

Recommended P/N 20682-0**E-02

| PART NO. | Pos. | A | B | C | D | E | J | K | L | U |
|---------------|------|-------|-------|-------|-------|-------|------|-------|------|-------|
| 20682-020E-02 | 20 | 9.40 | 7.60 | 12.43 | 13.20 | 4.80 | 2.40 | 5.60 | 2.00 | 10.01 |
| 20682-030E-02 | 30 | 13.40 | 11.60 | 16.43 | 17.20 | 9.60 | 2.40 | 12.00 | 1.60 | 14.01 |
| 20682-040E-02 | 40 | 17.40 | 15.60 | 20.43 | 21.20 | 12.00 | 2.40 | 14.40 | 1.60 | 18.01 |
| 20682-050E-02 | 50 | 21.40 | 19.60 | 24.43 | 25.20 | 16.80 | 2.80 | 18.40 | 1.60 | 22.01 |

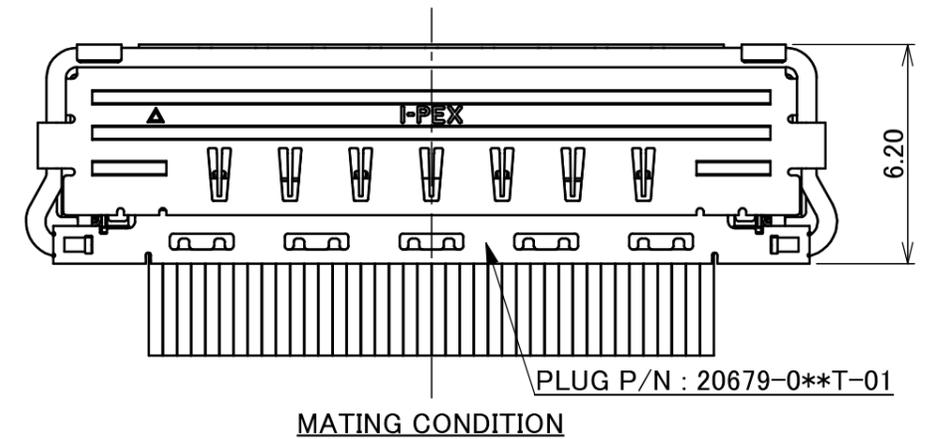
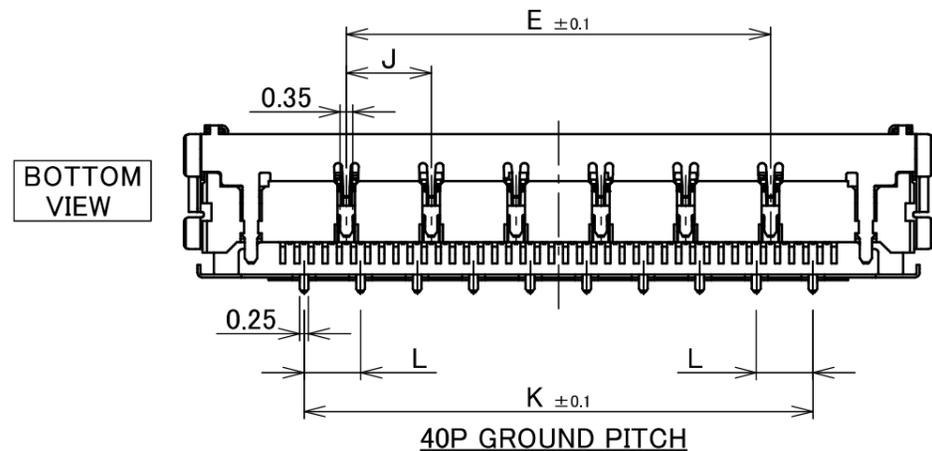
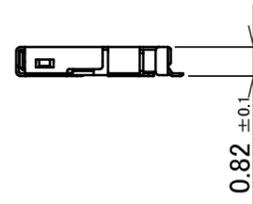
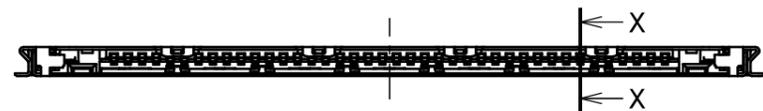
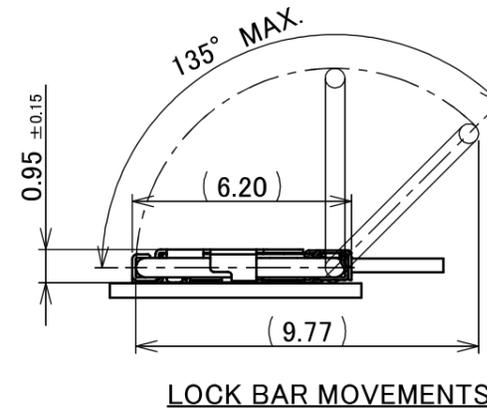
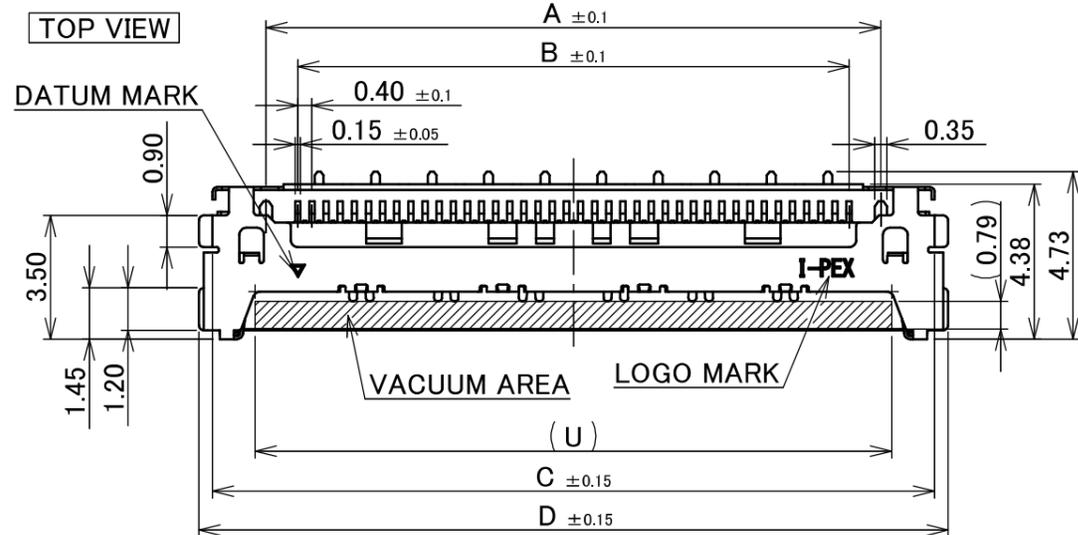
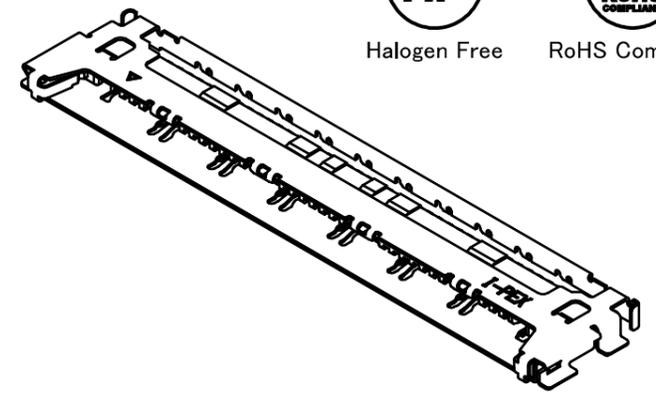
P/N : 20682-0 ** E- 02
Pos.



