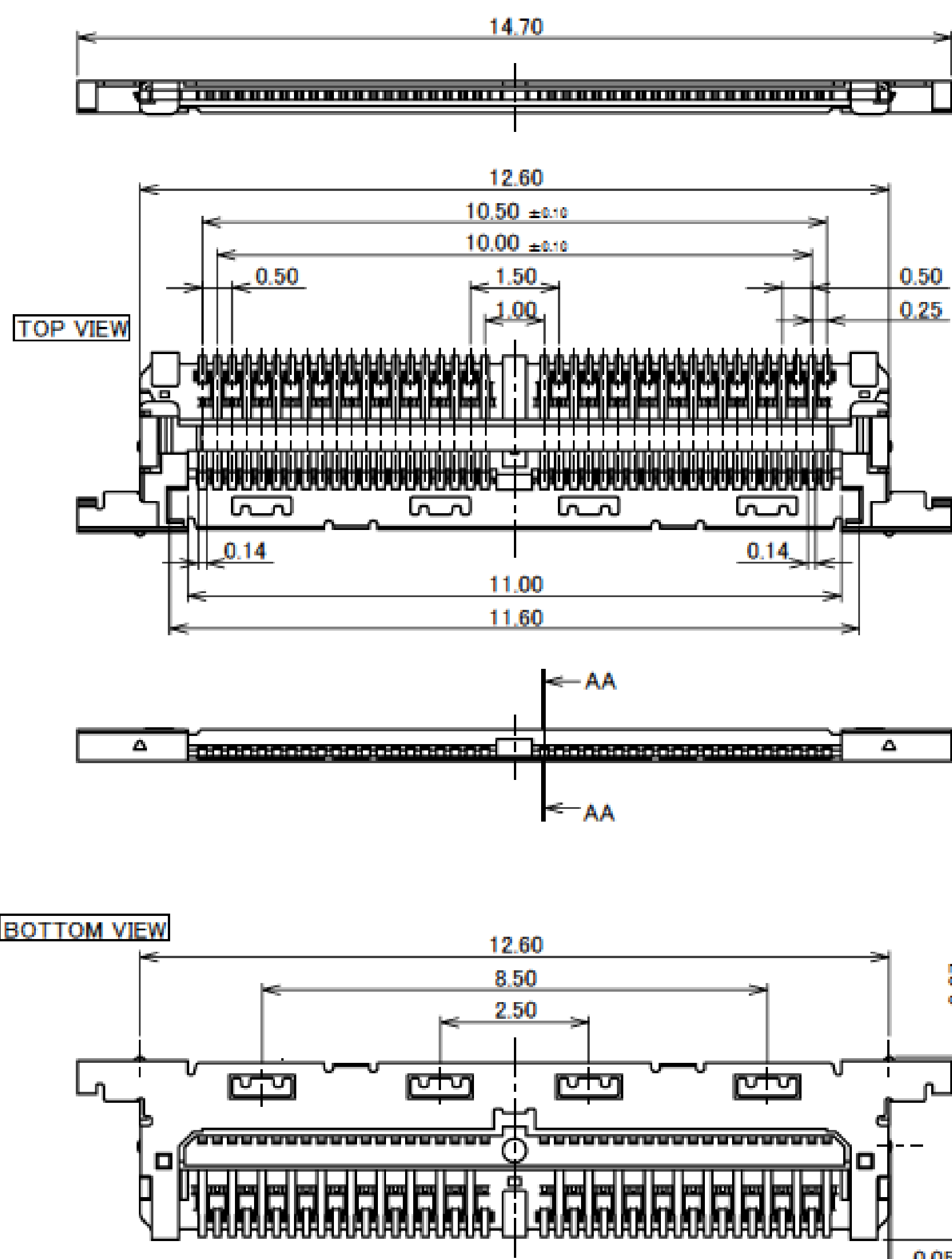
Plug for Cable Assembly

| ITEMS | SPECIFICATION |
|--------------------------------------|---|
| APPLICABLE CABLE | MICRO-COAXIAL CABLE : AWG# 46,44,39 DISCRETE WIRE : AWG# 39 |
| RATING VOLTAGE | 100V AC (PER CONTACT PIN) |
| RATING AMPERAGE (FOR CONTACT) | 0.10A AC/DC [AWG#46] PER CONTACT PIN/UP TO 40 CONTACTS 0.15A AC/DC [AWG#44] PER CONTACT PIN/UP TO 40 CONTACTS 0.50A AC/DC [AWG#39] PER CONTACT PIN/UP TO 8 CONTACTS ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION |
| OPERATING TEMPERATURE | 233~358K(-40℃~+85℃) (CONTAINING TEMPERATURE RISE BY CURRENT) |
| OPERATING HUMIDITY | 85% MAX.(NON-CONDENSING) |
| CONTACT RESISTANCE | INITIAL : 388mohm MAX.(AWG#39) / AFTER TEST : \triangle 40mohm MAX. INITIAL : 1,080mohm MAX.(AWG#44) INITIAL : 1,830mohm MAX.(AWG#46) |
| GROUND SHELL RESISTANCE | INITIAL : 50mohm MAX. / AFTER TEST : \triangle 40mohm MAX. |
| INSULATION RESISTANCE | INITIAL : 1,000Mohm MIN. / AFTER TEST : 500Mohm MIN. |
| DIELECTRIC WITHSTANDING VOLTAGE | AC250V 1min |
| DURABILITY | 20 CYCLES |
| MATING FORCE (INITIAL / 20 CYCLES) | 40P : 30.0N MAX. |
| UNMATING FORCE (INITIAL / 20 CYCLES) | 40P : 4.0N MIN. |
| CABLE RETENTION FORCE | 40P : 19.60N MIN. |
| PRODUCT SPECIFICATION | PRS-2403 |
| TEST REPORT | TR-17063 |
| INSTRUCTION MANUAL | HIM-17035 |
| ASSEMBLY MANUAL | ASM-17008 |
| APPEARANCE CRITERIA No. | QLS-A*** |

Rev.2

Plug Housing Assembly

| | |
|-----------------|---------------|
| Recommended P/N | 20974-040T-01 |
| PART NO. | Pos. |
| 20974-040T-01 | 40 |



