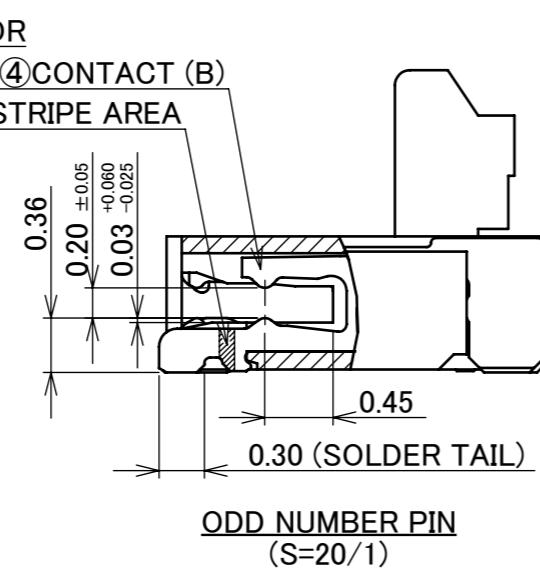
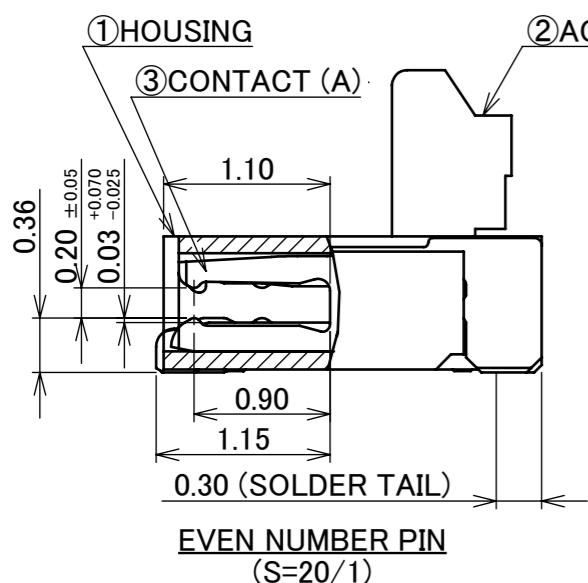
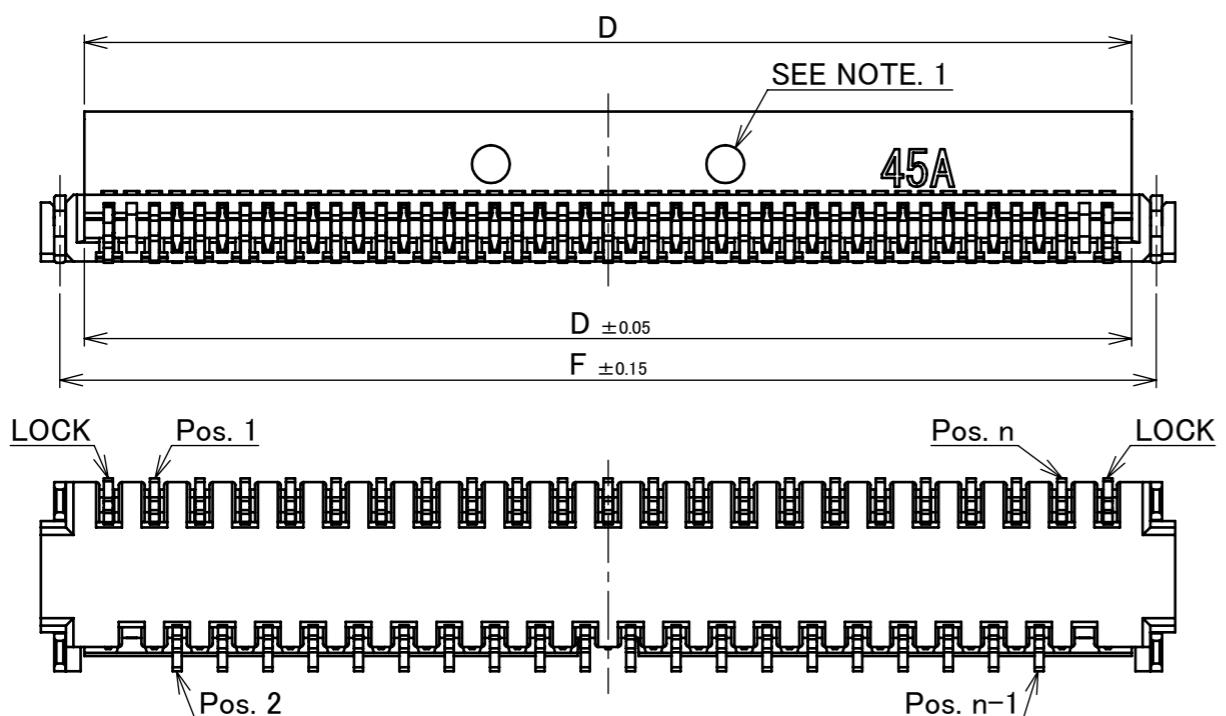
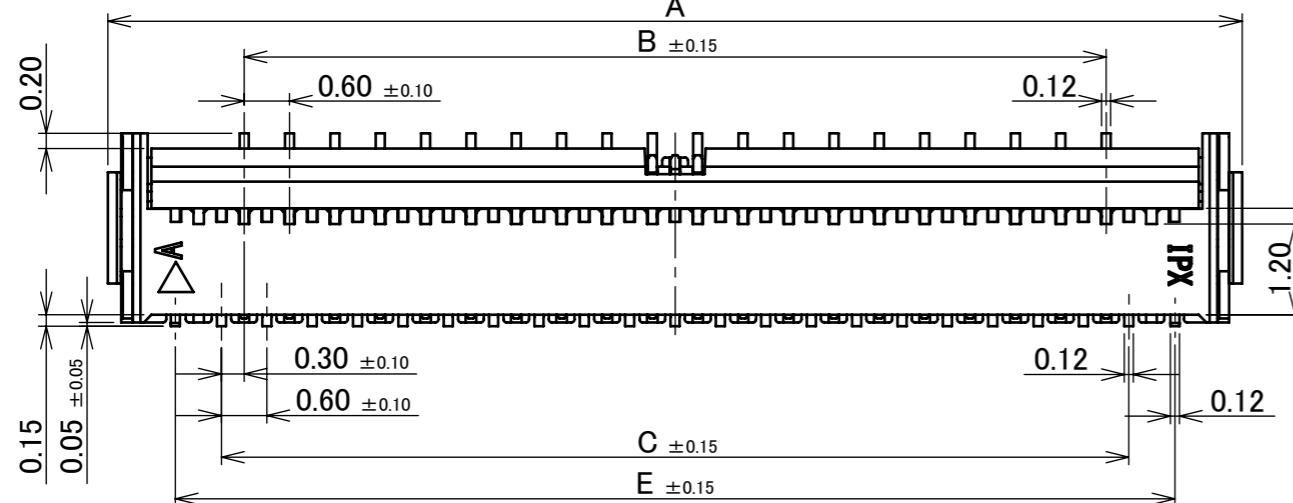


ODD NUMBER POS.