Halogen Free



RoHS Compliant



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

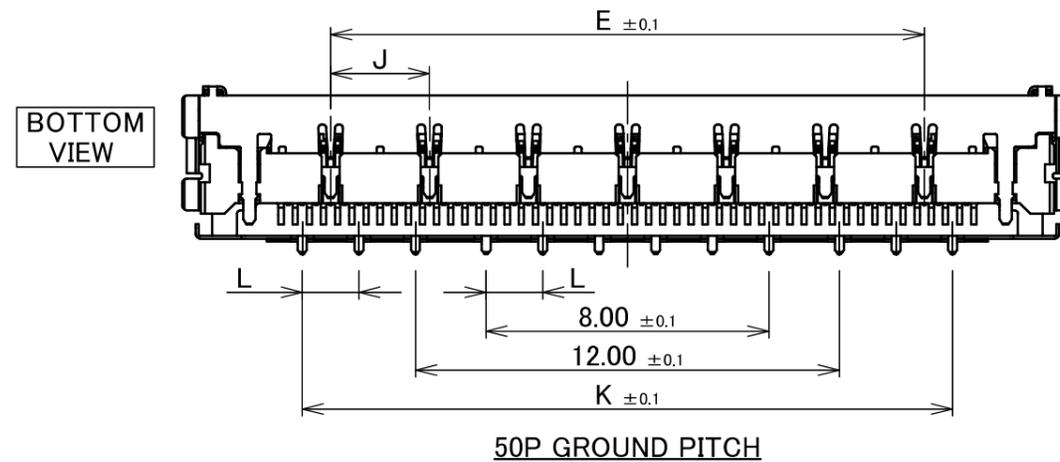
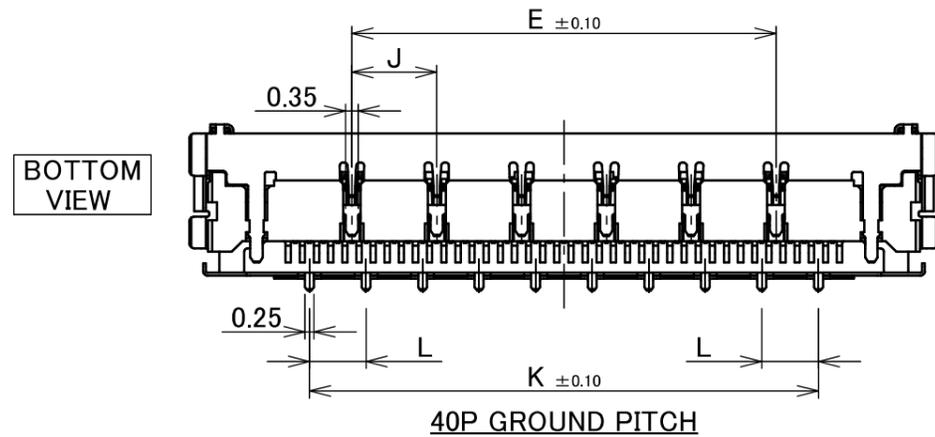
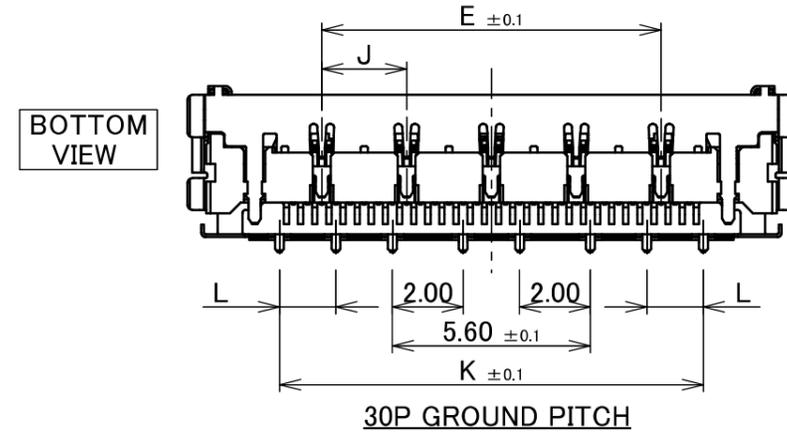
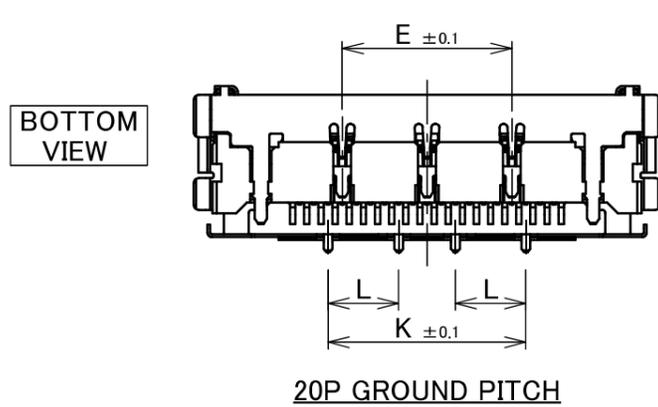
| REV. | ECN | BY | DATE | APP. | APP. | PROJECTION | SERIES No. | TITLE | SCALE | SHEET | REV. |
|------|---------|--------|------------|------|-----------------------------------|------------|------------|---------------------------------------|-------|-------|------|
| 19 | ZC00489 | K.Hara | 2026/02/19 | T.M | ANGLE ±2° 6 OVER 30 MAX. ±0.3 | PROJECTION | R1 | CABLIN® -CA II RECEPTACLE ASSEMBLY | 5:1 | mm | 19 |
| 18 | ZC00394 | K.Hara | 2026/01/05 | T.M | 6 MAX. ±0.2 30 OVER 120 MAX. ±0.5 | | | | | | |
| 17 | Z250835 | K.W | 2025/06/04 | M.T | GENERAL TOLERANCE. | | | | | | |
| 16 | Z250425 | K.Hara | 2025/03/13 | H.I | DWG. DATE | | | | | | |
| 15 | Z241785 | K.Hara | 2024/12/13 | H.I | T.Masunaga 2015/03/24 | | | | | | |
| 13 | Z240029 | K.Hara | 2024/01/12 | H.I | CHK. J.Tateishi | | | | | | |
| REV. | ECN | BY | DATE | APP. | APP. | DWG. No. | 20682 | | A3 | 1/8 | |

PATENT REGISTERED

REVISION RECORD E.Kawabe

| PART NO. | Pos. | E | J | K | L |
|---------------|------|-------|------|-------|------|
| 20682-020E-02 | 20 | 4.80 | 2.40 | 5.60 | 2.00 |
| 20682-030E-02 | 30 | 9.60 | 2.40 | 12.00 | 1.60 |
| 20682-040E-02 | 40 | 12.00 | 2.40 | 14.40 | 1.60 |
| 20682-050E-02 | 50 | 16.80 | 2.80 | 18.40 | 1.60 |