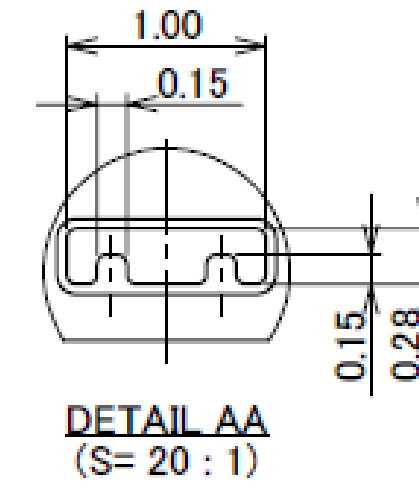
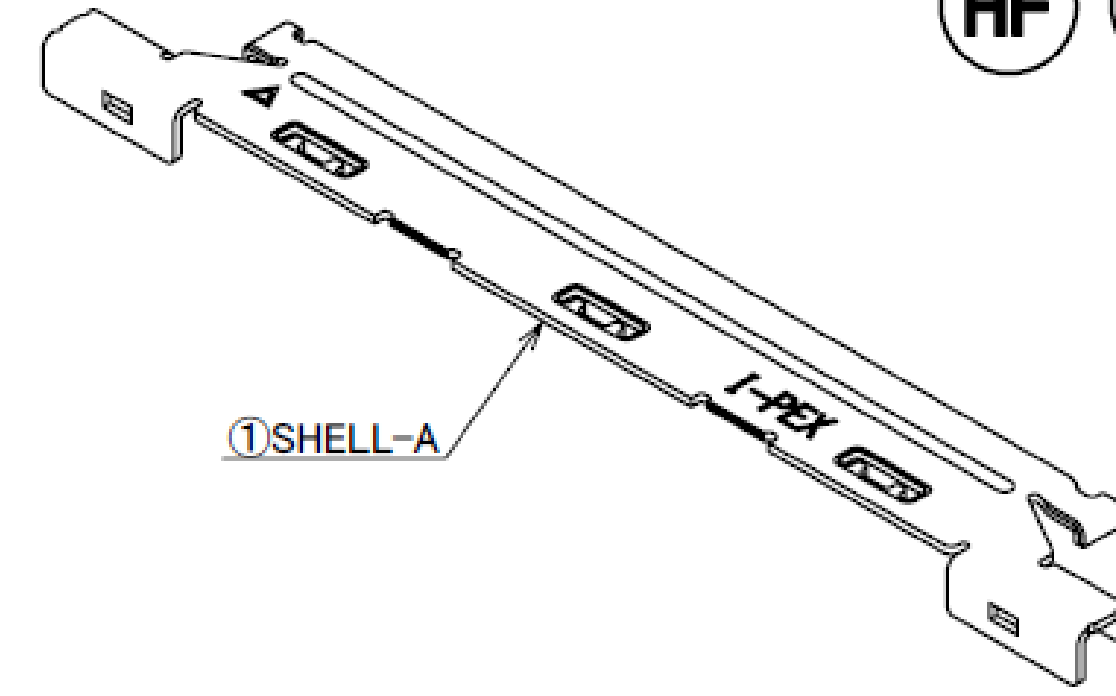
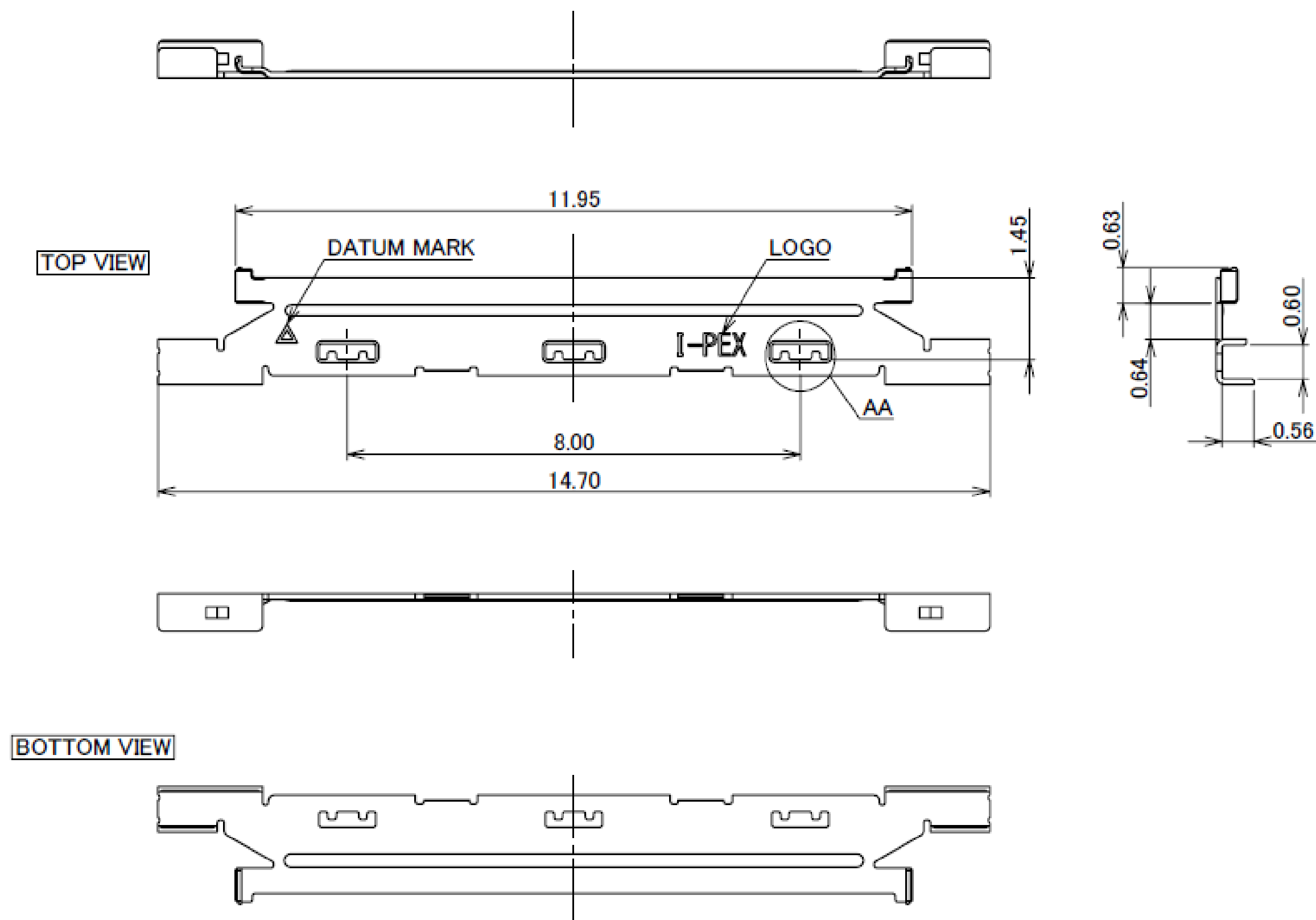
NOTES.
1. ASSEMBLY
1-1. 20977-040T-01
THIS PART IS ASSEMBLED WITH SHELL A (P/N 3655-0401) AND LOCK BAR ASS'Y (P/N 20975-040T-01) AFTER SOLDERED THE CABLE.
1-2. 20978-040T-01
THIS PART IS ASSEMBLED WITH SHELL A (P/N 3655-0401) AND LOCK BAR (P/N 3656-0402) AFTER SOLDERED THE CABLE.

| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |
|-----|-------------|--------------|--|
| 4 | SHELL B | SUS | PARTIAL Au 0.003 μ m MIN. OVER Ni 1.00 μ m MIN. |
| 3 | CONTACT B | CORSON ALLOY | CONTACT AREA : Au 0.25 μ m MIN. OVER Ni 2.00 μ m MIN. SOLDERING AREA : Au 0.03 μ m MIN. OVER Ni 1.00 μ m MIN. |
| 2 | CONTACT A | CORSON ALLOY | CONTACT AREA : Au 0.25 μ m MIN. OVER Ni 2.00 μ m MIN. SOLDERING AREA : Au 0.03 μ m MIN. OVER Ni 1.00 μ m MIN. |
| 1 | HOUSING | LCP | UL94V-0, BLACK |

Rev.1

Plug Shell-A

| | |
|-----------------|-----------|
| Recommended P/N | 3655-0401 |
| PART No. | 3655-0401 |

