

DW-5

Hybrid connector for discrete wire and FPC, height = 1.0 mm, 0.5 mm pitch, horizontal, backflip

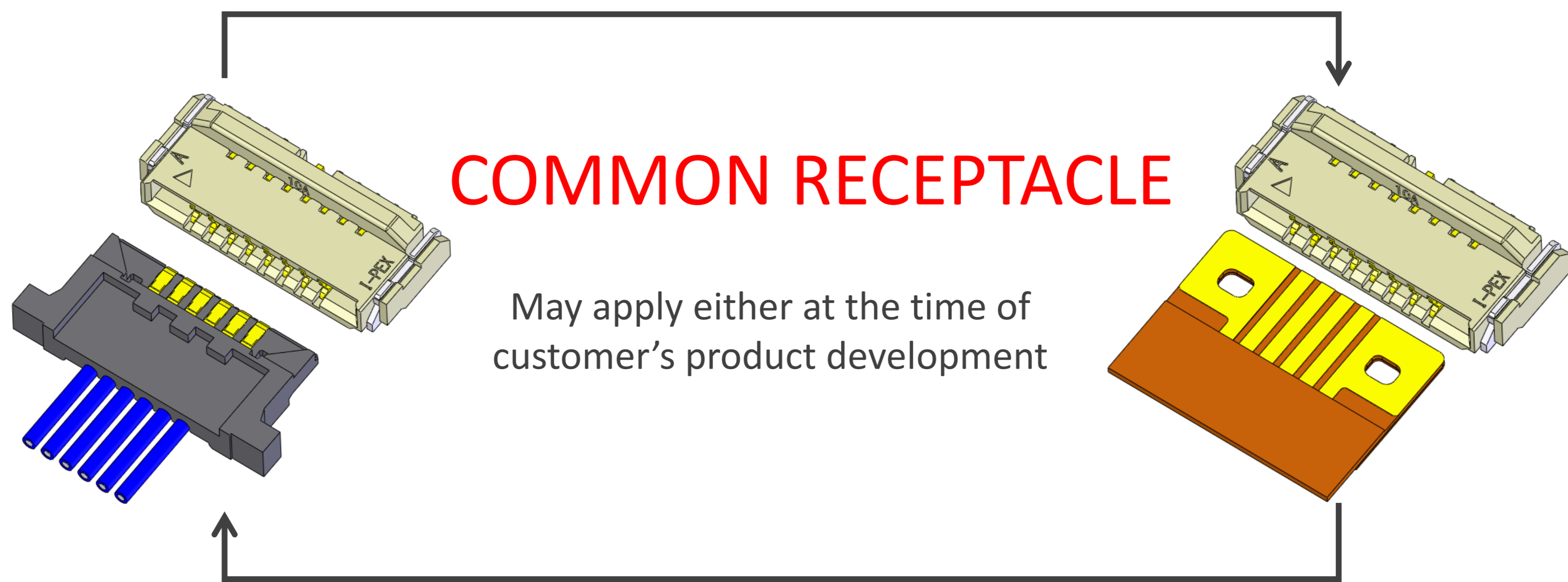


| Product Specifications: | | Plug | Receptacle |
|-------------------------|-----------|--|-----------------------|
| Board Pitch (mm) | | 0.5 | |
| Wiping Length (mm) | | 1 | |
| Size (mm) | Height | 1.0 +/- 0.1 | |
| | Width | Formula: 3.8+(0.5*?p) | Formula: 3.7+(0.5*?p) |
| | Depth | Open: Mating FPC : 3.0 Mating PLUG CABLE : 4.9 Close: Mating FPC : 3.5 Mating PLUG CABLE : 5.39 | |
| Pin counts | Range | 6-20 (even) | |
| | Available | 6, 8, 10 | |

| Applicable FPC/FFC: | |
|------------------------|----------------|
| FPC/FFC Contact Pitch | 0.5 |
| FPC/FFC Contact Point | Top and Bottom |
| FPC/FFC Thickness (mm) | 0.2 +/- 0.03 |

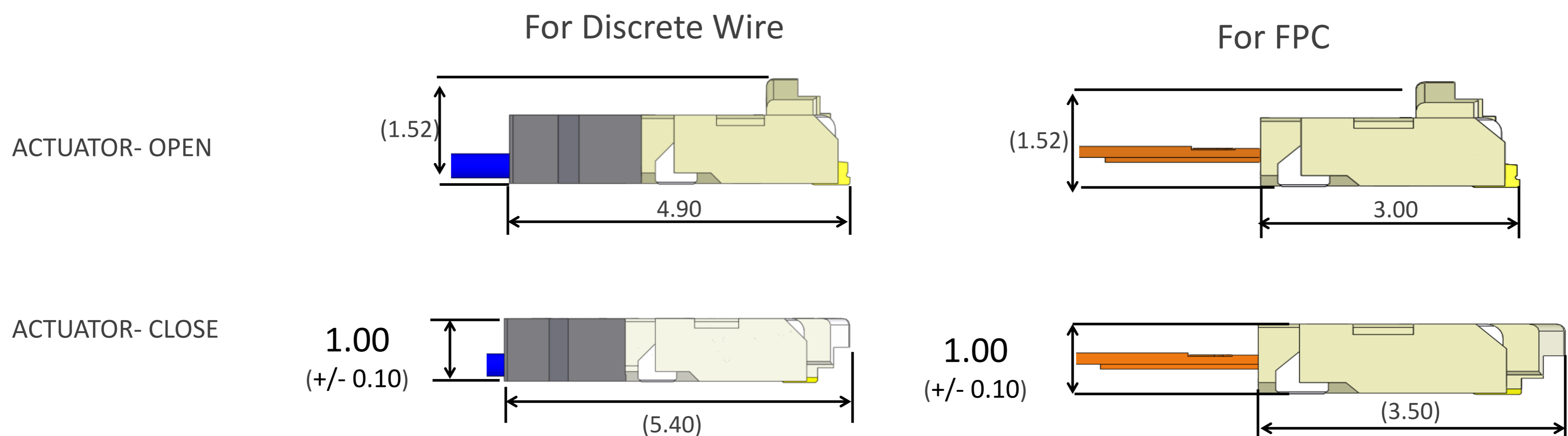
* Please inquire for pin counts not listed or outside of the pin count range.

► Hybrid connector for discrete wire and FPC

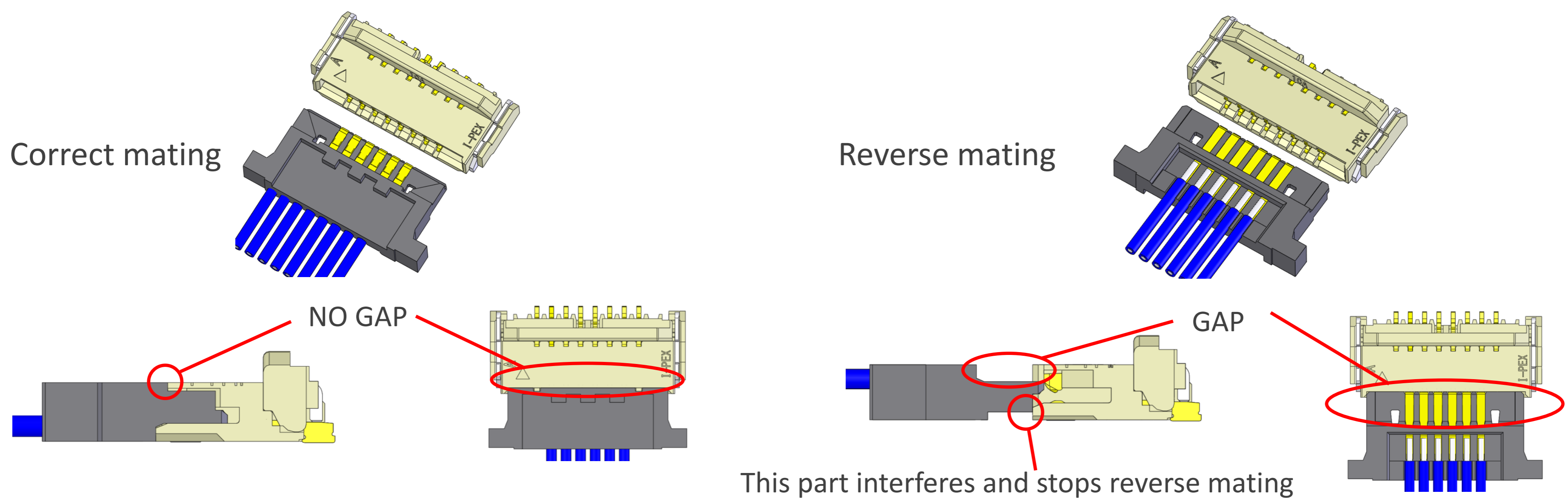


► Smallest in class at 1.0 mm height

Very low height of 1.00 mm, world's smallest class 6p dimension



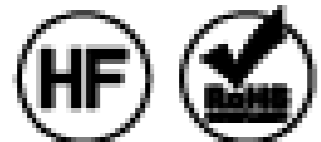
► Anti-reverse mating structure reduces operational error