PATENT REGISTERED



| | | | | | | | | |
|--------------------|--------|----------------|------------------|----------------------------|------------|------|---------------|-------|
| ANGLE | ±2° | 6 OVER 30 MAX. | ±0.3 | PROJECTION | SERIES No. | R1 | CUSTOMER COPY | |
| | 6 MAX. | ±0.2 | 30 OVER 120 MAX. | | ±0.5 | | | SCALE |
| GENERAL TOLERANCE. | | | | TITLE | | 5:1 | | |
| DWG. | | | | CABLIN [®] -CA II | | UNIT | | |
| CHK. | | | | RECEPTACLE ASSEMBLY | | mm | | |
| APP. | | | | DWG. No. | | SIZE | | SHEET |
| | | | | 20682 | | A3 | | |
| | | | | | | REV. | | 19 |
| | | | | | | 2/8 | | |

FOR CABLINE-CA II PLUG CABLE ASSEMBLY (DWG. NO. 20679)

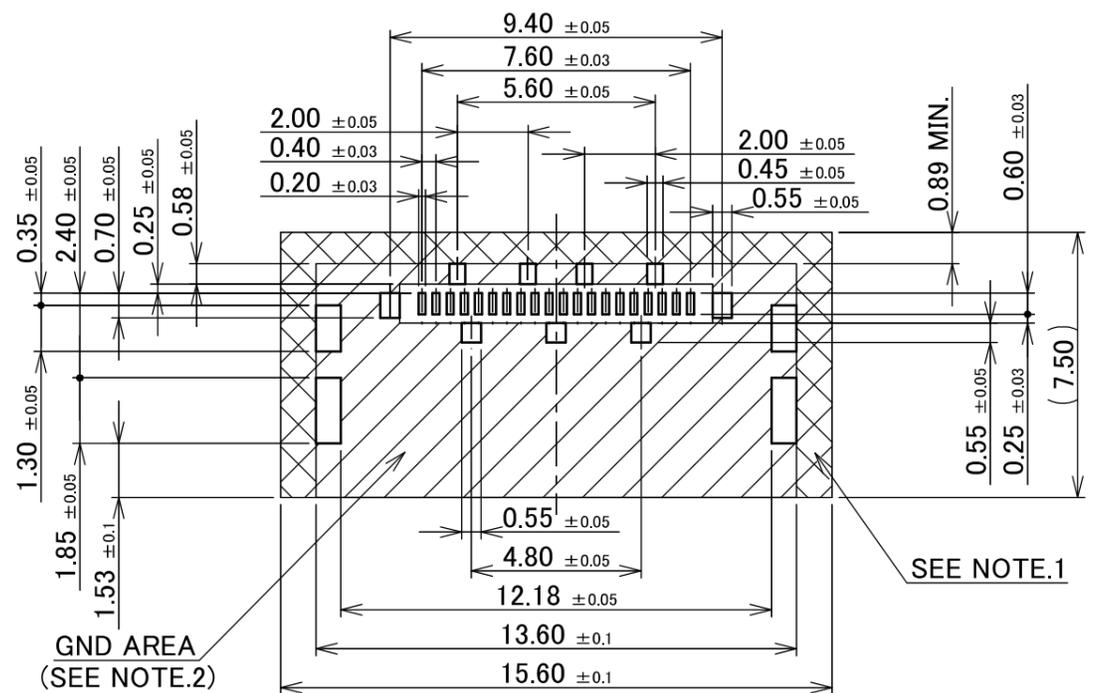
| ITEMS | SPECIFICATION |
|---|---|
| APPLICABLE CABLE | MICRO-COAXIAL : AWG #44 , 42 , 40 , 38 , 36 DISCRETE WIRE : AWG #36 , 34 TWINAXIAL CABLE : AWG #40 , 42 |
| RATED VOLTAGE | 100V AC (PER CONTACT PIN) ※THIS IS THE RATED VOLTAGE OF THE CONNECTOR. PLEASE NOTE THAT THE RATED VOLTAGE MAY VARY IN THE HARNESS DEPENDING ON THE CABLES USED. |
| RATED AMPERAGE (FOR CONTACT) | 0.1A AC/DC [AWG #44] PER CONTACT PIN/UP TO 50 CONTACTS 0.24A AC/DC [AWG #42] PER CONTACT PIN/UP TO 50 CONTACTS 0.3A AC/DC [AWG #40] PER CONTACT PIN/UP TO 50 CONTACTS 0.5A AC/DC [AWG #38] PER CONTACT PIN/UP TO 18 CONTACTS 0.8A AC/DC [AWG #36] PER CONTACT PIN/UP TO 6 CONTACTS 1.0A AC/DC [AWG #34] PER CONTACT PIN/UP TO 6 CONTACTS ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERTURE RISE MAY AFFECTED BY ACTUAL SITUATION. |
| OPERATING TEMPERATURE | 233 TO 378K (-40°C TO 105°C) |
| OPERATING HUMIDITY | 85% MAX. |
| CONTACT RESISTANCE | INITIAL : 180mohm MAX.(AWG #34) / AFTER TEST : \triangle 40mohm 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 : \triangle 40mohm MAX. |
| INSULATION RESISTANCE | INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN. |
| DIELECTRIC WITHSTANDING VOLTAGE | AC250V 1min |
| DURABILITY | 30 CYCLES |
| MATING FORCE (INITIAL / AFTER 30 CYCLES) | 20P : 9.70N MAX. 30P : 14.55N MAX. 40P : 19.40N MAX. 50P : 24.25N MAX. |
| UN-MATING FORCE (INITIAL / AFTER 30 CYCLES) | 20P : 2.0N MIN. 30P : 3.0N MIN. 40P : 4.0N MIN. 50P : 5.0N MIN. |
| CABLE RETENTION FORCE | 20P : 9.80N MIN. 30P : 14.55N MIN. 40P : 19.40N MIN. 50P : 24.25N MIN. |
| COPLANARITY | 0.10 MAX. |
| PRODUCT SPECIFICATION | PRS-2163 |
| TEST REPORT | TR-15103 |
| INSTRUCTION MANUAL | HIM-15033 |
| PACKING STANDARD | PST-15027 |
| APPEARANCE CRITERIA No. | QLS-A*** |

| | | | | | | | | |
|--------------------|---------------|----------------|------------------|---|------------------|---|-------|------|
| ANGLE | $\pm 2^\circ$ | 6 OVER 30 MAX. | ± 0.3 | PROJECTION  | SERIES No. R1 | CUSTOMER COPY | | |
| | 6 MAX. | ± 0.2 | 30 OVER 120 MAX. | | | | | |
| GENERAL TOLERANCE. | | | | TITLE CABLINE® -CA II RECEPTACLE ASSEMBLY | SCALE - |  | | |
| DWG. | DATE | | | | | | | |
| CHK. | | | | | | | | |
| APP. | | | | | | | | |
| | | | | DWG. No. | 20682 | SIZE | SHEET | REV. |
| | | | | | | A3 | 3/8 | 19 |