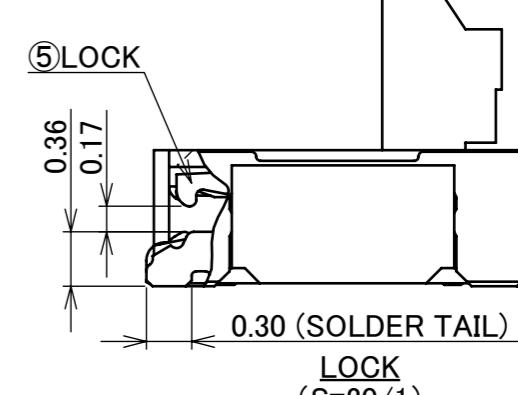
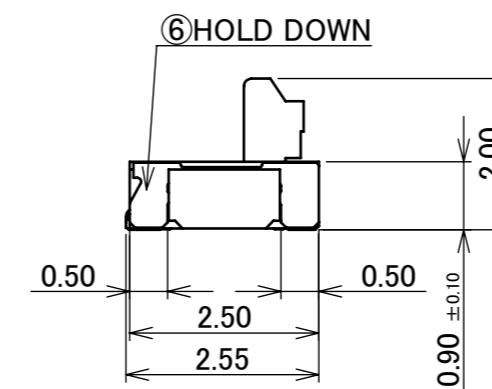
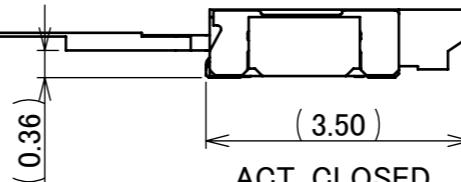


Confidential B



| PART NO. | Pos. | A | B | C | D | E | F |
|----------------|------|-------|-------|-------|-------|-------|-------|
| 20655-011E-01 | 11P | 6.00 | 2.40 | 3.00 | 4.85 | 4.20 | 5.50 |
| ◆20655-029E-01 | 29P | 11.40 | 7.80 | 8.40 | 10.25 | 9.60 | 10.90 |
| ◆20655-031E-01 | 31P | 12.00 | 8.40 | 9.00 | 10.85 | 10.20 | 11.50 |
| ◆20655-035E-01 | 35P | 13.20 | 9.60 | 10.20 | 12.05 | 11.40 | 12.70 |
| ◆20655-037E-01 | 37P | 13.80 | 10.20 | 10.80 | 12.65 | 12.00 | 13.30 |
| ◆20655-041E-01 | 41P | 15.00 | 11.40 | 12.00 | 13.85 | 13.20 | 14.50 |
| 20655-045E-01 | 45P | 16.20 | 12.60 | 13.20 | 15.05 | 14.40 | 15.70 |
| ◆20655-047E-01 | 47P | 16.80 | 13.20 | 13.80 | 15.65 | 15.00 | 16.30 |
| ◆20655-051E-01 | 51P | 18.00 | 14.40 | 15.00 | 16.85 | 16.20 | 17.50 |
| ◆20655-053E-01 | 53P | 18.60 | 15.00 | 15.60 | 17.45 | 16.80 | 18.10 |
| ◆20655-057E-01 | 57P | 19.80 | 16.20 | 16.80 | 18.65 | 18.00 | 19.30 |

◆ MARK MEANS NOT AVAILABLE.



NOTES.
 1. THIS DENT SHAPE IS PURPOSED FOR GOOD INJECTION QUALITY.
 THIS DENT SHAPE WILL NOT AFFECT CONNECTR FUNCTION.
 DENT SHAPE SHOWN ON DRAWING IS JUST FOR REFERENCE.
 DENT SHAPE AND QUANTITY MIGHT CHABGE FROM DIFFERENT
 PIN COUNT AND DIFFERENT TOOLING.
 2. CONTACT POINT: TOP AND BOTTOM CONTACT

CAUTION VISIT OUR WEBSITE FOR LATEST VERSIONS OF INSTRUCTION MANUAL
NO. HIM-18035 TO HANDLE THE PRODUCT PROPERLY AND SAFELY.

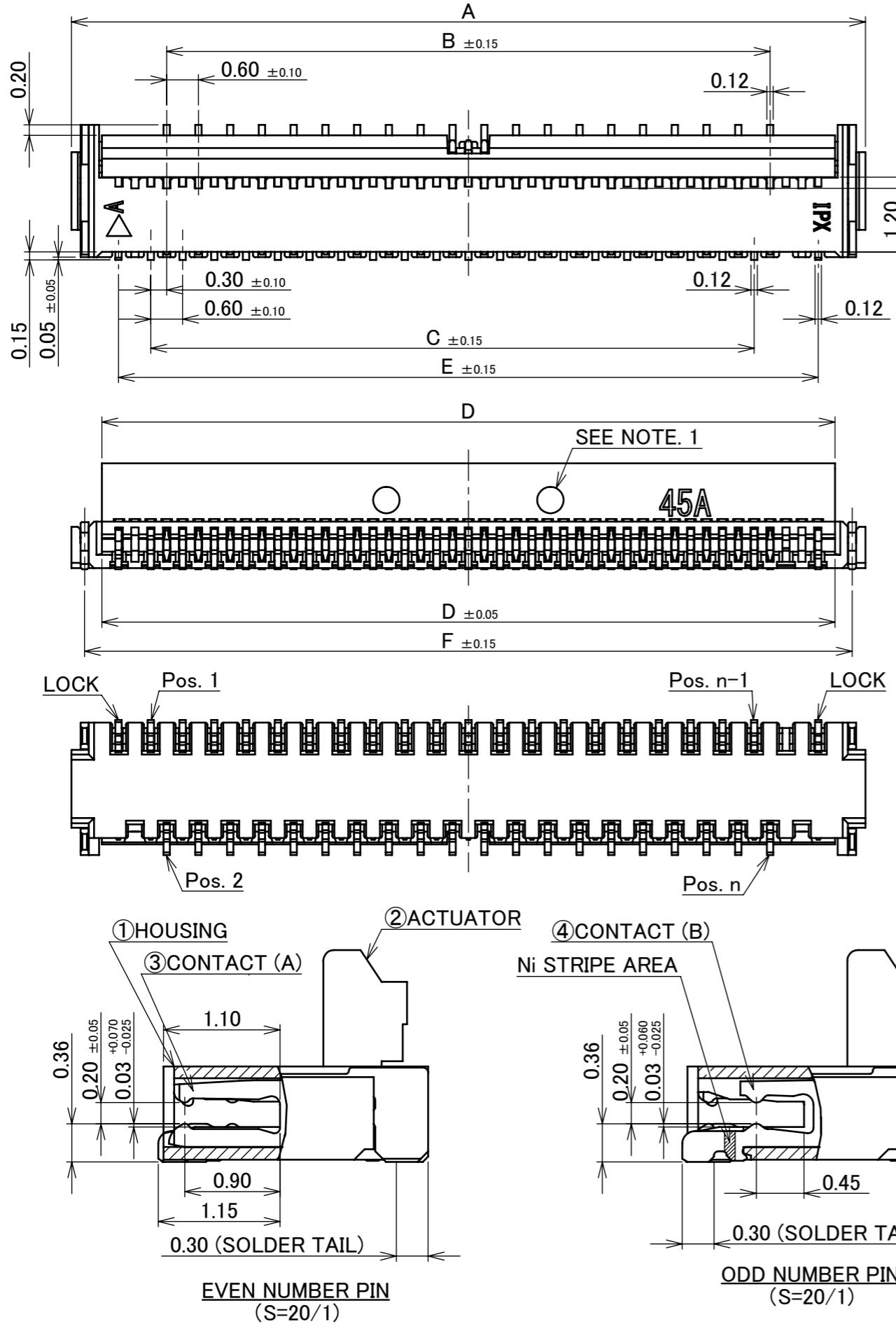
TABLE 1

| PART NO. | FINISH | | |
|---------------|--|-----------------|---|
| 20655-0**E-01 | 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. | | |
| 6 | HOLD DOWN | PHOSPHOR BRONZE | Sn 2~6 μm OVER Ni 1.00 μm MIN. |
| 5 | LOCK | PHOSPHOR BRONZE | SOLDERLING AREA: Au 0.03 μm MIN. OVER Ni 1.00 μm MIN. |
| 4 | CONTACT (B) | PHOSPHOR BRONZE | SEE TABLE 1, WITH NI STRIPE |
| 3 | CONTACT (A) | PHOSPHOR BRONZE | SEE TABLE 1 |
| 2 | ACTUATOR | LCP | UL94V-0, BEIGE |
| 1 | HOUSNIG | LCP | UL94V-0, BEIGE |
| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |

For BOE Technology Group Co., Ltd.

