

**MODEL:** UJ20-C-V-C-3-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                                |     |        |      |        |
|                                 | power pins collectively [A1, A4, A9, A12, B1, B4, B9, B12] |     |        | 5.0  | A      |
|                                 | VCONN pins individually [A5, B5]                           |     |        | 1.25 | A      |
|                                 | all other signal pins individually                         |     |        | 0.25 | 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**

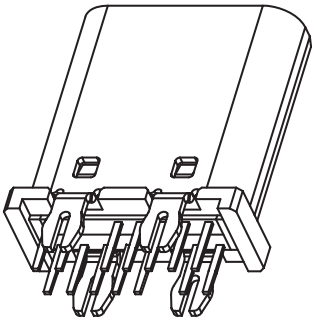
| parameter                     | conditions/description      | min | typ | max | units |
|-------------------------------|-----------------------------|-----|-----|-----|-------|
| reel storage                  | at relative humidity 65~70% | 25  |     | 30  | °C    |
| reflow soldering <sup>3</sup>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

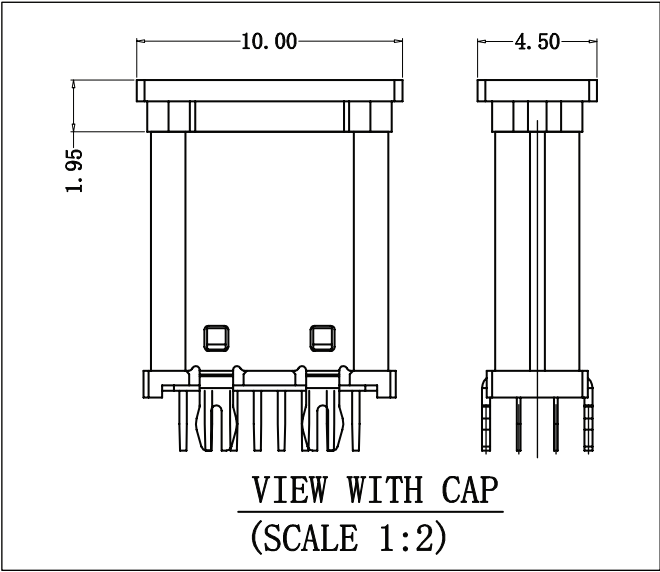
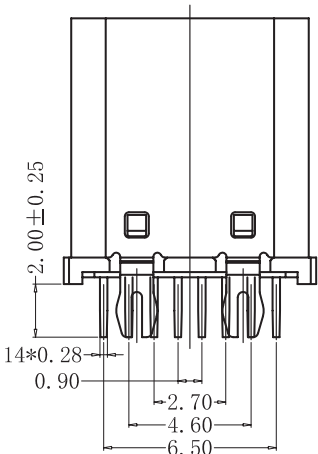
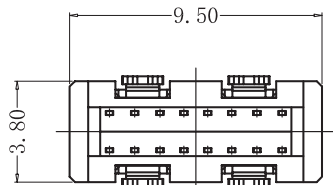
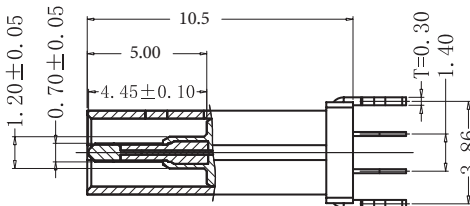
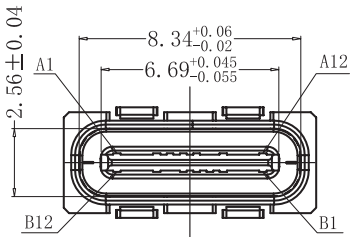
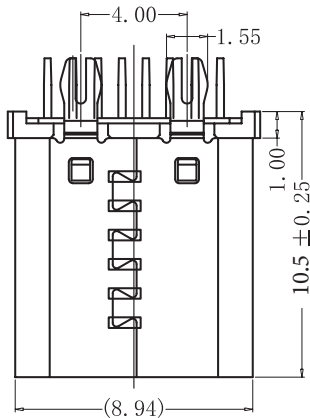


