

MODEL: UJ20-C-H-G-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

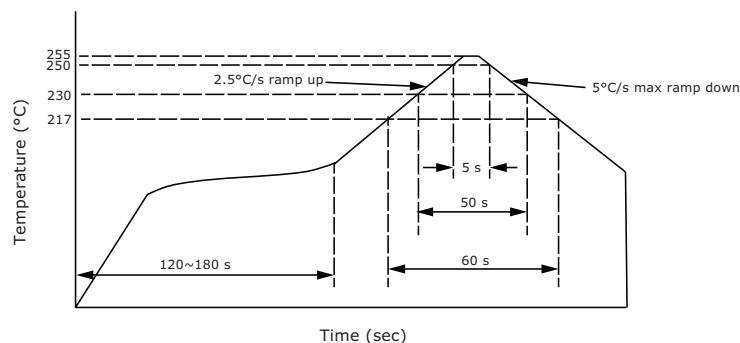
| parameter | conditions/description | min | typ | max | units |
|---------------------------------|---|-----|--------|---------------------|-------------|
| USB standard | USB 2.0 | | | | |
| rated input voltage | | | | 20 | Vdc |
| rated input current | as per EIA-364-70, Method B power pins collectively [A1, A4, A9, A12, B1, B4, B9, B12] VCONN pins individually [A5, B5] all other signal pins individually | | | 5.0 1.25 0.25 | A A A |
| contact resistance ¹ | | | | 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

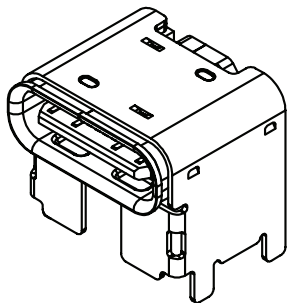
| parameter | conditions/description | min | typ | max | units |
|-------------------------------|-----------------------------|-----|-----|-----|-------|
| reel storage | at relative humidity 65-70% | 25 | | 30 | °C |
| reflow soldering ³ | see reflow profile | | 255 | 260 | °C |

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%.

