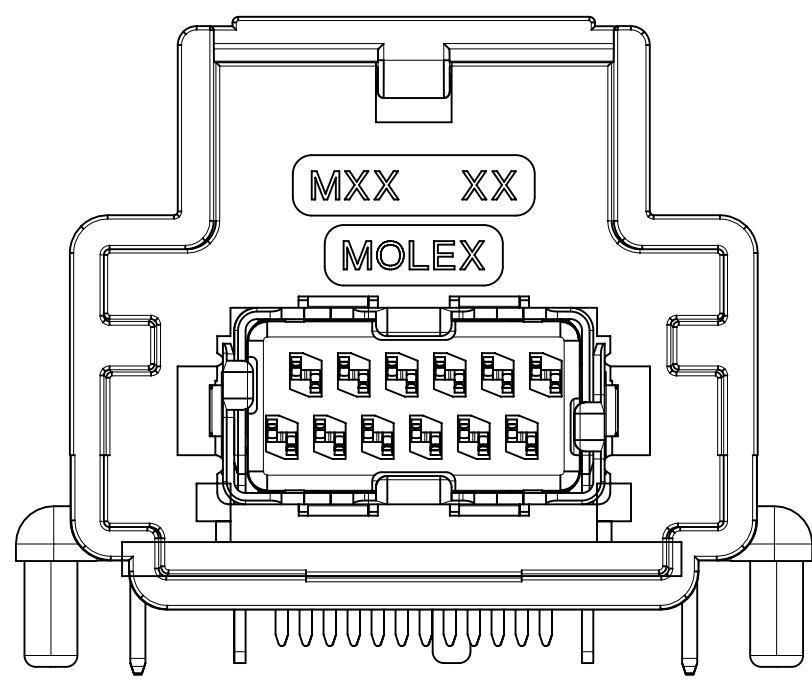
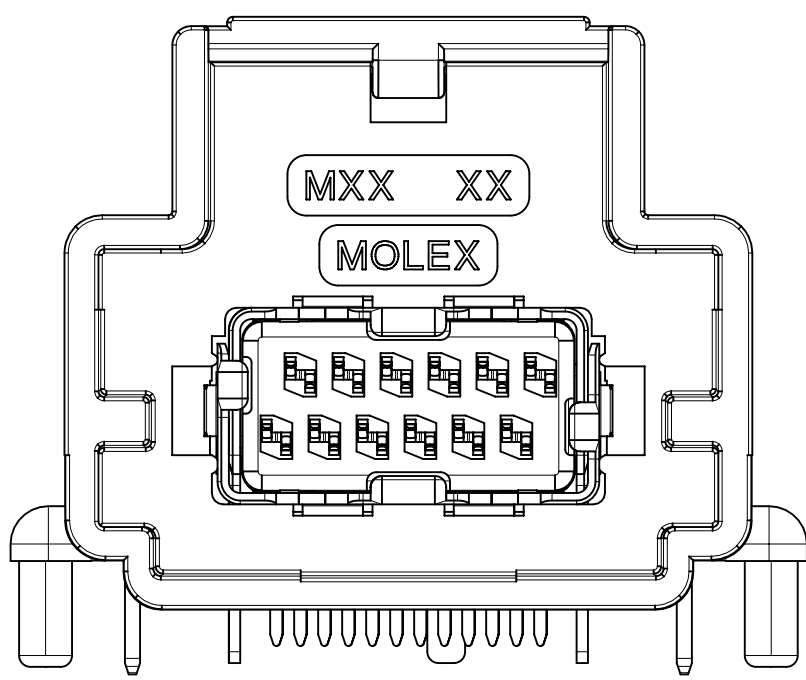




34861-1406  
34861-1206 (SI INSERTS) \*NOT QUALIFIED\*  
34861-1306 (2 SHIELD TABS)  
34861-2106 (SMT) \*NOT QUALIFIED\*  
34861-7009 (TERMINAL AND INSERTS CHANGE)  
(2 SHIELD TAB)  
34861-8009 SMT VERSION WITH HS INSERTS  
(NO SHIELD TABS)  
34861-9009 (TERMINAL AND INSERTS CHANGE)  
(2 SHIELD TAB)

KEY OPTION 'A'  
COLOR: BLACK

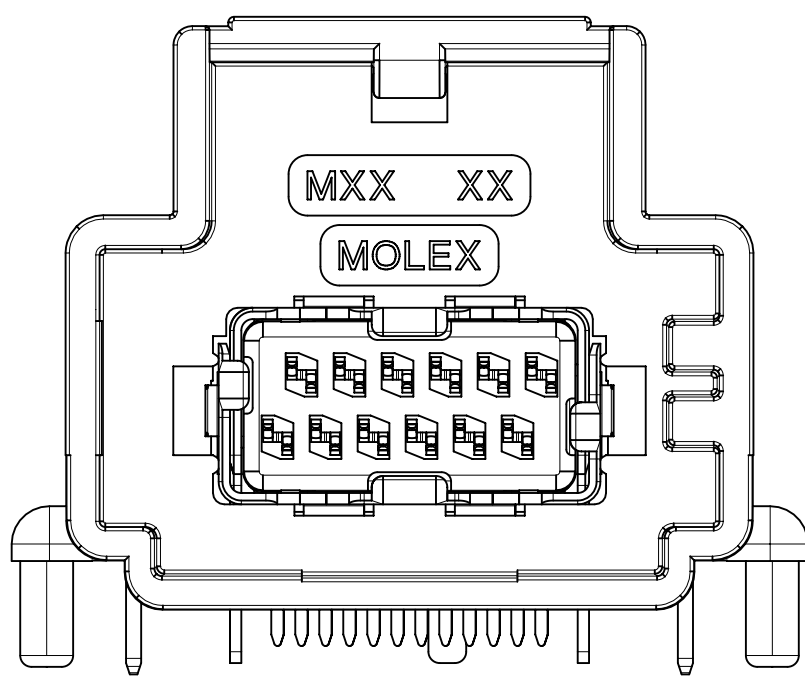
SALEABLE



34861-1416  
34861-1216 (SI INSERTS) \*NOT QUALIFIED\*  
34861-1316 (2 SHIELD TABS)  
34861-2116 (SMT) \*NOT QUALIFIED\*  
34861-7019 (TERMINAL AND INSERTS CHANGE)  
(2 SHIELD TAB)  
34861-8019 SMT VERSION WITH HS INSERTS  
(NO SHIELD TABS)  
34861-9019 (TERMINAL AND INSERTS CHANGE)  
(2 SHIELD TAB)

KEY OPTION 'B'  
COLOR: GRAY

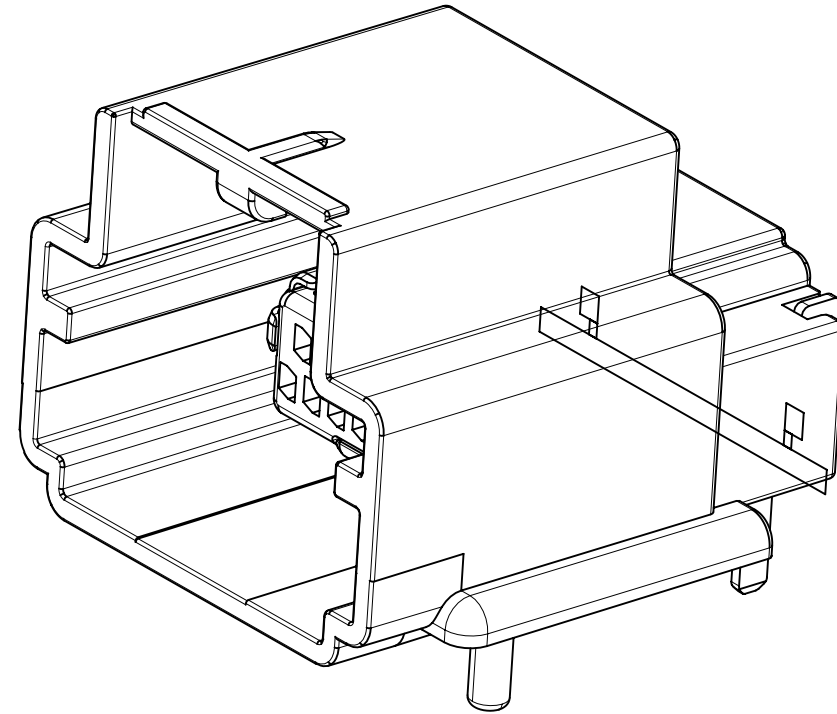
SALEABLE



34861-1426  
34861-1226 (SI INSERTS) \*NOT QUALIFIED\*  
34861-1326 (2 SHIELD TABS)  
34861-2126 (SMT) \*NOT QUALIFIED\*  
34861-7029 (TERMINAL AND INSERTS CHANGE)  
(2 SHIELD TAB)  
34861-8029 SMT VERSION WITH HS INSERTS  
(NO SHIELD TABS)  
34861-9029 (TERMINAL AND INSERTS CHANGE)  
(2 SHIELD TAB)

