



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

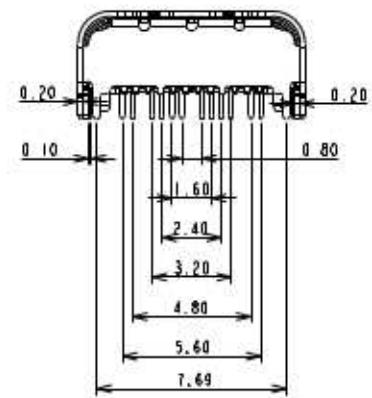
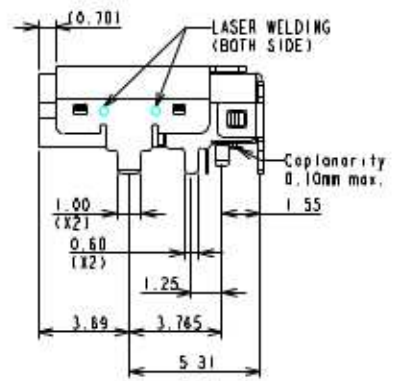
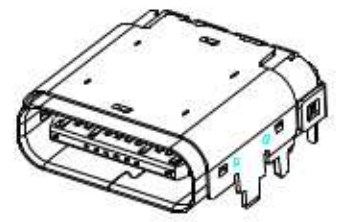
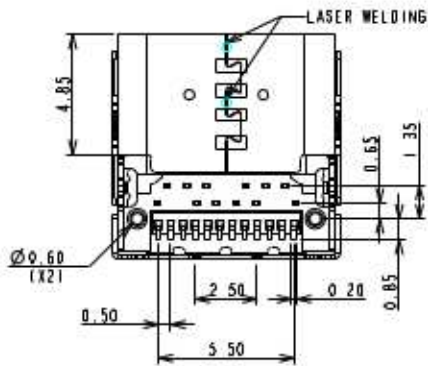
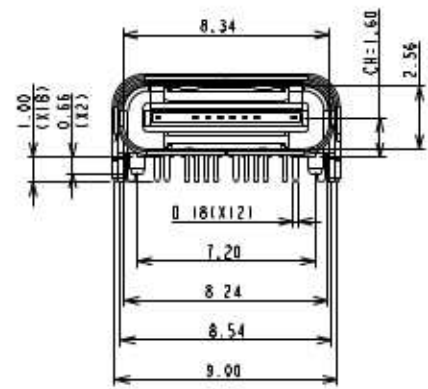
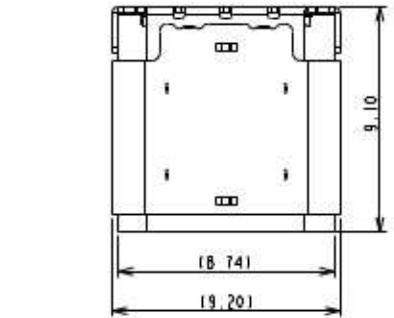
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HALOGEN FREE



| REV | ECN        | DESCRIPTION              | DATE     | DRAWN  | CHECKED   | APPROVED |
|-----|------------|--------------------------|----------|--------|-----------|----------|
| X1  | SZECR1542B | NEW RELEASE PER NPR14104 | 09/18/15 | Rui Su | Alan Tsai |          |
|     |            |                          |          |        |           |          |
|     |            |                          |          |        |           |          |
|     |            |                          |          |        |           |          |

