

**MODEL:** UJ20-C-V-G-SMT-P16-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**

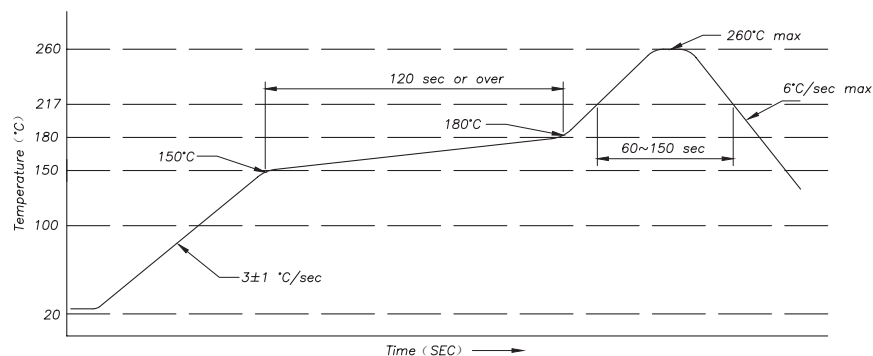
| parameter                       | conditions/description                                     | min | typ    | max  | units  |
|---------------------------------|------------------------------------------------------------|-----|--------|------|--------|
| USB standard                    | USB 2.0                                                    |     |        |      |        |
| rated input voltage             |                                                            |     |        | 30   | 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> | between terminals and mating plug                          |     |        | 40   | mΩ     |
| insulation resistance           | at 100 Vdc between adjacent contacts                       | 100 |        |      | MΩ     |
| voltage withstand               | between adjacent contacts for 1 minute                     | 100 |        |      | Vac    |
| insertion force                 | at a rate of 30 cycles/min                                 | 5   |        | 20   | N      |
| withdrawal force                | at a rate of 30 cycles/min                                 | 8   |        | 20   | N      |
| life                            | at a rate of 500 cycles per hour                           |     | 10,000 |      | cycles |
| operating temperature           |                                                            | -25 |        | 85   | °C     |
| flammability rating             | UL94V-0                                                    |     |        |      |        |
| RoHS                            | yes                                                        |     |        |      |        |

Note: 1. When measured at 20 mV / 100 mA.

**SOLDERABILITY**

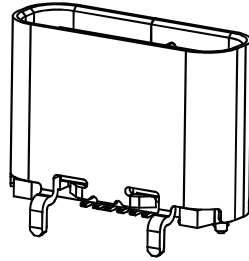
| parameter                     | conditions/description      | min | typ | max | units |
|-------------------------------|-----------------------------|-----|-----|-----|-------|
| reel storage                  | at relative humidity 65~70% | 25  |     | 30  | °C    |
| reflow soldering <sup>3</sup>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

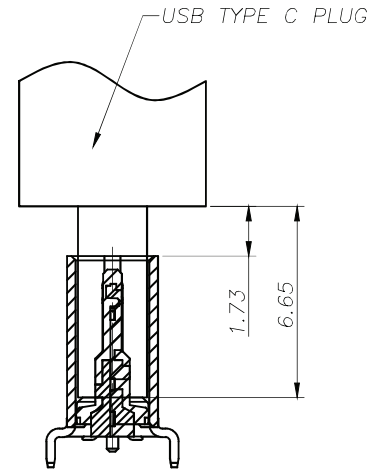
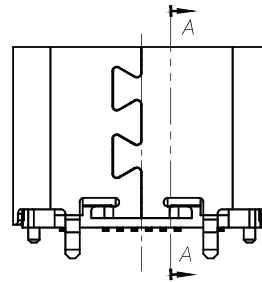
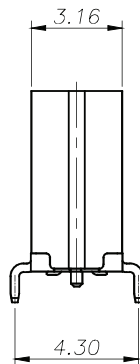
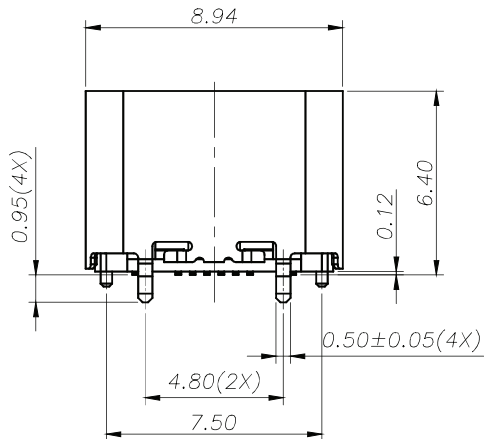
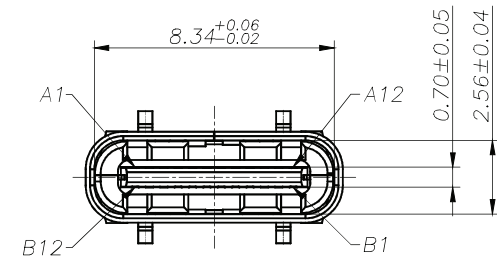