KEY OPTION 'C'  
COLOR: BROWN

SALEABLE



NOTES: VALID UNLESS OTHERWISE SPECIFIED

## 1. MATERIALS:

HEADER HOUSING: SPS, 30%GF

TERMINALS - COPPER ALLOY

OVERMOLDING - LCP, 30%GF

BISCUIT - SPS, 30%GF

SHIELDS - COPPER ALLOY

## 2. TERMINAL MATE-SIDE PLATING: SELECTIVE GOLD OVER NICKEL

TERMINAL PCB SIDE PLATING: TIN OVER NICKEL

SHIELDS PLATING - TIN OVER NICKEL

3. MATING CONNECTOR MINIMUM CLEARANCE: AREA TO REMAIN CLEAR OF MODULE COMPONENTS, ADHESIVE, DEBRIS, ETC.

4. PCB TO BE FR4 0.062" (1.57mm) THICK

5. LASER MARKING TO BE MARKED WITH:

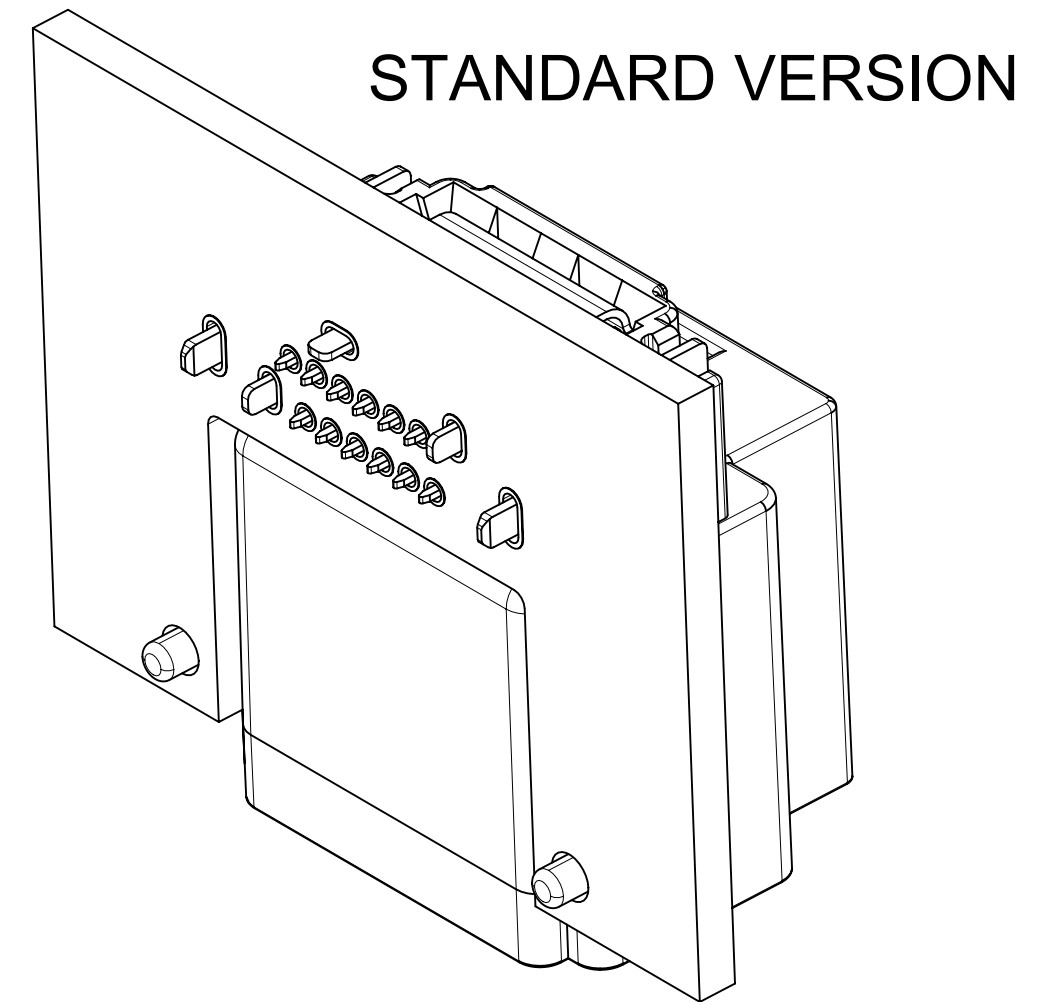
## HUMAN READABLE CODE (HRC)

-PERMANENTLY APPLIED ON THE PART WITH 1.5mm LETTER SIZE

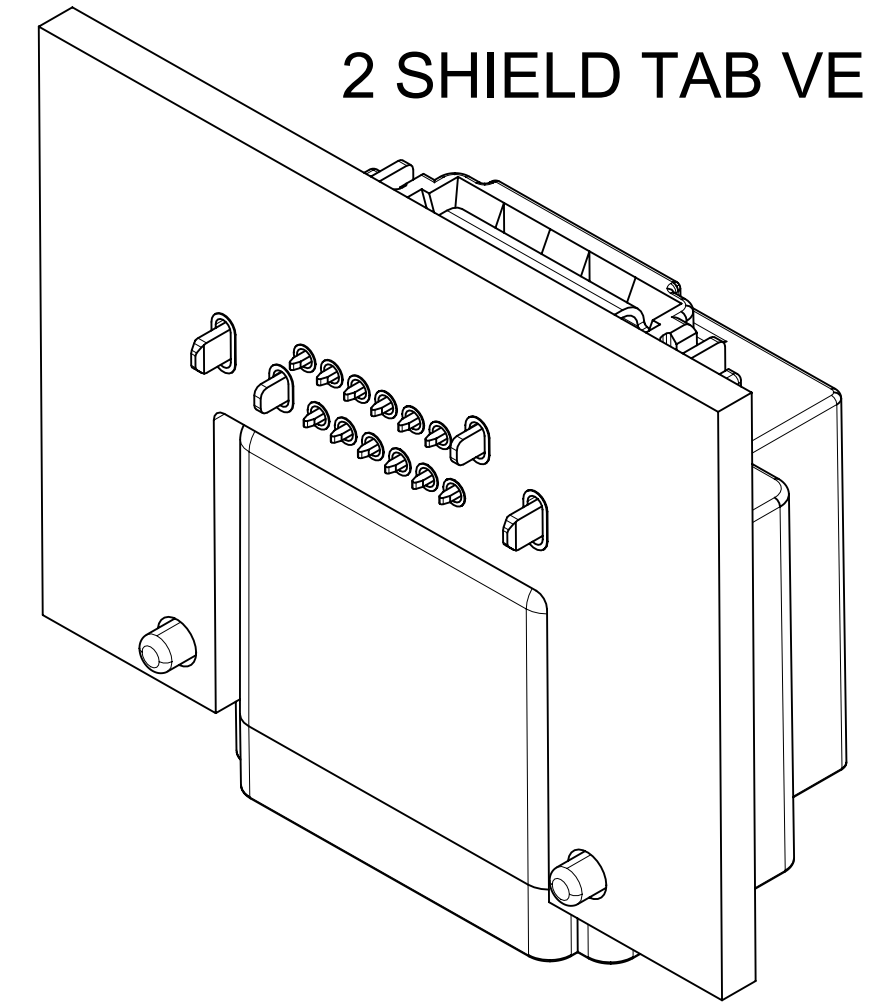
-INFORMATION TO BE PRINTED

5. DIGIT JULIAN MANUFACTURING DATE STAMP YYDDD

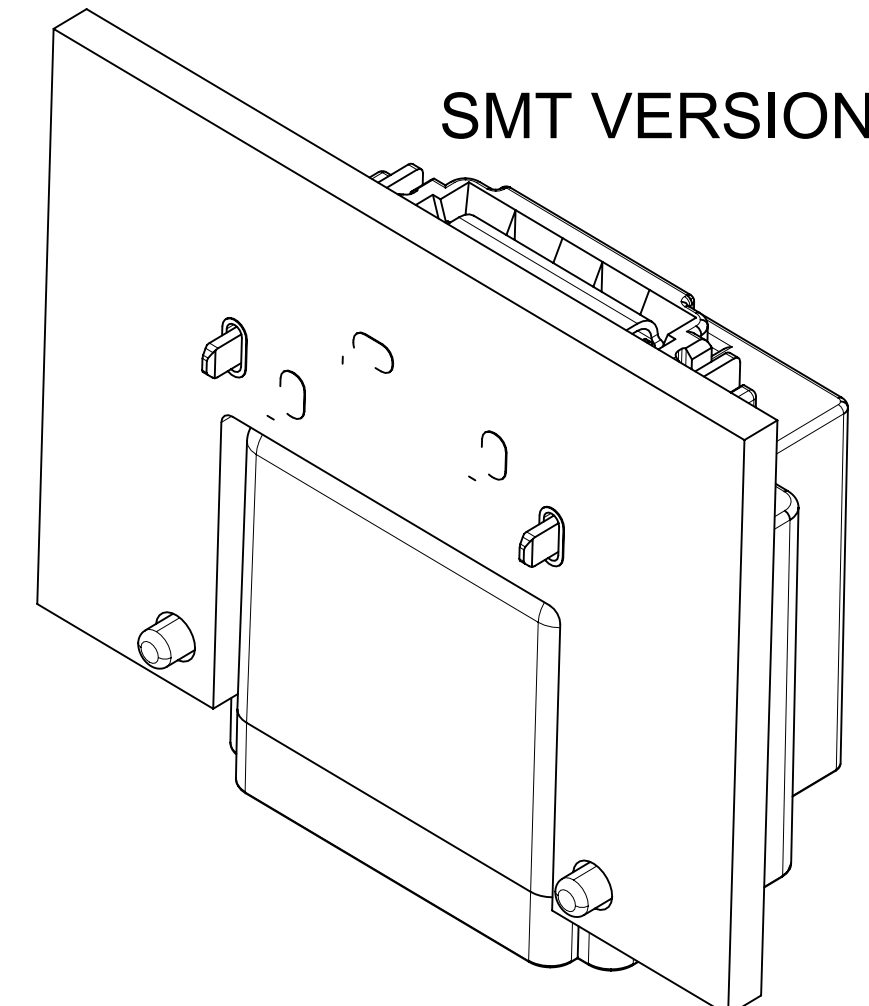
6. REFLOW SOLDERING IS RECOMMENDED FOR TESTING.



