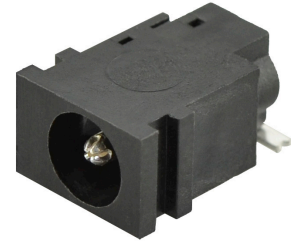


**MODEL:** PJ1-021-SMT-TR | **DESCRIPTION:** DC POWER JACK

**FEATURES**

- 1.65mm center pin
- 5 A rating
- right angle orientation
- surface mount (SMT)
- internal switch


**SPECIFICATIONS**

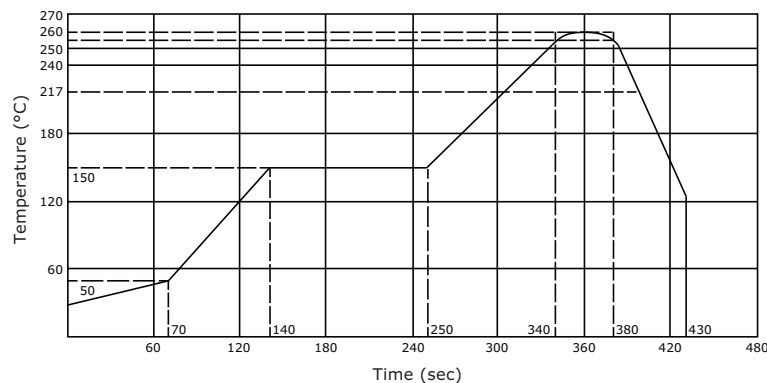
| parameter                       | conditions/description   | min | typ   | max      | units    |
|---------------------------------|--|-----|-------|----------|----------|
| rated input voltage             |  |     | 24    |          | Vdc      |
| rated input current             |  |     |       | 5        | A        |
| contact resistance <sup>1</sup> | between terminal and mating plug<br>between terminal in a closed circuit |     |       | 50<br>30 | mΩ<br>mΩ |
| insulation resistance           | at 500 Vdc   | 100 |       |          | MΩ       |
| voltage withstand               | for 1 minute   |     |       | 500      | Vac      |
| insertion/withdrawal force      |  | 0.3 |       | 3        | kg       |
| operating temperature           |  | -25 |       | 85       | °C       |
| life                            | at a rate of 24 cycles/minute  |     | 5,000 |          | cycles   |
| flammability rating             | UL94V-0  |     |       |          |          |
| RoHS                            | 2011/65/EU   |     |       |          |          |

Note: 1. When measured at a current of less than 100 mA/1 kHz  
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 <80%  |     |     | 40  | °C    |
| reflow soldering <sup>3</sup>  | see reflow profile   | 255 | 260 | 265 | °C    |
| drying conditions <sup>4</sup> | parts in reel: bake at 40°C ±5°C for 72 hours<br>parts removed from reel: bake at 40°C ±5°C for 10 hours |     |     |     |       |

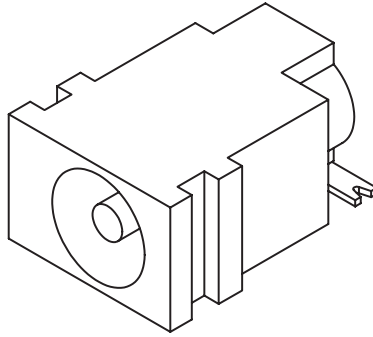
Note: 3. Must reflow solder within 72 hours from opening vacuum packaging at a temperature <30°C & relative humidity <60%.  
4. When exceeding floor life by >72 hours.