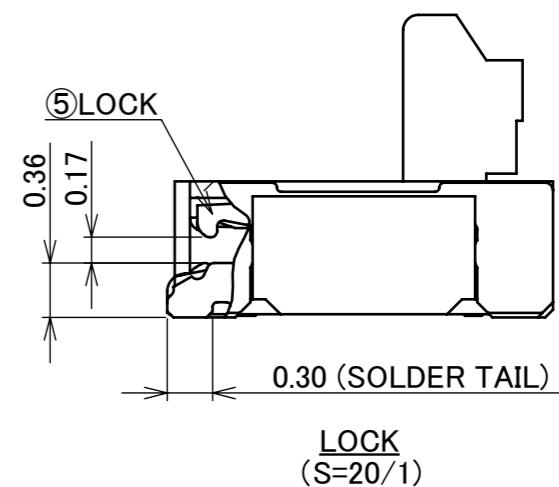
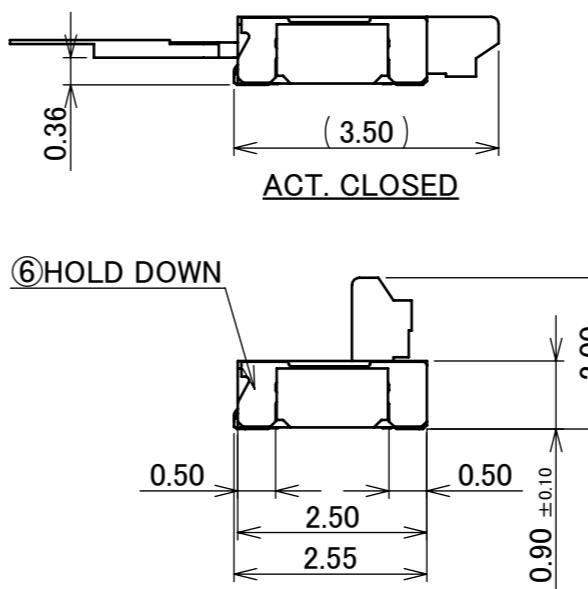
| | | | | | | |
|-----------------|---------------|------------------|--------------|--------------------|----------|---------------|
| ANGLE | $\pm 2^\circ$ | 6 OVER 30 MAX. | ± 0.3 | GENERAL TOLERANCE. | TITLE | CUSTOMER COPY |
| 6 MAX. | ± 0.2 | 30 OVER 120 MAX. | ± 0.5 | | | |
| 2 | Z210252 | S.Sh | Mar./12/'21 | H.I. | DWG. | |
| 1 | Z181210 | T.O | Sept./14/'18 | H.I. | DATE | R.Takei |
| 0 | Z151500 | R.T | Dec./24/'15 | | CHK. | 2015/12/24 |
| REV. | ECN | BY | DATE | APP. | APP. | M.Muro |
| REVISION RECORD | | | | | DWG. No. | 20655 |
| | | | | | SIZE | A3 |
| | | | | | SHEET | 1/7 |
| | | | | | REV. | 2 |

EVEN NUMBER POS.



| PART NO. | Pos. | A | B | C | D | E | F |
|----------------|------|-------|-------|-------|-------|-------|-------|
| ◆20655-030E-01 | 30P | 12.00 | 8.40 | 8.40 | 10.85 | 10.20 | 11.50 |
| 20655-040E-01 | 40P | 15.00 | 11.40 | 11.40 | 13.85 | 13.20 | 14.50 |
| ◆20655-050E-01 | 50P | 18.00 | 14.40 | 14.40 | 16.85 | 16.20 | 17.50 |

◆ MARK MEANS NOT AVAILABLE.



- NOTES.**
1. THIS DENT SHAPE IS PURPOSED FOR GOOD INJECTION QUALITY. THIS DENT SHAPE WILL NOT AFFECT CONNECTR FUNCTION. DENT SHAPE SHOWN ON DRAWING IS JUST FOR REFERENCE. DENT SHAPE AND QUANTITY MIGHT CHABGE FROM DIFFERENT PIN COUNT AND DIFFERENT TOOLING.
 2. CONTACT POINT: TOP AND BOTTOM CONTACT

CAUTION VISIT OUR WEBSITE FOR LATEST VERSIONS OF INSTRUCTION MANUAL NO. HIM-18035 TO HANDLE THE PRODUCT PROPERLY AND SAFELY.

For BOE Technology Group Co., Ltd.