STANDARD VERSION



## 2 SHIELD TAB VERSION

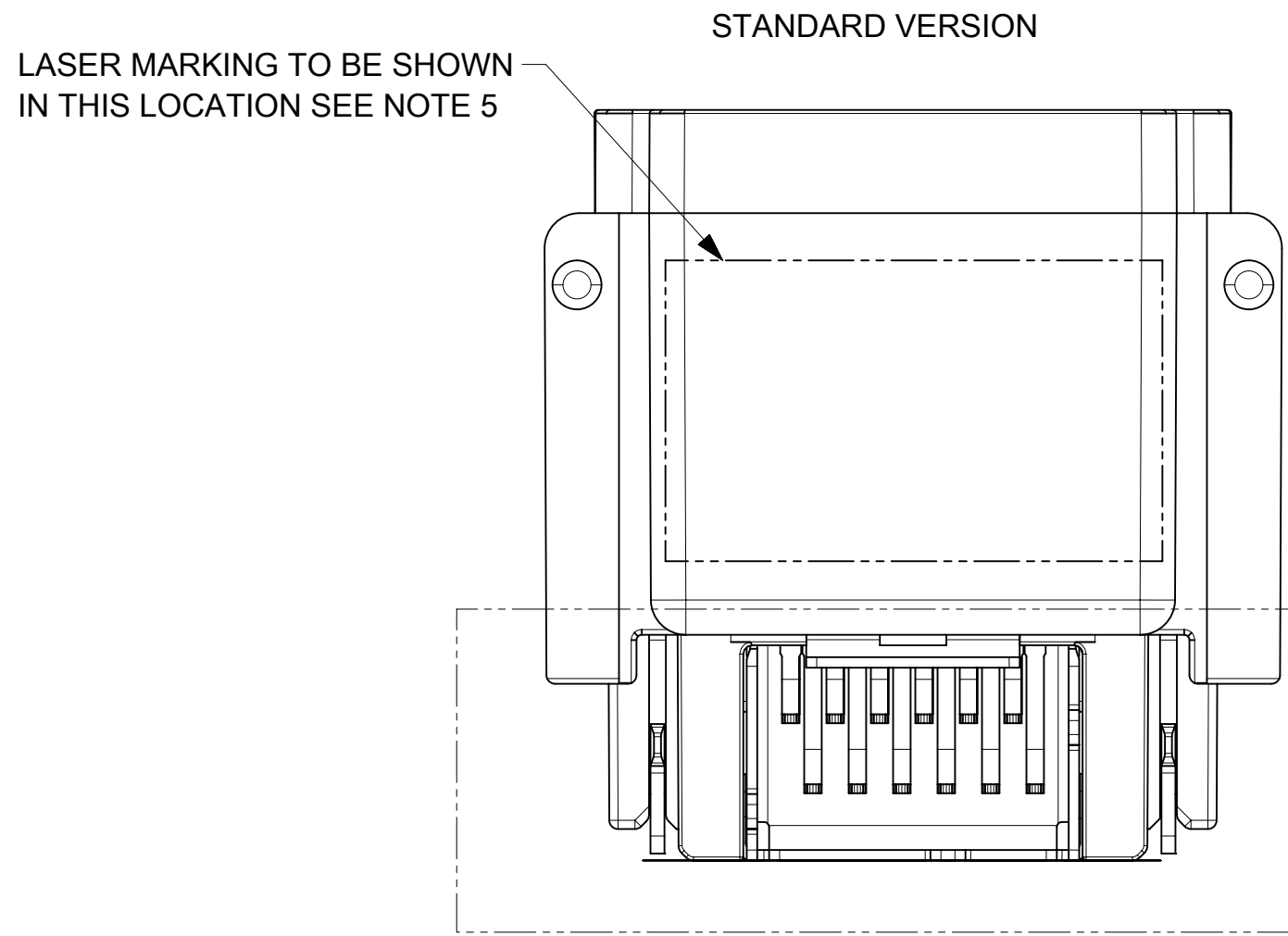
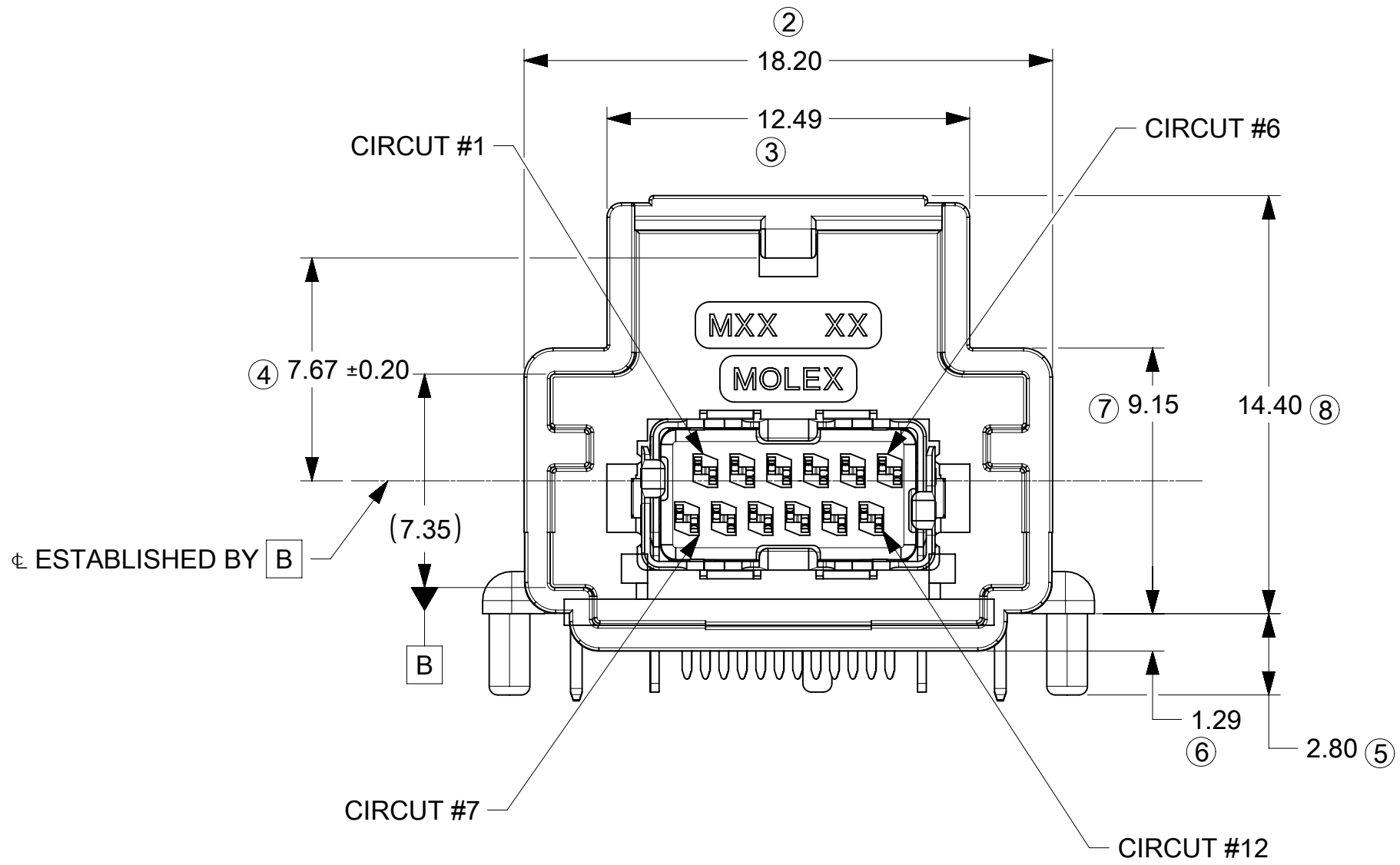
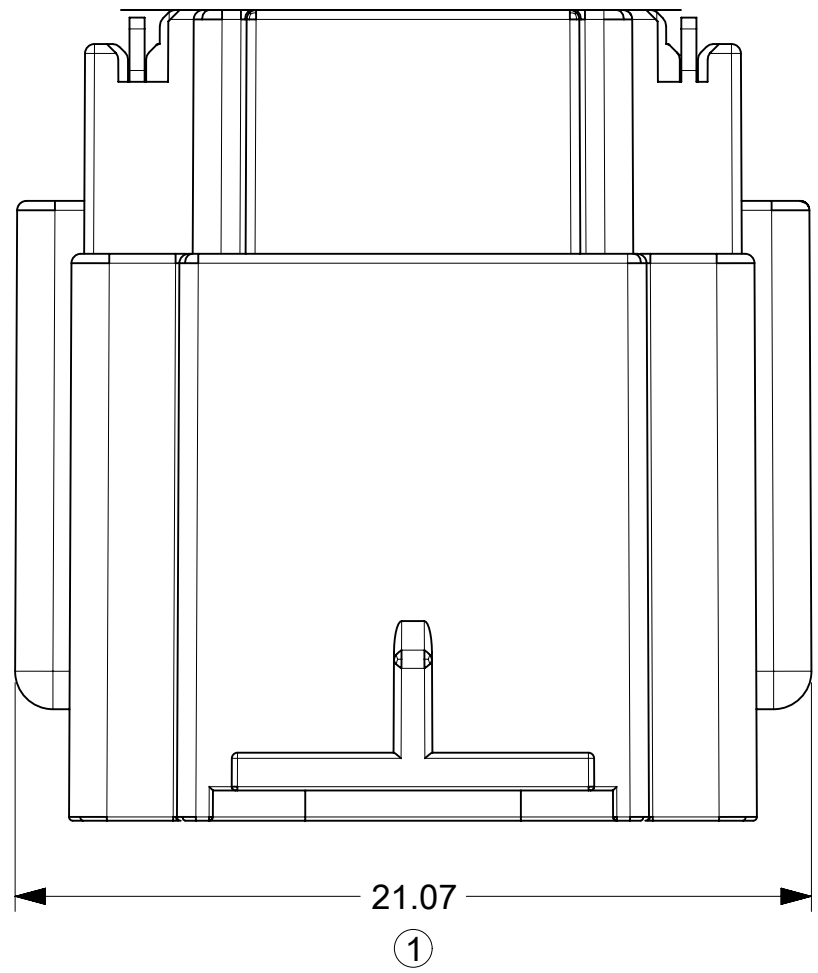