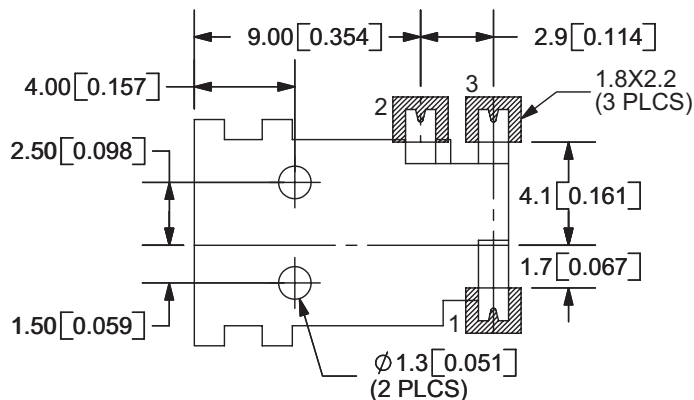
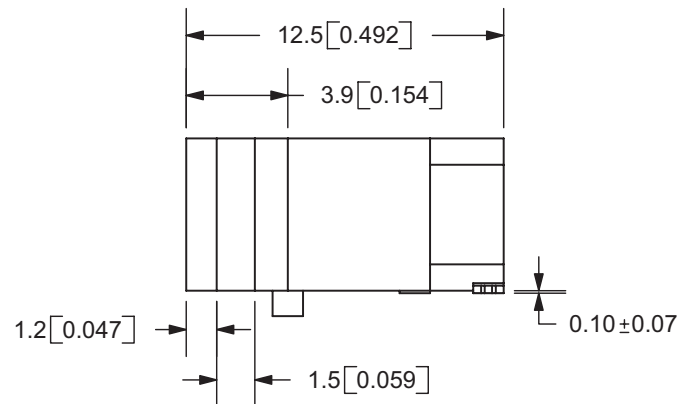
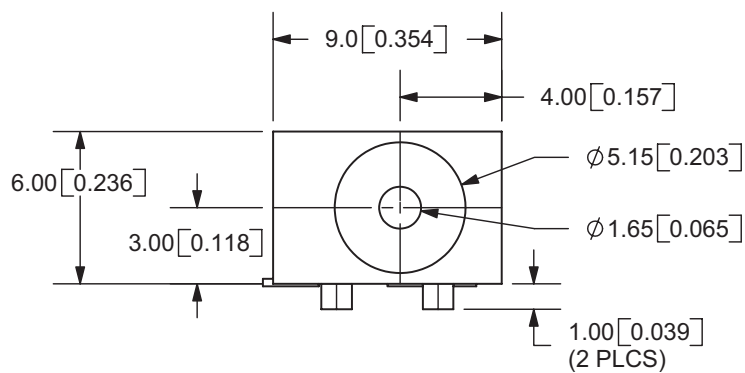
## MECHANICAL DRAWING

units: mm[inches]

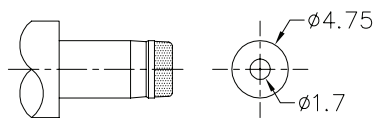
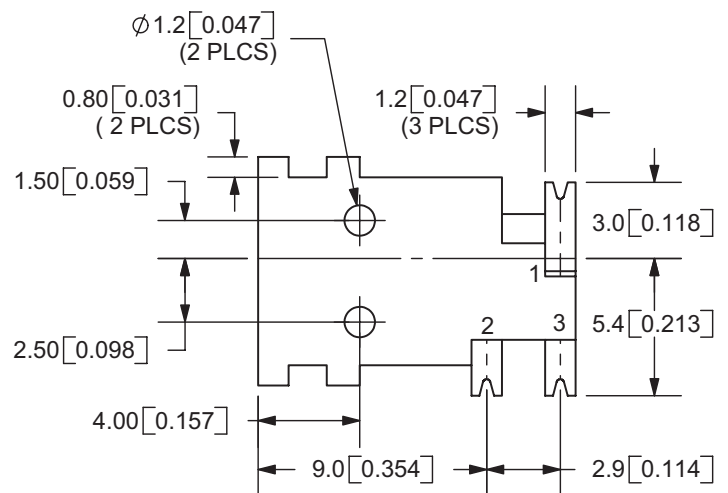
tolerance:

X.X  $\pm 0.2$ mmX.XX  $\pm 0.1$ mmX.XXX  $\pm 0.05$ mm

|            | MATERIAL           | PLATING |
|------------|--------------------|---------|
| center pin | brass              | silver  |
| terminal 1 | brass              | silver  |
| terminal 2 | copper alloy       | silver  |
| terminal 3 | brass              | silver  |
| plastic    | PA6T or equivalent |         |



RECOMMENDED  
PCB LAYOUT  
(Top View)