## MECHANICAL DRAWING

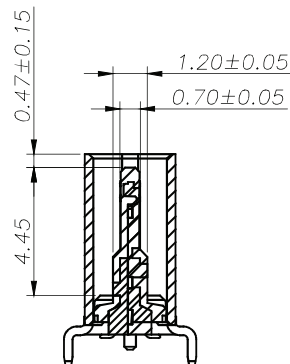
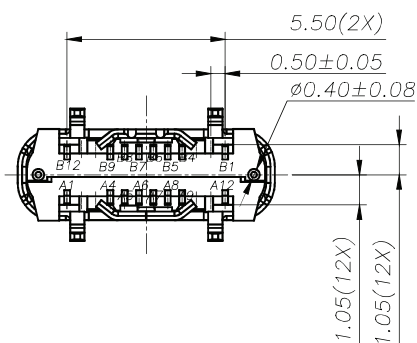
units: mm  
 tolerance:  
 X.X  $\pm 0.30$  mm  
 X.XX  $\pm 0.20$  mm  
 X.XXX  $\pm 0.10$  mm  
 unless otherwise specified



| DESCRIPTION | MATERIAL        | PLATING/COLOR                                                                                                   |
|-------------|-----------------|-----------------------------------------------------------------------------------------------------------------|
| housing     | LCP (UL94V-0)   | black                                                                                                           |
| contact     | C1815           | contact area: 3 $\mu$ " gold<br>over 50 $\mu$ " nickel<br>solder area: 3 $\mu$ " gold<br>over 50 $\mu$ " nickel |
| mid plate   | stainless steel | clear                                                                                                           |
| front shell | stainless steel | 30 $\mu$ " nickel                                                                                               |