Component Parts Details

Plug for Cable Assembly

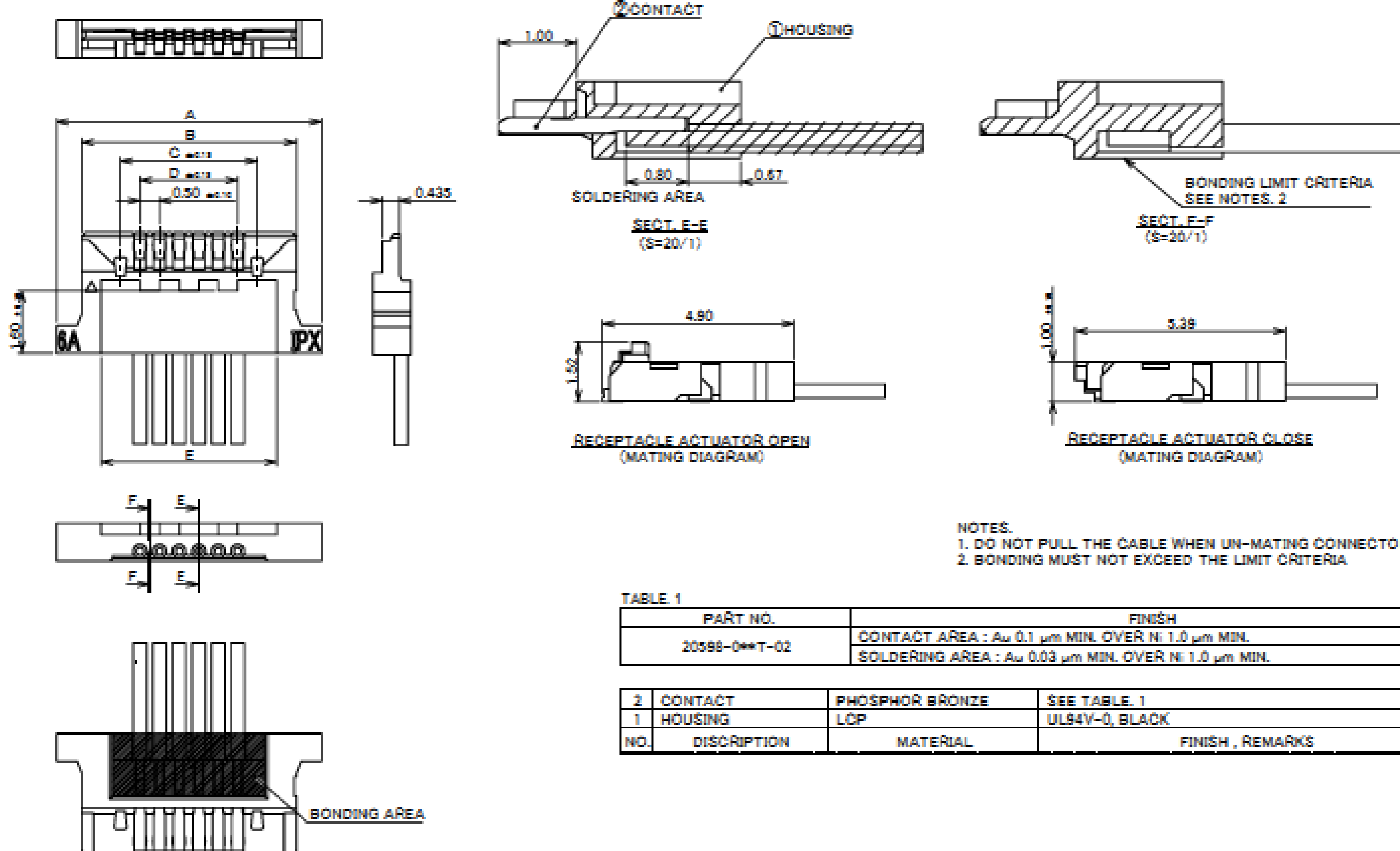
Recommended P/N 20598-0**T-02



CAUTION VISIT OUR WEBSITE FOR LATEST VERSIONS OF INSTRUCTION MANUAL NO. HIM-14010 TO HANDLE THE PRODUCT PROPERLY AND SAFELY.

| PART No. | POS. | A | B | C | D | E |
|----------------|------|-------|-------|-------|------|-------|
| 20598-006T-02 | 6 | 6.80 | 5.50 | 3.50 | 2.50 | 4.50 |
| 20598-008T-02 | 8 | 7.80 | 6.50 | 4.50 | 3.50 | 5.50 |
| 20598-010T-02 | 10 | 8.80 | 7.50 | 5.50 | 4.50 | 6.50 |
| ◆20598-020T-02 | 20 | 13.80 | 12.50 | 10.50 | 9.50 | 11.50 |

◆ MARK MEANS NOT AVAILABLE



NOTES:
1. DO NOT PULL THE CABLE WHEN UN-MATING CONNECTORS
2. BONDING MUST NOT EXCEED THE LIMIT CRITERIA

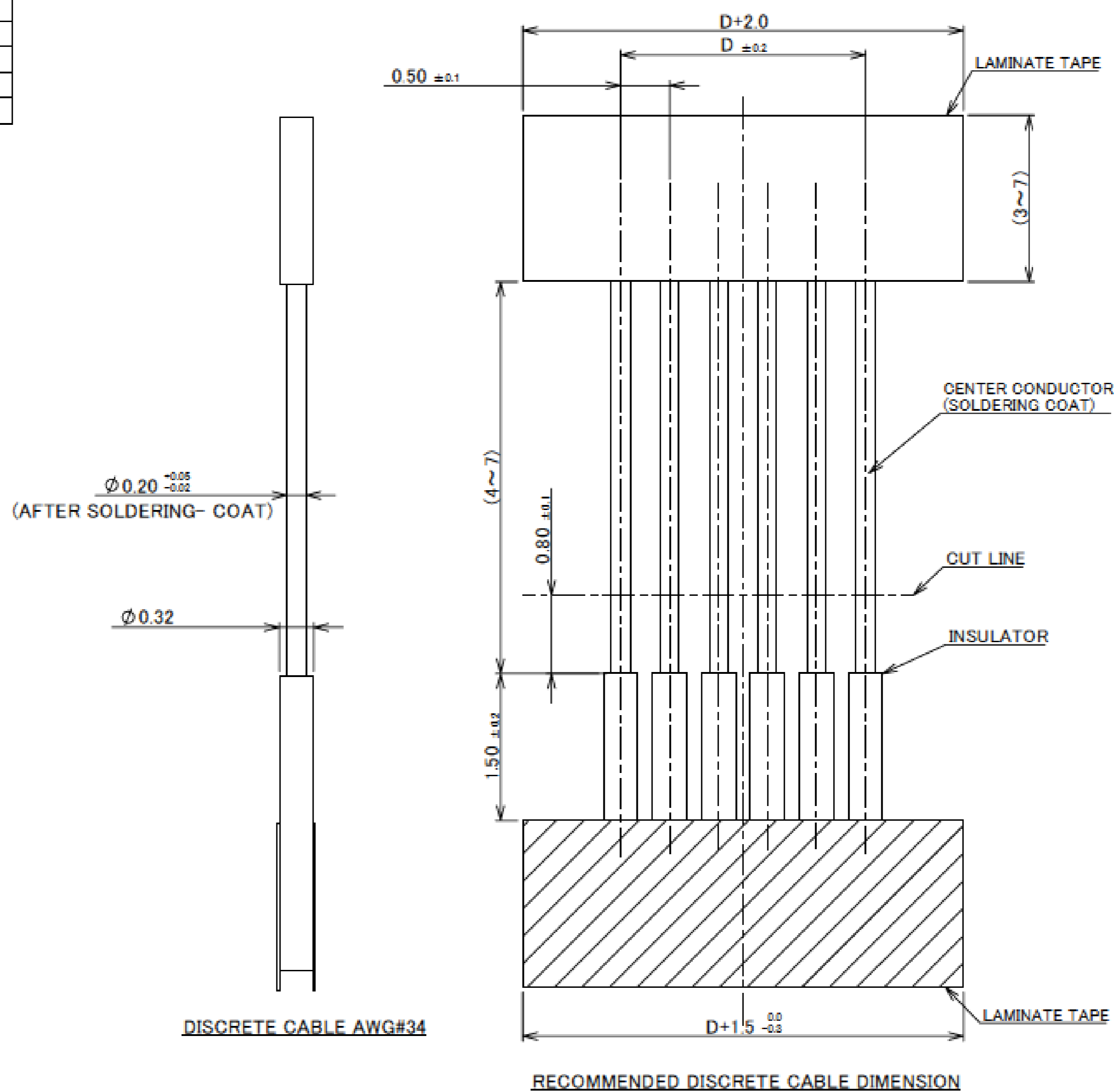
| PART NO. | FINISH |
|---------------|---|
| 20598-0**T-02 | CONTACT AREA : Au 0.1 μm MIN. OVER Ni 1.0 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.0 μm MIN. |