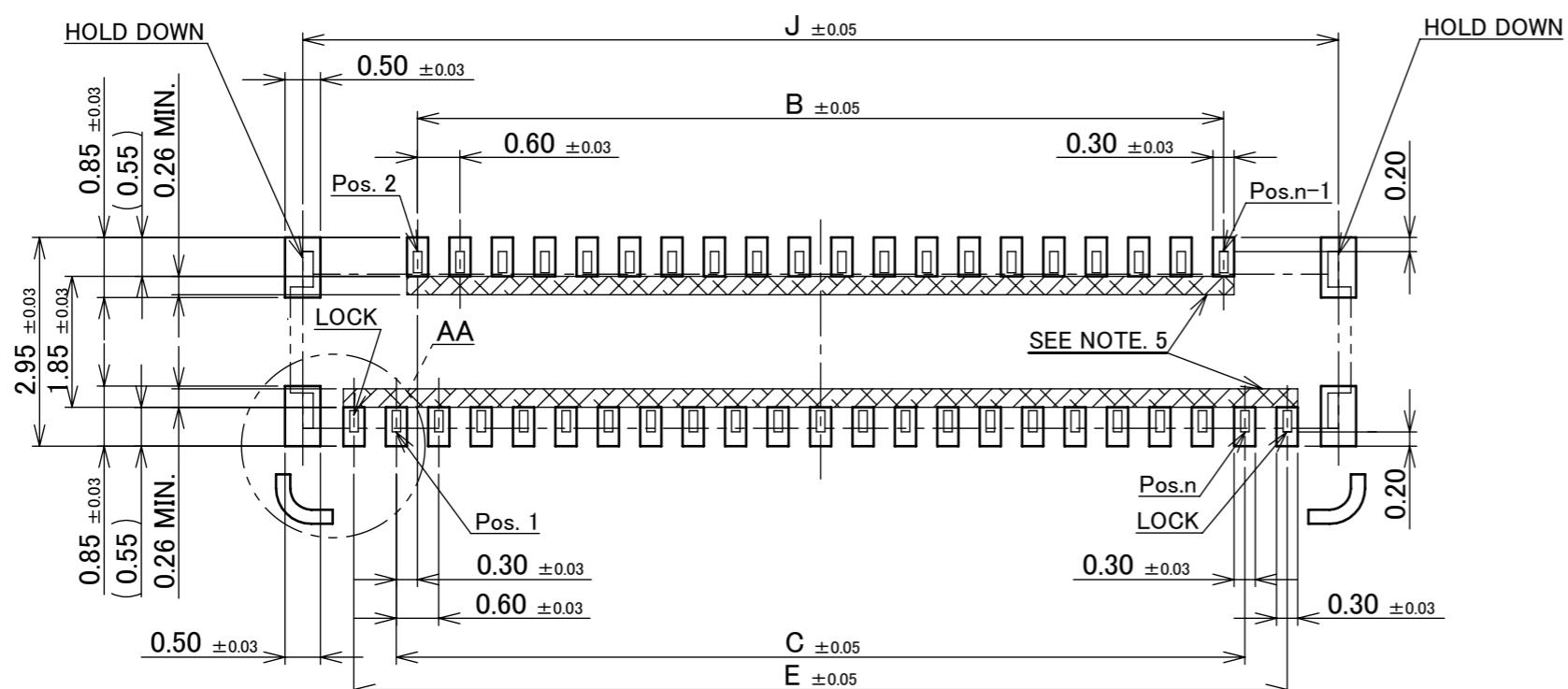
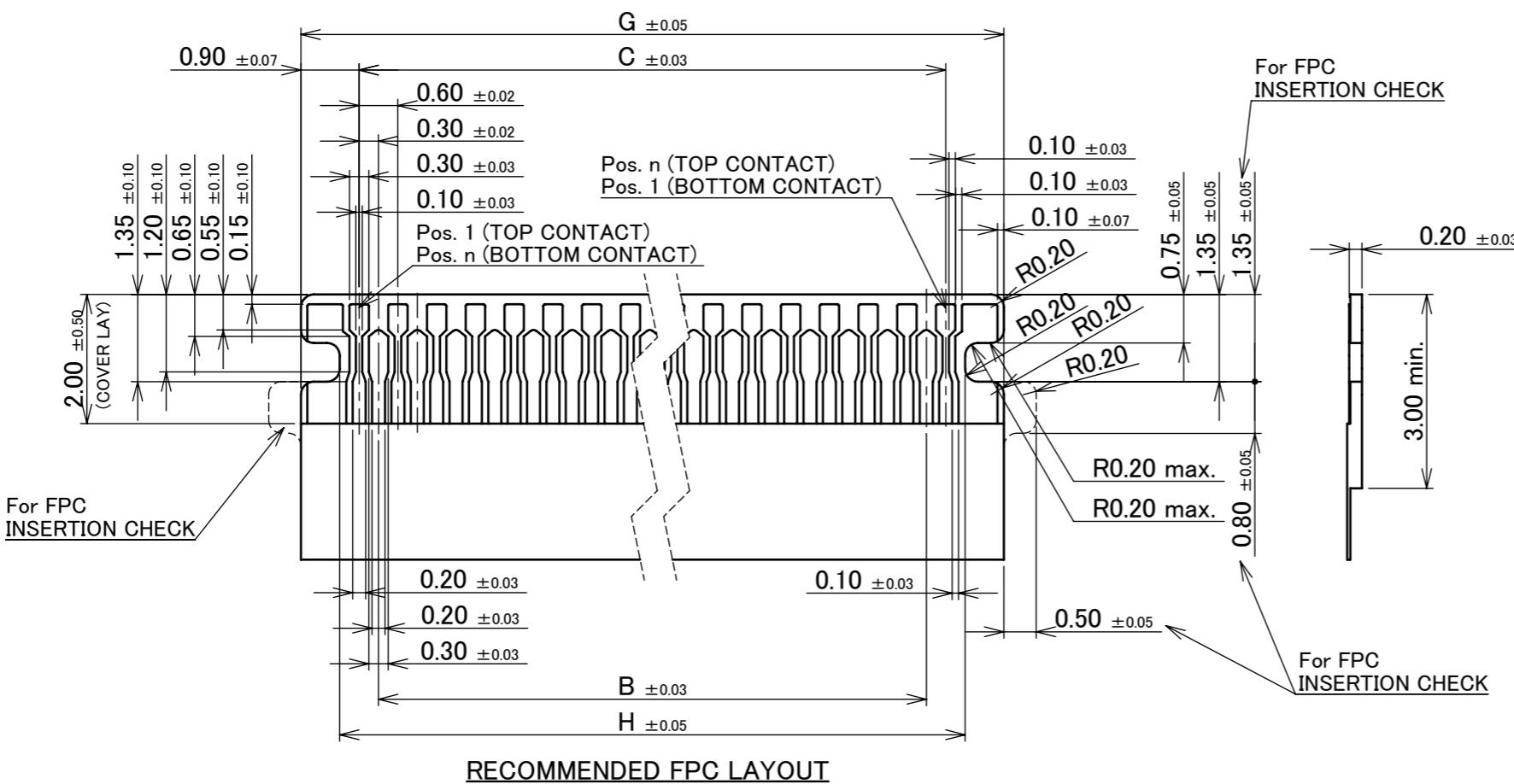
| | | | | |
|---------------------------------|----------------------------|------------|------------|---------------|
| ANGLE $\pm 2^\circ$ | 6 OVER 30 MAX. ± 0.3 | PROJECTION | SERIES No. | CUSTOMER COPY |
| 6 MAX. ± 0.2 | 30 OVER 120 MAX. ± 0.5 | | R0 | |
| GENERAL TOLERANCE. | | | | |
| DWG. | DATE | TITLE | | |
| MINIFLEX® 3-BFN L-LK-HD TYPE | | | | |
| CHK. | | SCALE | 10:1 | |
| APP. | DWG. No. | UNIT | mm | |
| 20655 | | SIZE | A3 | |
| | | SHEET | 2/7 | REV. |
| | | | | 2 |

| ITEMS | SPECIFICATION |
|--|--|
| RATING VOLTAGE | 50V AC/DC (PER CONTACT) |
| RATING AMPERAGE | 0.3A DC (PER CONTACT) |
| OPERATING TEMPERATURE | 233~358K(-40°C~85°C) |
| OPERATING HUMIDITY | 20~80%RH (NON-CONDENSING) |
| CONTACT RESISTANCE | INITIAL : 60mohm MAX. / AFTER TEST : △40mohm MAX. |
| INSULATION RESISTANCE | 100Mohm MIN. |
| DIELECTRIC WITHSTANDING VOLTAGE | AC250V 1min |
| DURABILITY | 20 CYCLES |
| ACTUATOR LOCKING FORCE (INITIAL / 20TH CYCLES) | INITIAL / 20 CYCLES 0.21N (21gf) × (n + 2) MAX. |
| ACTUATOR UNLOCKING FORCE (INITIAL / 20TH CYCLES) | INITIAL / 20 CYCLES 0.014N (1.4gf) × (n + 2) MIN. |
| FPC RETENTION FORCE (INITIAL / AFTER TEST) | INITIAL: 0.20N (20gf) × n + 1.0N MIN. / AFTER TEST: 0.20N (20gf) × n + 1.0N MIN. |
| COPLANARITY | 0.10 MAX. |
| PRODUCT SPECIFICATION | PRS-2186 |
| TEST REPORT | TR-15119 |
| PACKING STANDARD | PST-15018 |
| INSTRUCTION MANUAL | HIM-18035 |
| APPEARANCE CRITERIA No. | QLS-A*** |

※ "n" IS THE NUMBER OF PIN

| For BOE Technology Group Co., Ltd. | | | | | |
|------------------------------------|------|------------------|------|---|------------|
| ANGLE | ±2° | 6 OVER 30 MAX. | ±0.3 | PROJECTION | SERIES No. |
| 6 MAX. | ±0.2 | 30 OVER 120 MAX. | ±0.5 |  | R0 |
| GENERAL TOLERANCE. | | | | CUSTOMER COPY | |
| DWG. | DATE | | | | |
| CHK. | | | | | |
| APP. | | | | DWG. No. | SIZE |
| | | | | 20655 | SHEET |
| | | | | 20655 | REV. |
| | | | | 20655 | 2 |
| | | | | mm | UNIT |
| | | | | SCALE | |
| | | | | TITLE | |
| | | | | MINIFLEX® 3-BFN L-LK-HD TYPE | |
| | | | | I-PEX | |

ODD NUMBER POS.