MECHANICAL DRAWING

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=0.12 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=0.30 mm | 50 $\mu$ " nickel                                                                                                       |
| mid plate   | stainless steel<br>t=0.15 mm | 50 $\mu$ " nickel                                                                                                       |



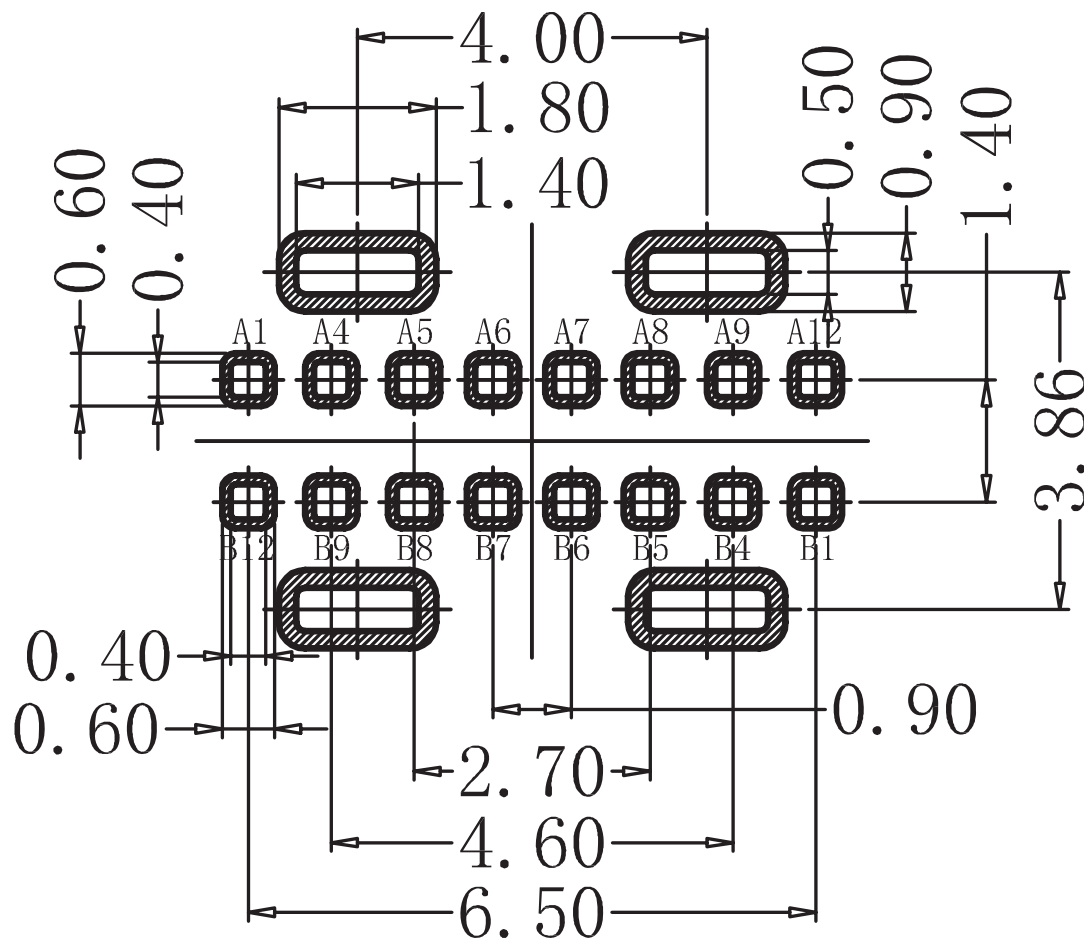
## MECHANICAL DRAWING (CONTINUED)

units: mm

PCB tolerance:  $\pm 0.05$  mm

PCB thickness: 1.6 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             |