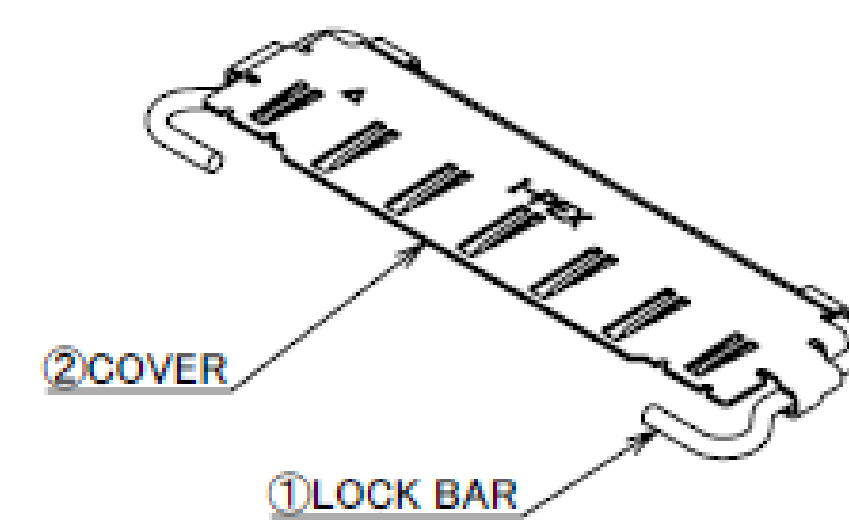
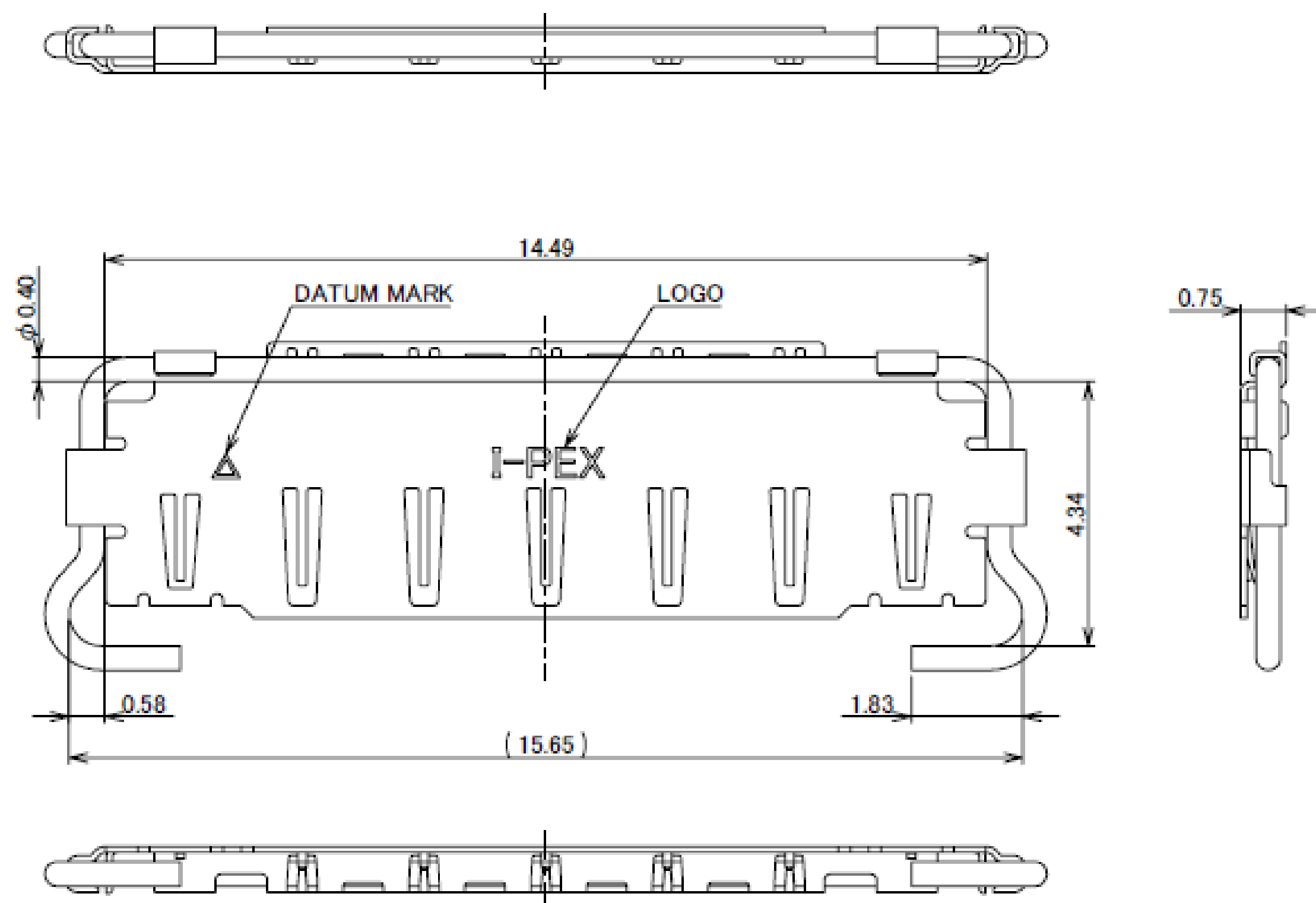
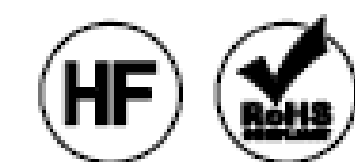


| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |
|-----|-------------|----------|--|
| 1 | SHELL-A | SUS | PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN. |

Rev.0

Plug Lock Bar Assembly

| | |
|-----------------|---------------|
| Recommended P/N | 20975-040T-01 |
| PART No. | 20975-040T-01 |