RECOMMENDED PCB LAYOUT & METAL MASK LAYOUT

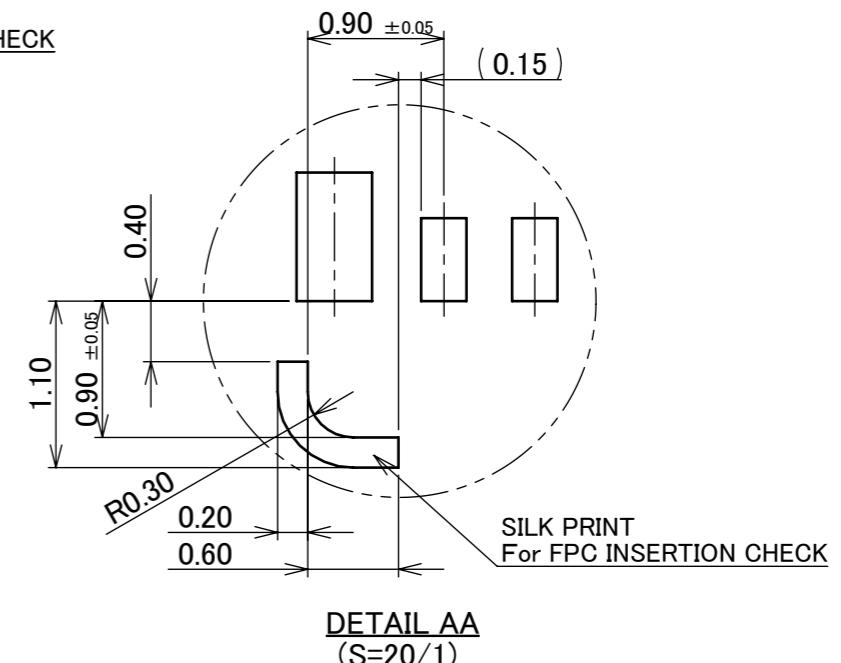
METAL MASK THICKNESS : t=0.12 mm

| PART NO. | Pos. | B | C | E | G | H | J |
|----------------|------|-------|-------|-------|-------|-------|-------|
| 20655-011E-01 | 11P | 2.40 | 3.00 | 4.20 | 4.80 | 3.60 | 5.65 |
| ◆20655-029E-01 | 29P | 7.80 | 8.40 | 9.60 | 10.20 | 9.00 | 11.05 |
| ◆20655-031E-01 | 31P | 8.40 | 9.00 | 10.20 | 10.80 | 9.60 | 11.65 |
| ◆20655-035E-01 | 35P | 9.60 | 10.20 | 11.40 | 12.00 | 10.80 | 12.85 |
| ◆20655-037E-01 | 37P | 10.20 | 10.80 | 12.00 | 12.60 | 11.40 | 13.45 |
| ◆20655-041E-01 | 41P | 11.40 | 12.00 | 13.20 | 13.80 | 12.60 | 14.65 |
| 20655-045E-01 | 45P | 12.60 | 13.20 | 14.40 | 15.00 | 13.80 | 15.85 |
| ◆20655-047E-01 | 47P | 13.20 | 13.80 | 15.00 | 15.60 | 14.40 | 16.45 |
| ◆20655-051E-01 | 51P | 14.40 | 15.00 | 16.20 | 16.80 | 15.60 | 17.65 |
| ◆20655-053E-01 | 53P | 15.00 | 15.60 | 16.80 | 17.40 | 16.20 | 18.25 |
| ◆20655-057E-01 | 57P | 16.20 | 16.80 | 18.00 | 18.60 | 17.40 | 19.45 |

◆ MARK MEANS NOT AVAILABLE.

NOTES

- 3. MATERIAL**
COVER FILM : PI
CONDUCTOR : COPPER(RARE)
BASE FILM : PI
STIFFENER : PI
ADHESIVE : THERMOSETTING ADHESIVE
 - 4. FINISH**
Au OVER Ni UNDER PLATING.
 - 5. SOLDER RESIST SHALL BE APPLIED TO PREVENT SHORT CIRCUITS WHEN PLACING SIGNAL LINES ON GROUND AREA.**