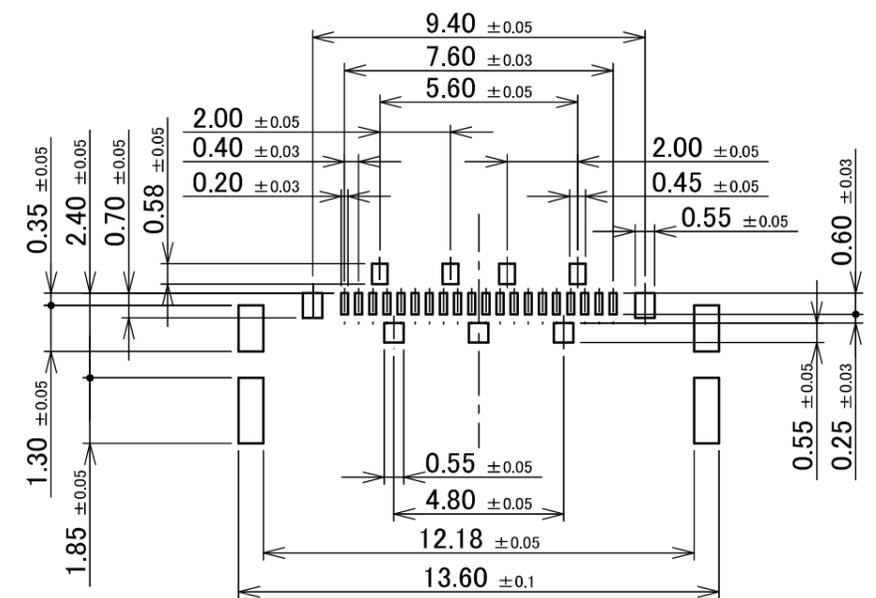
FOR CABLINE-CA IIF PLUG SHELL ASSEMBLY (DWG. NO. 20856)

| ITEMS | SPECIFICATION |
|---|---|
| RATED VOLTAGE | 100V AC (PER CONTACT PIN) |
| RATED AMPERAGE (FOR SIGNAL CONTACT) | 0.3A AC/DC (PER CONTACT PIN) ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION. |
| OPERATING TEMPERATURE | 233 TO 358K(-40°C TO +85°C) |
| OPERATING HUMIDITY | 85% MAX. |
| CONTACT RESISTANCE (FOR SIGNAL CONTACT) | INITIAL : 60mohm MAX. / AFTER TEST : \triangle 40mohm MAX. |
| GROUND SHELL RESISTANCE | INITIAL : 60mohm MAX. / AFTER TEST : \triangle 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 : 13.5N MAX. 40P : 18.0N MAX. 50P : 22.5N MAX. |
| UNMATING FORCE (INITIAL / AFTER TEST) | 30P : 1.44N MIN. 40P : 1.92N MIN. 50P : 2.40N MIN. |
| PRODUCT SPECIFICATION | PRS-2418 |
| TEST REPORT | TR-17079 |
| PACKING STANDARD | PST-17104 |
| INSTRUCTION MANUAL | HIM-17029 |
| ASSEMBLY MANUAL | ASM-17006 |
| APPEARANCE CRITERIA No. | QLS-A*** |

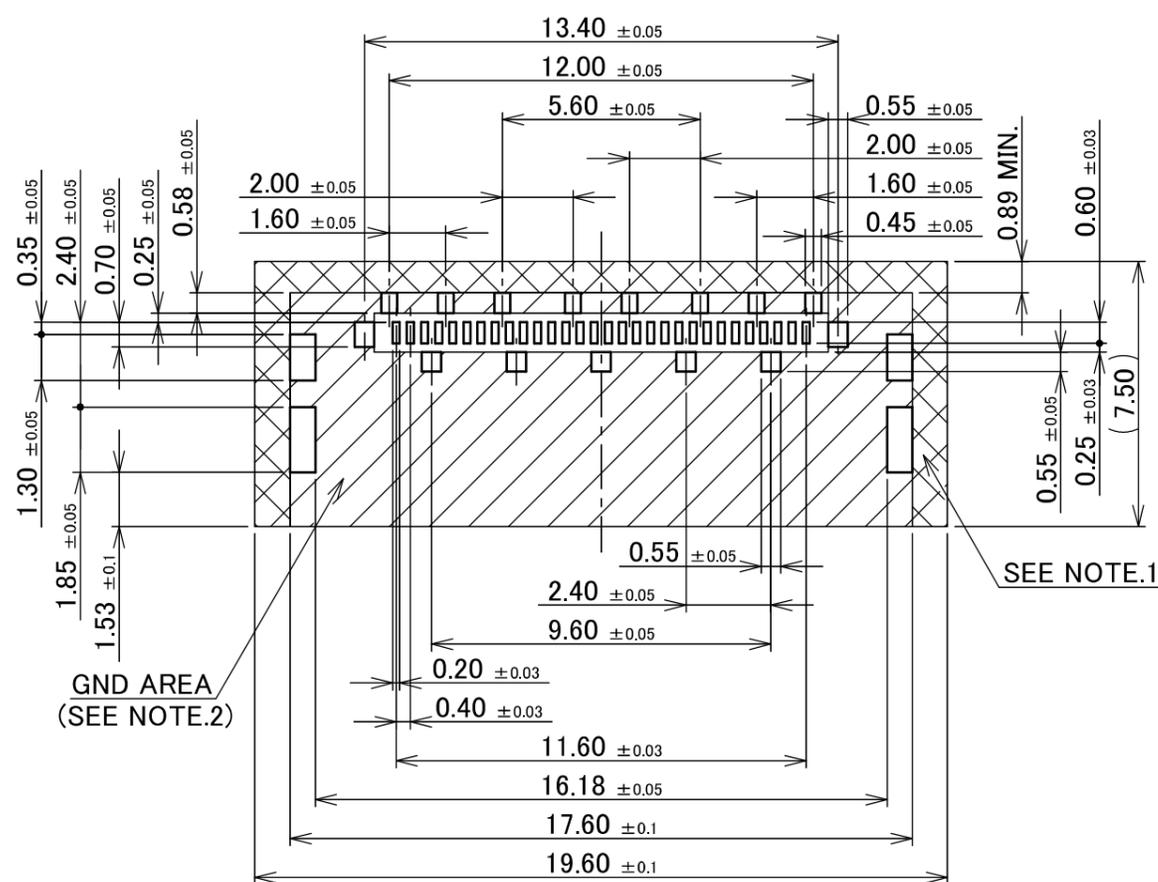
| | | | | | | | | |
|--------------------|---------------|------------------|-----------|--|------------------|---------------|-------|------|
| ANGLE | $\pm 2^\circ$ | 6 OVER 30 MAX. | ± 0.3 | PROJECTION | SERIES No. R1 | CUSTOMER COPY | | |
| 6 MAX. | ± 0.2 | 30 OVER 120 MAX. | ± 0.5 | | | | | |
| GENERAL TOLERANCE. | | | | TITLE CABLINE®-CA II RECEPTACLE ASSEMBLY | SCALE | I-PEX | | |
| DWG. | DATE | | | | - | | | |
| CHK. | | | | | UNIT | | | |
| APP. | | | | | mm | | | |
| | | | | DWG. No. | 20682 | SIZE | SHEET | REV. |
| | | | | | A3 | 4/8 | 19 | |