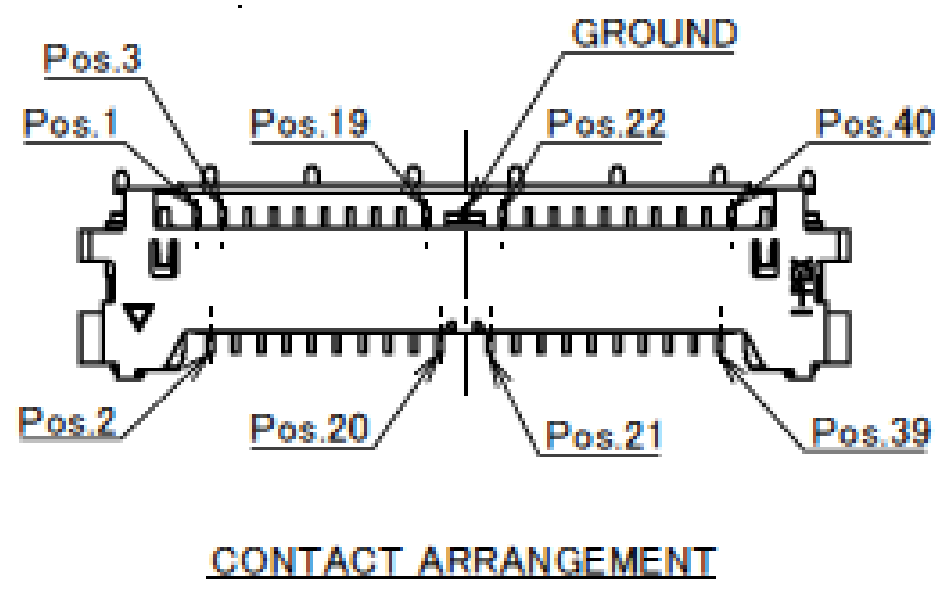
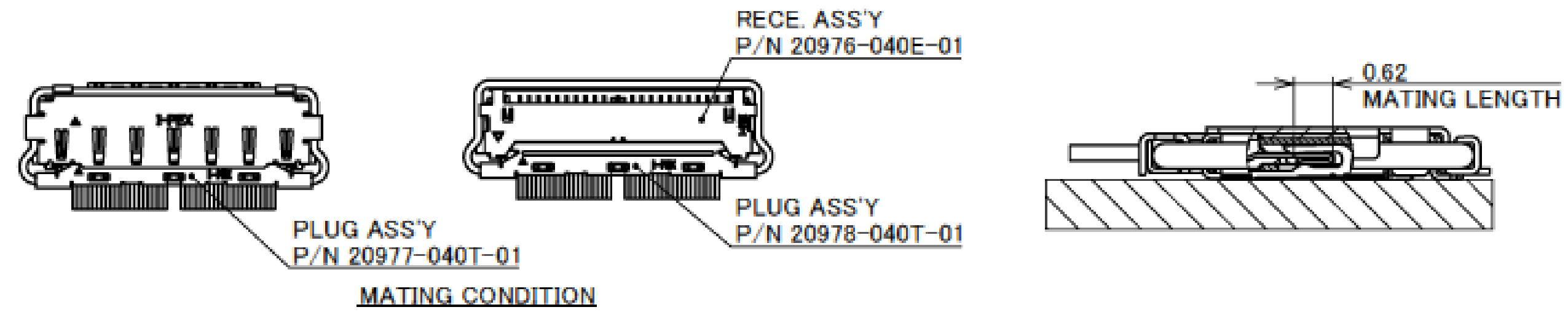
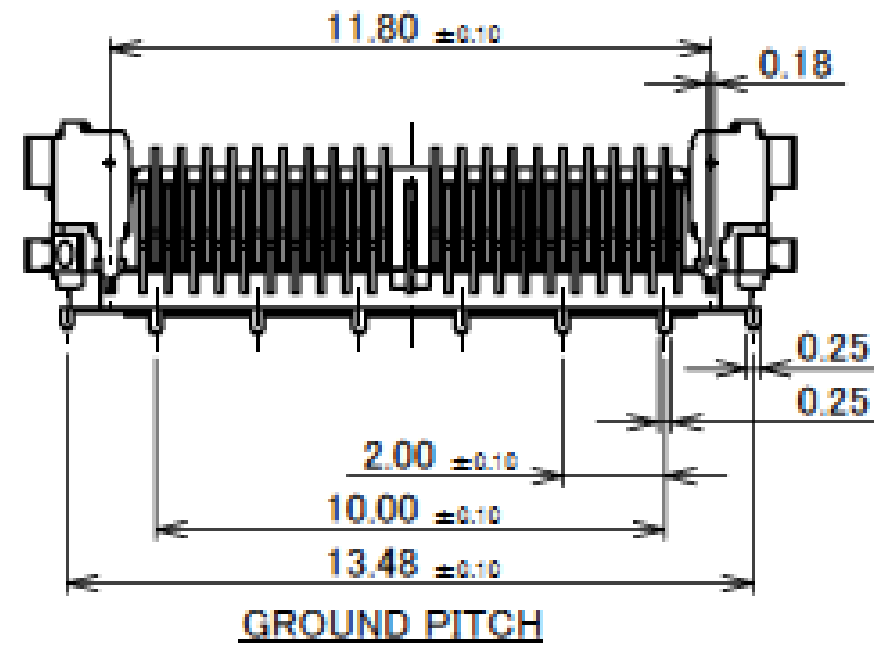