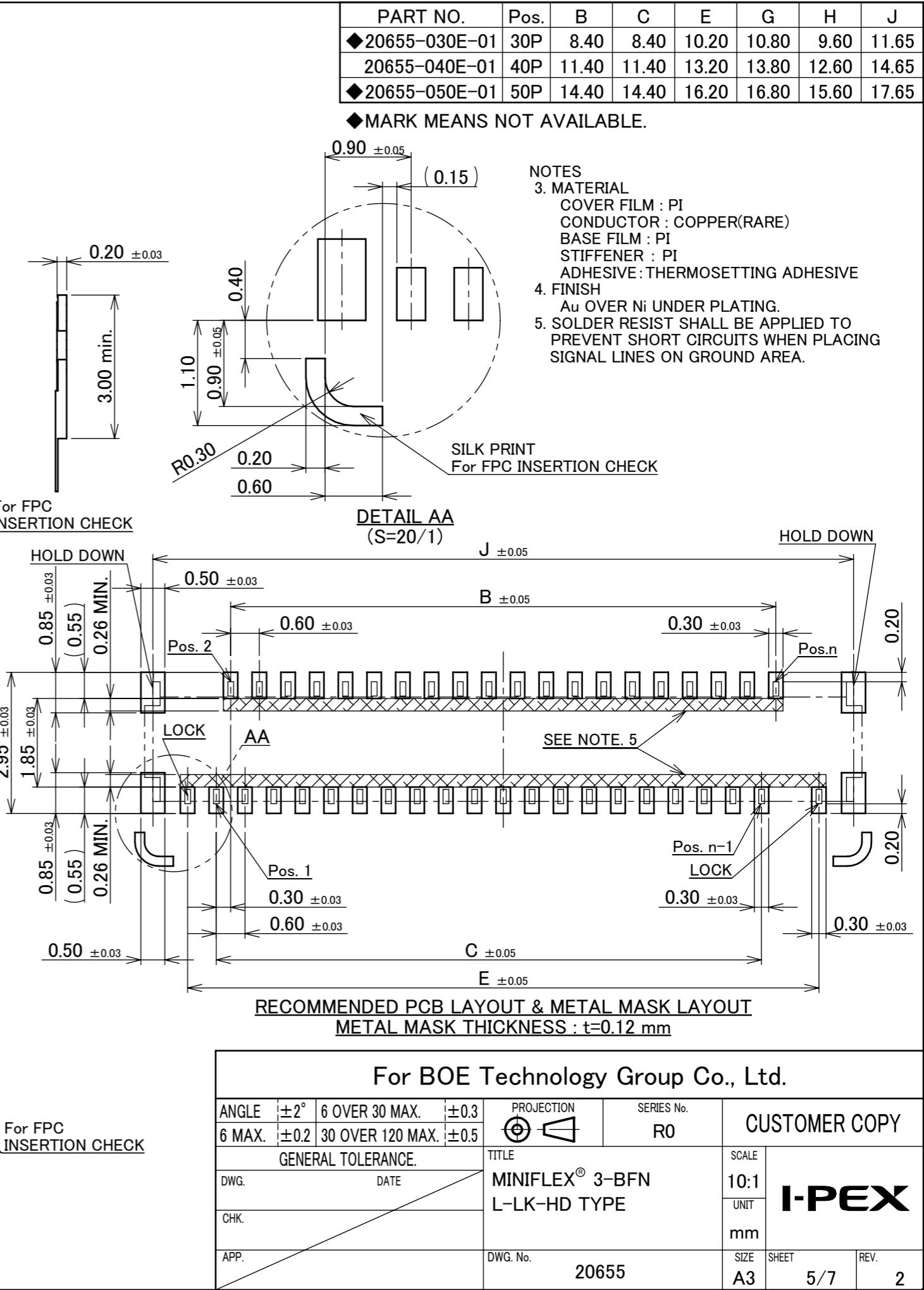
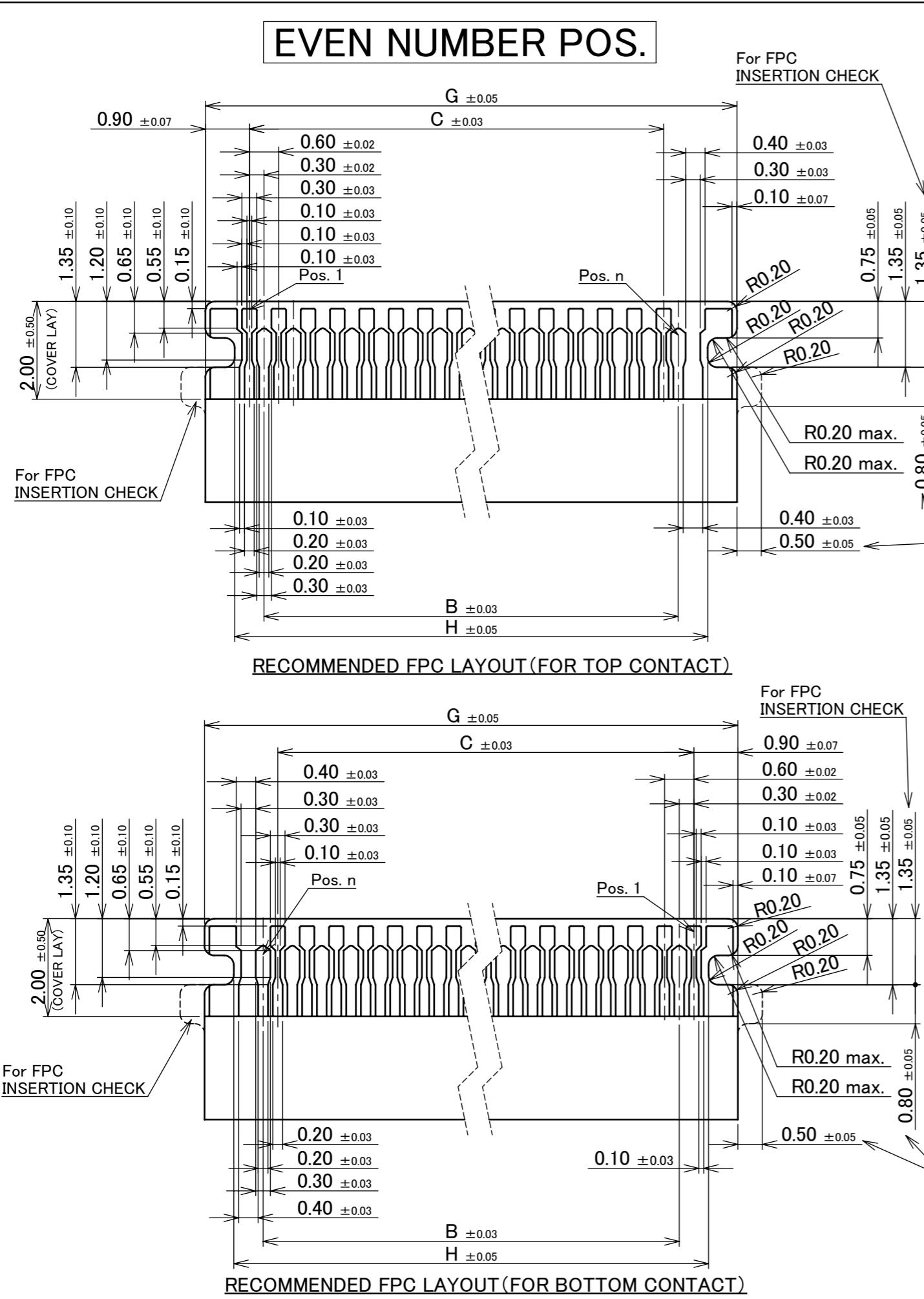


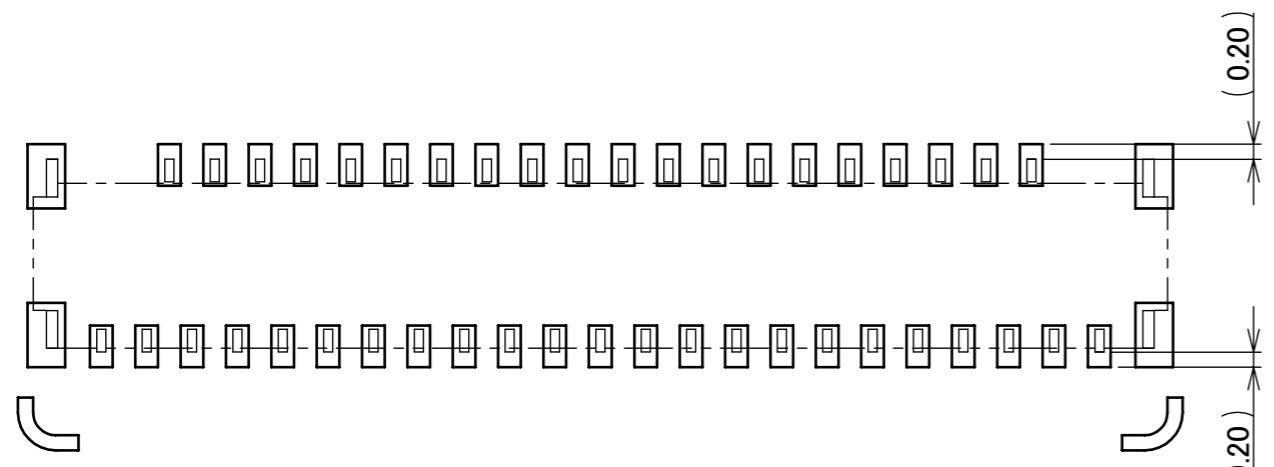
DETAIL AA
(S=20/1)

For BOE Technology Group Co., Ltd.