FEMALE AND MALE MATCHING DRAWING



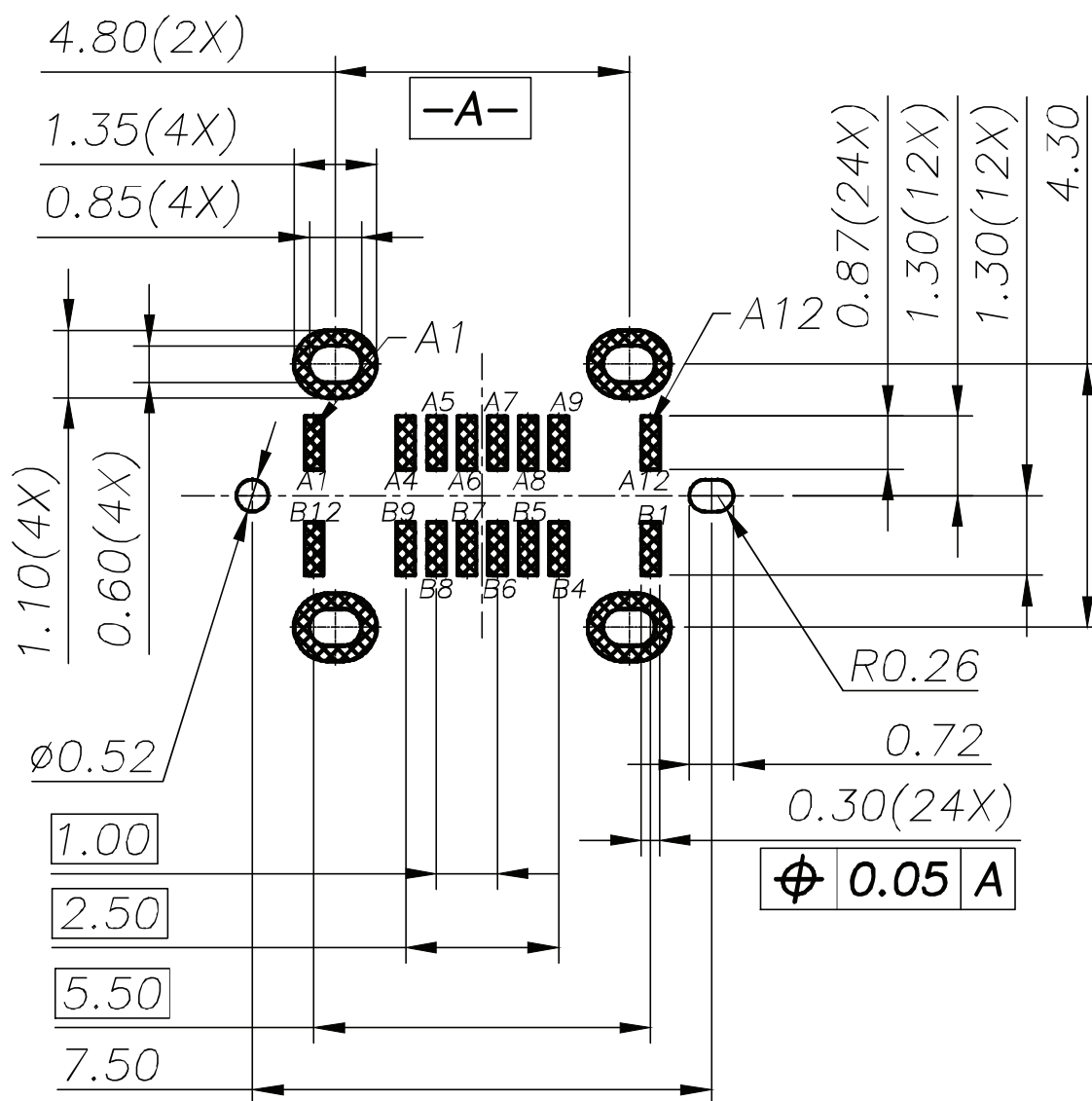
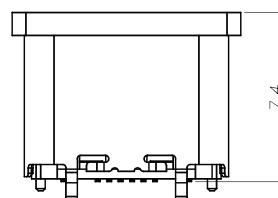
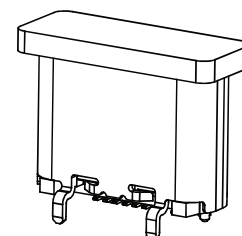
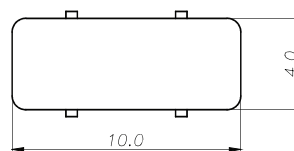
SECTION:A-A

## MECHANICAL DRAWING (CONTINUED)

units: mm  
 PCB tolerance:  $\pm 0.05$  mm  
 PCB thickness: 0.8 mm

| PIN CONNECTIONS |             |     |             |
|-----------------|-------------|-----|-------------|
| PIN             | SIGNAL NAME | PIN | SIGNAL NAME |
| A1              | GND         | B12 | GND         |
| A4              | VBUS        | B9  | VBUS        |
| A5              | CC1         | B8  | SBU2        |
| A6              | D+          | B7  | D-          |
| A7              | D-          | B6  | D+          |
| A8              | SBU1        | B5  | CC2         |
| A9              | VBUS        | B4  | VBUS        |
| A12             | GND         | B1  | GND         |

with cover:



Recommended PCB Layout  
 Top View

## PACKAGING

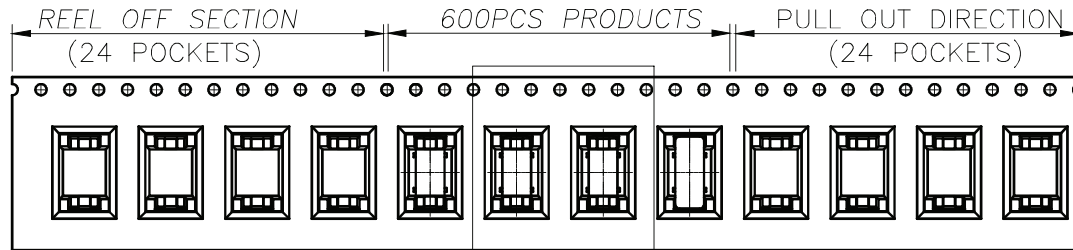
units: mm

Reel Size: Ø330

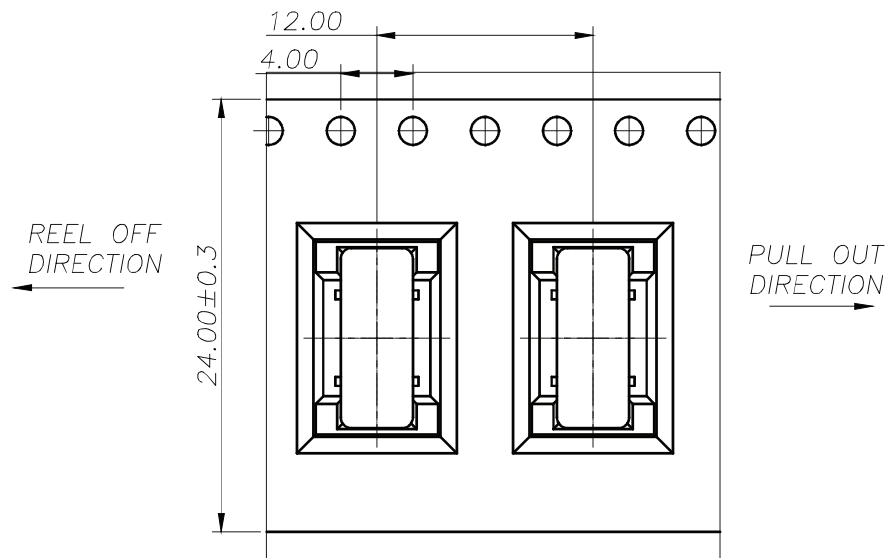
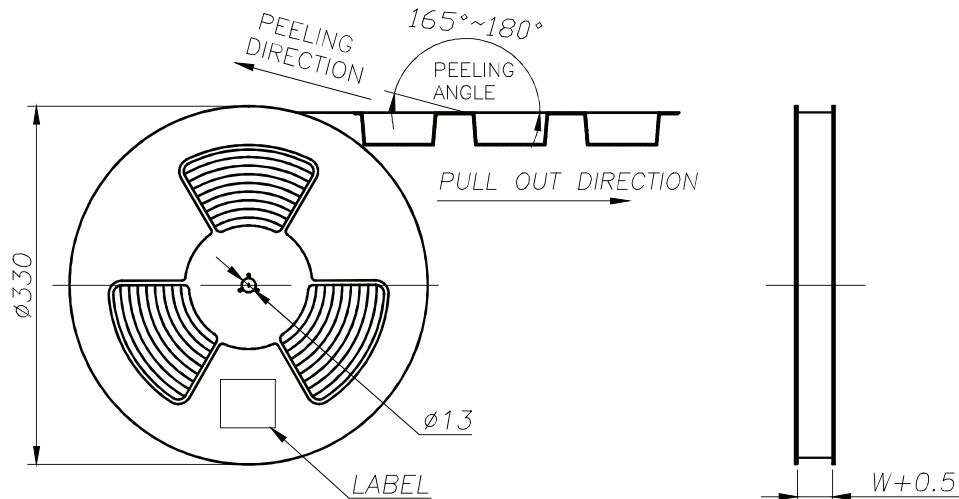
Reel QTY: 600 pcs per reel

Carton Size: 340 x 340 x 320 mm

Carton QTY: 6,000 pcs



SEE DETAIL X



REVISION HISTORY

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 07/25/2024 |

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



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