TABLE A: PRODUCT NUMBERING CODE

C-BR25 - A K X X  
 ① ② ③ ④ ⑤

1. CONNECTOR TYPE:  
 BR25: USB TYPE-C RECP. R/A CONN

2. NO. OF POSITION:  
 A: 24 POSITIONS.

3. COLOR OF INSULATOR:  
 K BLACK

4. PLATING OF CONTACT:  
 1: GOLD FLASH ON CONTACT AREA.  
 5: Au 30u" PLATING ON CONTACT AREA

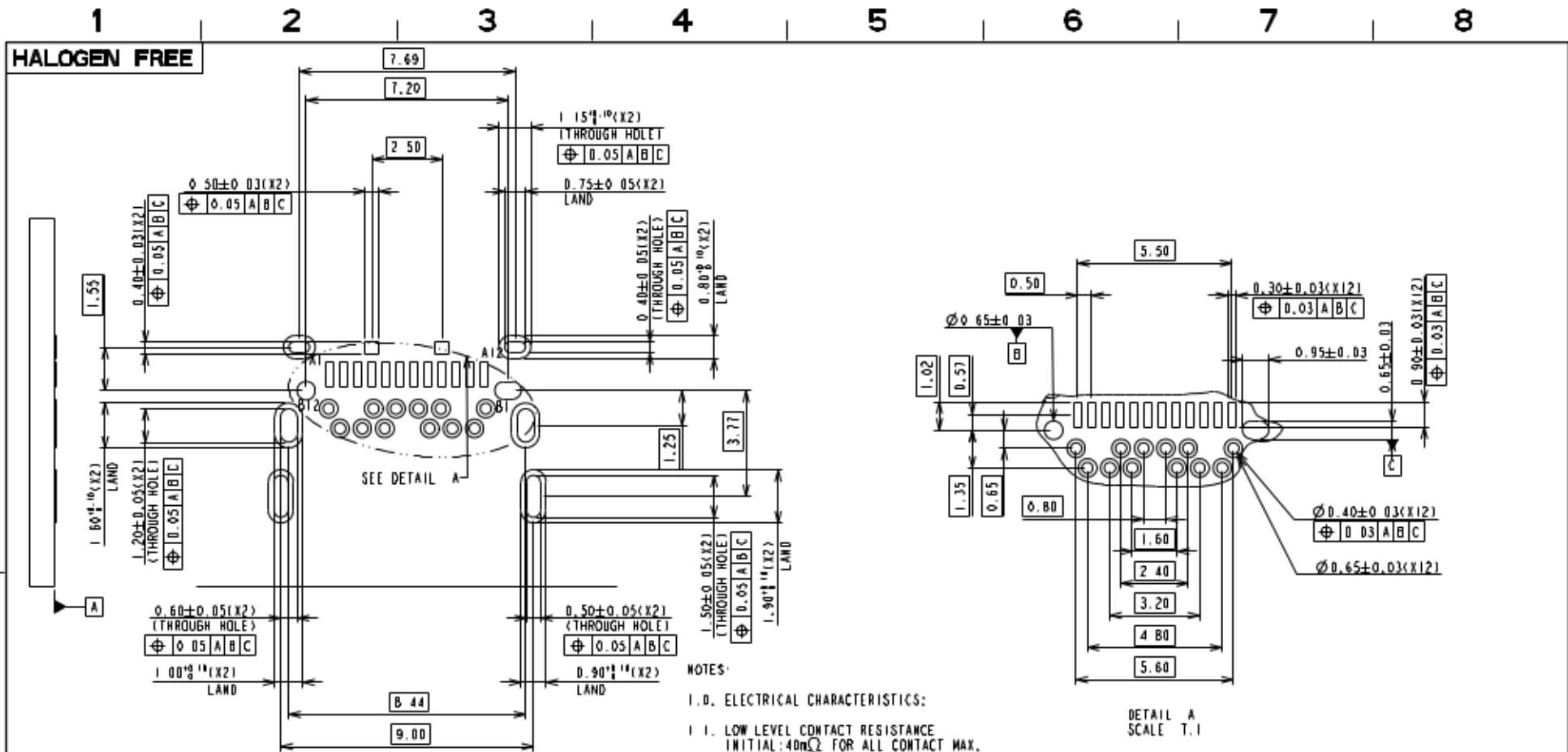
5. PLATING OF FRONT SHELL:  
 3: SOLDERING NICKEL

|   |              |    |               |                          |
|---|--------------|----|---------------|--------------------------|
| 6 | EMI RING     | 2  | H- BR25-COXXX | METAL / Ni PLATED        |
| 5 | GROUND PLATE | 1  | H- BR25-GDXXX | METAL / Ni PLATED        |
| 4 | SHELL        | 2  | S- BR25-XDXXX | METAL / Ni PLATED        |
| 3 | DOWN-CONTACT | 12 | T- BR25-20XXX | COPPER ALLOY / Au PLATED |
| 2 | UP-CONTACT   | 12 | T- BR25-10XXX | COPPER ALLOY / Au PLATED |
| 1 | HALF PRODUCT | 2  | BR25-AHXXX    | HI-TEMP. G.F. 8L94V-D    |