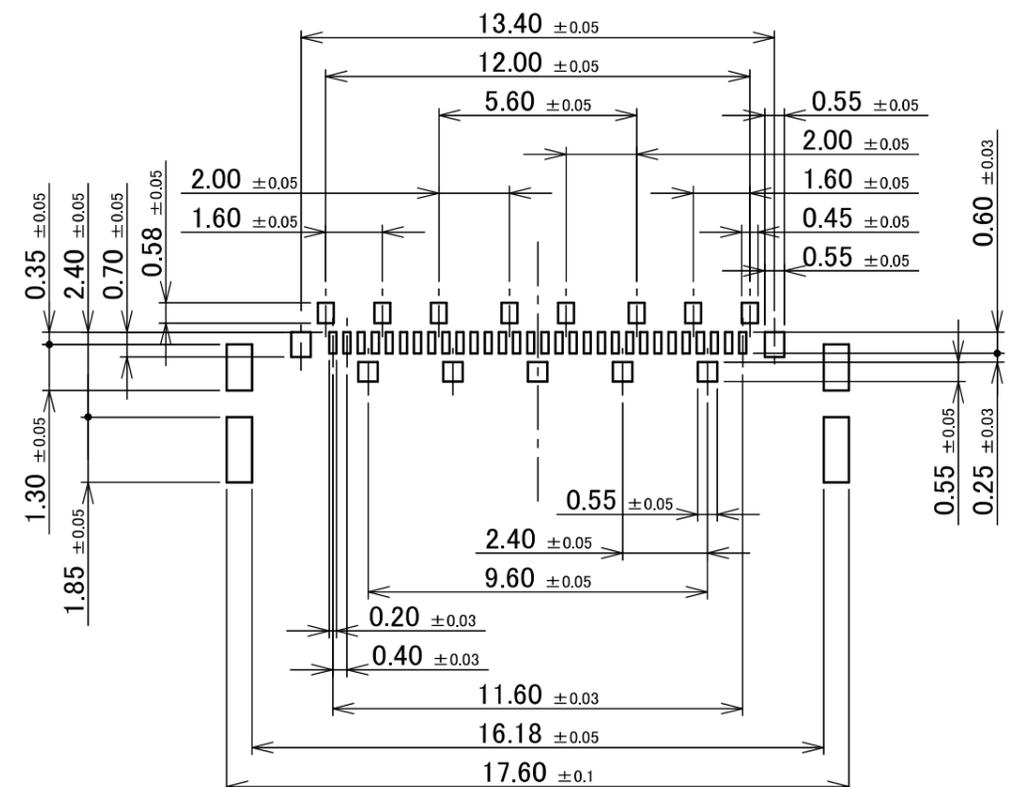
20P RECOMMENDED FOOTPRINT PATTERN LAYOUT



20P RECOMMENDED METAL MASK LAYOUT
METAL MASK THICKNESS : t=0.12mm



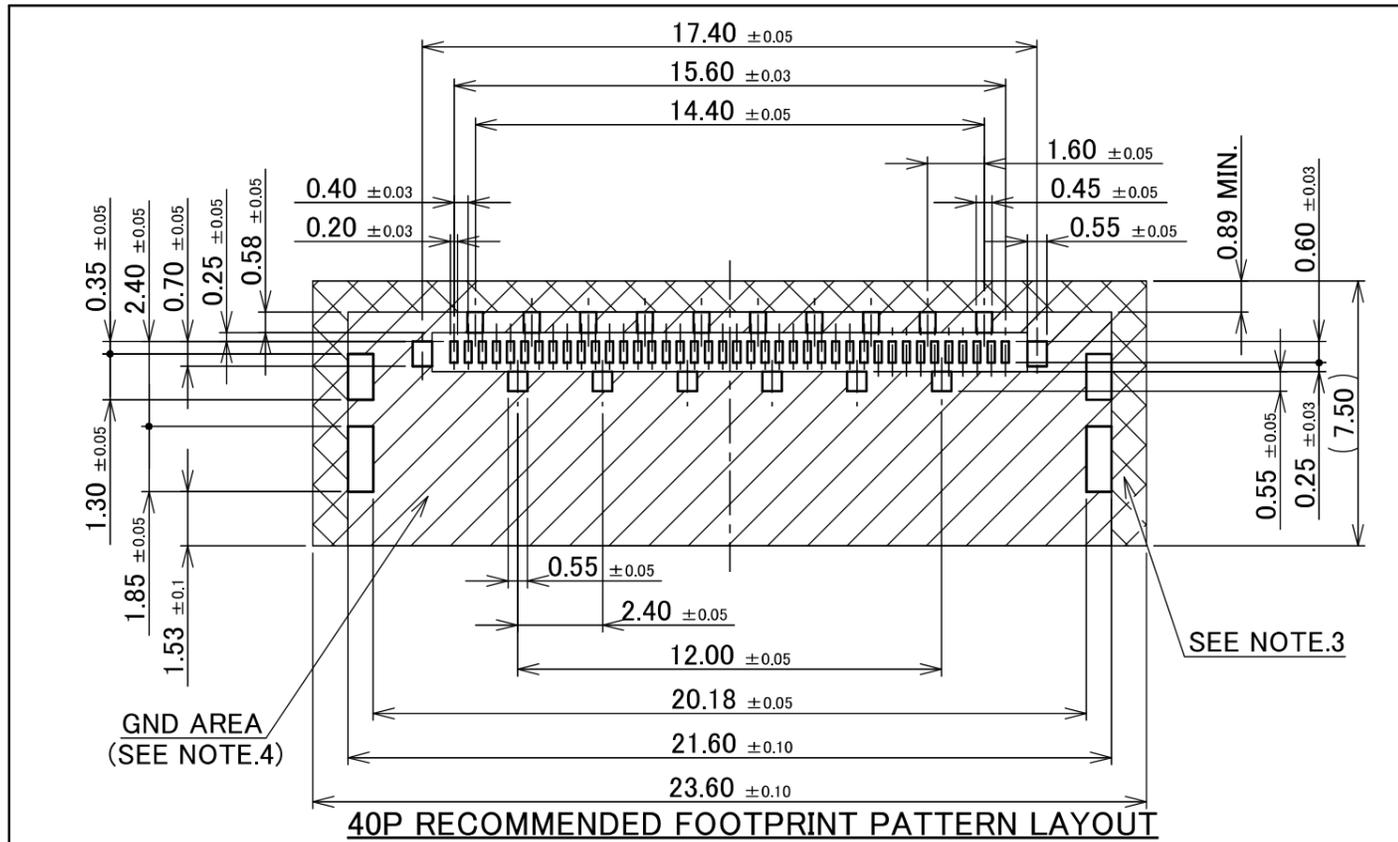
30P RECOMMENDED FOOTPRINT PATTERN LAYOUT