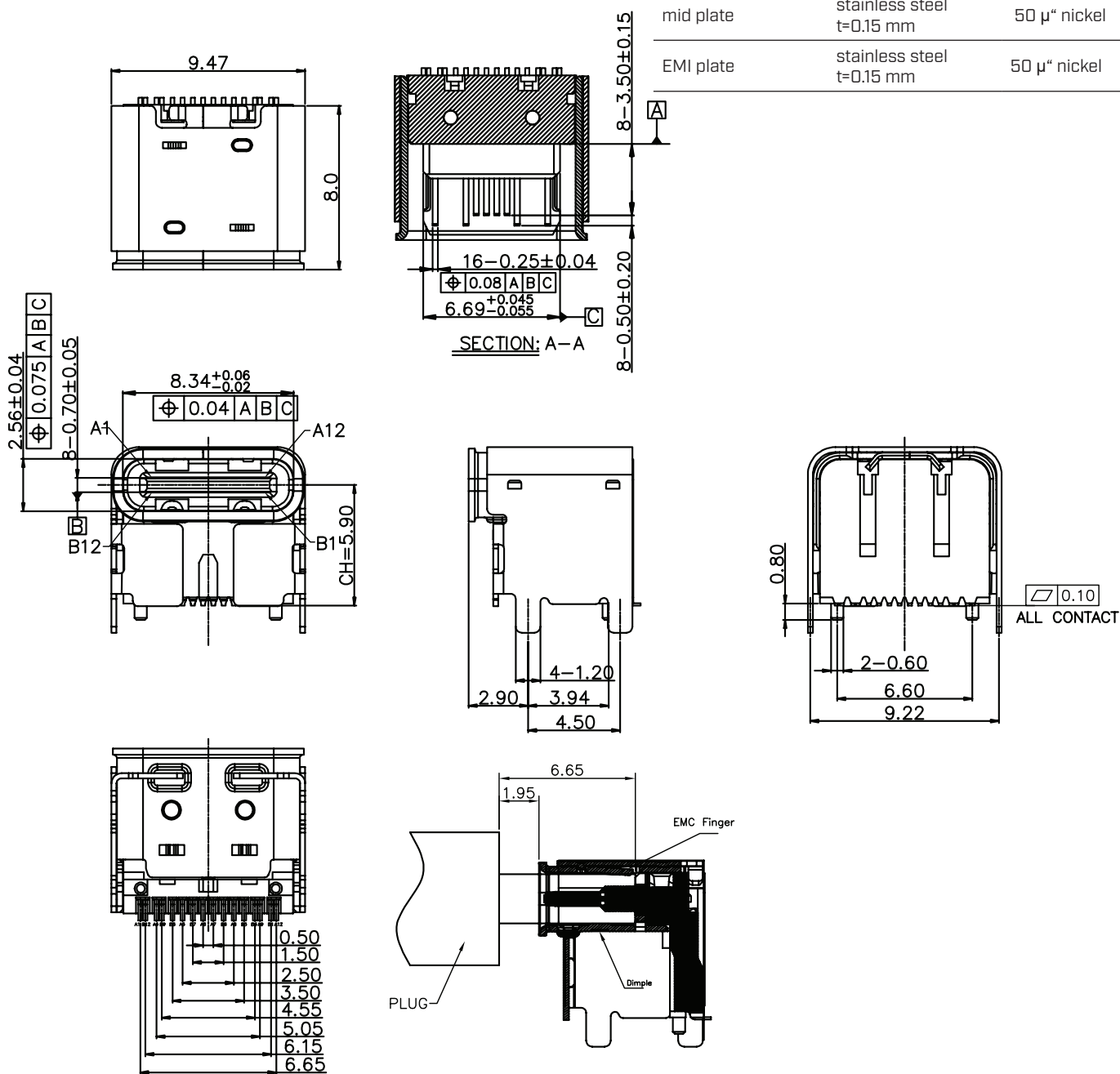


MECHANICAL DRAWING

units: mm
 tolerance:
 X. ± 0.50 mm
 X.X ± 0.30 mm
 X.XX ± 0.20 mm
 X.XXX ± 0.10 mm
 unless otherwise specified



| DESCRIPTION | MATERIAL | PLATING/COLOR |
|-------------|------------------------------|---|
| insulator | LCP (UL94V-0) | black |
| contact | copper alloy t=0.12 mm | contact area: gold flash over 50 μ " nickel solder area: 80 μ " matte tin over 50 μ " nickel |
| shell | stainless steel t=0.25 mm | 50 μ " nickel |
| cover shell | stainless steel t=0.30 mm | 50 μ " nickel |
| mid plate | stainless steel t=0.15 mm | 50 μ " nickel |
| EMI plate | stainless steel t=0.15 mm | 50 μ " nickel |

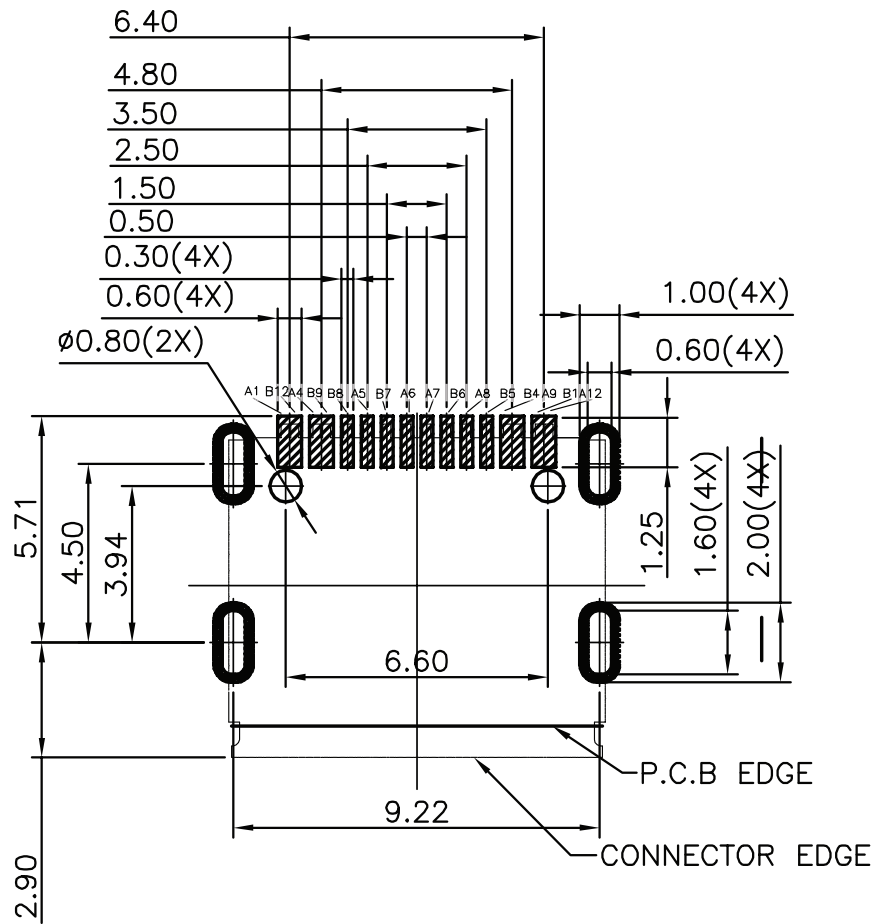


AFTER MATING

MECHANICAL DRAWING (CONTINUED)

units: mm
 PCB tolerance: ± 0.05 mm
 PCB thickness: 0.8 ± 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 |