TABLE B: PIN ASSIGNMENT

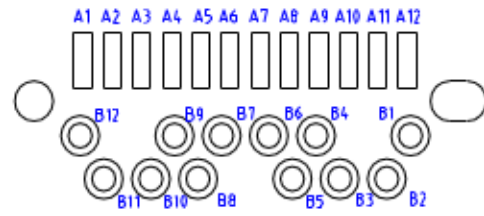
|             |     |       |       |      |      |     |     |      |      |       |       |     |
|-------------|-----|-------|-------|------|------|-----|-----|------|------|-------|-------|-----|
| PIN NO.     | A1  | A2    | A3    | A4   | A5   | A6  | A7  | A8   | A9   | A10   | A11   | A12 |
| SIGNAL NAME | GND | SSTp1 | SSTn1 | VBUS | CC1  | Dp1 | Dn1 | SBU1 | VBUS | SSRn2 | SSRp2 | GND |
| PIN NO.     | B12 | B11   | B10   | B9   | B8   | B7  | B6  | B5   | B4   | B3    | B2    | B1  |
| SIGNAL NAME | GND | SSRp1 | SSRn1 | VBUS | SBU2 | Dn2 | Dp2 | CC2  | VBUS | SSTn2 | SSTp2 | GND |

| ITEM  | NAME           | Q'TY  | PART # | MATERIAL / FINISH                                  |                     |                |   |                     |                |                |                |                 |                |   |  |  |  |  |
|---|----------------|---|--------|--|---------------------|----------------|---|---------------------|----------------|----------------|----------------|-----------------|----------------|---|--|--|--|--|
| <table border="0"> <tr> <td>DESIGNED BY: Rui Su</td> <td>DATE: 09/18/15</td> <td rowspan="4" style="text-align: center; vertical-align: middle;"> <b>CnC Tech, LLC</b><br/>           USB TYPE - C 3.1 (10Gbps) CONN<br/>           RECEPTACLE - TOP MOUNT TYPE         </td> </tr> <tr> <td>GENERAL ENG: Rui Su</td> <td>DATE: 09/18/15</td> </tr> <tr> <td>DESIGN: Rui Su</td> <td>DATE: 09/18/15</td> </tr> <tr> <td>CHECKED: Rui Su</td> <td>DATE: 09/18/15</td> </tr> <tr> <td colspan="4">           SCALE: 1:1<br/>           SHEET 1 OF 2<br/>           PART: 700         </td> <td>           TITLE: C-BR25-AK53<br/>           REV: 00-05<br/>           DATE: 09/18/15         </td> </tr> </table> |                |   |        |  | DESIGNED BY: Rui Su | DATE: 09/18/15 | <b>CnC Tech, LLC</b><br>USB TYPE - C 3.1 (10Gbps) CONN<br>RECEPTACLE - TOP MOUNT TYPE | GENERAL ENG: Rui Su | DATE: 09/18/15 | DESIGN: Rui Su | DATE: 09/18/15 | CHECKED: Rui Su | DATE: 09/18/15 | SCALE: 1:1<br>SHEET 1 OF 2<br>PART: 700 |  |  |  | TITLE: C-BR25-AK53<br>REV: 00-05<br>DATE: 09/18/15 |
| DESIGNED BY: Rui Su   | DATE: 09/18/15 | <b>CnC Tech, LLC</b><br>USB TYPE - C 3.1 (10Gbps) CONN<br>RECEPTACLE - TOP MOUNT TYPE |        |  |                     |                |   |                     |                |                |                |                 |                |   |  |  |  |  |
| GENERAL ENG: Rui Su   | DATE: 09/18/15 |   |        |  |                     |                |   |                     |                |                |                |                 |                |   |  |  |  |  |
| DESIGN: Rui Su  | DATE: 09/18/15 |   |        |  |                     |                |   |                     |                |                |                |                 |                |   |  |  |  |  |
| CHECKED: Rui Su   | DATE: 09/18/15 |   |        |  |                     |                |   |                     |                |                |                |                 |                |   |  |  |  |  |
| SCALE: 1:1<br>SHEET 1 OF 2<br>PART: 700   |                |   |        | TITLE: C-BR25-AK53<br>REV: 00-05<br>DATE: 09/18/15 |                     |                |   |                     |                |                |                |                 |                |   |  |  |  |  |

