

**MODEL:** UJ20-C-H-C-1-SMT-TR | **DESCRIPTION:** USB RECEPTACLE

**FEATURES**

- USB Type C receptacle
- USB 2.0
- 480 Mbit/s data transfer speed
- reflow solder compatible
- tape & reel packaging


**SPECIFICATIONS**

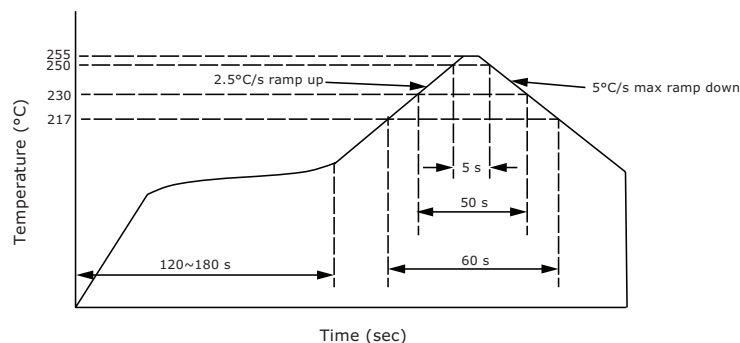
| parameter                       | conditions/description  | min | typ    | max                 | units       |
|---------------------------------|---|-----|--------|---------------------|-------------|
| USB standard                    | USB 2.0   |     |        |                     |             |
| rated input voltage             |   |     |        | 20                  | Vdc         |
| rated input current             | as per EIA-364-70, Method B<br>power pins collectively [A1, A4, A9, A12, B1, B4, B9, B12]<br>VCONN pins individually [A5, B5]<br>all other signal pins individually |     |        | 5.0<br>1.25<br>0.25 | A<br>A<br>A |
| contact resistance <sup>1</sup> |   |     |        | 40                  | mΩ          |
| insulation resistance           | at 200 Vdc  | 100 |        |                     | MΩ          |
| voltage withstand               | for 1 minute  | 100 |        |                     | Vac         |
| insertion force                 |   | 5   |        | 20                  | N           |
| withdrawal force                |   | 6   |        | 20                  | N           |
| life                            |   |     | 10,000 |                     | cycles      |
| operating temperature           |   | -40 |        | 85                  | °C          |
| flammability rating             | UL94V-0   |     |        |                     |             |
| RoHS                            | yes   |     |        |                     |             |

Note: 1. When measured at 20 mV / 100 mA.  
2. All specifications measured at 10-35°C, humidity at 45-85%, under standard atmospheric pressure, unless otherwise noted.

**SOLDERABILITY**

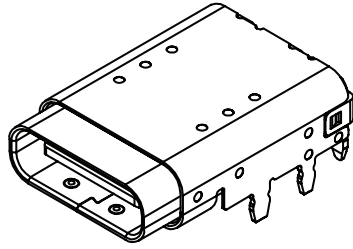
| parameter                     | conditions/description      | min | typ | max | units |
|-------------------------------|-----------------------------|-----|-----|-----|-------|
| reel storage                  | at relative humidity 65-70% | 25  |     | 30  | °C    |
| reflow soldering <sup>3</sup> | see reflow profile          |     | 255 | 260 | °C    |

Note: 3. It is recommended to reflow solder within 3 months from opening vacuum packaging at a temperature of 25-30°C & relative humidity 65-70%.