| NO. | DESCRIPTION | MATERIAL | FINISH, REMARKS |
|-----|-------------|-----------------|-----------------|
| 2 | CONTACT | PHOSPHOR BRONZE | SEE TABLE 1 |
| 1 | HOUSING | LCP | UL94V-0, BLACK |

Plug for Cable Assembly

| PART No. | POS. | D |
|----------------|------|------|
| 20598-006T-02 | 6 | 2.50 |
| 20598-008T-02 | 8 | 3.50 |
| 20598-010T-02 | 10 | 4.50 |
| ◆20598-020T-02 | 20 | 9.50 |

◆ MARK MEANS NOT AVAILABLE



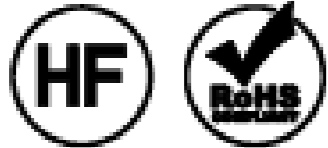
Rev.3

| ITEMS | SPECIFICATION |
|--|--|
| APPLICABLE CABLE | DISCRETE : AWG#34 |
| RATING VOLTAGE | 50V AC (PER A CONTACT) |
| RATING AMPERAGE | 0.7A DC [AWG#34] (PER A CONTACT) |
| OPERATING TEMPERATURE | 233~358K(-40°C~85°C) |
| OPERATING HUMIDITY | 80% MAX.(NON-CONDENSING) |
| CONTACT RESISTANCE | INITIAL : 40mohm MAX. / AFTER TEST : \surd20mohm MAX. |
| INSULATION RESISTANCE | INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN. |
| DIELECTRIC WITHSTANDING VOLTAGE | AC200V 1min |
| DURABILITY | 20TH CYCLES |
| ACTUATOR LOCKING FORCE (INITIAL / 20TH CYCLES) | INITIAL/ 20TH CYCLES : 0.6N(61gf) × (n + 2) MAX. |
| ACTUATOR UNLOCKING FORCE (INITIAL / 20TH CYCLES) | INITIAL/ 20TH CYCLES : 0.05N(5gf) × (n + 2) MIN. |
| PLUG RETENTION FORCE (INITIAL / AFTER TEST) | INITIAL : 0.15N(15gf) × n + 2.0N MIN. / AFTER TEST : 0.15N(15gf) × n + 1.0N MIN. |
| PRODUCT SPECIFICATION | PRS-1880 |
| TEST REPORT | TR-13103 |
| PACKING STANDARD | PST-14006 |
| INSTRUCTION MANUAL | HIM-14010 |
| ASSEMBLY MANUAL | ASM-12002 |