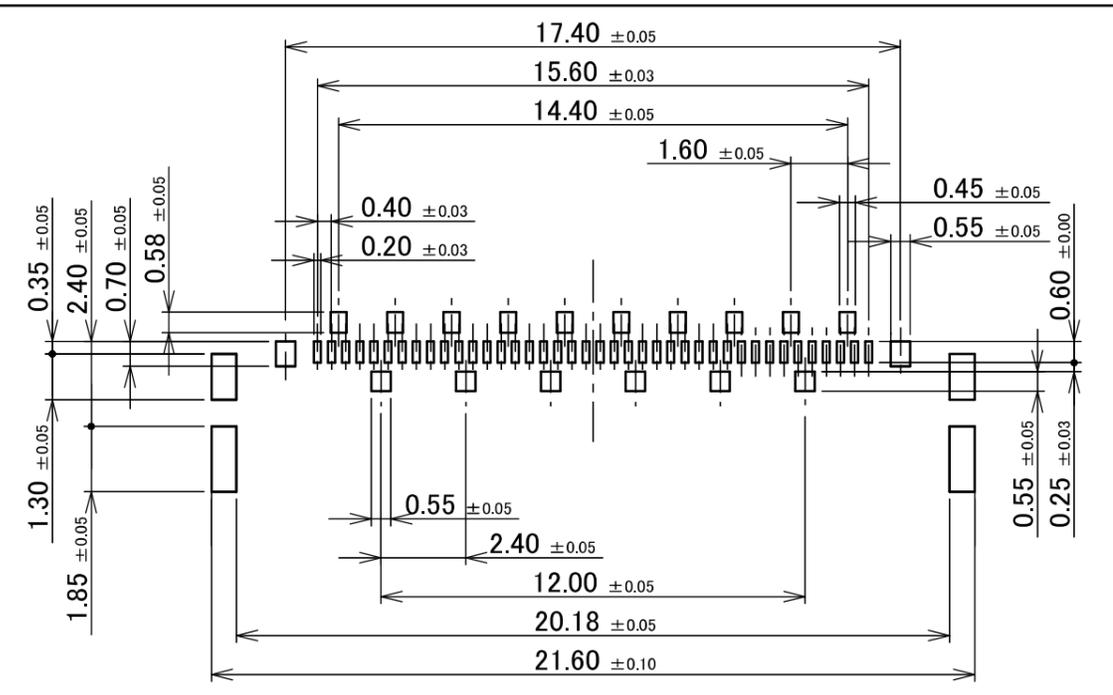
30P RECOMMENDED METAL MASK LAYOUT
METAL MASK THICKNESS : t=0.12mm

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

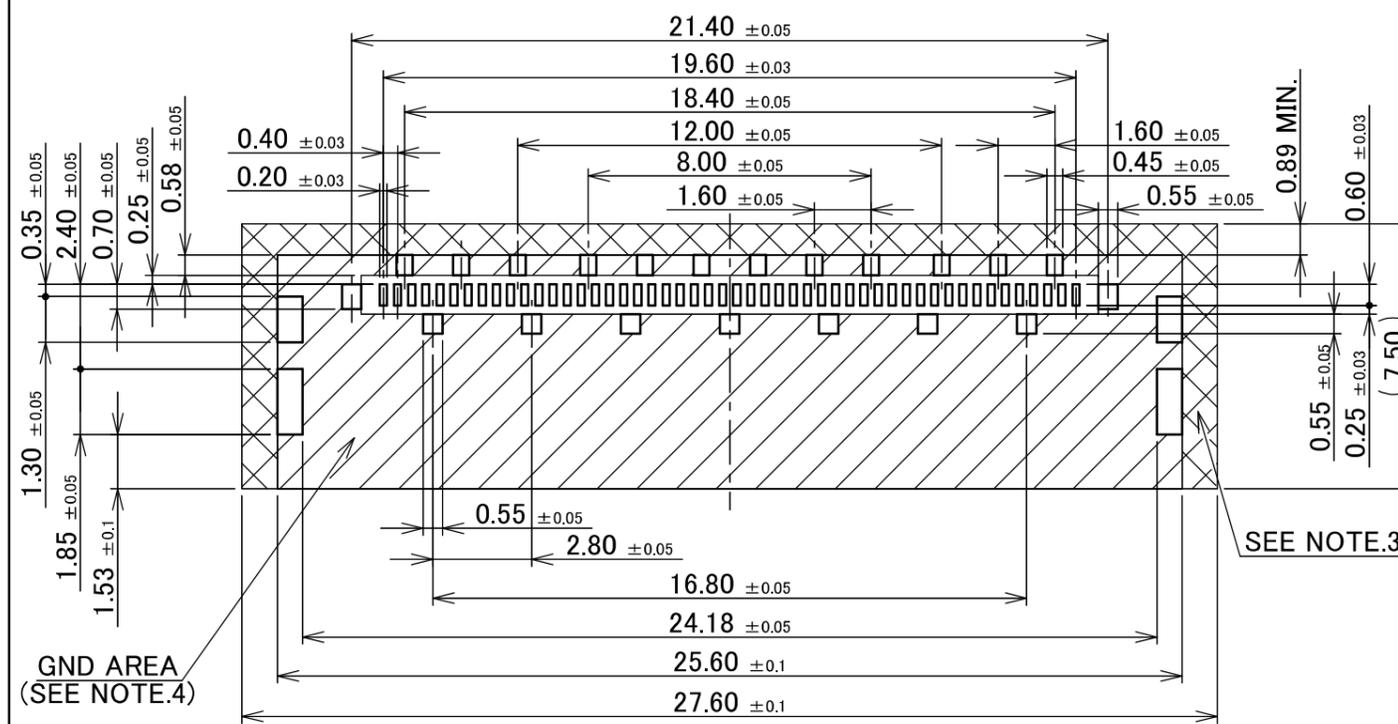
| | | | | | | | |
|--------------------|------|------------------|------|----------------------------|------------|---------------|--------------|
| ANGLE | ±2° | 6 OVER 30 MAX. | ±0.3 | PROJECTION | SERIES No. | CUSTOMER COPY | |
| | | | | | R1 | | |
| 6 MAX. | ±0.2 | 30 OVER 120 MAX. | ±0.5 | TITLE | | SCALE | I-PEX |
| GENERAL TOLERANCE. | | | | CABLIN [®] -CA II | | 5:1 | |
| DWG. | DATE | | | RECEPTACLE ASSEMBLY | | UNIT | |
| CHK. | | | | | | mm | |
| APP. | | | | DWG. No. | 20682 | SIZE | SHEET |
| | | | | | | A3 | 5/8 |
| | | | | | | | REV. |
| | | | | | | | 19 |



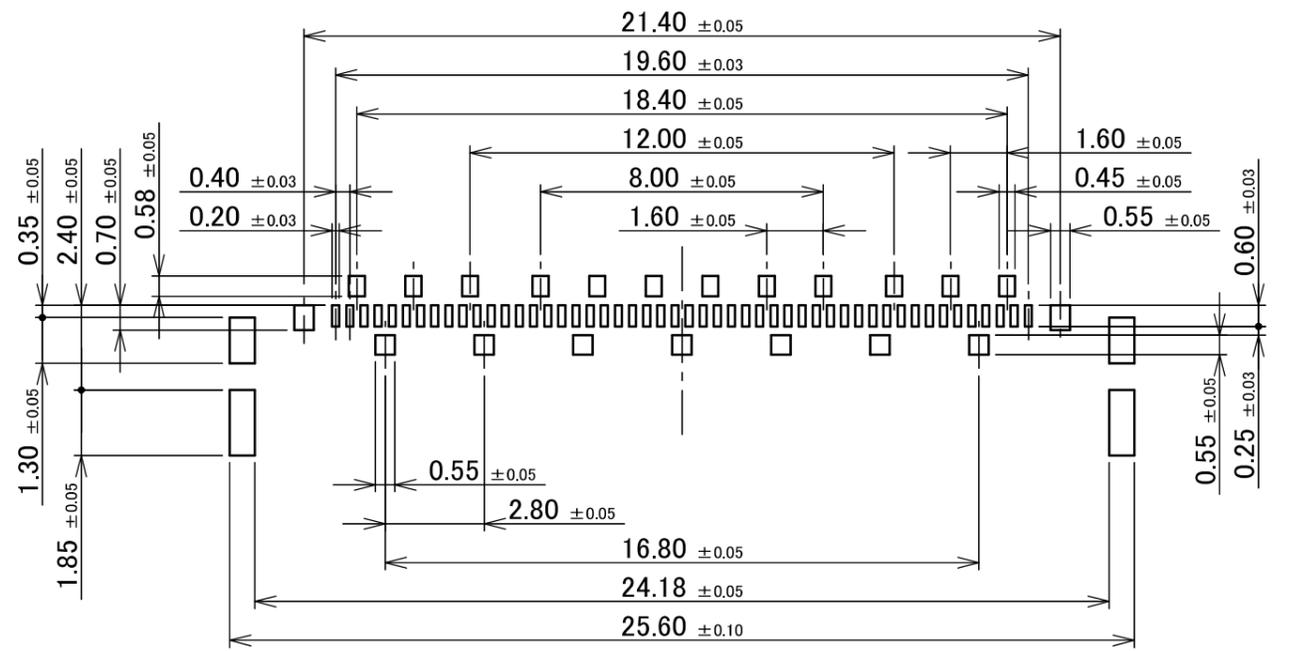
40P RECOMMENDED FOOTPRINT PATTERN LAYOUT