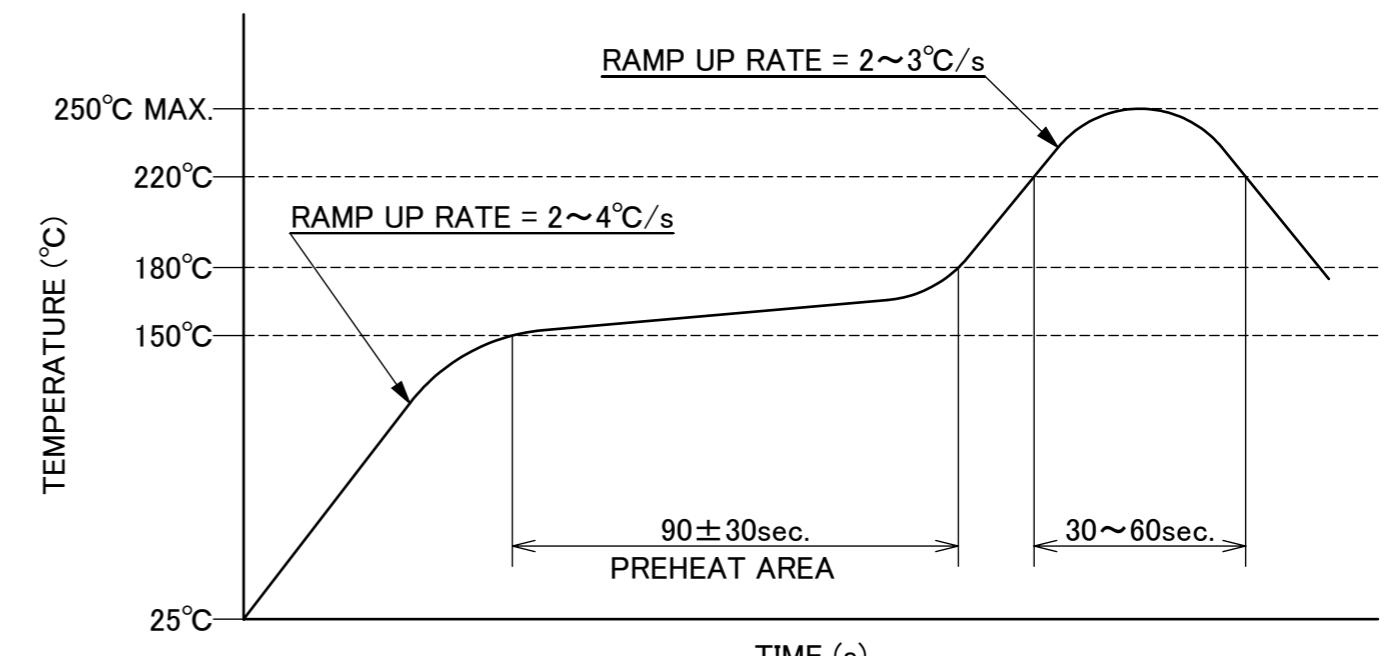
| | | | | | | | | | |
|--------------------|----------------------------|------------------------------------|------------------------|---|---------------------------------|---------------|--------------|--|--|
| ANGLE 6 MAX. | $\pm 2^\circ$ ± 0.2 | 6 OVER 30 MAX. 30 OVER 120 MAX. | ± 0.3 ± 0.5 | PROJECTION  | SERIES No. R0 | CUSTOMER COPY | | | |
| GENERAL TOLERANCE. | | | | TITLE | MINIFLEX® 3-BFN L-LK-HD TYPE | SCALE 10:1 | I-PEX | | |
| DWG. | DATE | | | | | UNIT mm | | | |
| CHK. | | | | | | | | | |
| APP. | | | | DWG. No. 20655 | SIZE A3 | SHEET 4/7 | REV. 2 | | |

EVEN NUMBER POS.