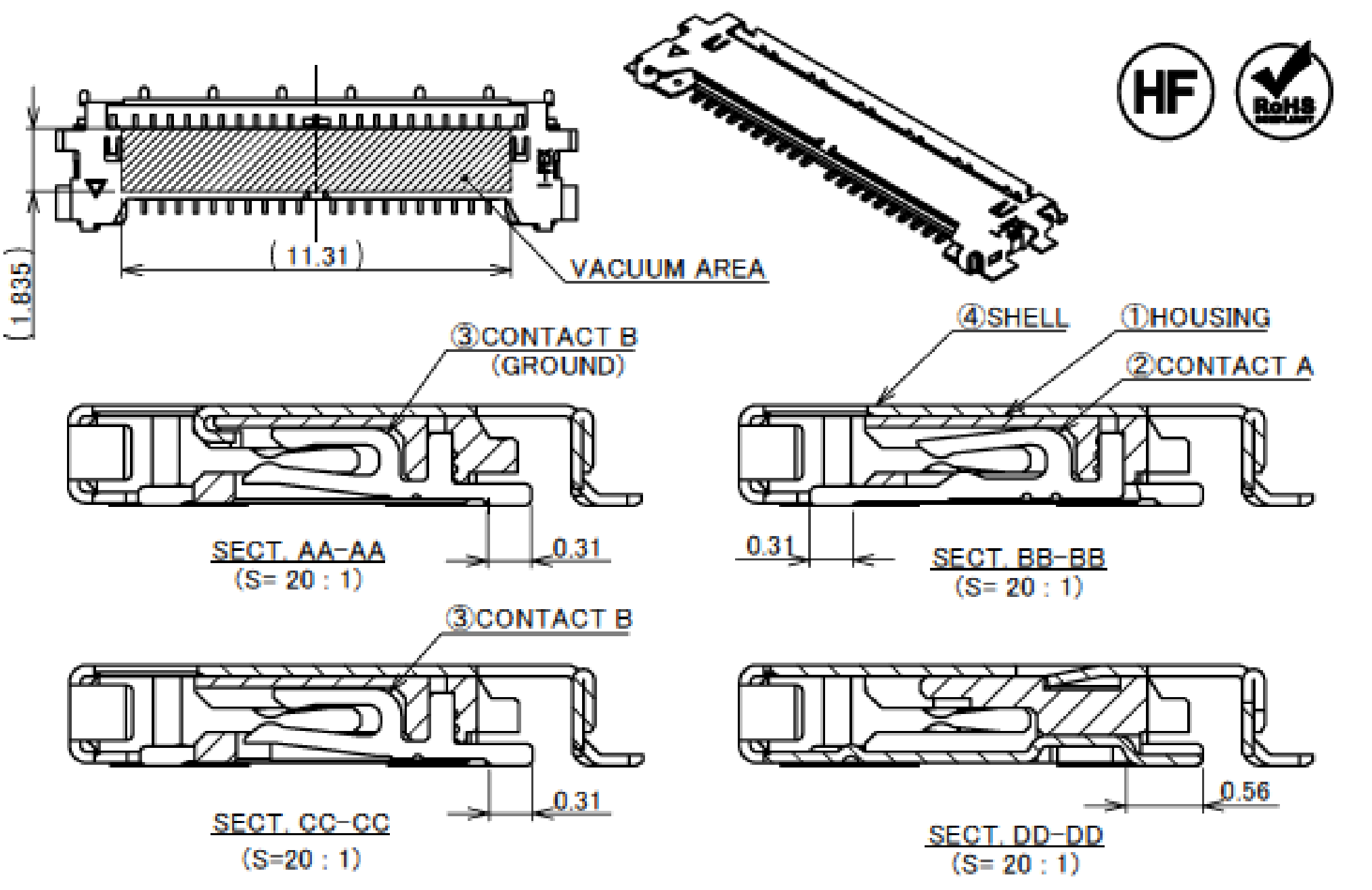
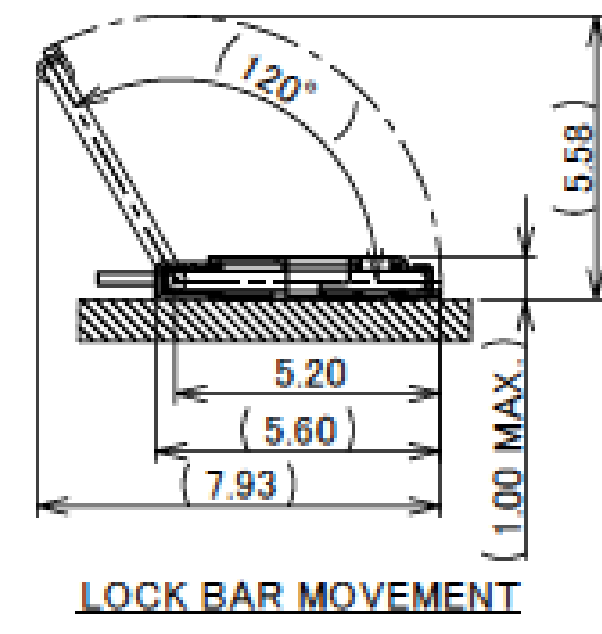
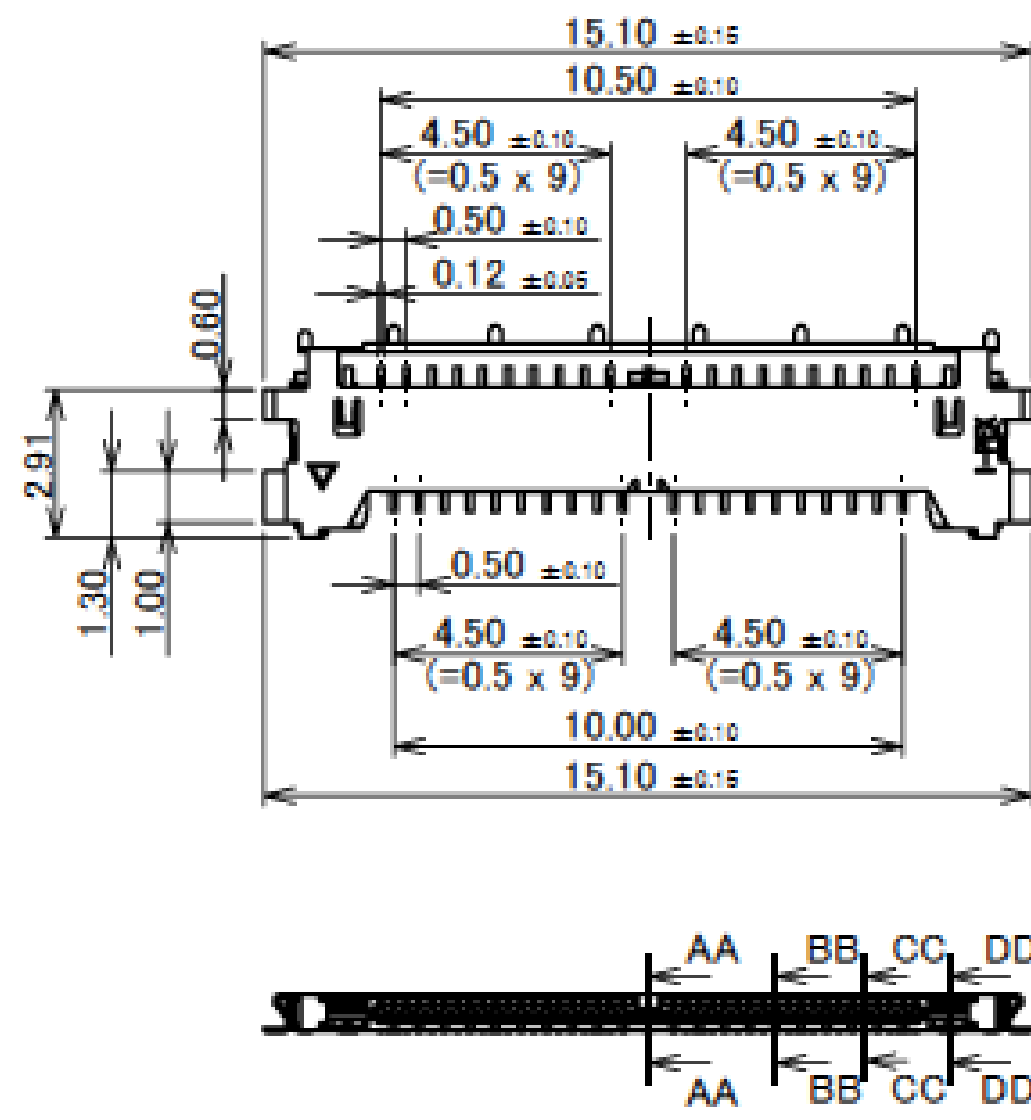


| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |
|-----|-------------|-----------------|-------------------------------|
| 2 | COVER | PHOSPHOR BRONZE | ALL OVER Ni 1.00 μ m MIN. |
| 1 | LOCK BAR | SUS ϕ 0.40 | - |

Rev.0

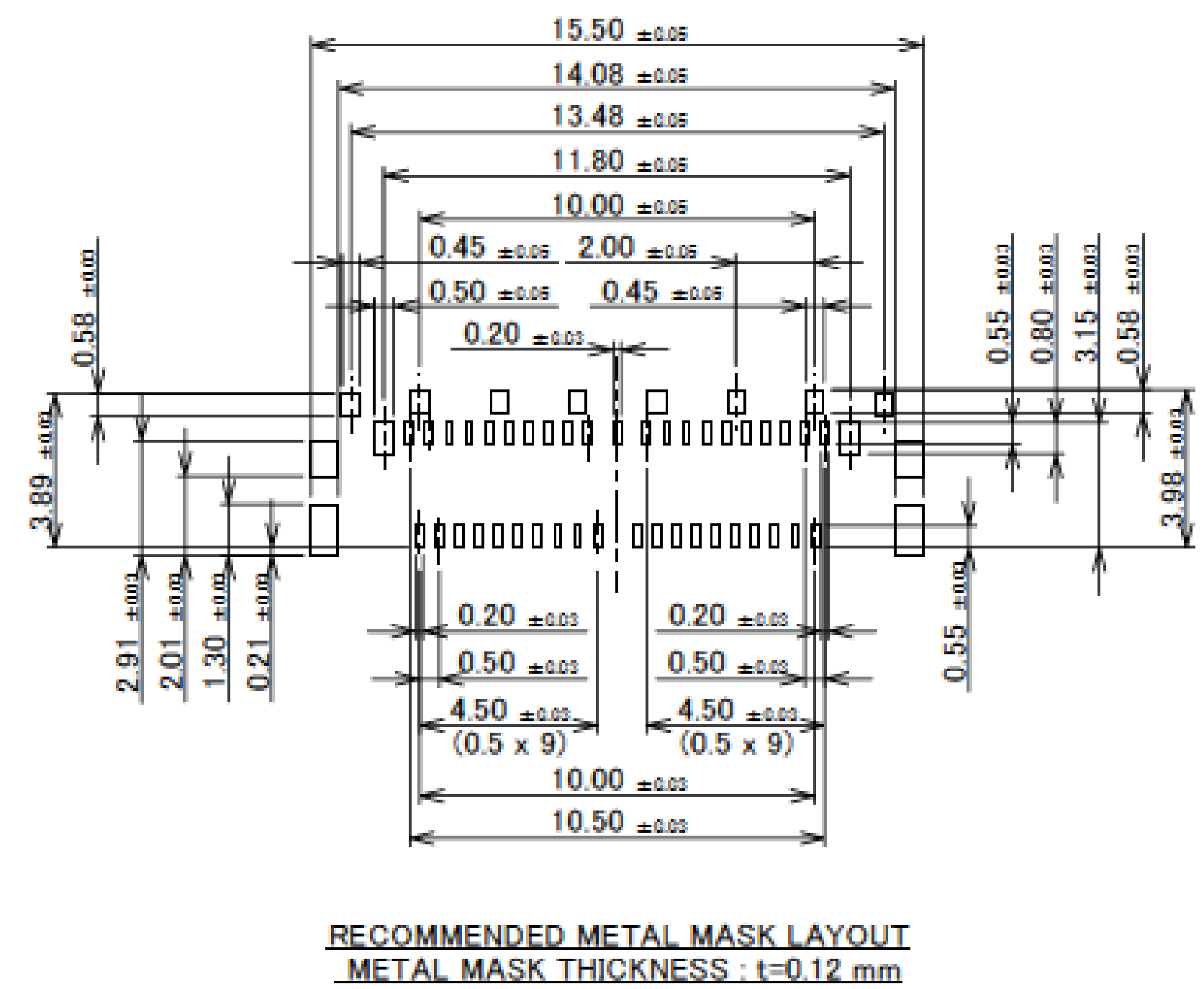
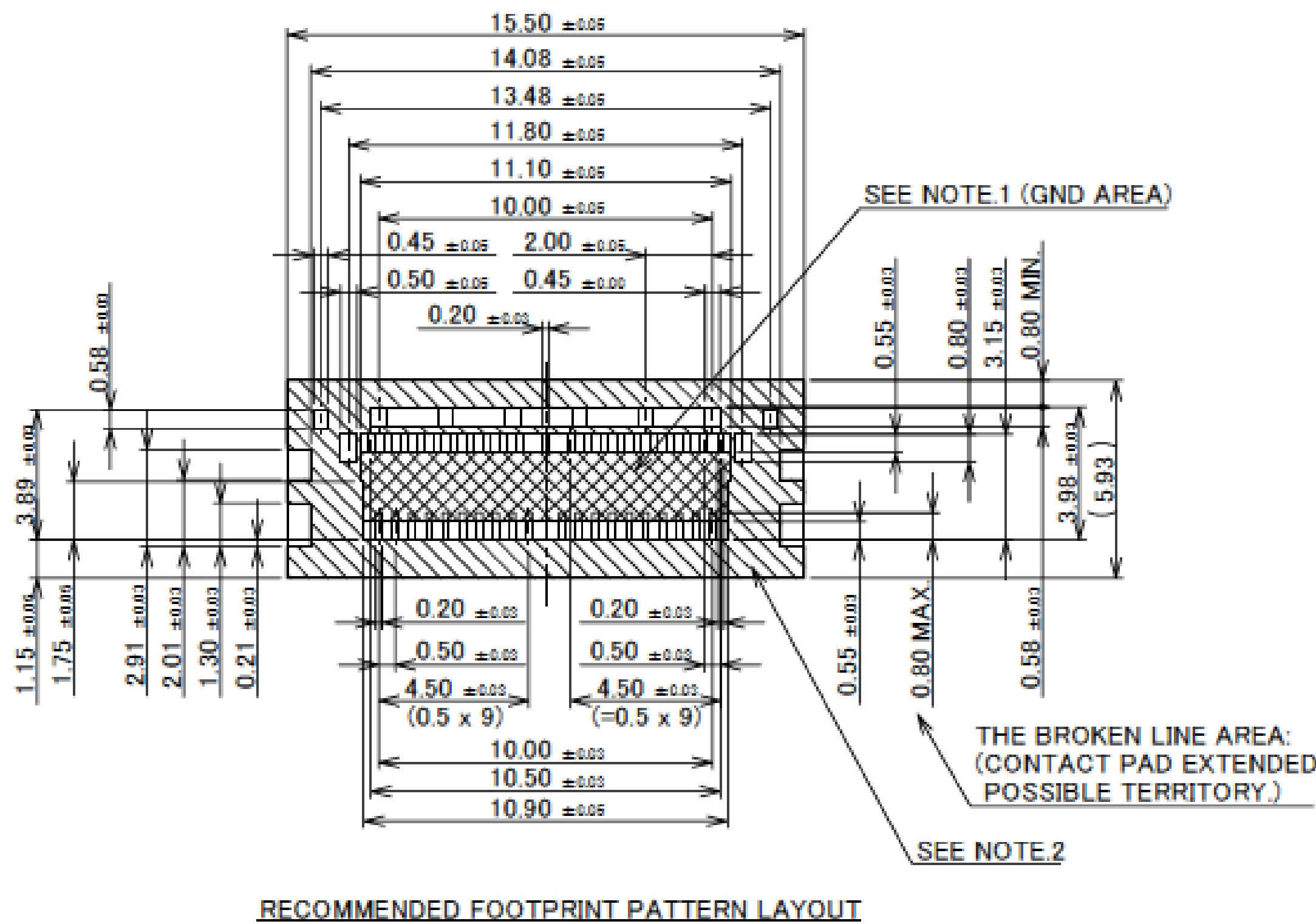
Receptacle Assembly