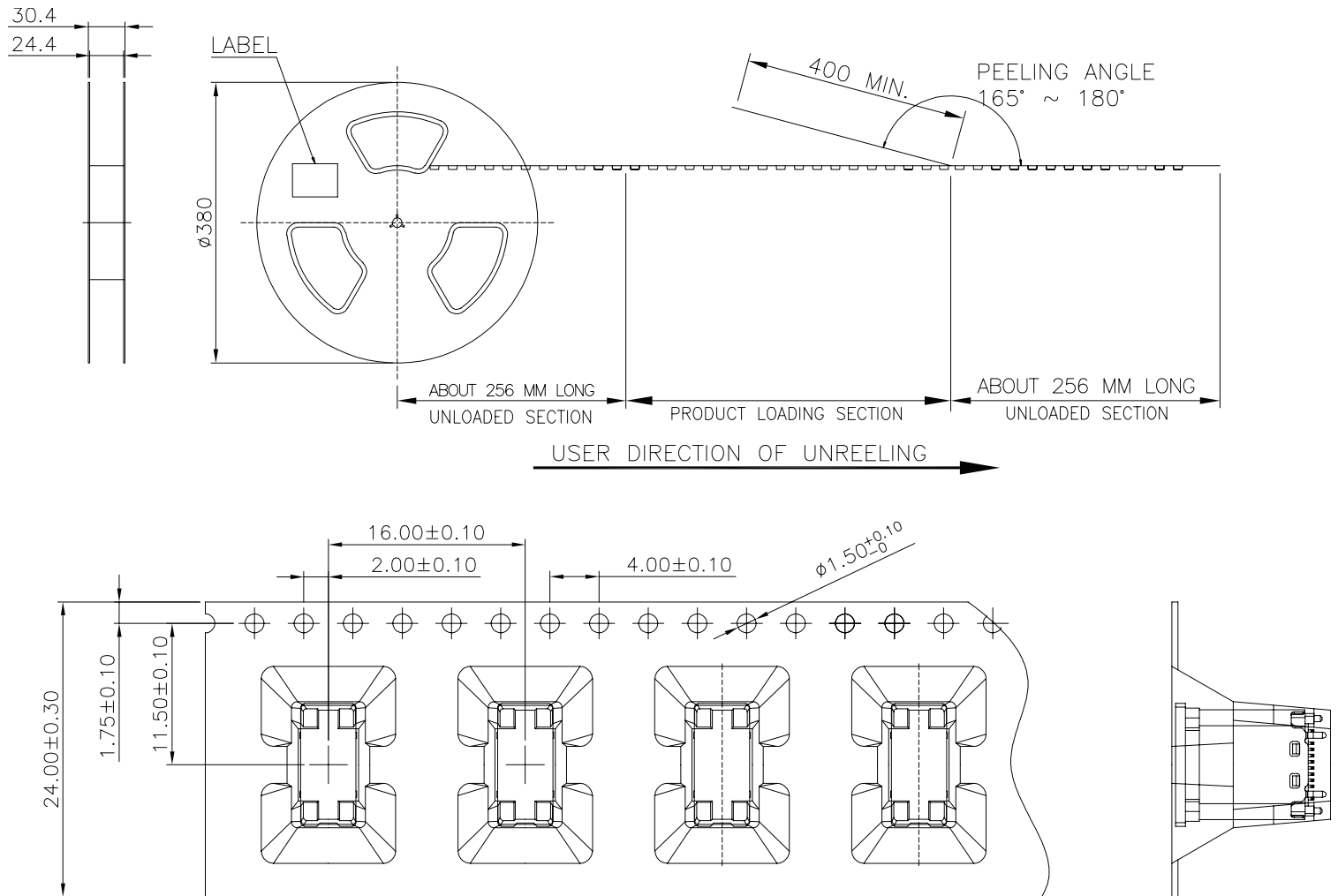
Recommended PCB Layout  
Top View

## PACKAGING

units: mm

Reel Size:  $\varnothing 380$  mm

Reel QTY: 500 pcs per reel



REVISION HISTORY

| rev. | description                       | date       |
|------|-----------------------------------|------------|
| 1.0  | initial release                   | 05/16/2024 |
| 1.01 | CUI Devices rebranded to Same Sky | 09/12/2024 |
| 1.02 | changed packaging                 | 03/28/2025 |

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



Same Sky offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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