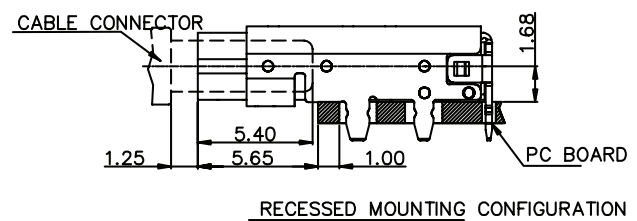
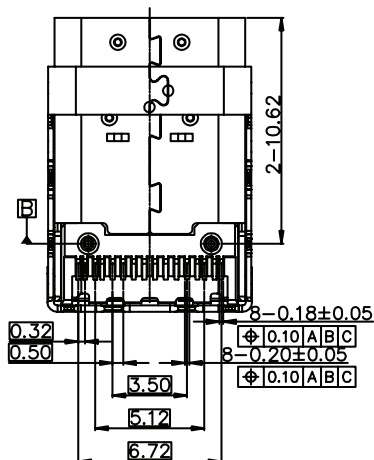
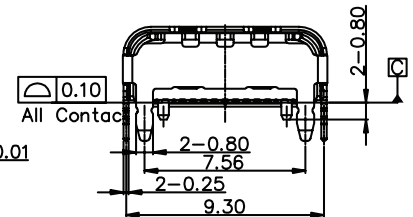
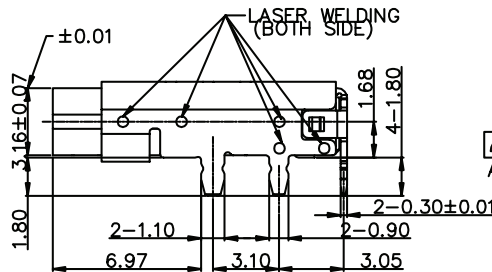
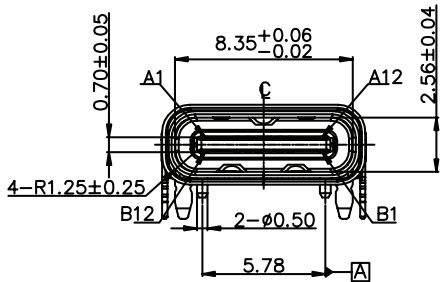
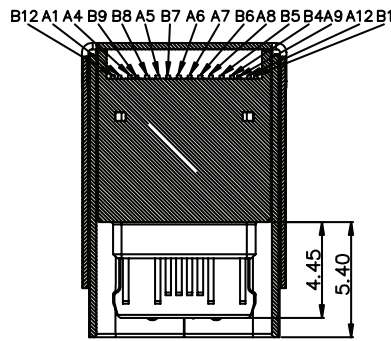
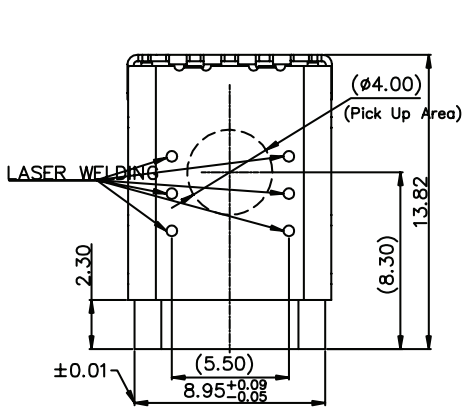


## MECHANICAL DRAWING

units: mm  
 tolerance:  
 X.  $\pm 0.50$  mm  
 X.X  $\pm 0.30$  mm  
 X.XX  $\pm 0.20$  mm  
 X.XXX  $\pm 0.10$  mm  
 unless otherwise specified