※ "n" IS THE NUMBER OF PIN

Receptacle for Cable Assembly

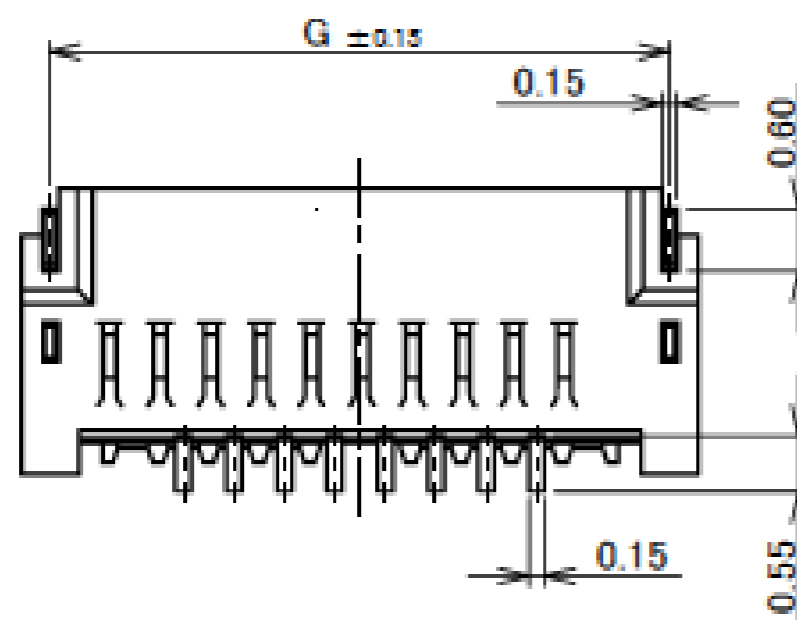
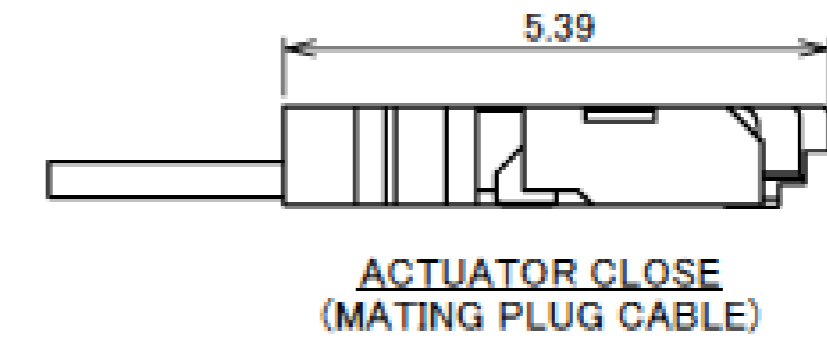
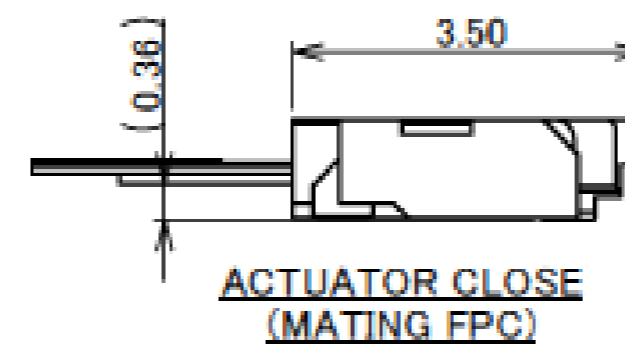
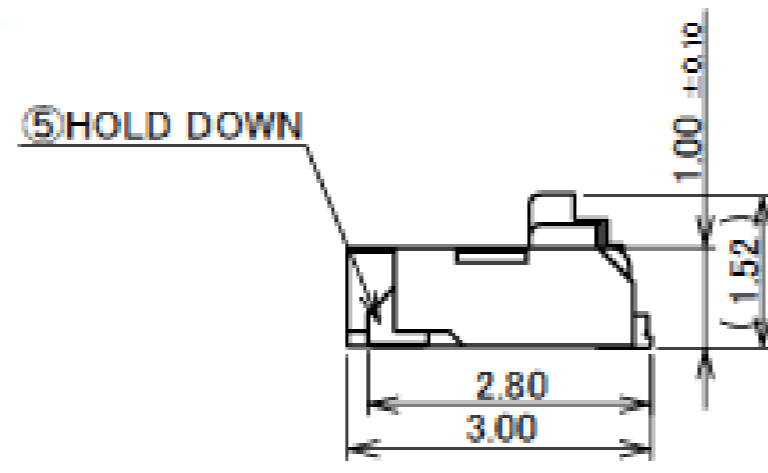
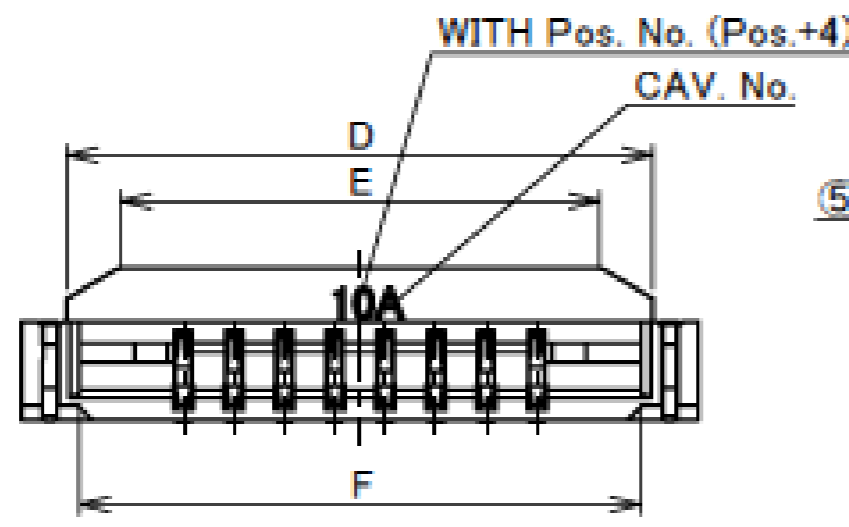
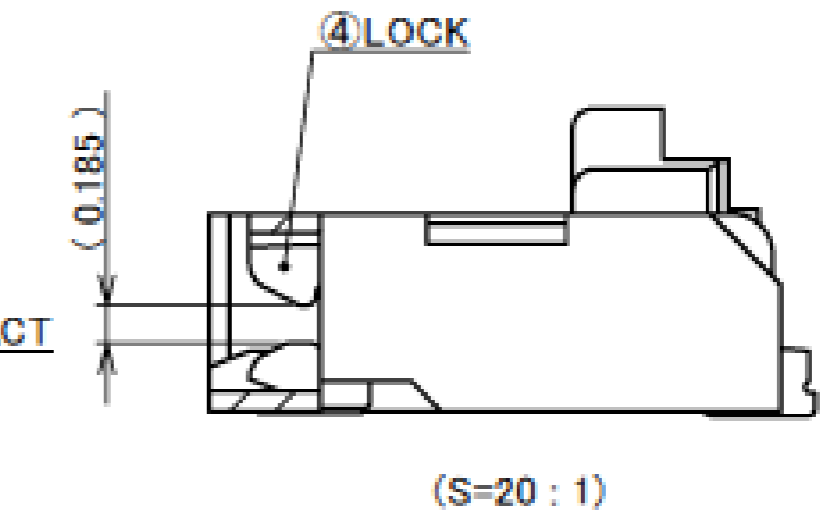
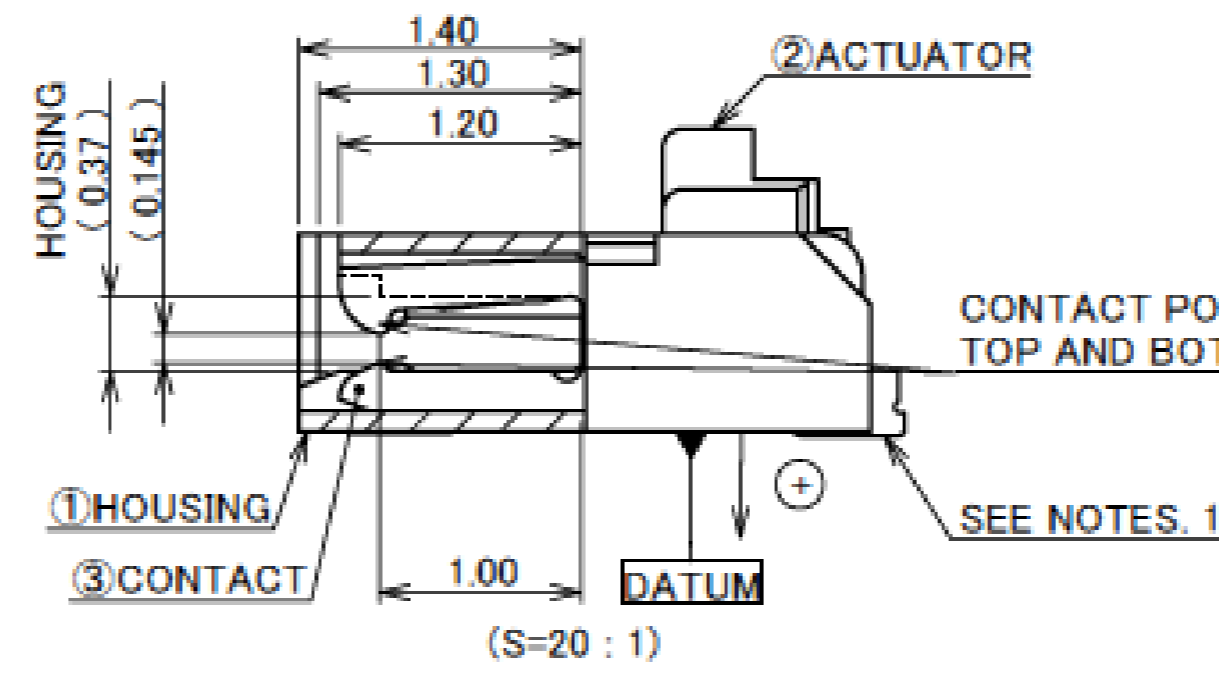
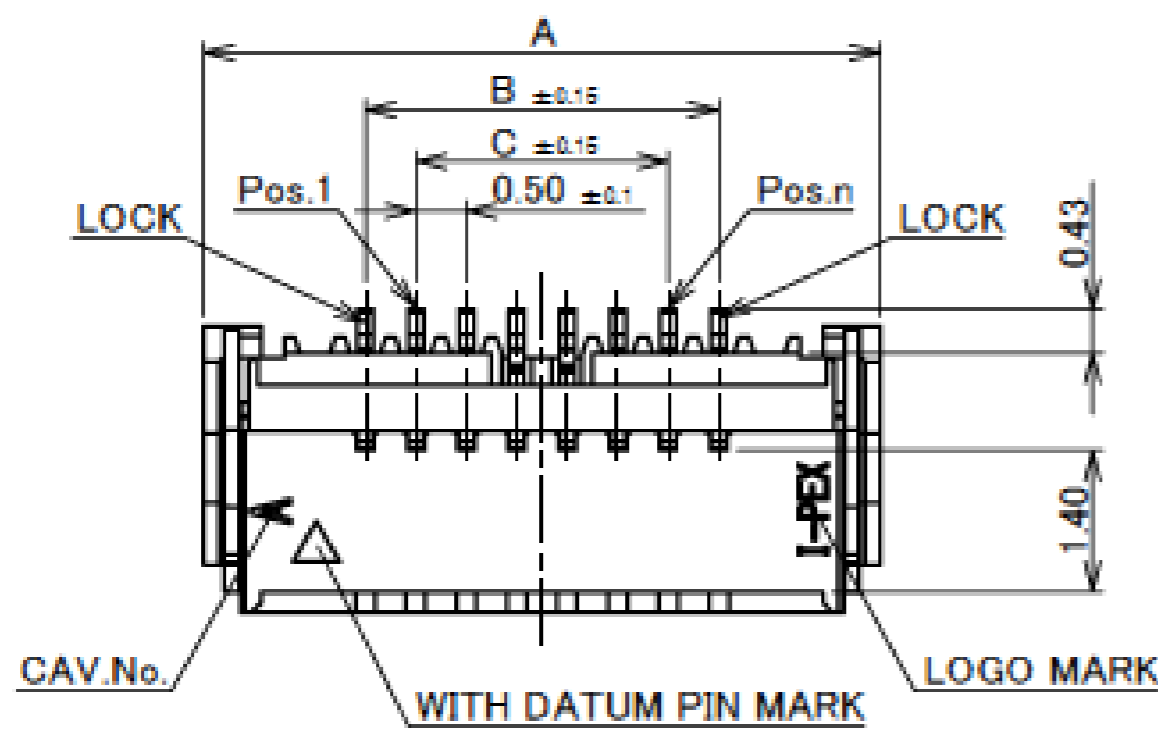
Recommended P/N 20597-0**E-02



CAUTION VISIT OUR WEBSITE FOR LATEST VERSIONS OF INSTRUCTION MANUAL NO. HIM-14010 AND HIM-12019 TO HANDLE THE PRODUCT PROPERLY AND SAFELY.

