


**MODEL:** UP31-CV-G-CM | **DESCRIPTION:** USB PLUG

**FEATURES**

- USB Type C plug
- USB 3.1
- 10 Gbit/s data transfer speed
- reflow solder compatible


**SPECIFICATIONS**

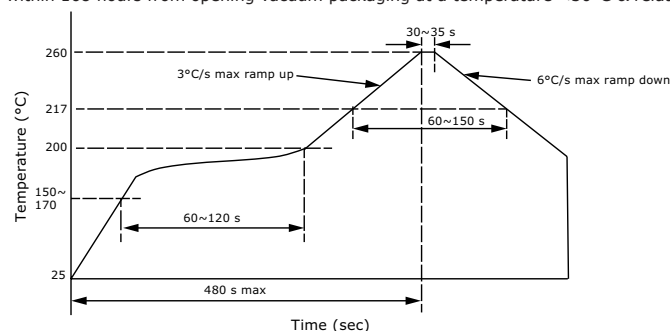
| parameter                       | conditions/description                            | min | typ    | max  | units  |
|---------------------------------|---------------------------------------------------|-----|--------|------|--------|
| rated input voltage             |                                                   |     |        | 20   | Vdc    |
| rated input current             | as per EIA-364-70, Method B                       |     |        |      |        |
|                                 | power pins collectively (A4, A9, B4, B9)          |     |        | 5.0  | A      |
|                                 | GND pins collectively (A1, A12, B1, B12)          |     |        | 6.25 | A      |
|                                 | VCONN pins individually (A5, B5)                  |     |        | 1.25 | A      |
| contact resistance <sup>1</sup> | between terminals and mating plug                 |     |        | 0.25 | A      |
|                                 |                                                   |     |        | 40   | mΩ     |
| insulation resistance           | at 100 Vdc for 1 minute between adjacent contacts | 100 |        |      | MΩ     |
| voltage withstand               | at 60 Hz for 1 minute between adjacent contacts   |     |        | 100  | Vac    |
| insertion force                 | at a rate of 12.5 mm/min                          | 5   |        | 20   | N      |
| withdrawal force                | at a rate of 12.5 mm/min                          | 8   |        | 20   | N      |
| life                            | at a rate of 200 max cycles per hour              |     | 10,000 |      | cycles |
| operating temperature           |                                                   | -30 |        | 85   | °C     |
| storage temperature             |                                                   | -40 |        | 85   | °C     |
| flammability rating             | UL94V-0                                           |     |        |      |        |
| RoHS                            | 2011/65/EU                                        |     |        |      |        |

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

**SOLDERABILITY**

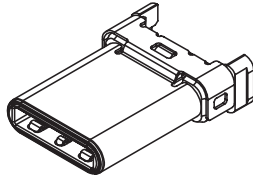
| parameter                     | conditions/description    | min | typ | max | units |
|-------------------------------|---------------------------|-----|-----|-----|-------|
| reel storage                  | at relative humidity <60% |     |     | 30  | °C    |
| reflow soldering <sup>2</sup> | see reflow profile        | 255 | 260 | 265 | °C    |

Note: 2. It is recommended to reflow solder within 168 hours from opening vacuum packaging at a temperature <30°C & relative humidity <60%.