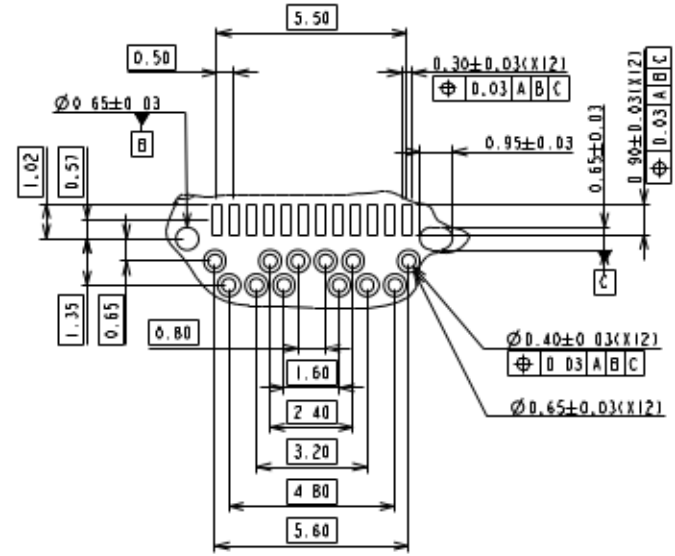


RECOMMENDED PCB LAYOUT  
THICKNESS IS 0.90 mm  
TOLERANCE ±0.05

TABLE C PIN NO (TOP VIEW)



- NOTES:
- 1.0. ELECTRICAL CHARACTERISTICS:
    - 1.1. LOW LEVEL CONTACT RESISTANCE  
INITIAL: 40mΩ FOR ALL CONTACT MAX.  
AFTER: 10mΩ MAX CHANGE
    - 1.2. DIELECTRIC WITHSTANDING VOLTAGE:  
100 VAC FOR 1 MINUTE SEA LEVEL
    - 1.3. INSULATION RESISTANCE:  
100MΩ MIN.
    - 1.4. CURRENT RATING:  
VBUS AND GND CONTACTS RATED AT 1.25A EA.  
PARALLELED FOR A TOTAL OF 5A
  - 2.0. MECHANICAL CHARACTERISTICS:
    - 2.1. INSERTION FORCE: 20N MAX
    - 2.2. EXTRACTION FORCE 1-1000 CYCLES 6N MIN. 20 N MAX.  
EXTRACTION FORCE 1001-10000 CYCLES 6N MIN. 20 N MAX.
    - 2.3. DURABILITY : 10,000 CYCLES
    - 3.0 OPERATING TEMPERATURE: -55°C TO +85°



DETAIL A  
SCALE T.1

|  |  |   |                     |
|--|--|---|---------------------|
| TITLE: GENERAL SPECIFICATION<br>DESIGNED BY: RUI-3a<br>CHECKED BY: RUI-3a<br>SCALE: 7:1<br>SHEET: 2 OF 2<br>UNIT: MM | DRAWN: RUI-3a<br>DATE: 09/19/15<br>DESIGN: RUI-3a<br>DATE: 09/19/15<br>CHECKED: RUI-3a<br>DATE: 09/19/15<br>APPROVED: [Signature]<br>DATE: | CnC Tech, LLC<br>TITLE: USB TYPE - C 3.1 (10Gbps) CONN RECEPTACLE - TDP MOUNT TYPE<br>SERIES: C-BR25-AK53<br>DWG NO.: | SIZE: A3<br>REV: X1 |
|--|--|---|---------------------|