## SMT VERSION

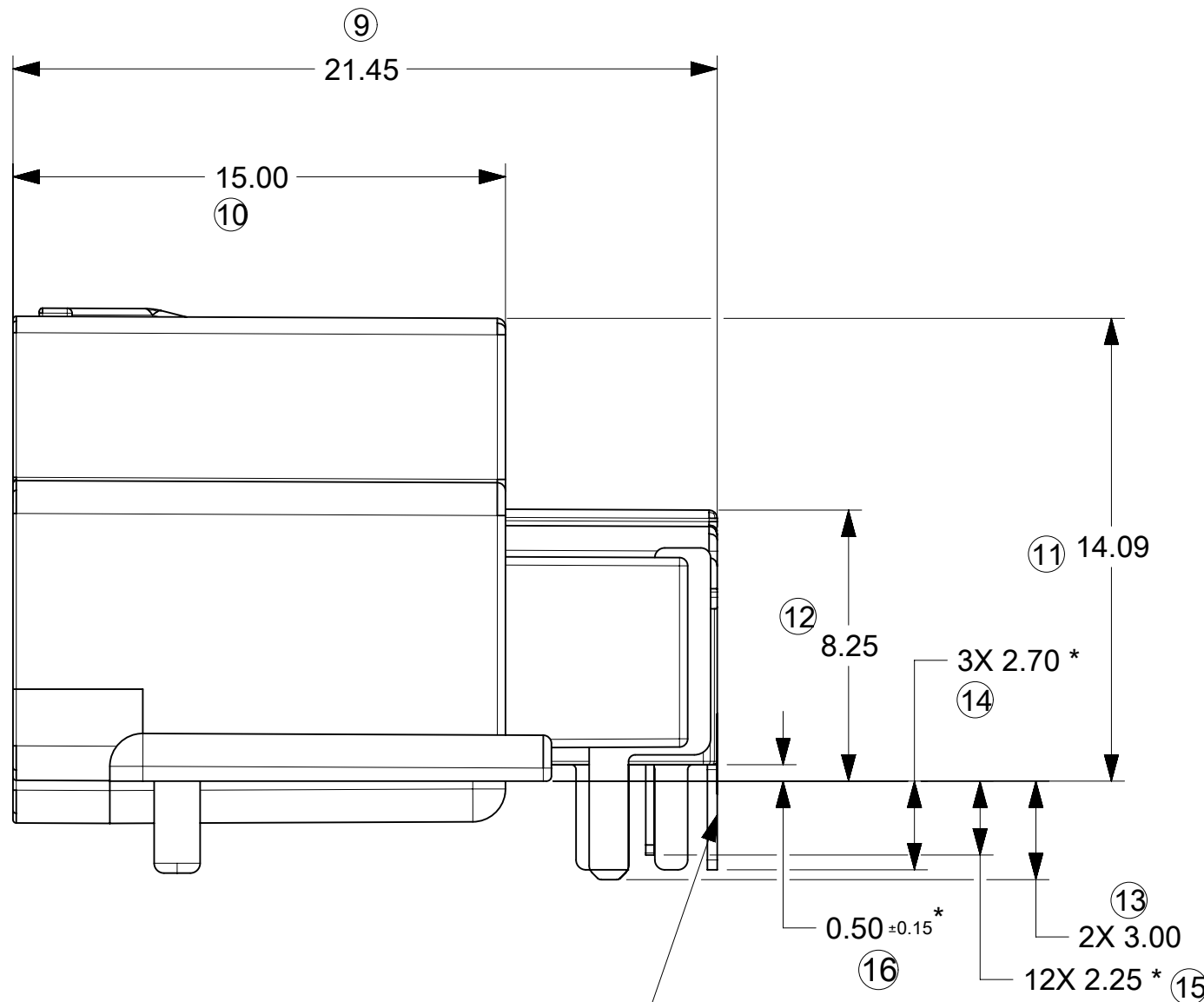
|     |                                                                                                                                                    |             |            |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------|
| C11 | NOTES 6 ADDED                                                                                                                                      | PRAVEEN     | 27NOV2023  |
| C10 | REMOVED "NOT QUALIFIED" FROM 80X9 SERIES.REMOVED "NOT QUALIFIED" FROM SHEET 4. SHEET-4 SMT PCB LAYOUT DIMENSIONS UPDATED.BALLOON NUMBER 17 UPDATED | PRAVEEN     | 28OCT2022  |
| C9  | NOTES ADDED ON SHEET 2 & 4 AND BALLOON NUMBER 17 UPDATED. FOR 34861-90(09, 19, 29, 39, 49, 59) NOT QUALIFIED REMOVED.                              | PRAVEEN     | 06JUNE2022 |
| C8  | BALLOON NUMBER 17 UPDATED                                                                                                                          | PRAVEEN     | 28OCT2021  |
| C7  | ADDED PART NUMBER 34861-9009-9059, SHEET 4 DIMENSION UPDATED.                                                                                      | PRAVEEN     | 10OCT2021  |
| C6  | ADDED PART NUMBER 34861-8009/8019/8029<br>ADDED DIM 16                                                                                             | MSUBHASH    | 15JULY2021 |
| C4  | UPDATED PCB LAYOUT - PIN HOLE DIA                                                                                                                  | SUDAYGUNAGI | 01JULY2020 |
| REV | DESCRIPTION                                                                                                                                        | ENGINEER    | DATE       |

|                                                                                                                                               |  |                                                                                       |  |                                                                                                                                                                                                           |        |                 |                                                    |                |          |              |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------------|----------------------------------------------------|----------------|----------|--------------|
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |                                                                                       |  |                                                                                                                                                                                                           |        |                 |                                                    |                |          |              |
| DIMENSION UNITS                                                                                                                               |  | SCALE                                                                                 |  | CURRENT REV DESC:<br><br>EC NO: 772885<br>DRWN: PRAVEC2 2023/11/27<br>CHK'D: JOEB17 2024/01/05<br>APPR: JOEB17 2024/01/05<br><br>INITIAL REVISION:<br>DRWN: XLHE14 2018/06/25<br>APPR: DNAYLIS 2018/06/27 |        |                 | molex                                              |                |          |              |
| mm                                                                                                                                            |  | 5:1                                                                                   |  |                                                                                                                                                                                                           |        |                 | 12CKT HSALII RIGHT ANGLE HEADER<br>HEADER ASSEMBLY |                |          |              |
| GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                                                                                                      |  |                                                                                       |  |                                                                                                                                                                                                           |        |                 |                                                    |                |          |              |
| ANGULAR TOL ± °                                                                                                                               |  |                                                                                       |  |                                                                                                                                                                                                           |        |                 |                                                    |                |          |              |
| 4 PLACES                                                                                                                                      |  | ±                                                                                     |  |                                                                                                                                                                                                           |        |                 |                                                    |                |          |              |
| 3 PLACES                                                                                                                                      |  | ±                                                                                     |  |                                                                                                                                                                                                           |        |                 |                                                    |                |          |              |
| 2 PLACES                                                                                                                                      |  | ± 0.2                                                                                 |  | PRODUCT CUSTOMER DRAWING                                                                                                                                                                                  |        |                 |                                                    |                |          |              |
| 1 PLACE                                                                                                                                       |  | ±                                                                                     |  |                                                                                                                                                                                                           |        |                 |                                                    |                |          |              |
| 0 PLACES                                                                                                                                      |  | ±                                                                                     |  | DOCUMENT NUMBER                                                                                                                                                                                           |        | DOC TYPE        |                                                    | DOC PART       | REVISION |              |
|                                                                                                                                               |  |                                                                                       |  | 348611406                                                                                                                                                                                                 |        | PSD             |                                                    | 000            | C11      |              |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                                    |  | THIRD ANGLE PROJECTION                                                                |  | DRAWING                                                                                                                                                                                                   | SERIES | MATERIAL NUMBER |                                                    | CUSTOMER       |          | SHEET NUMBER |
|                                                                                                                                               |  |  |  | D-SIZE                                                                                                                                                                                                    | 34861  | SEE CHART       |                                                    | GENERAL MARKET |          | 1 OF 4       |