| PART No. | POS. | A | B | C | D | E | F | G |
|----------------|------|-------|-------|------|-------|------|-------|-------|
| 20597-006E-02 | 6 | 6.70 | 3.50 | 2.50 | 5.80 | 4.80 | 5.56 | 6.15 |
| 20597-008E-02 | 8 | 7.70 | 4.50 | 3.50 | 6.80 | 5.80 | 6.56 | 7.15 |
| 20597-010E-02 | 10 | 8.70 | 5.50 | 4.50 | 7.80 | 6.80 | 7.56 | 8.15 |
| ◆20597-020E-02 | 20 | 13.70 | 10.50 | 9.50 | 12.80 | 6.80 | 12.56 | 13.15 |

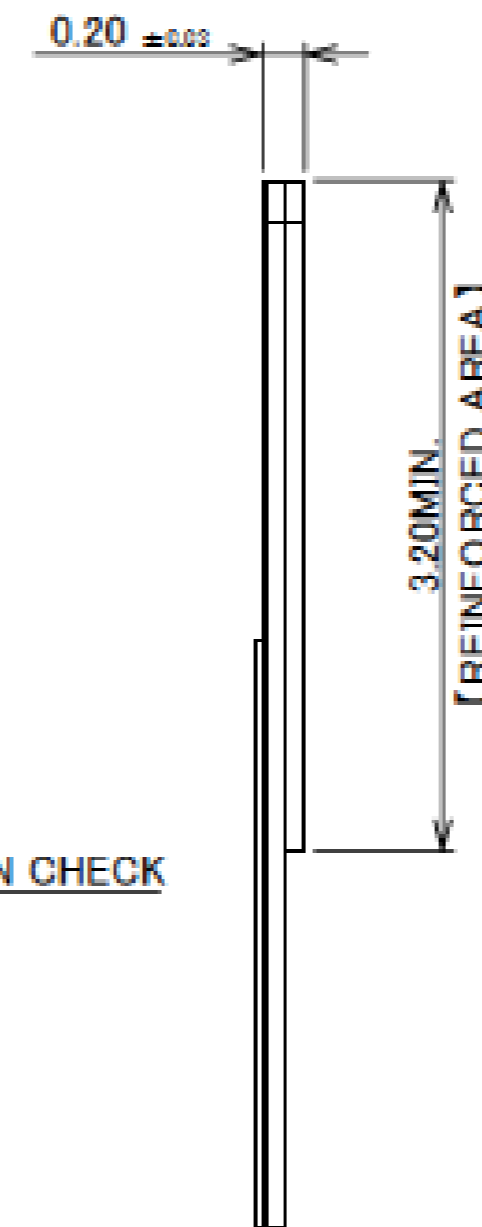
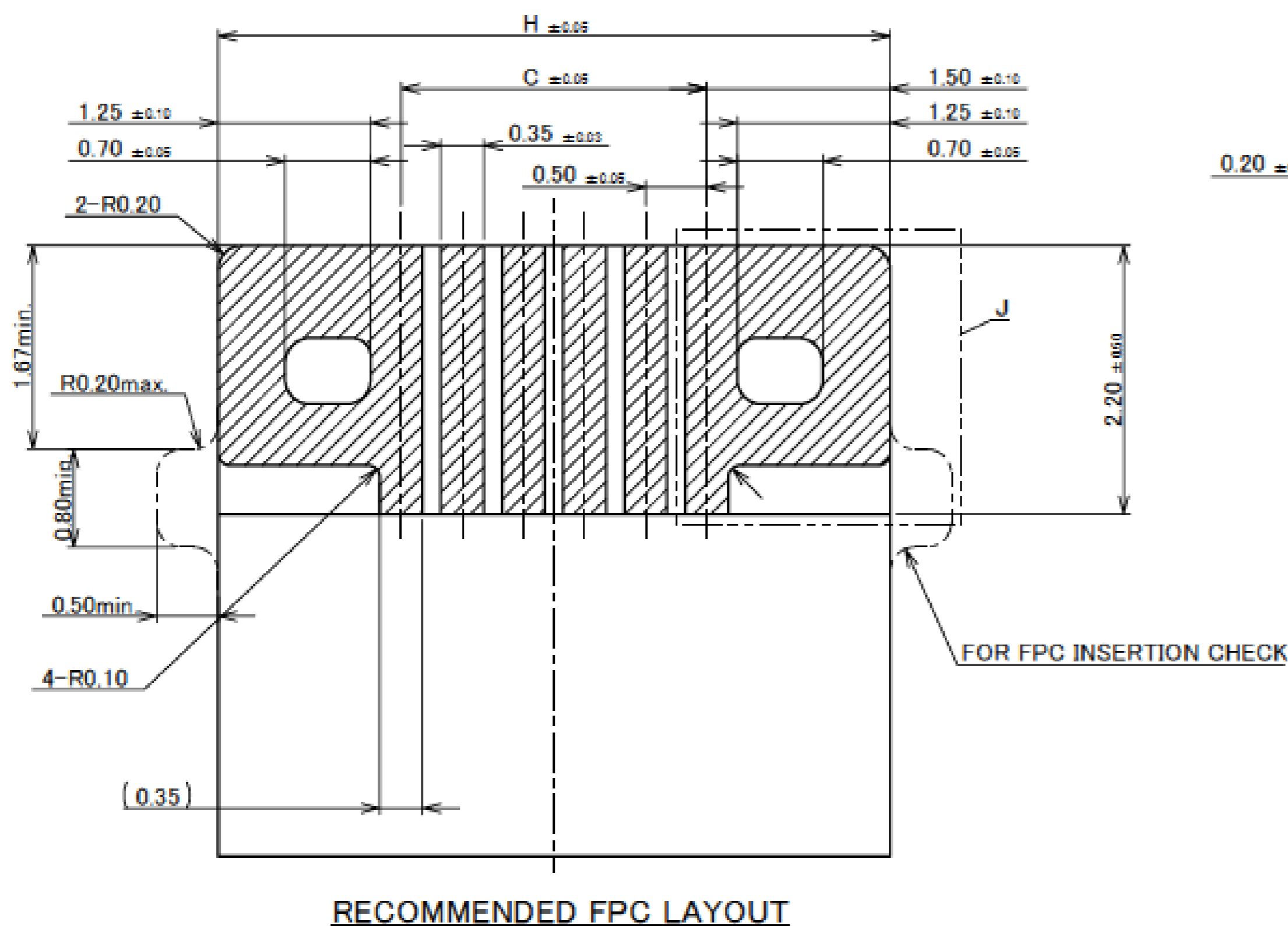
◆ MARK MEANS NOT AVAILABLE



| | | | |
|---|-----------|-----------------|---|
| 5 | HOLD DOWN | PHOSPHOR BRONZE | Sn 2~6 μm MIN.OVER Ni 1.0 μm MIN. |
| 4 | LOCK | PHOSPHOR BRONZE | Au 0.03 μm MIN. OVER Ni 1.0 μm MIN. |
| 3 | CONTACT | PHOSPHOR BRONZE | CONTACT AREA : Au 0.1 μm MIN. OVER Ni 1.0 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.0 μm MIN. |
| 2 | ACTUATOR | LCP | UL94V-0, BEIGE |
| 1 | HOUSING | LCP | UL94V-0, BEIGE |