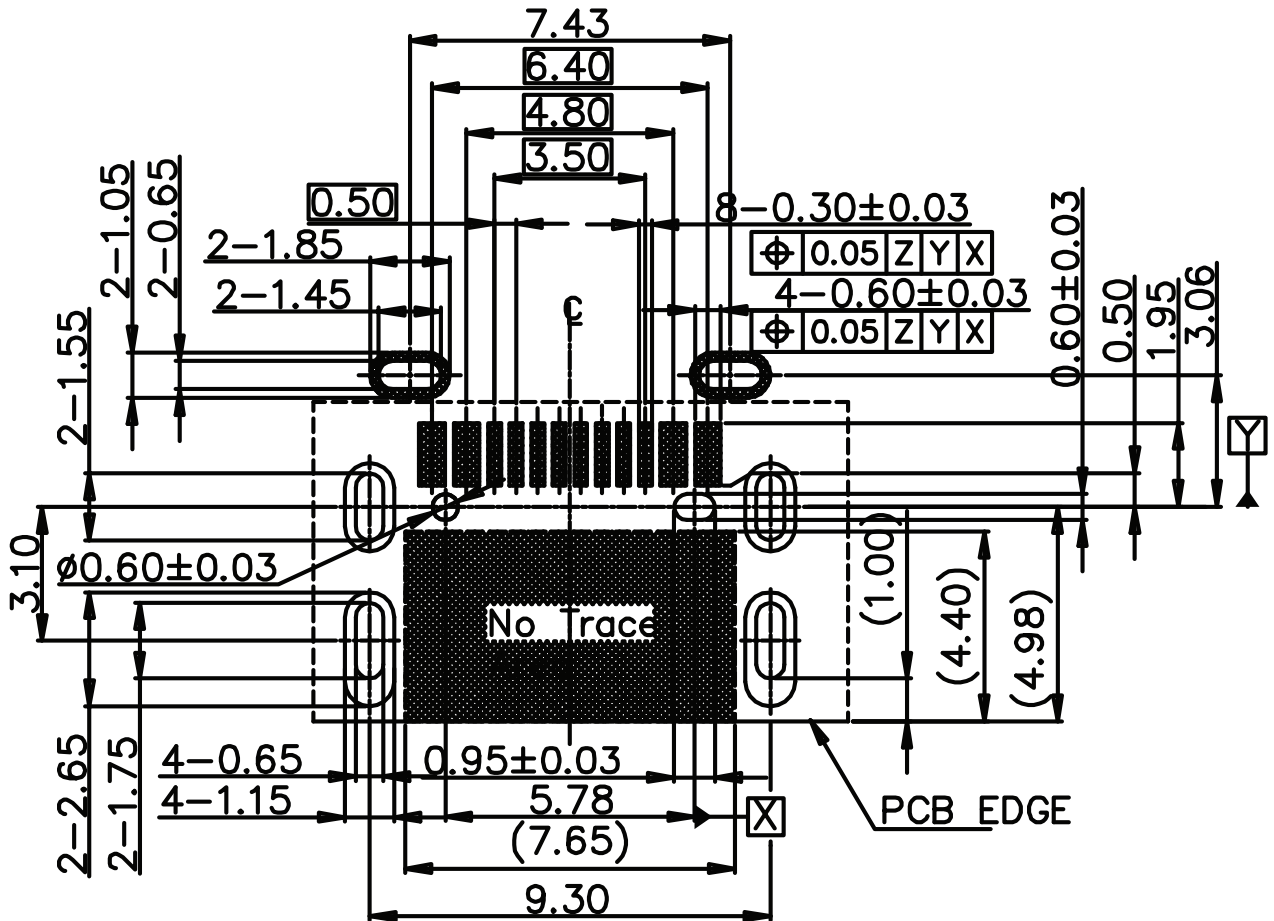
| DESCRIPTION | MATERIAL                     | PLATING/COLOR   |
|-------------|------------------------------|---|
| insulator   | LCP (UL94V-0)                | black   |
| contact     | copper alloy<br>t=0.15 mm    | contact area: gold<br>flash over 50 $\mu$ "<br>nickel<br>solder area: 80 $\mu$ "<br>matte tin over 50 $\mu$ "<br>nickel |
| shell       | stainless steel<br>t=0.25 mm | 50 $\mu$ " nickel   |
| cover shell | stainless steel<br>t=0.30 mm | 50 $\mu$ " nickel   |
| mid plate   | stainless steel<br>t=0.15 mm | 50 $\mu$ " nickel   |



## MECHANICAL DRAWING (CONTINUED)

units: mm  
 PCB tolerance:  $\pm 0.05$  mm  
 PCB thickness:  $1.0 \pm 0.05$  mm

| PIN CONNECTIONS |             |                 |       |             |                 |
|-----------------|-------------|-----------------|-------|-------------|-----------------|
| PIN             | SIGNAL NAME | MATING SEQUENCE | PIN   | SIGNAL NAME | MATING SEQUENCE |
| A1              | GND         | FIRST           | B12   | GND         | FIRST           |
| A4              | VBUS        | FIRST           | B9    | VBUS        | FIRST           |
| A5              | CC1         | SECOND          | B8    | SBU2        | SECOND          |
| A6              | Dp1         | SECOND          | B7    | Dn2         | SECOND          |
| A7              | Dn1         | SECOND          | B6    | Dp2         | SECOND          |
| A8              | SBU1        | SECOND          | B5    | CC2         | SECOND          |
| A9              | VBUS        | FIRST           | B4    | VBUS        | FIRST           |
| A12             | GND         | FIRST           | B1    | GND         | FIRST           |
| SHELL           |             | GND             | SHELL |             | GND             |