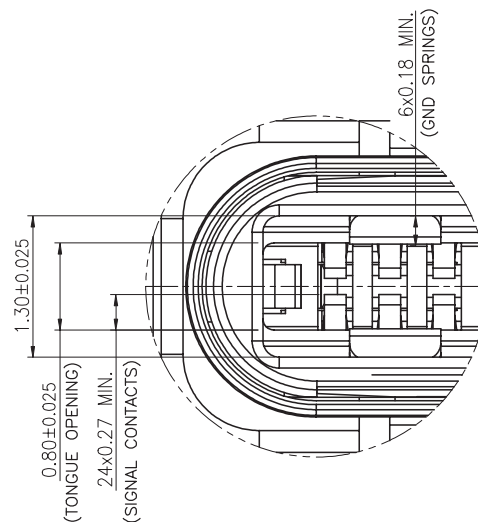
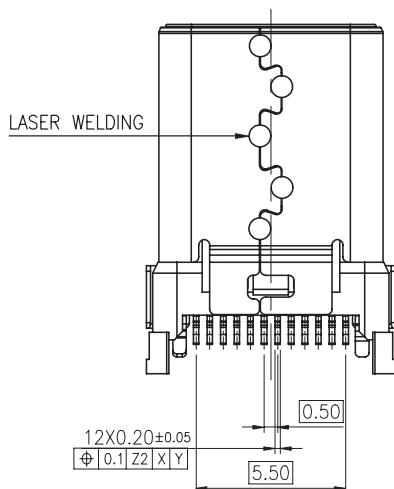
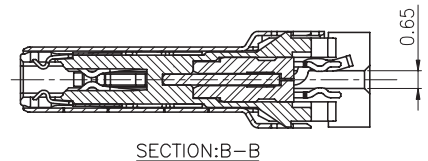
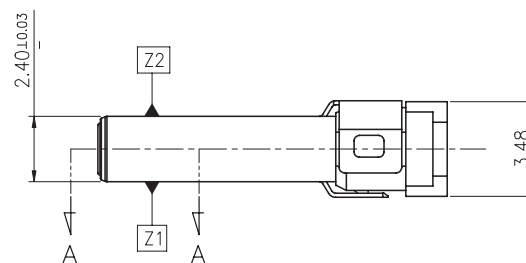
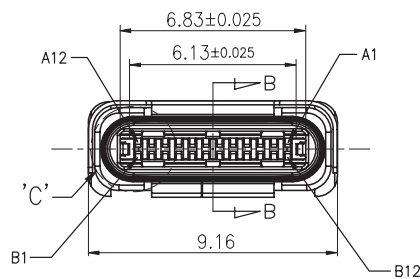
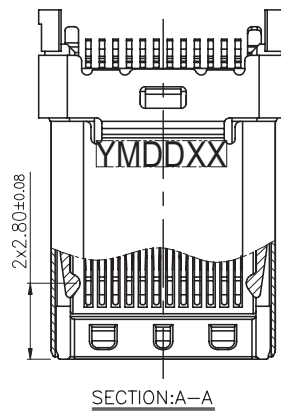
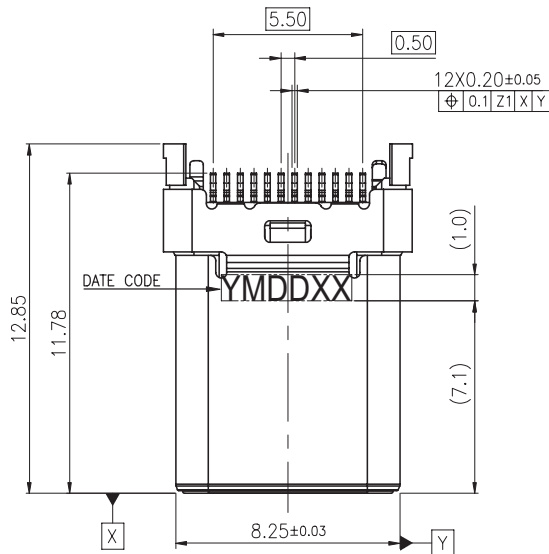


## MECHANICAL DRAWING

units: mm  
tolerance:  
X.X  $\pm 0.2$  mm  
X.XX  $\pm 0.15$  mm



|                   | MATERIAL          | PLATING                 |
|-------------------|-------------------|-------------------------|
| contact terminals | copper alloy      | contact: 2 $\mu$ " gold |
| ground spring     | stainless steel   |                         |
| shell             | stainless steel   | nickel                  |
| latch             | stainless steel   | nickel                  |
| insulator         | silicone adhesive |                         |
| internal body     | LCP               |                         |
| housing           | PA9T              |                         |





## REVISION HISTORY

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| rev. | description       | date       |
|------|-------------------|------------|
| 1.0  | initial release   | 12/19/2017 |
| 1.01 | updated datasheet | 01/30/2018 |

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

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