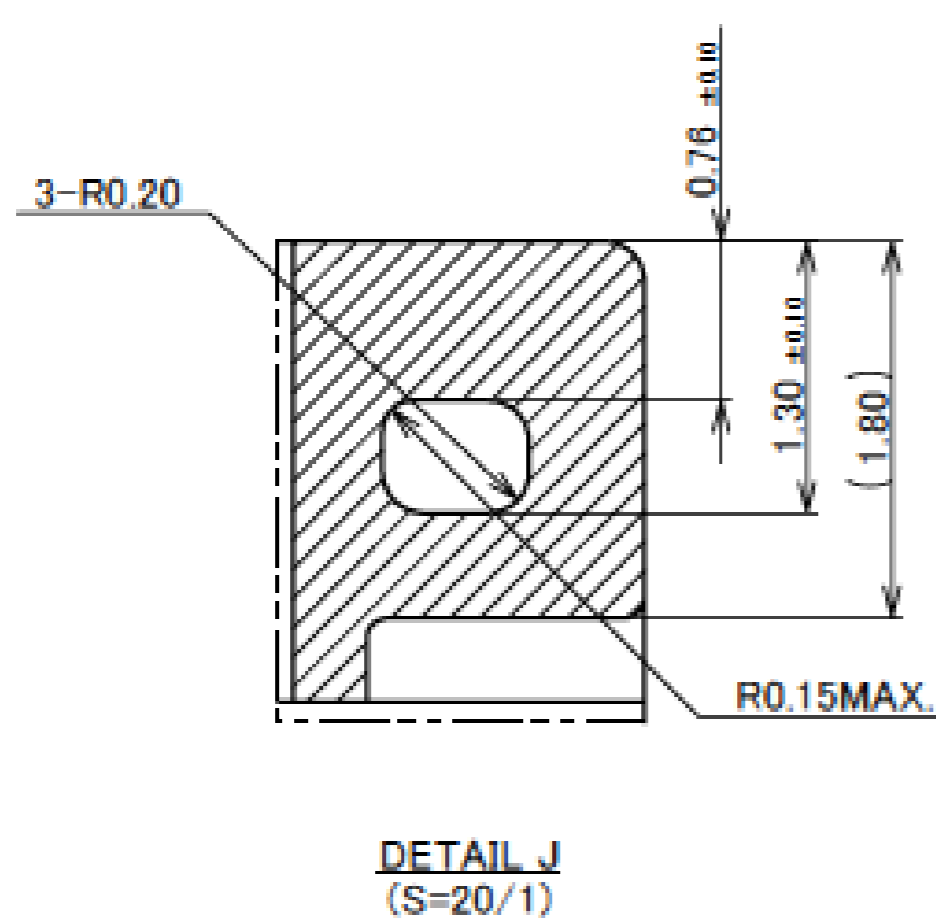
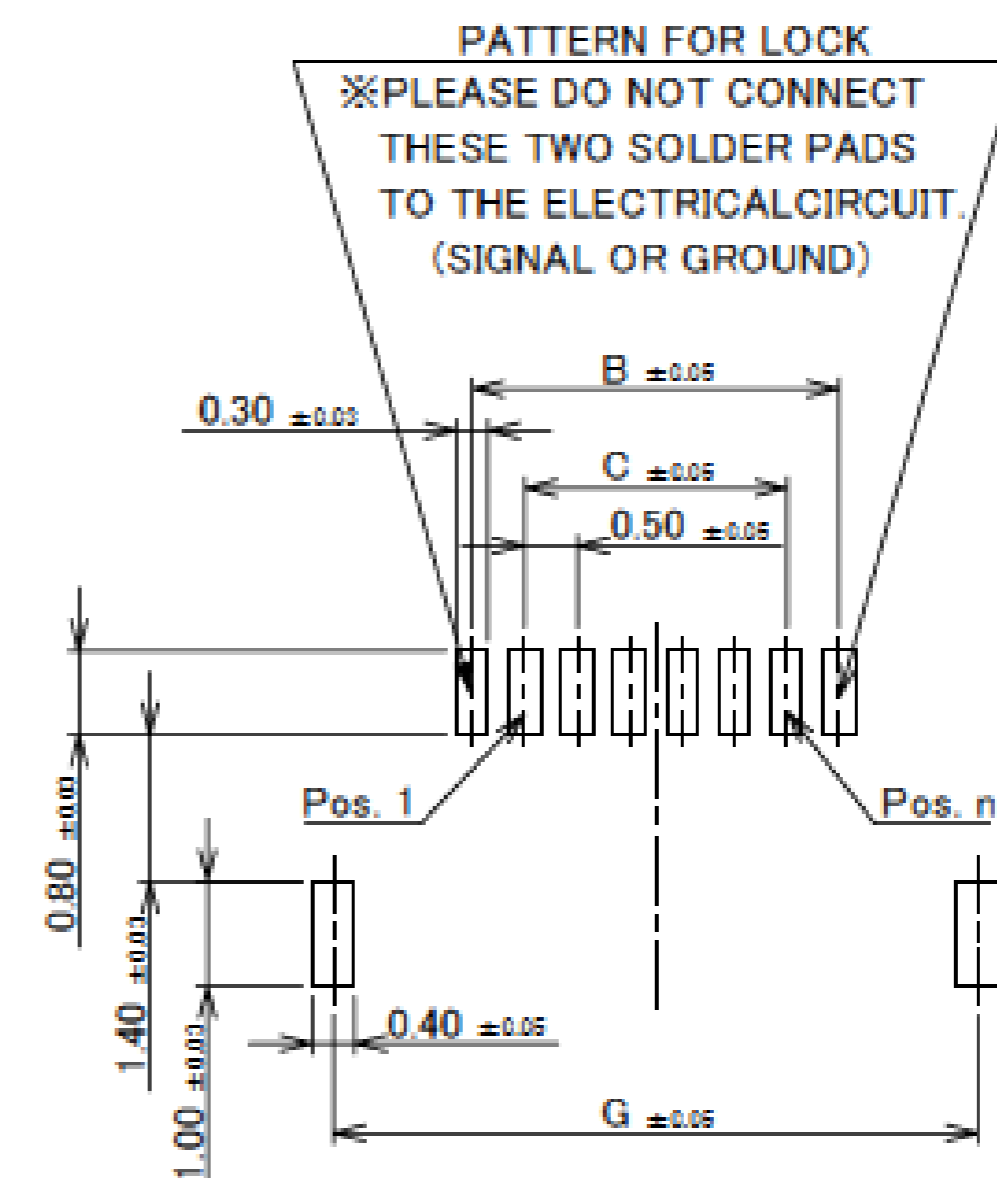
NOTES
1. CONTACT TAIL IS PROJECTION FROM HOUSING IN THE + DIRECTION. (0~0.06)

Rev.7



| PART No. | POS. | B | C | G | H |
|----------------|------|-------|------|-------|-------|
| 20597-006E-02 | 6 | 3.50 | 2.50 | 6.15 | 5.50 |
| 20597-008E-02 | 8 | 4.50 | 3.50 | 7.15 | 6.50 |
| 20597-010E-02 | 10 | 5.50 | 4.50 | 8.15 | 7.50 |
| ◆20597-020E-02 | 20 | 10.50 | 9.50 | 13.15 | 12.50 |