**40P RECOMMENDED METAL MASK LAYOUT
METAL MASK THICKNESS : t=0.12mm**



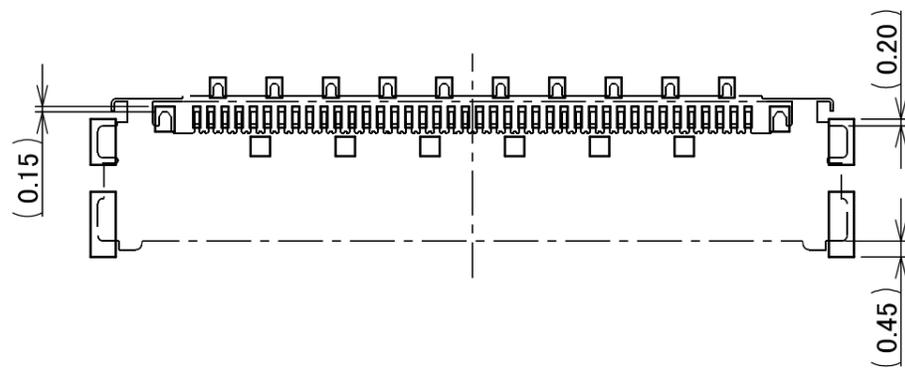
50P RECOMMENDED FOOTPRINT PATTERN LAYOUT



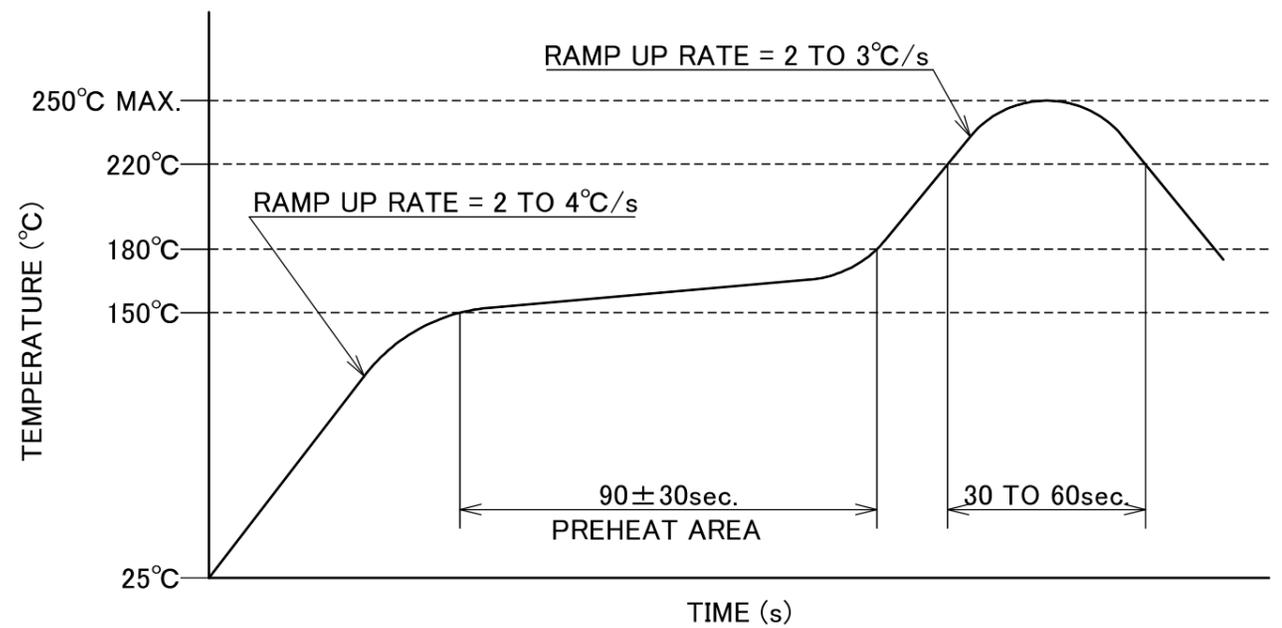
**50P RECOMMENDED METAL MASK LAYOUT
METAL MASK THICKNESS : t=0.12mm**

NOTES.
3. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.
4. SOLDER RESIST MUST BE APPLIED TO THIS AREA.

| | | | | | | | | |
|--------------------|------|------------------|------|---|------------------|---------------|--------------|------|
| ANGLE | ±2° | 6 OVER 30 MAX. | ±0.3 | PROJECTION ⊕ | SERIES No. R1 | CUSTOMER COPY | | |
| 6 MAX. | ±0.2 | 30 OVER 120 MAX. | ±0.5 | | | | | |
| GENERAL TOLERANCE. | | | | TITLE | | SCALE | I-PEX | |
| DWG. | DATE | | | CABLIN [®] -CA II RECEPTACLE ASSEMBLY | | 5:1 | | |
| CHK. | | | | | | UNIT | | |
| APP. | | | | DWG. No. 20682 | | mm | | |
| | | | | | | SIZE | SHEET | REV. |
| | | | | | | A3 | 6/8 | 19 |