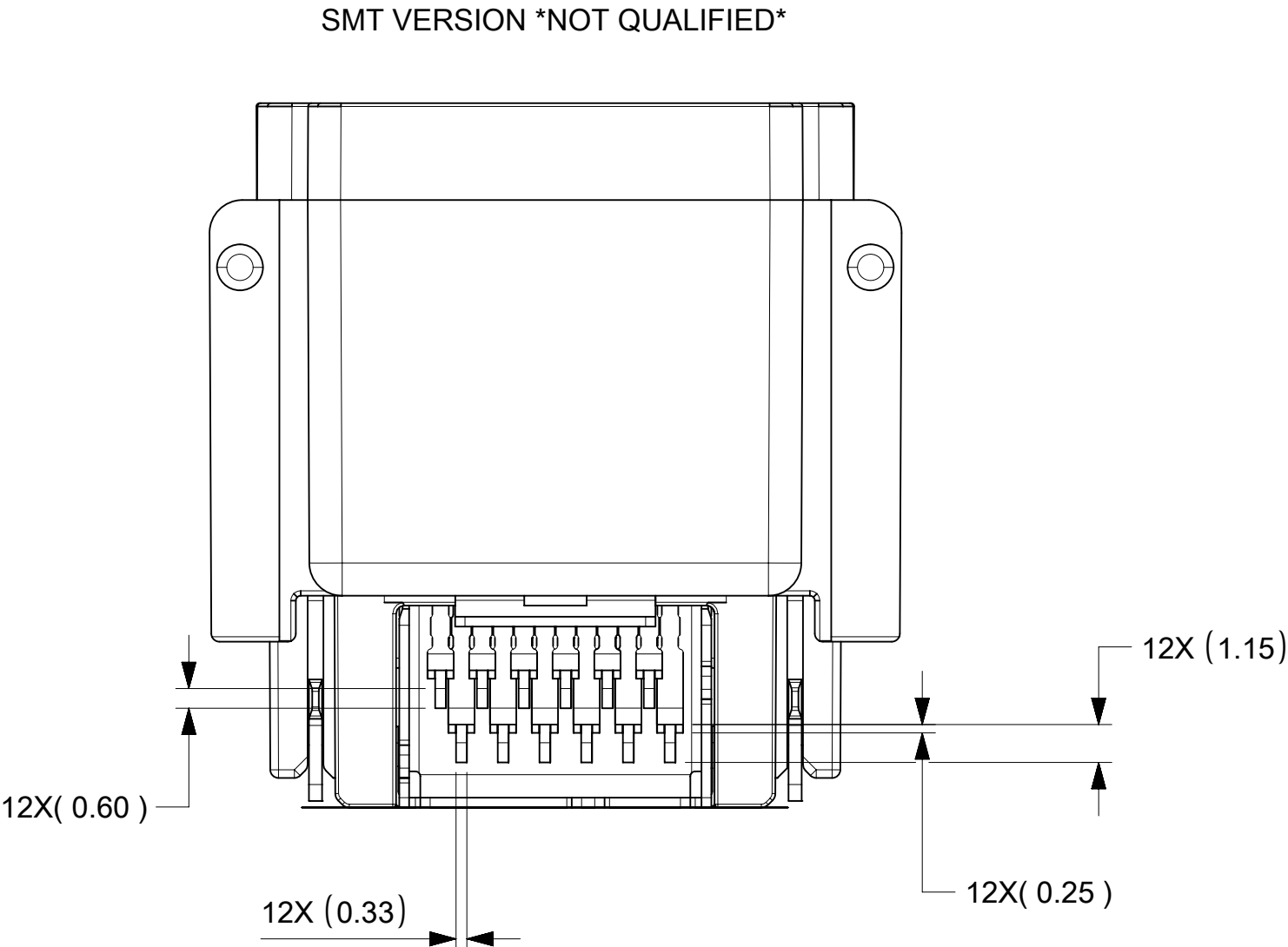




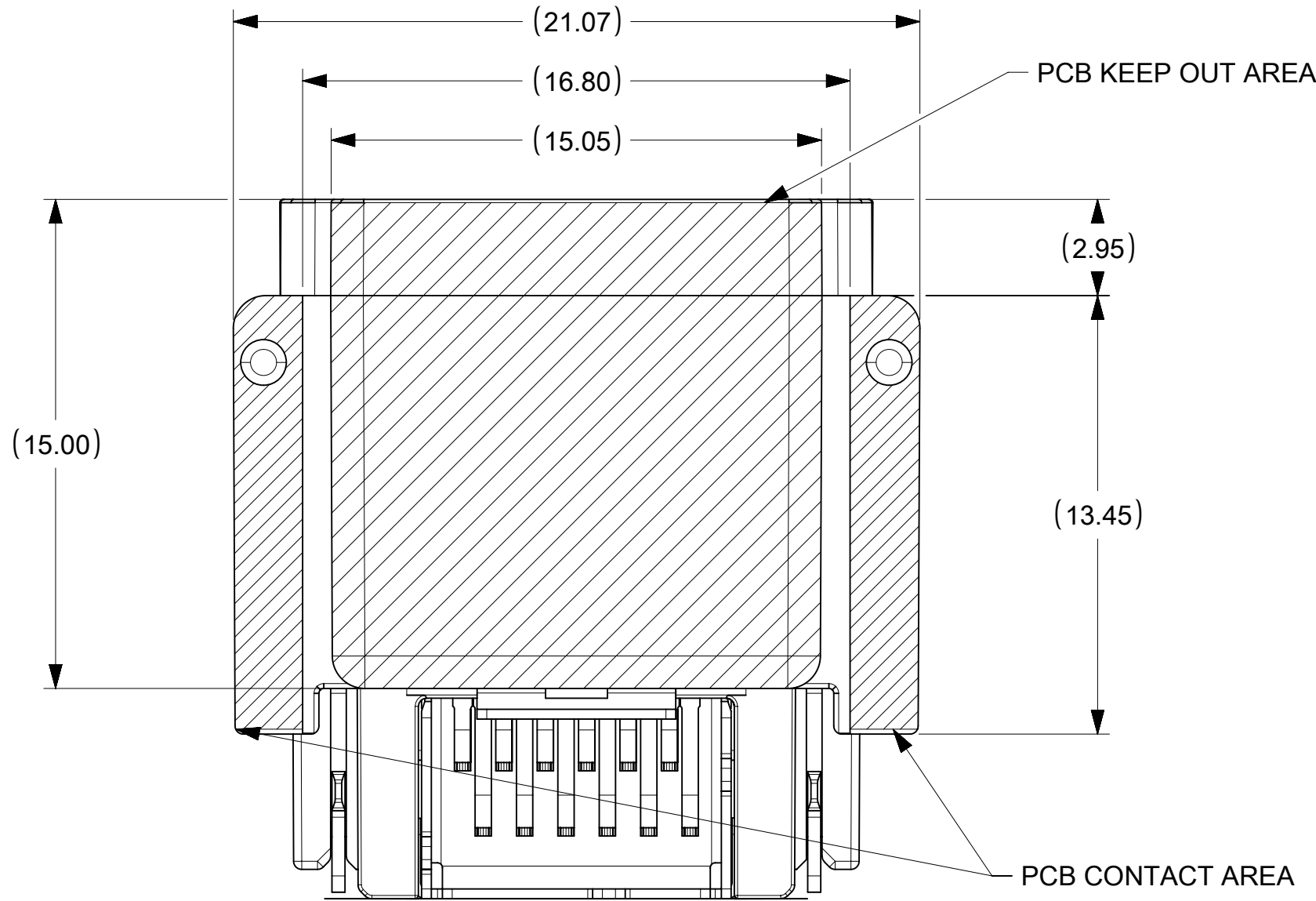
Note:-  
\* - Balloon Number 14, 15 & 16 is not applicable for 348618009, 8019, 8029, 8039, 8049.



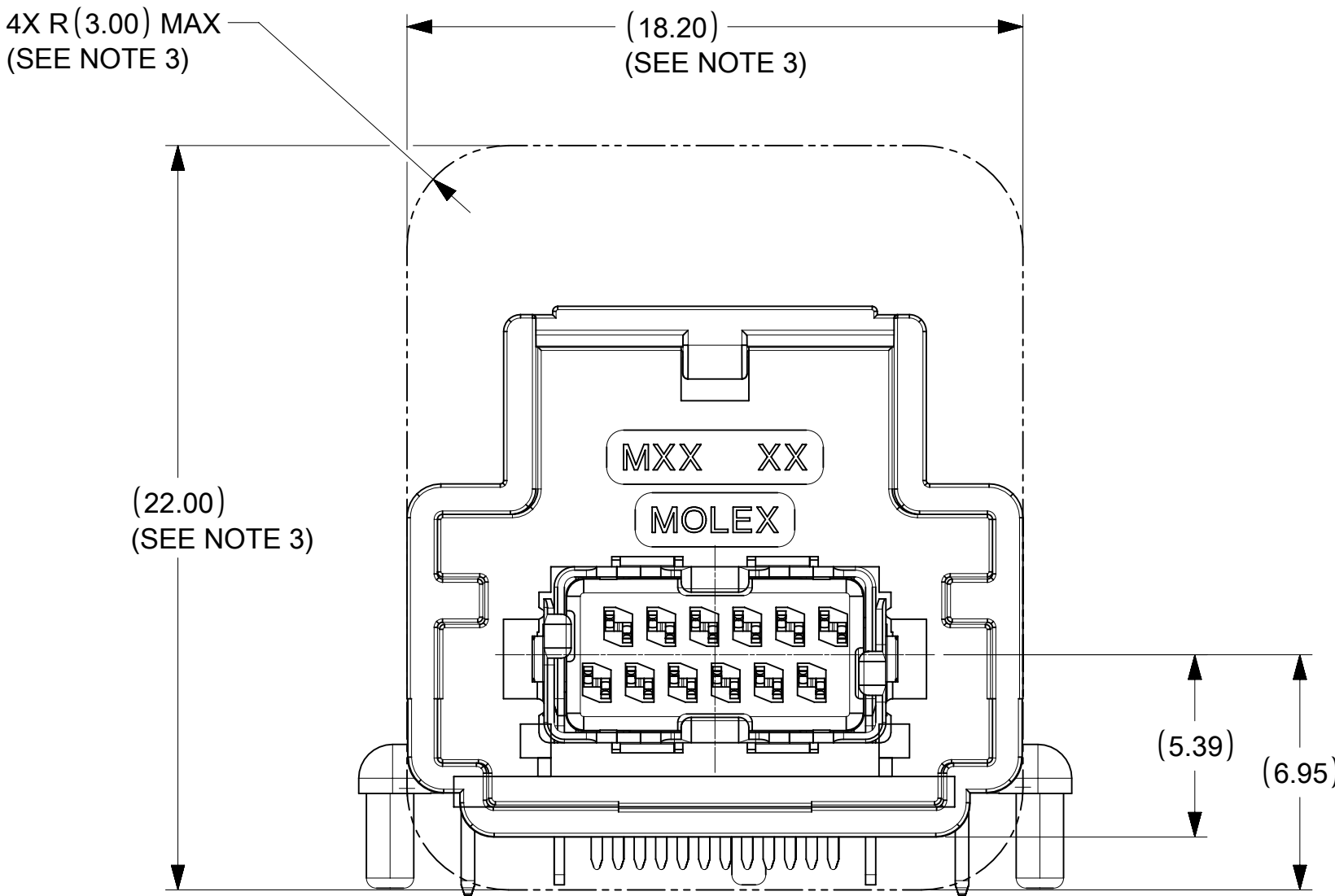
THIS SHIELD TAB IS REMOVED ON  
PART NUMBERS 34861-1306, 34861-1316, 34861-1326  
34861-7009, 34861-7019, 34861-7029  
34861-7059