| | |
|-----------------|---------------|
| Recommended P/N | 20976-040E-01 |
| PART NO. | Pos. |
| 20976-040E-01 | 40 |



| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |
|-----|-------------|----------------|--|
| 4 | SHELL | PHOSHOR BRONZE | PARTIAL Au 0.03 μm MIN. OVER Ni 1.00 μm MIN. |
| 3 | CONTACT B | CORSON ALLOY | CONTACT AREA : Au 0.10 μm MIN. OVER Ni 1.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN. |
| 2 | CONTACT A | CORSON ALLOY | CONTACT AREA : Au 0.10 μm MIN. OVER Ni 1.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN. |
| 1 | HOUSING | LCP | UL94V-0, BLACK |

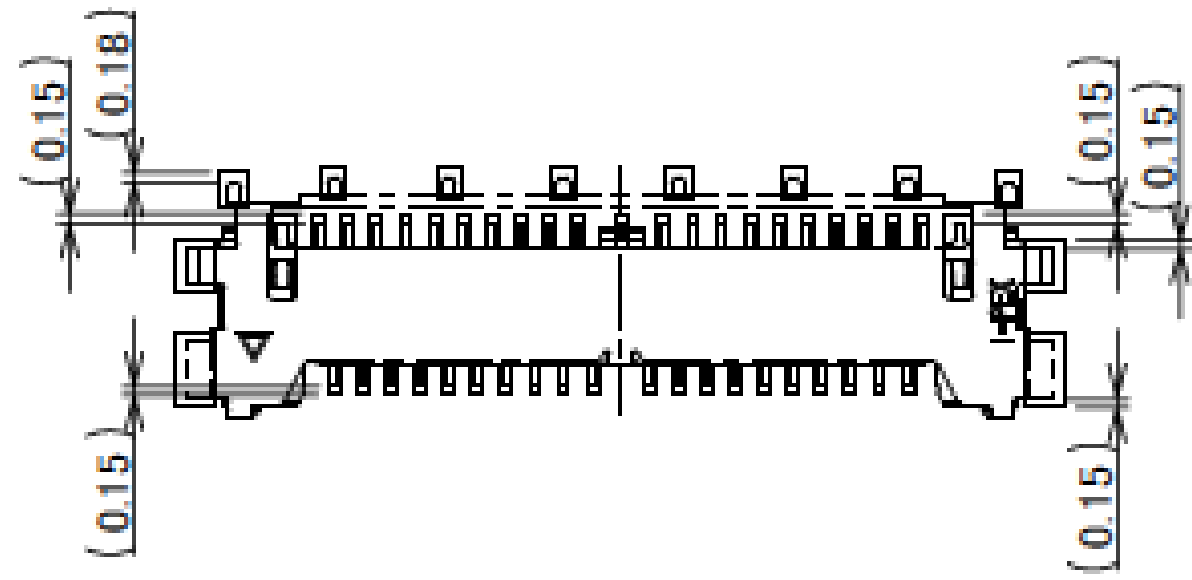
Rev.2



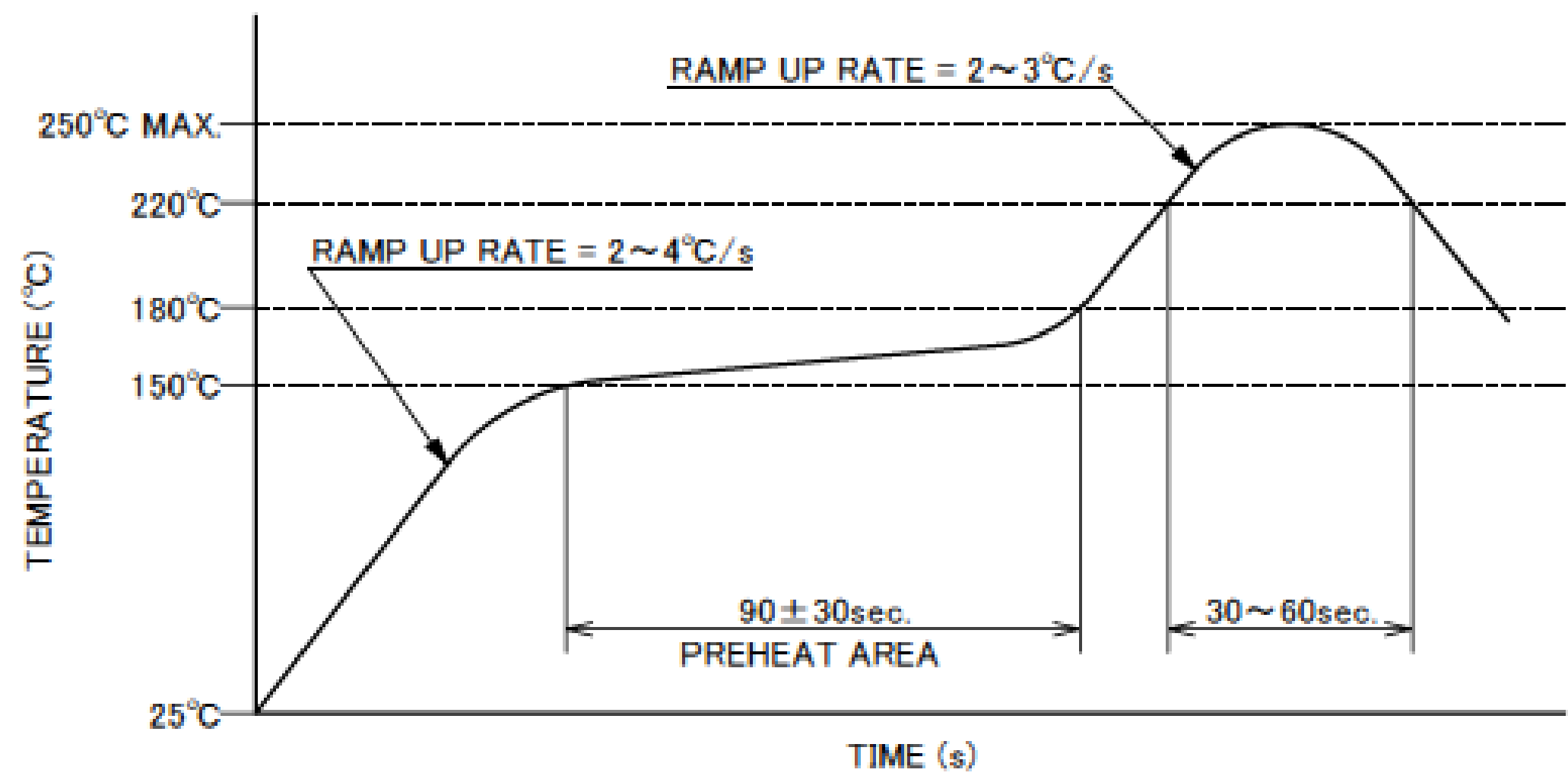
NOTES.
1. SOLDER RESIST MUST BE APPLIED TO THIS AREA
2. DO NOT MOUNT ANOTHER COMPONENTS IN THIS AREA.

Rev.2

Receptacle Assembly



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

Rev.2

| ITEMS | SPECIFICATION |
|--------------------------------------|--|
| APPLICABLE CABLE | MICRO-COAXIAL CABLE : AWG# 46,44 DISCRETE WIRE : AWG# 39 |
| RATING VOLTAGE | 100V AC (PER CONTACT PIN) |
| RATING AMPERAGE (FOR CONTACT) | 0.10A AC/DC [AWG#46] PER CONTACT PIN/UP TO 40 CONTACTS 0.15A AC/DC [AWG#44] PER CONTACT PIN/UP TO 40 CONTACTS 0.50A AC/DC [AWG#39] PLUG WITH COVER CABLE ASS'Y (P/N : 20977-040T-01) PER CONTACT PIN/UP TO 8 CONTACTS PLUG WITHOUT COVER CABLE ASS'Y (P/N : 20978-040T-01) PER CONTACT PIN/UP TO 7 CONTACTS ※ TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION |
| OPERATING TEMPERATURE | 233~358K(-40°C~+85°C) (CONTAINING TEMPERATURE RISE BY CURRENT) |
| OPERATING HUMIDITY | 85% MAX.(NON-CONDENSING) |
| CONTACT RESISTANCE | INITIAL : 388mohm MAX.(AWG#39) / AFTER TEST : $\triangleleft 40\text{mohm MAX.}$ INITIAL : 1,080mohm MAX.(AWG#44) INITIAL : 1,830mohm MAX.(AWG#46) |
| GROUND SHELL RESISTANCE | INITIAL : 50mohm MAX. / AFTER TEST : $\triangleleft 40\text{mohm MAX.}$ |
| INSULATION RESISTANCE | INITIAL : 1,000Mohm MIN. / AFTER TEST : 500Mohm MIN. |
| DIELECTRIC WITHSTANDING VOLTAGE | AC250V 1min |
| DURABILITY | 20 CYCLES |
| MATING FORCE (INITIAL / 20 CYCLES) | 40P : 30.0N MAX. |
| UNMATING FORCE (INITIAL / 20 CYCLES) | 40P : 4.0N MIN. |
| CABLE RETENTION FORCE | 40P : 19.60N MIN. |
| COPLANARITY | 0.10 MAX. |
| PRODUCT SPECIFICATION | PRS-2403 |
| TEST REPORT | TR-17063 |
| PACKING STANDARD | PST-17126 |
| INSTRUCTION MANUAL | HIM-17035 (WHEN PLUG WITH COVER CABLE ASS'Y IS USED) HIM-17040 (WHEN PLUG WITHOUT COVER CABLE ASS'Y IS USED) |
| APPEARANCE CRITERIA No. | QLS-A*** |