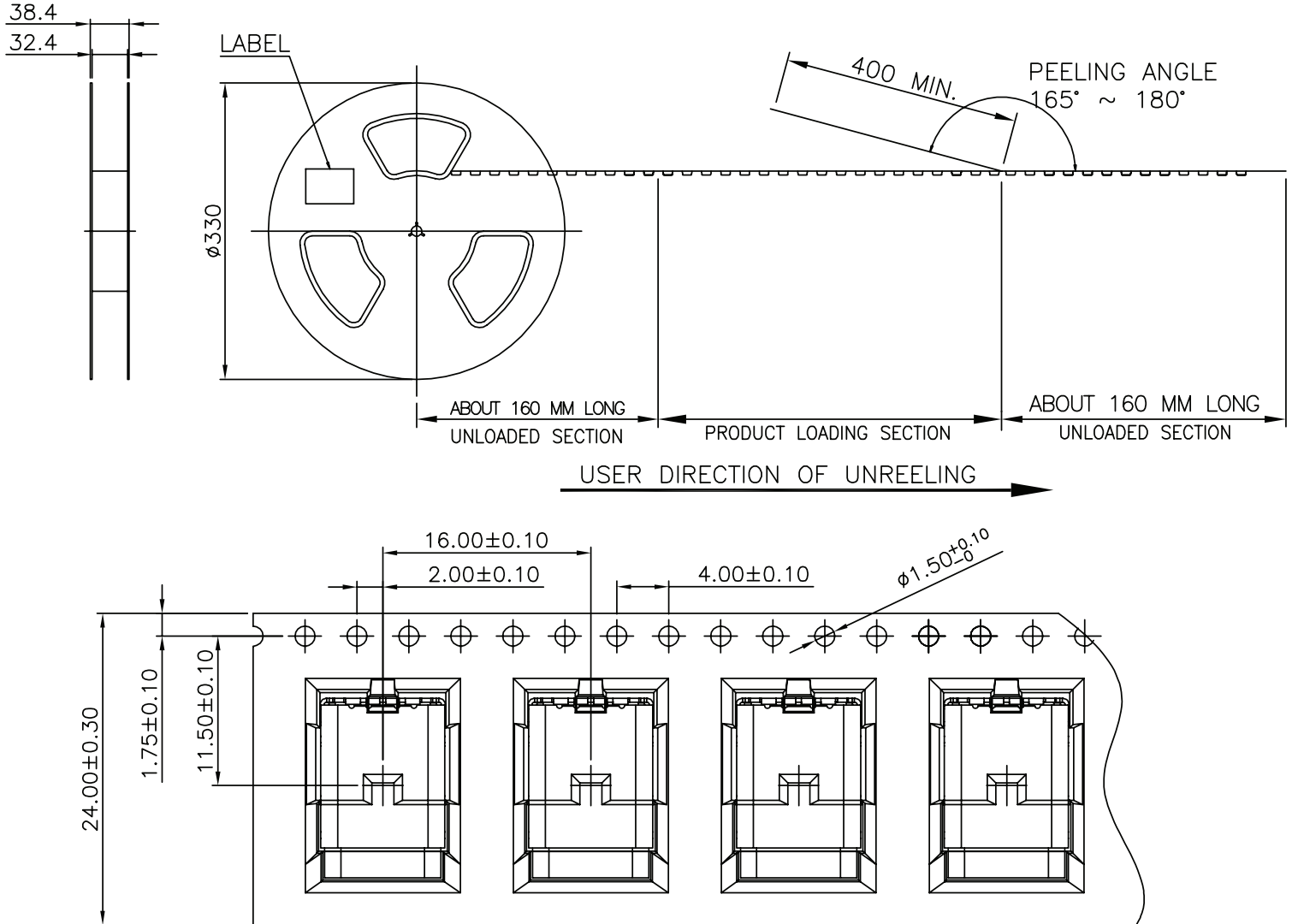
Recommended PCB Layout  
 Top View

## PACKAGING

units: mm

Reel Size:  $\varnothing 330$  mm

Reel QTY: 600 pcs per reel



## REVISION HISTORY

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 05/16/2024 |

The revision history provided is for informational purposes only and is believed to be accurate.



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