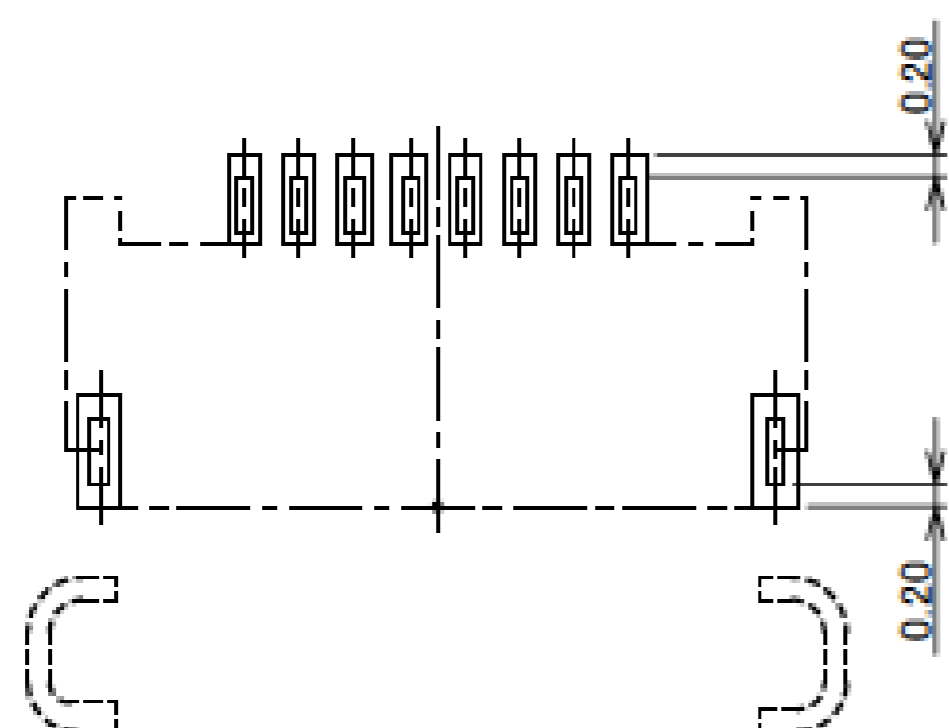
◆ MARK MEANS NOT AVAILABLE



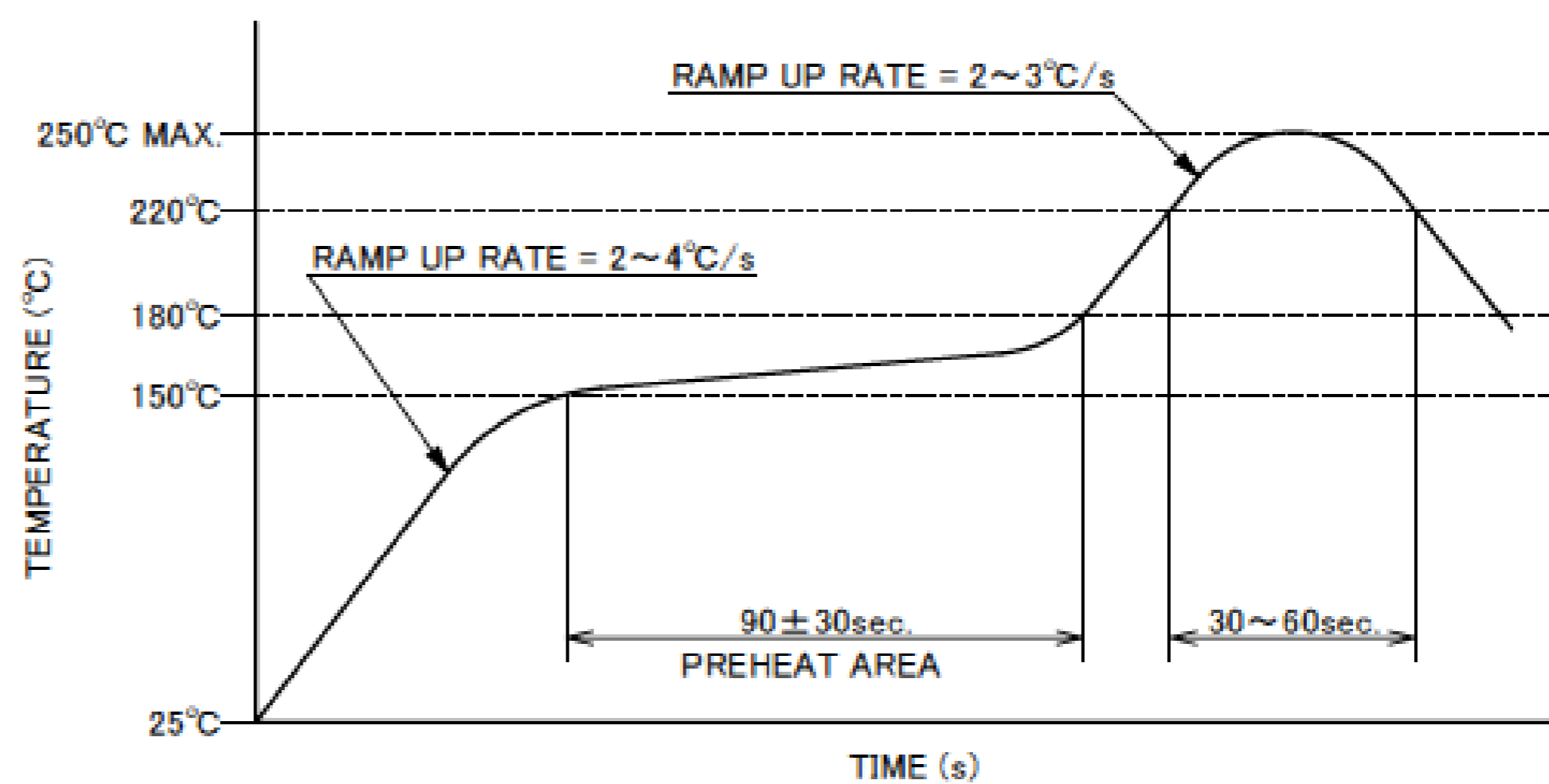
NOTES
2.MATERIAL
COVER FILM : PI
CONDUCTOR : COPPER(RARE)
BASE FILM : PI
STIFFENER : PI
ADHESIVE : THERMOSETTING ADHESIVE
3.FINISH
Au OVER Ni PLATING.

Rev.7

Receptacle for Cable Assembly



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

Rev.7

| ITEMS | SPECIFICATION |
|---|--|
| RATING VOLTAGE | 50V AC (PER CONTACT) |
| RATING AMPERAGE | 0.5A DC [FPC] (PER CONTACT) 0.7A DC [AWG#34] (PER CONTACT) |
| OPERATING TEMPERATURE | 233~358K(-40°C~85°C) |
| OPERATING HUMIDITY | 80% MAX.(NON-CONDENSING) |
| CONTACT RESISTANCE | INITIAL : 40mohm MAX. / AFTER TEST : \triangleleft 20mohm MAX. |
| INSULATION RESISTANCE | INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MAX. (PLUG CABLE) 100Mohm MIN. (FPC) |
| DIELECTRIC WITHSTANDING VOLTAGE | AC200V 1min |
| DURABILITY | 20TH CYCLES |
| ACTUATOR LOCKING FORCE (INITIAL / 20TH CYCLES) | INITIAL/ 20TH CYCLES : $0.6N(61gf) \times (n + 2)$ MAX. |
| ACTUATOR UNLOCKING FORCE (INITIAL / 20TH CYCLES) | INITIAL/ 20TH CYCLES : $0.05N(5gf) \times (n + 2)$ MIN. |
| PLUG AND FPC RETENTION FORCE (INITIAL / AFTER TEST) | INITIAL : $0.15N(15gf) \times n + 2.0N$ MIN. / AFTER TEST : $0.15N(15gf) \times n + 1.0N$ MIN. |
| COPLANARITY | 0.08 MAX. |
| PRODUCT SPECIFICATION | PRS-1880 |
| TEST REPORT | TR-13103 |
| PACKING STANDARD | PST-13047 |
| INSTRUCTION MANUAL | HIM-14010 (FOR MATING PLUG CABLE) HIM-12019 (FOR MATING FPC) |
| APPEARANCE CRITERIA No. | QLS-A*** |