## PCB CLEAROUT REGIONS



## HEADER-TO-MODULE INTERFACE REQUIREMENTS



|                                                                                                                                               |  |          |  |                                                                                                                     |  |                                                                                       |  |        |  |                 |  |             |  |                |  |        |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--|----------|--|---------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|--------|--|-----------------|--|-------------|--|----------------|--|--------|--|
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| DIMENSION UNITS                                                                                                                               |  | SCALE    |  | CURRENT REV DESC:                                                                                                   |  |                                                                                       |  |        |  |                 |  |             |  |                |  |        |  |
| mm                                                                                                                                            |  | 5:1      |  |                                                                                                                     |  |                                                                                       |  |        |  |                 |  |             |  |                |  |        |  |
| GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                                                                                                      |  |          |  | <div>molex</div> <div>12CKT HSALII RIGHT ANGLE HEADER<br/>HEADER ASSEMBLY</div> <div>PRODUCT CUSTOMER DRAWING</div> |  |                                                                                       |  |        |  |                 |  |             |  |                |  |        |  |
| ANGULAR TOL    ±    °                                                                                                                         |  |          |  |                                                                                                                     |  |                                                                                       |  |        |  |                 |  |             |  |                |  |        |  |
| 4 PLACES                                                                                                                                      |  | ±        |  |                                                                                                                     |  |                                                                                       |  |        |  |                 |  |             |  |                |  |        |  |
| 3 PLACES                                                                                                                                      |  | ±        |  |                                                                                                                     |  |                                                                                       |  |        |  |                 |  |             |  |                |  |        |  |
| 2 PLACES                                                                                                                                      |  | ±    0.2 |  |                                                                                                                     |  |                                                                                       |  |        |  |                 |  |             |  |                |  |        |  |
| 1 PLACE                                                                                                                                       |  | ±        |  | DOCUMENT NUMBER<br><div>348611406</div>                                                                             |  |                                                                                       |  |        |  |                 |  |             |  |                |  |        |  |
| 0 PLACES                                                                                                                                      |  | ±        |  |                                                                                                                     |  |                                                                                       |  |        |  | DOC TYPE        |  | DOC PART    |  | REVISION       |  |        |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                                    |  |          |  | THIRD ANGLE PROJECTION                                                                                              |  | DRAWING                                                                               |  | SERIES |  | MATERIAL NUMBER |  | CUSTOMER    |  | SHEET NUMBER   |  |        |  |
|                                                                                                                                               |  |          |  |                                |  |  |  | D-SIZE |  | 34861           |  | SEE SHEET 1 |  | GENERAL MARKET |  | 2 OF 4 |  |
|                                                                                                                                               |  |          |  | INITIAL REVISION:                                                                                                   |  |                                                                                       |  |        |  |                 |  |             |  |                |  |        |  |
|                                                                                                                                               |  |          |  | EC NO: 772885                                                                                                       |  |                                                                                       |  |        |  |                 |  |             |  |                |  |        |  |
| DRWN: PRAVEC2                                                                                                                                 |  |          |  |                                                                                                                     |  | 2023/11/27                                                                            |  |        |  |                 |  |             |  |                |  |        |  |
| CHK'D: JOEB17                                                                                                                                 |  |          |  |                                                                                                                     |  | 2024/01/05                                                                            |  |        |  |                 |  |             |  |                |  |        |  |
| APPR: JOEB17                                                                                                                                  |  |          |  |                                                                                                                     |  | 2024/01/05                                                                            |  |        |  |                 |  |             |  |                |  |        |  |
| DRWN: XLHE14                                                                                                                                  |  |          |  |                                                                                                                     |  | 2018/06/25                                                                            |  |        |  |                 |  |             |  |                |  |        |  |
| APPR: DNAYLIS                                                                                                                                 |  |          |  |                                                                                                                     |  | 2018/06/27                                                                            |  |        |  |                 |  |             |  |                |  |        |  |