CONNECTOR ON RECOMMENDED PCB LAYOUT

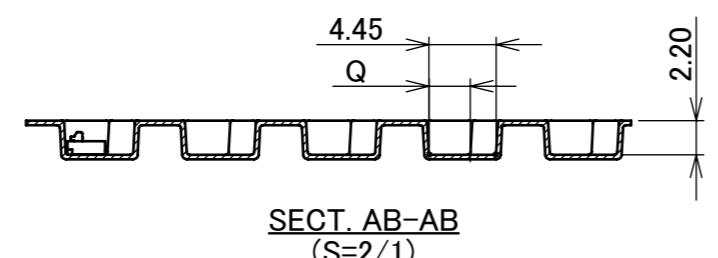
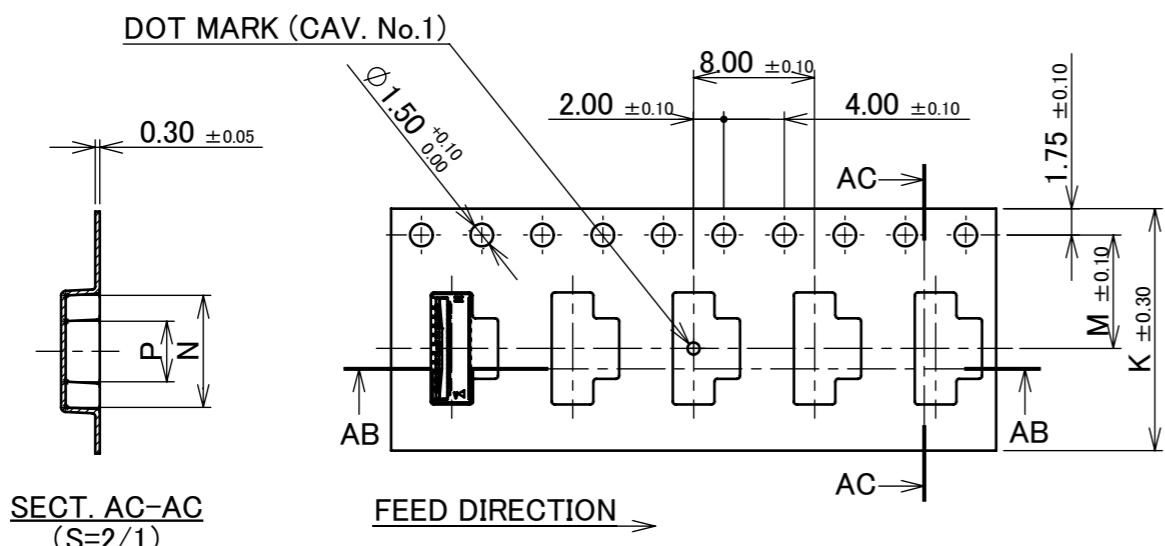
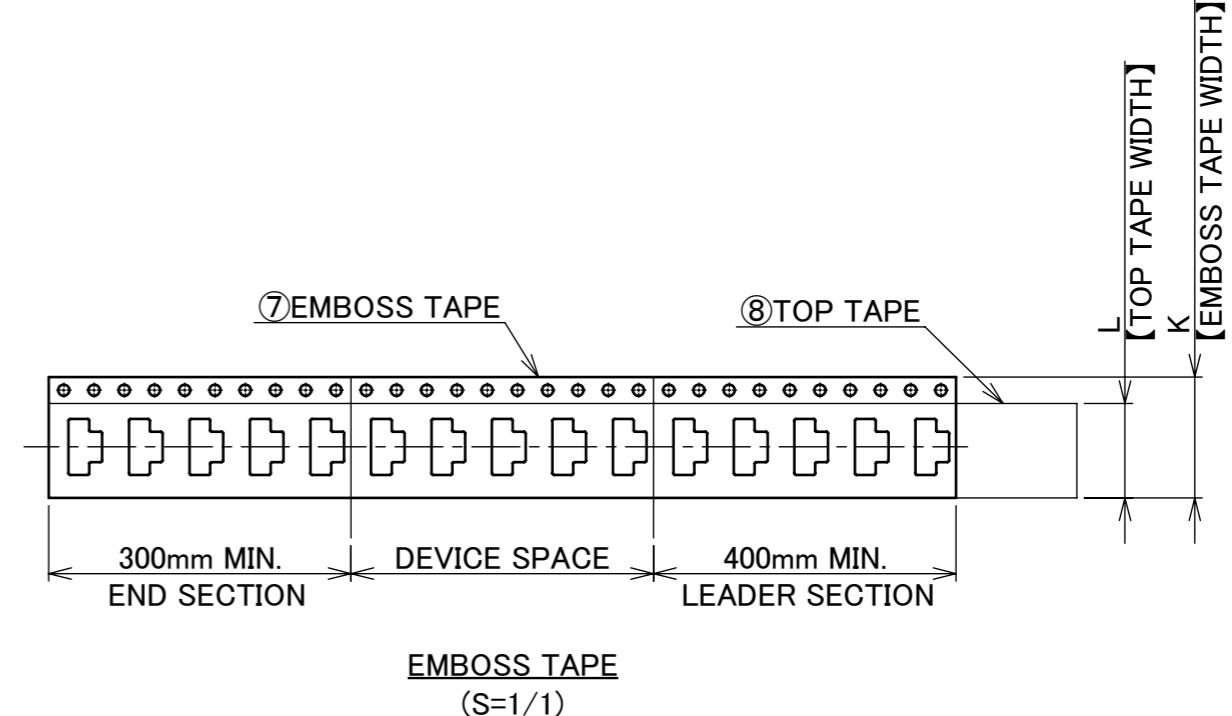
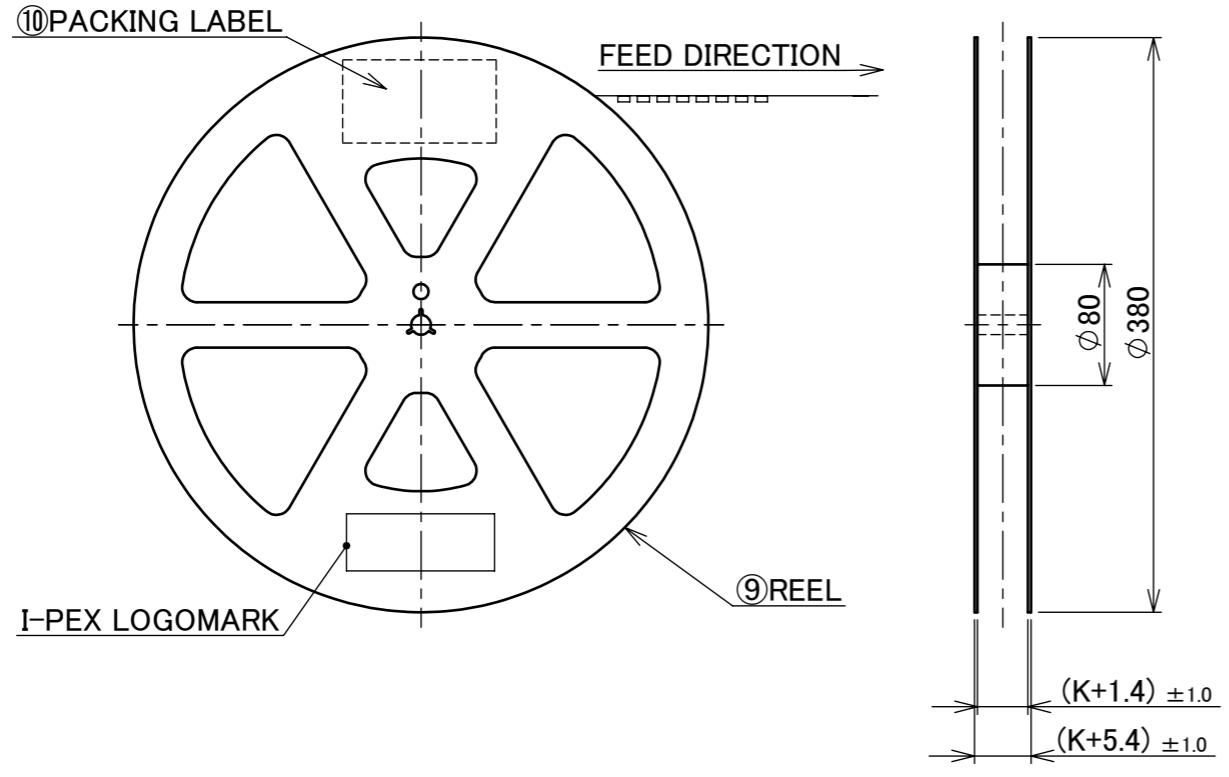


REFLOW TEMPERATURE PROFILE
SENJU METAL INDUSTRY CO., LTD. : M705-SHF(Sn96.5 Ag3.0 Cu0.5)

For BOE Technology Group Co., Ltd.

| | | | | | | |
|-----------------|----------------------------|------------------------------------|------------------------|--|--|---|
| ANGLE 6 MAX. | $\pm 2^\circ$ ± 0.2 | 6 OVER 30 MAX. 30 OVER 120 MAX. | ± 0.3 ± 0.5 | PROJECTION TITLE DWG. DATE CHK. APP. | SERIES No. R0 MINIFLEX® 3-BFN L-LK-HD TYPE DWG. No. 20655 | CUSTOMER COPY SCALE 10:1 UNIT mm SIZE A3 SHEET 6/7 REV. 2 |
|-----------------|----------------------------|------------------------------------|------------------------|--|--|---|

| DEVICE P/N | K | L | M | N | P | Q | QTY. PER EMBOSSED REEL (PIECES / REEL) | QTY. PER PACKING CARTON (REELS / CARTON) |
|---------------|------|------|-------|-------|------|------|---|---|
| 20655-011E-01 | 16.0 | 13.5 | 7.50 | 6.20 | 4.00 | 2.75 | 4,000 / REEL | 7 / CARTON = 28,000 |
| 20655-040E-01 | 24.0 | 21.5 | 11.50 | 15.40 | 8.00 | 2.95 | | 5 / CARTON = 20,000 |
| 20655-045E-01 | | | | 16.60 | | | | |



NOTES.

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

| NO. | DESCRIPTION | MATERIAL | FINISH , REMARKS |
|-----|---------------|-----------------------------|---------------------------------------|
| 10 | PACKING LABEL | - | - |
| 9 | REEL | PS | BLACK |
| 8 | TOP TAPE | PET t=0.062 TRANSPARENCY | ANTI-STATIC TYPE HEAT WELDING TYPE |
| 7 | EMBOSS TAPE | PS t=0.3 TRANSPARENCY | ANTI-STATIC TYPE |

For BOE Technology Group Co., Ltd.

| | | | | | | |
|--------------------|---------------|------------------|-----------|---------------------------------|------------|---------------|
| ANGLE | $\pm 2^\circ$ | 6 OVER 30 MAX. | ± 0.3 | PROJECTION | SERIES No. | CUSTOMER COPY |
| 6 MAX. | ± 0.2 | 30 OVER 120 MAX. | ± 0.5 | | R0 | |
| GENERAL TOLERANCE. | | | | TITLE | | |
| DWG. | DATE | | | MINIFLEX® 3-BFN L-LK-HD TYPE | | |
| CHK. | | | | SCALE | 1:X | |
| APP. | | | | UNIT | mm | |
| | | | | DWG. No. | 20655 | |
| | | | | SIZE | A3 | |
| | | | | REV. | 7/7 | |
| | | | | | 2 | |