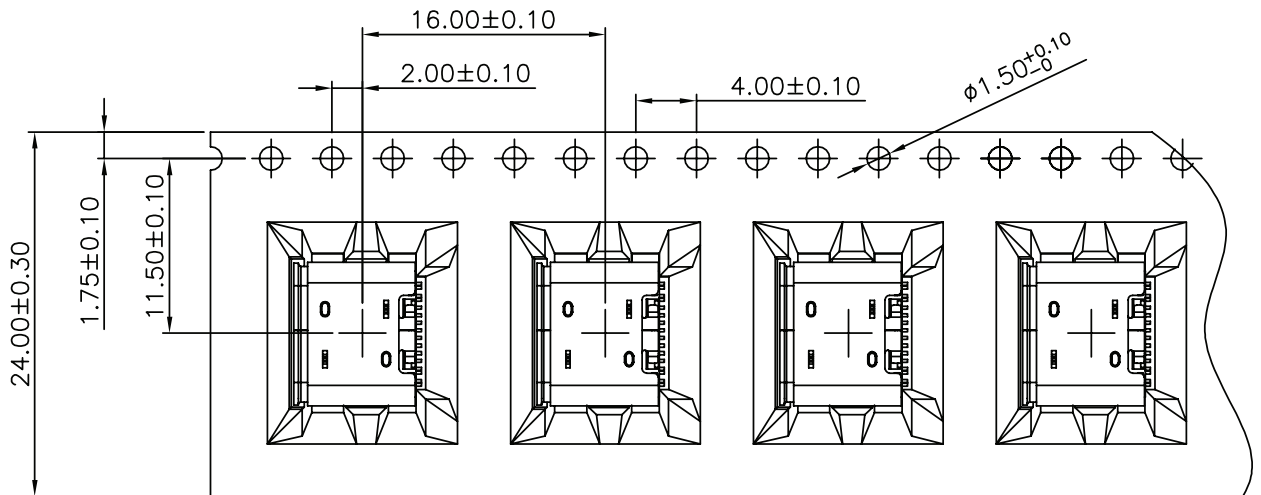
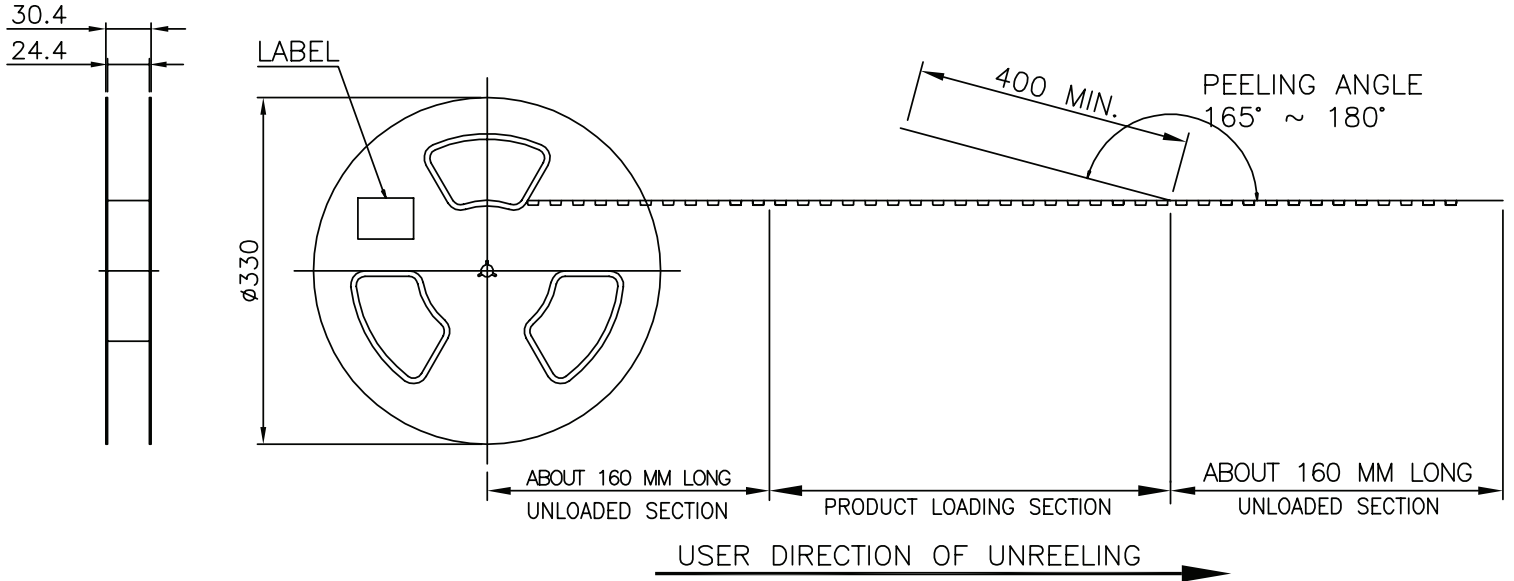
Recommended PCB Layout
 Top View

PACKAGING

units: mm

Reel Size: $\varnothing 330$ mm

Reel QTY: 550 pcs per reel



REVISION HISTORY

| rev. | description | date |
|------|-----------------|------------|
| 1.0 | initial release | 05/17/2024 |

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



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