MATING PLUG  
Jack Insertion Depth: 8.0 mm

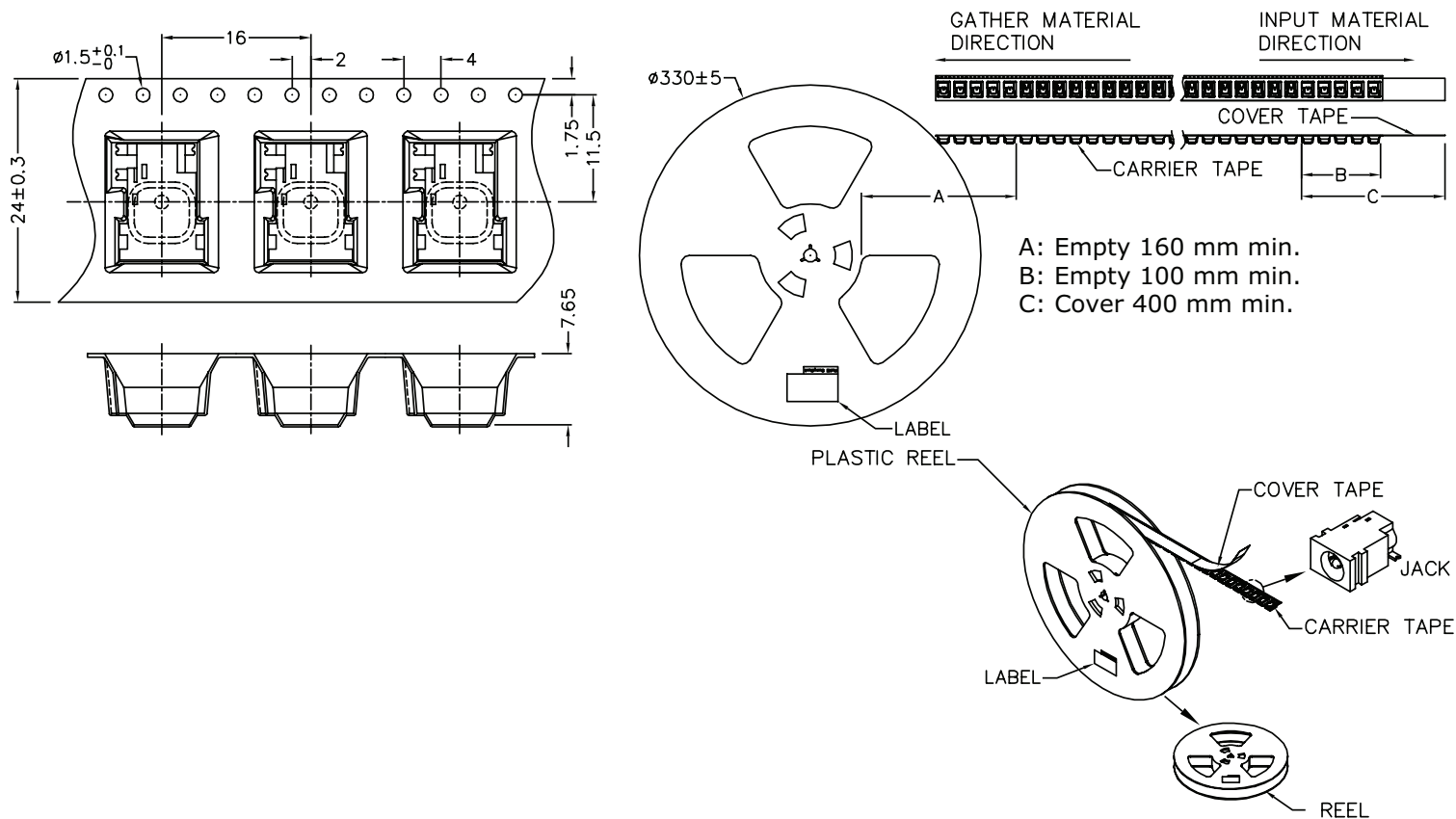
|            |             |
|------------|-------------|
| SCHEMATIC  |             |
| Model      | PJ1-021-SMT |
| Center Pin | Ø1.65 mm    |

## PACKAGING

units: mm

Reel Size: Ø330 mm

Reel QTY: 500 pcs per reel



## REVISION HISTORY

| rev. | description  | date       |
|------|--|------------|
| 1.0  | initial release  | 10/20/2005 |
| 1.01 | changed housing material to PA6T from PBT                                | 01/10/2006 |
| 1.02 | added TR package option and jack insertion depth                         | 11/07/2012 |
| 1.03 | applied new spec template  | 08/22/2013 |
| 1.04 | increased voltage rating   | 04/08/2016 |
| 1.05 | added storage and drying conditions, and tape and reel packaging details | 07/28/2017 |

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

**CUI INC<sup>®</sup>**

**Headquarters**  
20050 SW 112th Ave.  
Tualatin, OR 97062  
**800.275.4899**

Fax 503.612.2383  
**cui.com**  
techsupport@cui.com

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

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.