**molex**

12CKT HSALII RIGHT ANGLE HEADER  
HEADER ASSEMBLY

PRODUCT CUSTOMER DRAWING

348611406

PSD

000

C11

SEE SHEET 1

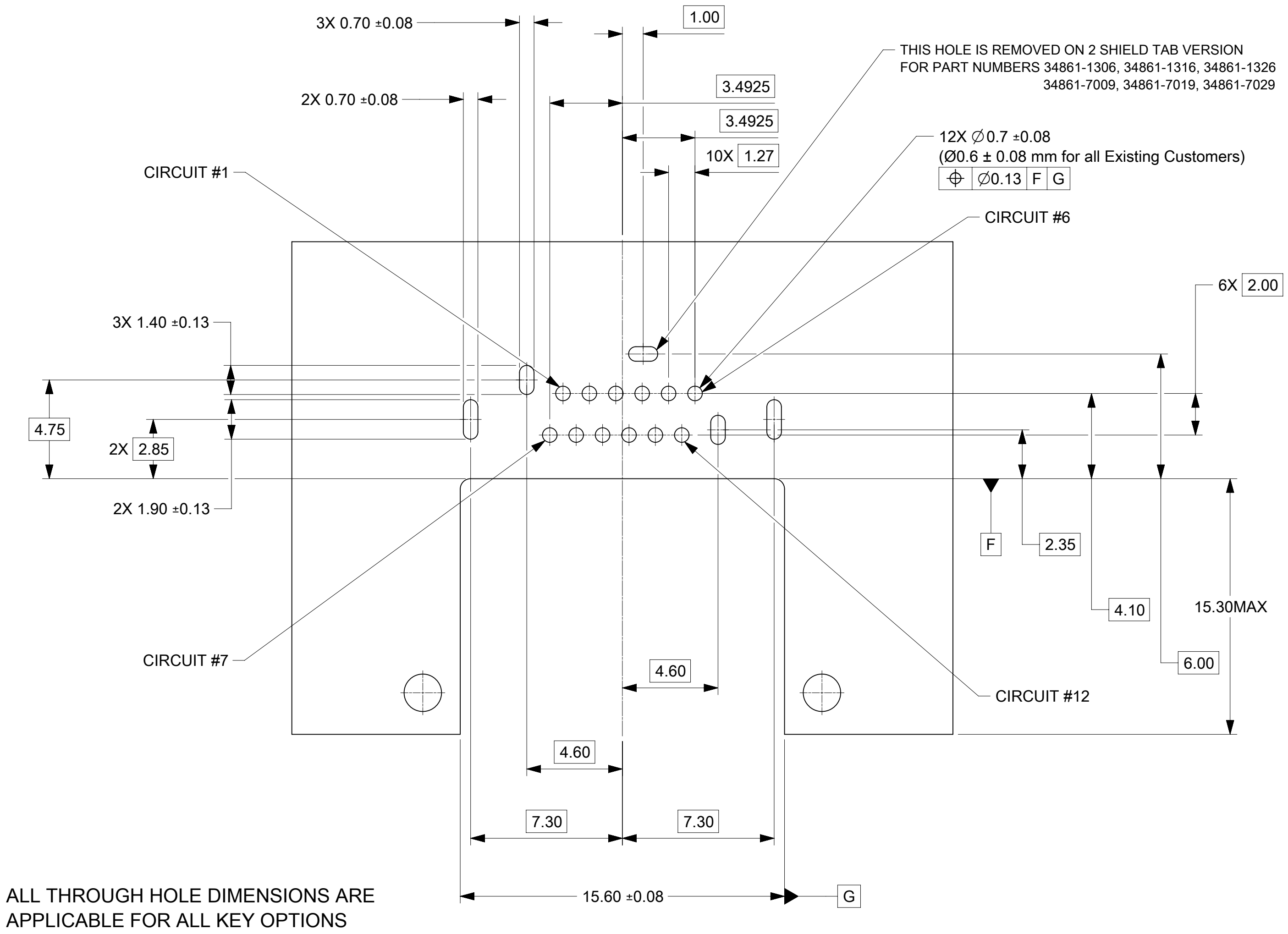
GENERAL MARKET

2 OF 4

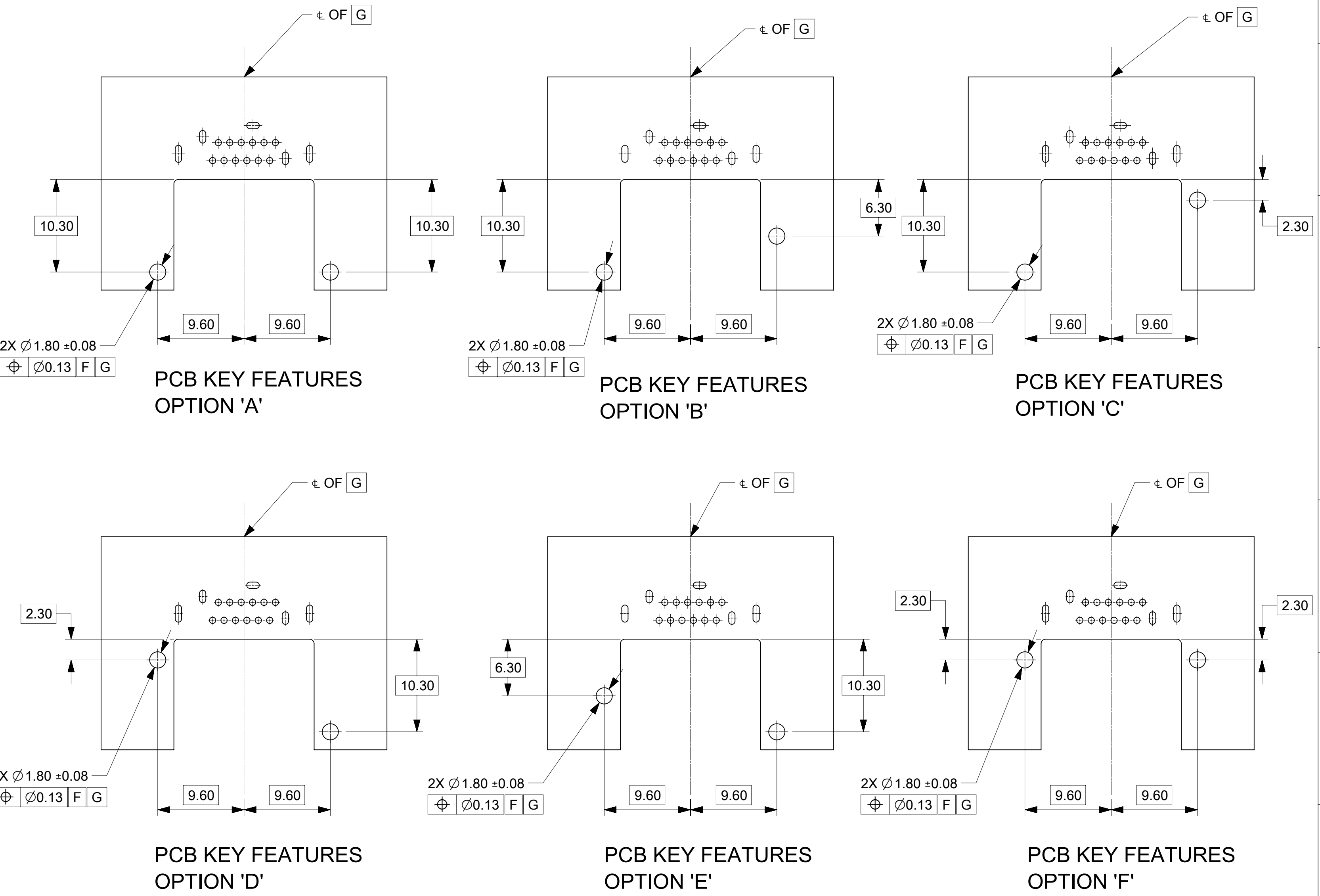
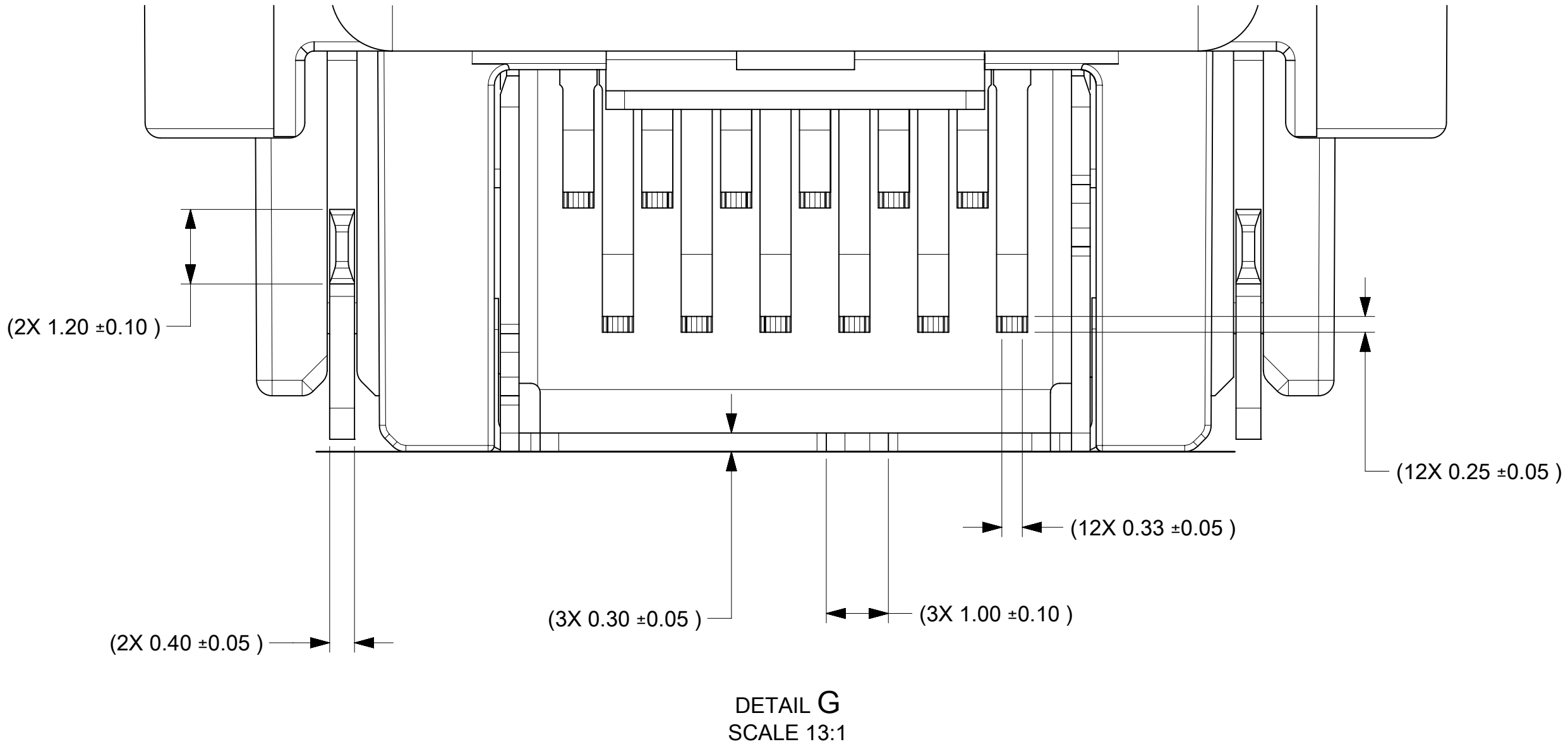
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|-----------------|----|--------------|------------|----------|
| DOCUMENT STATUS | P1 | RELEASE DATE | 2024/01/05 | 14:27:53 |
|-----------------|----|--------------|------------|----------|