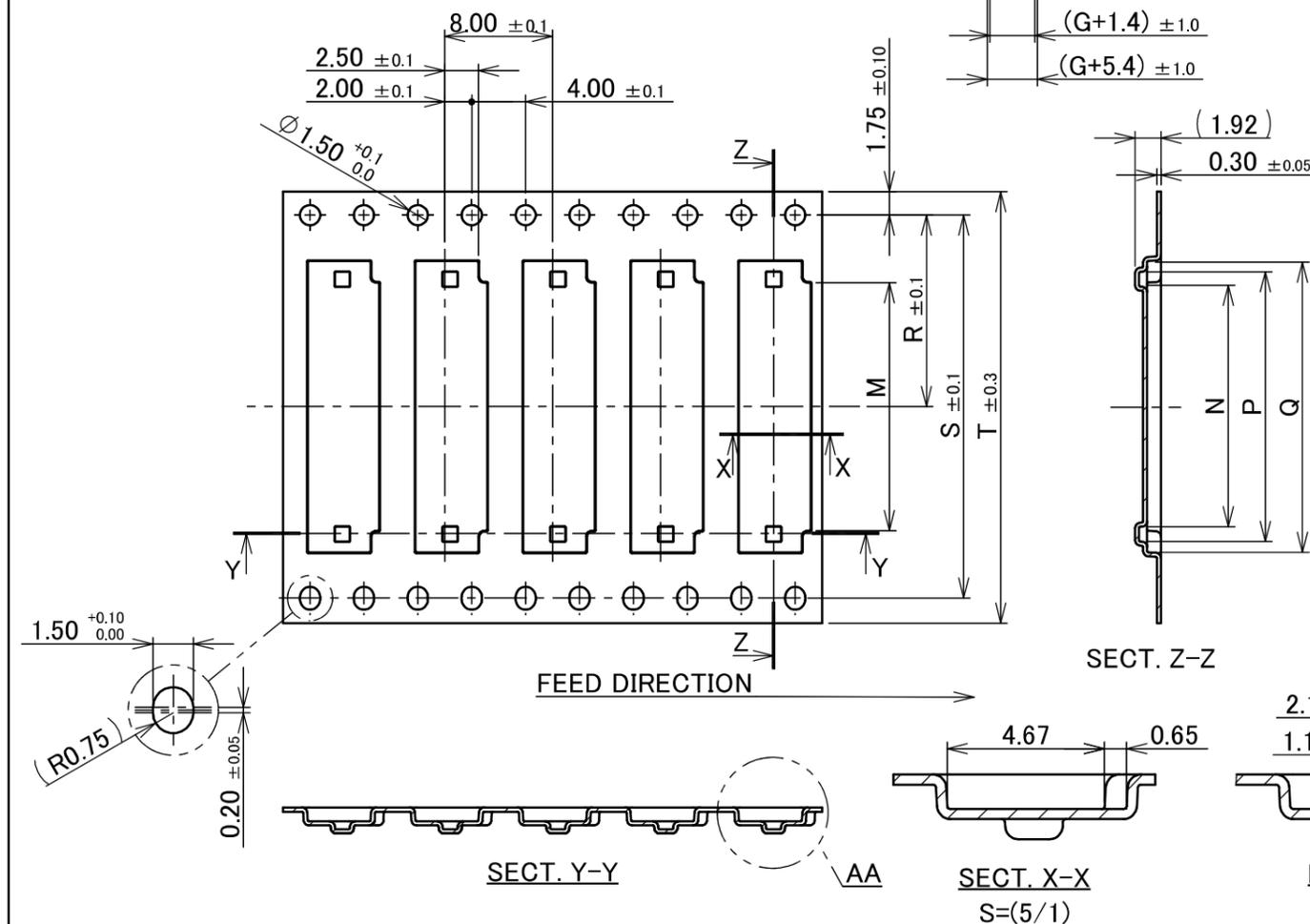
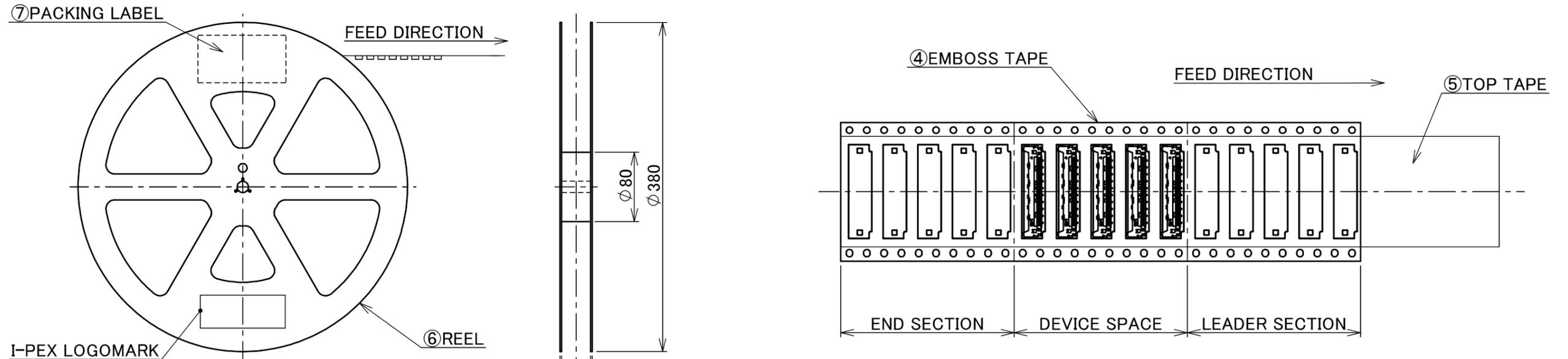
CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

| | | | | | | | | |
|--------------------|------|------------------|------|--|----------------------------|---------------|--------------|------------|
| ANGLE | ±2° | 6 OVER 30 MAX. | ±0.3 | PROJECTION | SERIES No. R1 | CUSTOMER COPY | | |
| 6 MAX. | ±0.2 | 30 OVER 120 MAX. | ±0.5 | | | | | |
| GENERAL TOLERANCE. | | | | TITLE CABLIN [®] -CA II RECEPTACLE ASSEMBLY | SCALE 5:1 UNIT mm | | | |
| DWG. | DATE | | | | | | | |
| CHK. | | | | | | | | |
| APP. | | | | | | | | |
| | | | | DWG. No. | 20682 | SIZE A3 | SHEET 7/8 | REV. 19 |

| PART NO. | G | M | N | P | Q | R | S | T | QTY. PER EMBOSS REEL (PIECES / REEL) | QTY. PER PACKING CARTON (REELS / CARTON) |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|---|---|
| 20682-020E-02 | 24.00 | 7.60 | 9.80 | 12.00 | 13.60 | 11.50 | - | 24.00 | 5500 / REEL | 5 / CARTON = 27500 |
| 20682-030E-02 | 32.00 | 14.40 | 13.80 | 16.00 | 17.60 | 14.20 | 28.40 | 32.00 | | 4 / CARTON = 22000 |
| 20682-040E-02 | 32.00 | 18.40 | 17.80 | 20.00 | 21.60 | 14.20 | 28.40 | 32.00 | | 3 / CARTON = 16500 |
| 20682-050E-02 | 44.00 | 22.40 | 21.80 | 24.00 | 25.60 | 20.20 | 40.40 | 44.00 | | |



NOTES.

- TAPING SPECIFICATION FOLLOWS JIS C 0806 (IEC 60286-3).
- EMPTY SECTION OF LEADER AND END ON EACH END OF THE TAPE FOLLOW JIS C 0806 (IEC 60286-3).
- TOP TAPE SHALL NOT STICK OUT FROM EMBOSS TAPE.
- TOP TAPE SHALL NOT COVER FEED HOLE.

| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |
|-----|---------------|---------------------|------------------------|
| 7 | PACKING LABEL | - | - |
| 6 | REEL | PS | ANTI-STATIC TYPE BLACK |
| 5 | TOP TAPE | PET TRANSPARENCY | ANTI-STATIC TYPE |
| 4 | EMBOSS TAPE | PS TRANSPARENCY | ANTI-STATIC TYPE |

| ANGLE | ±2° | 6 OVER 30 MAX. | ±0.3 | PROJECTION | SERIES No. | CUSTOMER COPY | | | |
|--------------------|------|------------------|------|------------|------------|---------------------|-------|-------|------|
| 6 MAX. | ±0.2 | 30 OVER 120 MAX. | ±0.5 | | R1 | | | | |
| GENERAL TOLERANCE. | | | | | | TITLE | SCALE | | |
| DWG. | DATE | | | | | CABLIN® -CA II | 5:1 | | |
| CHK. | | | | | | RECEPTACLE ASSEMBLY | UNIT | I-PEX | |
| APP. | | | | | | DWG. No. | SIZE | SHEET | REV. |
| | | | | | | 20682 | A3 | 8/8 | 19 |