※ "n" IS THE NUMBER OF PIN

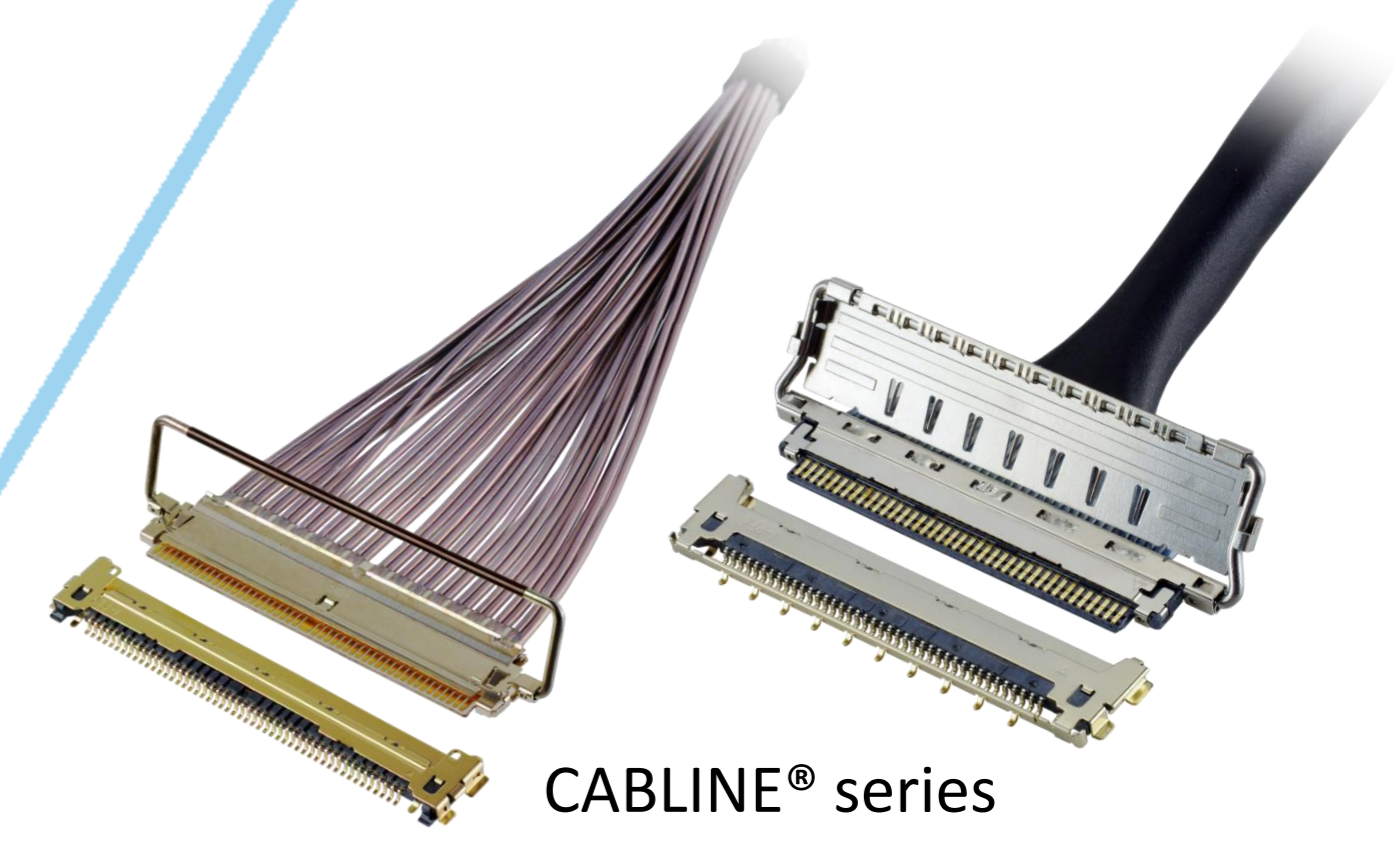
Custom Connectors Available

 RF Connector

MHF® series



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



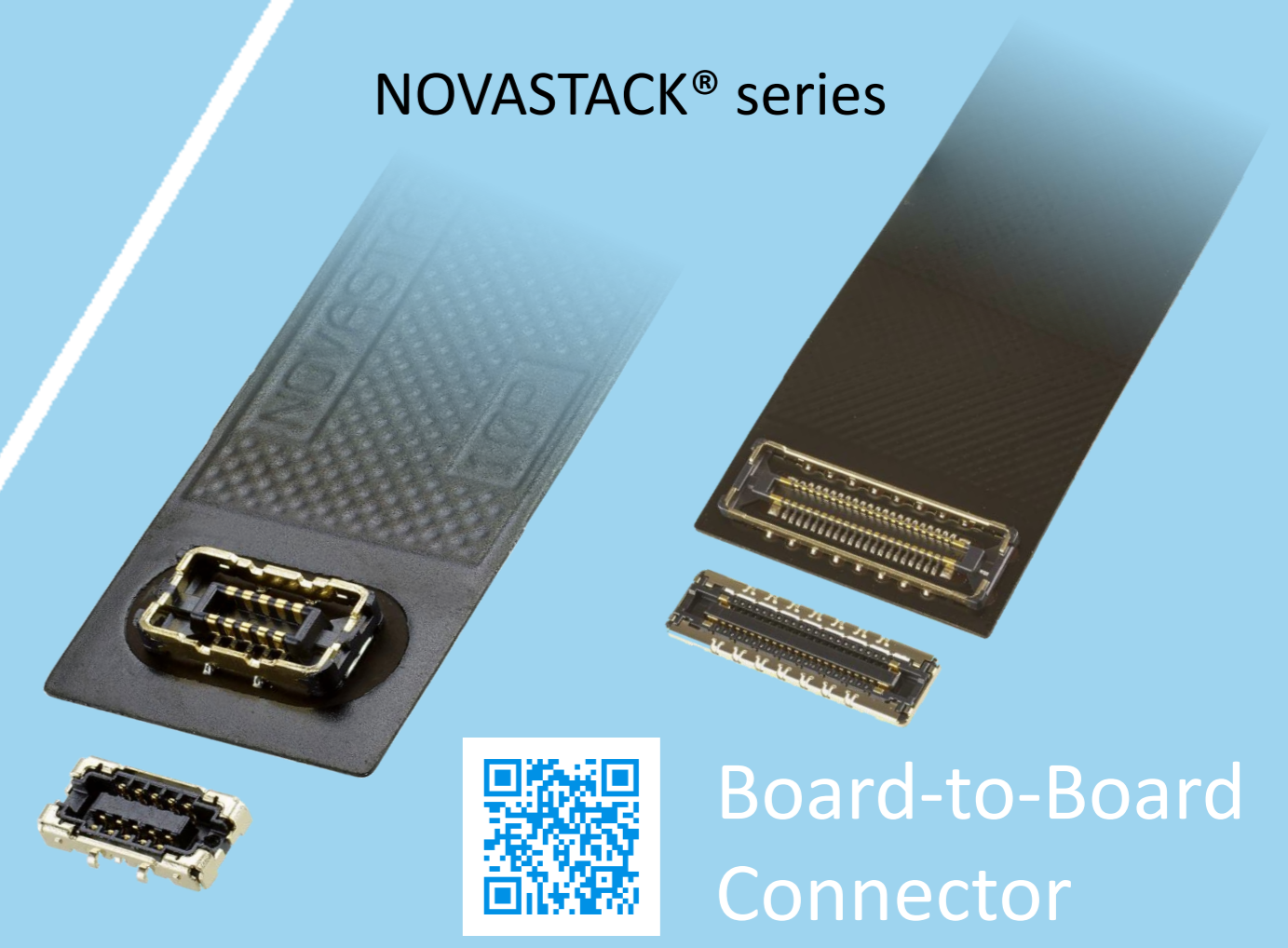
 Optical Module

LIGHTPASS® series



NOVASTACK® series

 Board-to-Board Connector



 Power Connector/
Terminal

AP series

ISH® series



MINIFLEX® series

EVAFLEX® series

 FPC FFC Connector

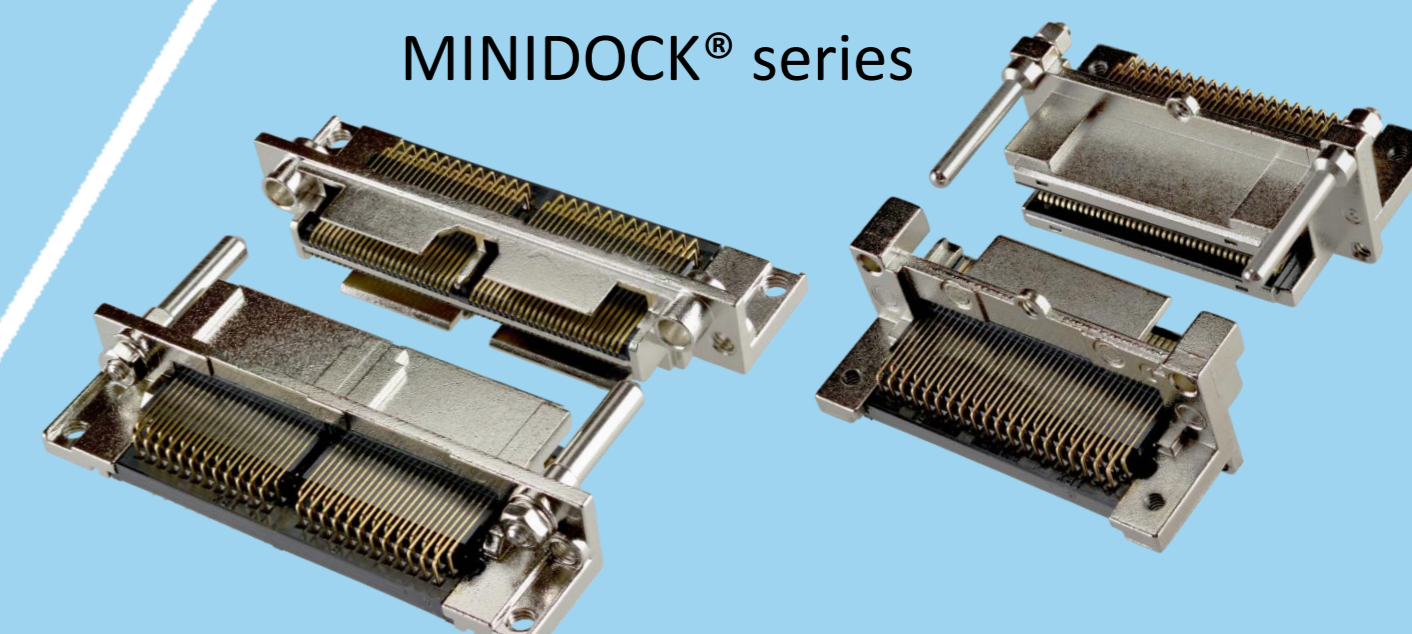


Inquiry



MINIDOCK® series

 I/O Connector



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