Rev.2

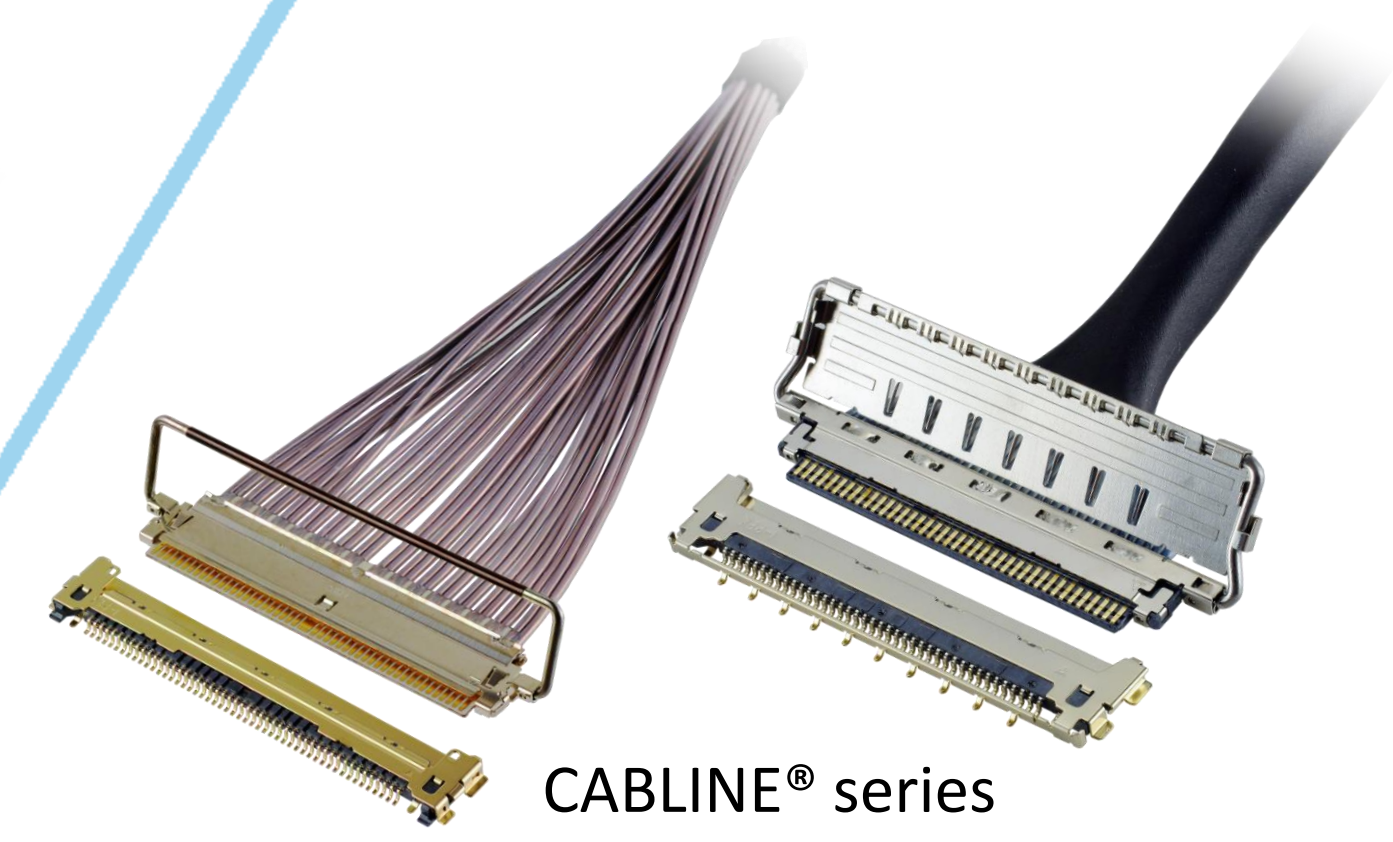
Custom Connectors Available

 RF Connector

MHF® series



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



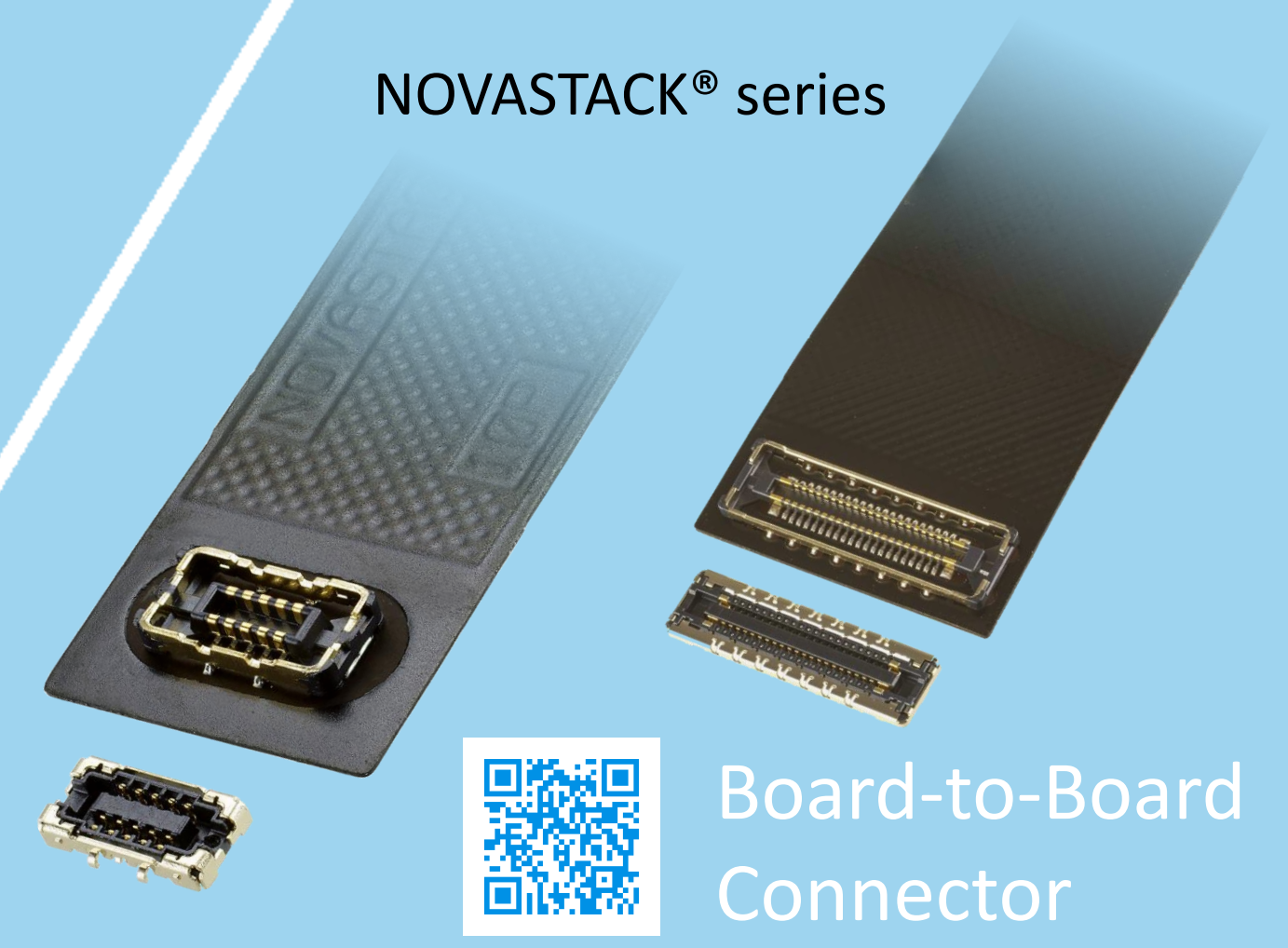
 Optical Module

LIGHTPASS® series



NOVASTACK® series

 Board-to-Board Connector



 Power Connector/
Terminal

AP series

ISH® series



MINIFLEX® series

EVAFLEX® series

 FPC FFC Connector

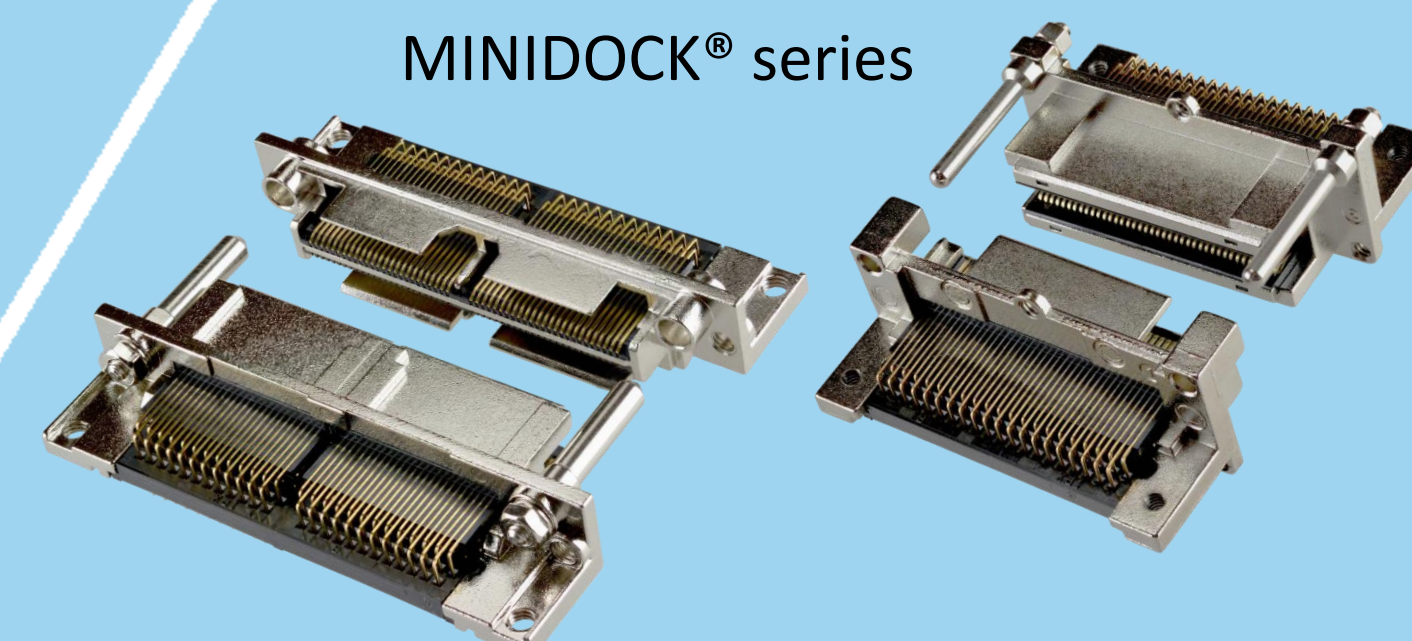


Inquiry



MINIDOCK® series

 I/O Connector



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Contact your sales representative or more detailed information.

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I-PEX

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