RECOMMENDED PCB LAYOUT - HEADER SIDE PCB



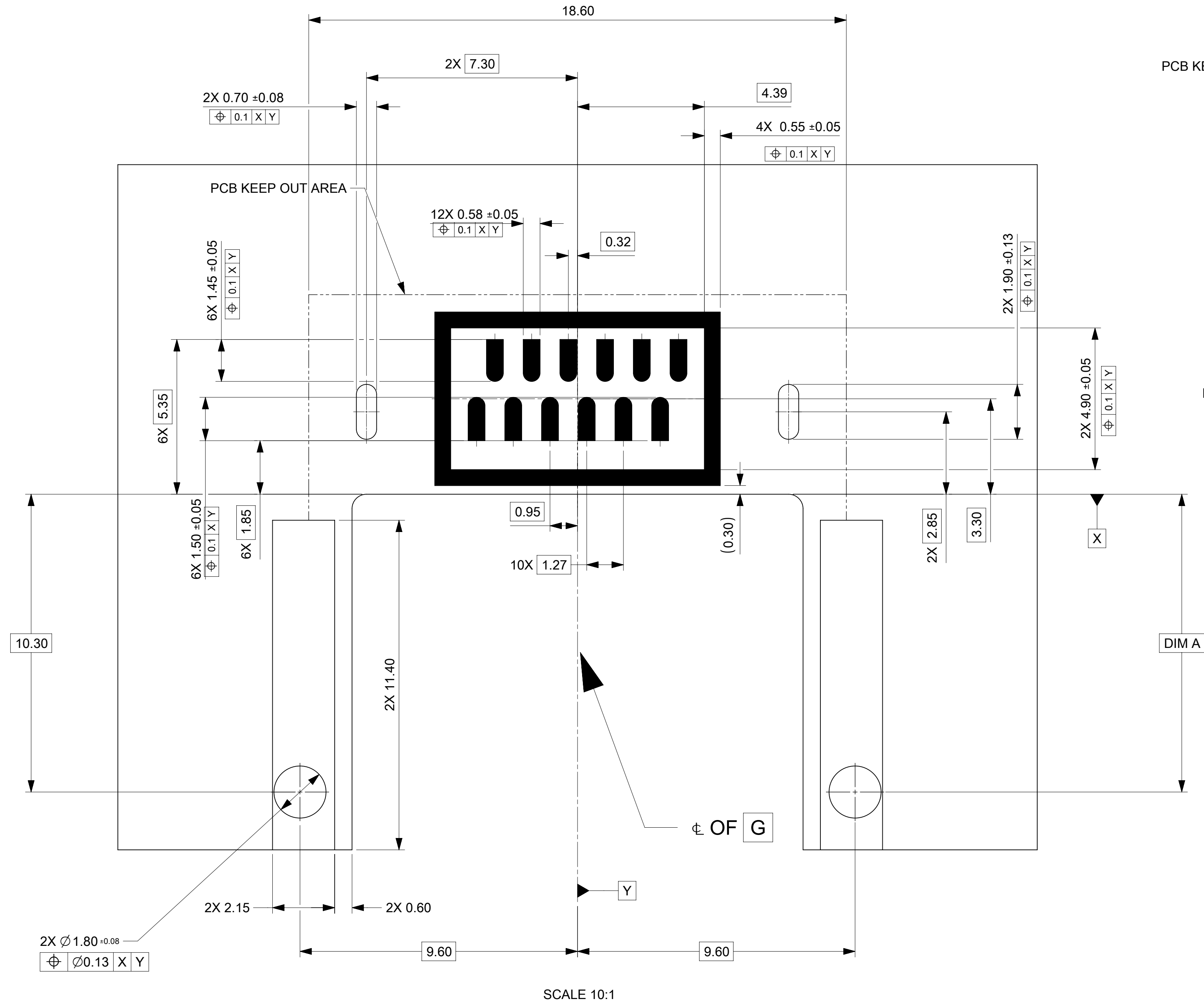
SOLDER TAILS SIZE  
FOR REFERENCE ONLY



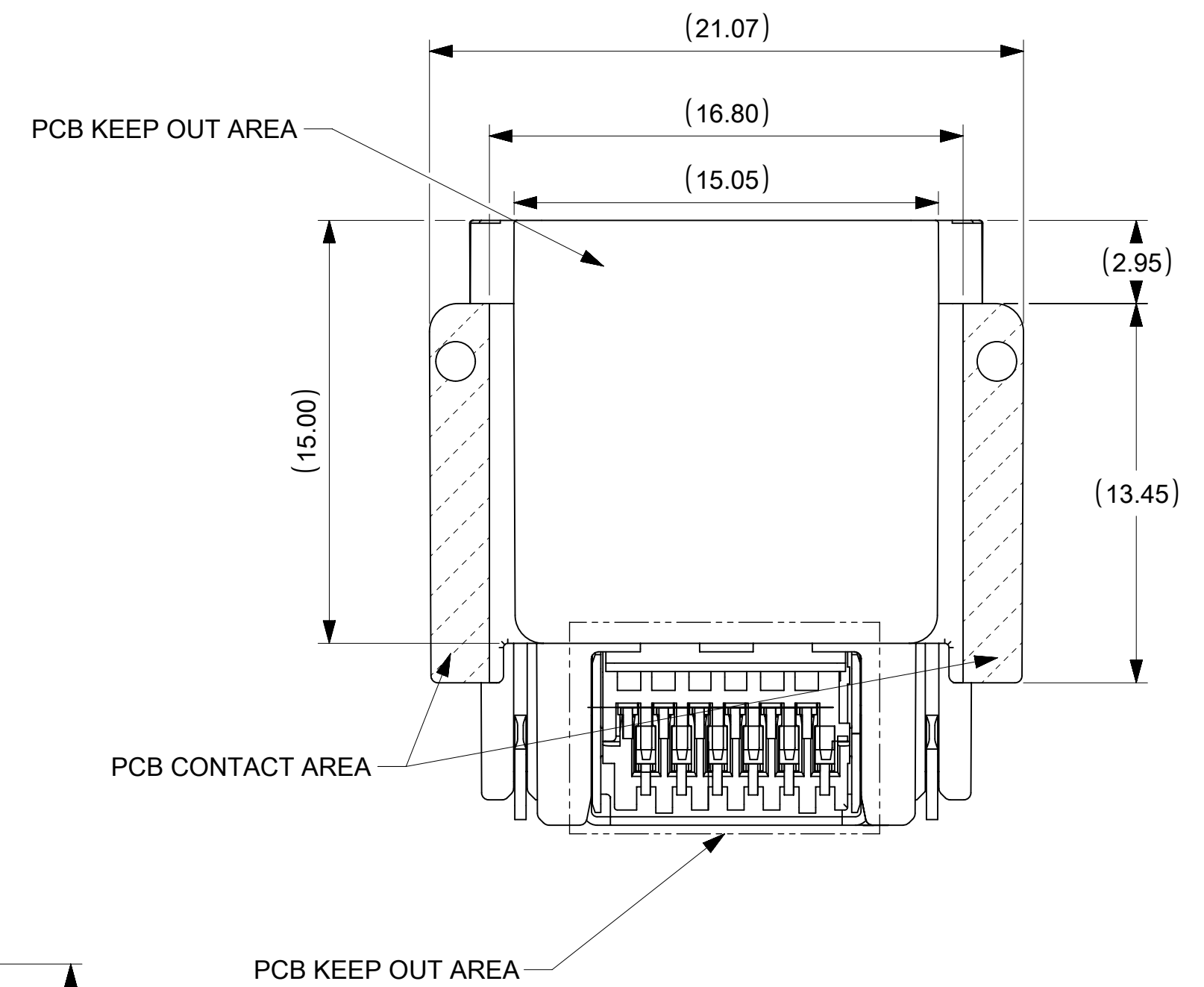
|                                                                                                                                               |  |       |  |                                                                                                                       |  |            |  |                |  |                        |  |          |          |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--|-------|--|-----------------------------------------------------------------------------------------------------------------------|--|------------|--|----------------|--|------------------------|--|----------|----------|----------|
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| DIMENSION UNITS                                                                                                                               |  | SCALE |  | CURRENT REV DESC:                                                                                                     |  |            |  |                |  |                        |  |          |          |          |
| mm                                                                                                                                            |  | 4:1   |  |                                                                                                                       |  |            |  |                |  |                        |  |          |          |          |
| GENERAL TOLERANCES (UNLESS SPECIFIED)                                                                                                         |  |       |  | EC NO: 772885<br>DRWN: PRAVEC2<br>CHK'D: JOEB17<br>APPR: JOEB17<br>INITIAL REVISION:<br>DRWN: XLHE14<br>APPR: DNAYLIS |  |            |  |                |  |                        |  |          |          |          |
| ANGULAR TOL ± °                                                                                                                               |  |       |  |                                                                                                                       |  |            |  |                |  |                        |  |          |          |          |
| 4 PLACES                                                                                                                                      |  | ±     |  | 2023/11/27                                                                                                            |  |            |  |                |  |                        |  |          |          |          |
| 3 PLACES                                                                                                                                      |  | ±     |  | 2024/01/05                                                                                                            |  |            |  |                |  |                        |  |          |          |          |
| 2 PLACES                                                                                                                                      |  | ± 0.2 |  | 2024/01/05                                                                                                            |  |            |  |                |  |                        |  |          |          |          |
| 1 PLACE                                                                                                                                       |  | ±     |  | PRODUCT CUSTOMER DRAWING                                                                                              |  |            |  |                |  |                        |  |          |          |          |
| 0 PLACES                                                                                                                                      |  | ±     |  |                                                                                                                       |  |            |  |                |  |                        |  |          |          |          |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                                    |  |       |  | THIRD ANGLE PROJECTION                                                                                                |  | DRAWING    |  | SERIES         |  | DOCUMENT NUMBER        |  | DOC TYPE | DOC PART | REVISION |
|                                                                                                                                               |  |       |  |                                                                                                                       |  |            |  |                |  | 348611406              |  | PSD      | 000      | C11      |
| D-SIZE                                                                                                                                        |  |       |  | 34861                                                                                                                 |  | SEE SHEET1 |  | GENERAL MARKET |  | SHEET NUMBER<br>3 OF 4 |  |          |          |          |

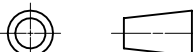


## SMT VERSION WITH HIGH SPEED INSERTS



| KEY OPTION | DIM A |
|------------|-------|
| A          | 10.30 |
| B          | 6.30  |
| C          | 2.30  |



|                                                                                                                                               |                                                                                                                 |                          |                        |                 |                                                    |                               |          |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------|------------------------|-----------------|----------------------------------------------------|-------------------------------|----------|----------|
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| DIMENSION UNITS<br>mm                                                                                                                         | SCALE<br>10:1                                                                                                   | CURRENT REV DESC:        |                        |                 | <b>molex</b>                                       |                               |          |          |
| GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                                                                                                      |                                                                                                                 |                          |                        |                 | 12CKT HSALII RIGHT ANGLE HEADER<br>HEADER ASSEMBLY |                               |          |          |
| ANGULAR TOL    ±       °                                                                                                                      | EC NO: 772885                                                                                                   |                          |                        |                 |                                                    |                               |          |          |
| 4 PLACES             ±                                                                                                                        | DRWN: PRAVEC2                                                                                                   |                          | 2023/11/27             |                 |                                                    |                               |          |          |
| 3 PLACES             ±                                                                                                                        | CHK'D: JOEB17                                                                                                   |                          | 2024/01/05             |                 |                                                    |                               |          |          |
| 2 PLACES             ±      0.2                                                                                                               | APPR: JOEB17                                                                                                    |                          | 2024/01/05             |                 | PRODUCT CUSTOMER DRAWING                           |                               |          |          |
| 1 PLACE               ±                                                                                                                       | INITIAL REVISION:                                                                                               |                          |                        |                 | DOCUMENT NUMBER                                    | DOC TYPE                      | DOC PART | REVISION |
| 0 PLACES             ±                                                                                                                        | DRWN: XLHE14                                                                                                    |                          | 2018/06/25             |                 | 348611406                                          | PSD                           | 000      | C1       |
|                                                                                                                                               | APPR: DNNALIS                                                                                                   |                          | 2018/06/27             |                 |                                                    |                               |          |          |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                                    | THIRD ANGLE PROJECTION<br> | DRAWING<br><b>D-SIZE</b> | SERIES<br><b>34861</b> | MATERIAL NUMBER | CUSTOMER<br><b>GENERAL MARKET</b>                  | SHEET NUMBER<br><b>4 OF 4</b> |          |          |

|                 |    |              |            |          |
|-----------------|----|--------------|------------|----------|
| DOCUMENT STATUS | P1 | RELEASE DATE | 2024/01/05 | 14:27:53 |
|-----------------|----|--------------|------------|----------|