# **CUI** DEVICES

Additional Resources: Product Page

**date** 10/04/2019

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MODEL: MJ1-2533-SMT-TR | DESCRIPTION: AUDIO JACK

#### **FEATURES**

- surface mount
- horizontal
- tip switch
- tape and reel package
- suitable for medical applications





#### **SPECIFICATIONS**

| parameter                       | conditions/description   | min | typ   | max      | units     |
|---------------------------------|--|-----|-------|----------|-----------|
| rated input voltage             |  |     | 12    |          | Vdc       |
| rated input current             |  |     |       | 1        | А         |
| contact resistance <sup>1</sup> | between terminal and mating plug<br>between terminal in a closed circuit |     |       | 50<br>30 | $m\Omega$ |
| insulation resistance           | at 500 Vdc   | 100 |       |          | МΩ        |
| 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                            | yes  |     |       |          |           |
|                                 |  |     |       |          |           |

Note:

- 1. When measured at a current of less than 100 mA/1 kHz 2. All specifications measured at  $10{\sim}35^{\circ}\text{C}$ , humidity at  $45{\sim}85\%$ ,
- 2. All specifications measured at 10~35°C, humidity at 45~85%, under standard atmospheric pressure, unless otherwise noted.

## **SOLDERABILITY**

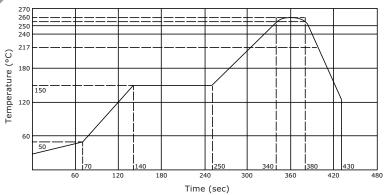
| parameter                     | conditions/description                        | min | typ | max | units |
|-------------------------------|---|-----|-----|-----|-------|
| reel storage                  | at relative humidity <80%                     |     |     | 40  | °C    |
| reflow soldering <sup>3</sup> | see reflow profile                            | 255 | 260 | 265 | °C    |
| drying conditions4            | parts in reel: bake at 40°C ±5°C for 72 hours |     |     |     |       |

drying conditions<sup>4</sup>

parts removed from reel: bake at 40°C ±5°C for 10 hours

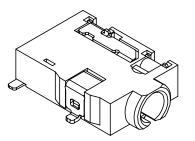
Must reflow solder within 72 hours from opening vacuum packaging at a temperature <30°C & relative humidity <60%.

4. When exceeding floor life by >72 hours.

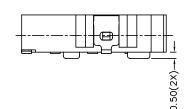


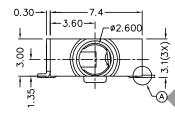
## **MECHANICAL DRAWING**

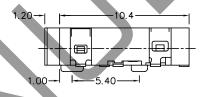
units: mm tolerance: X.X ±0.2mm X.XX ±0.1mm X.XXX ±0.05mm PCB: ±0.05 mm

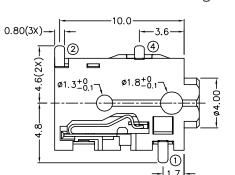


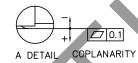
|            | MATERIAL              | PLATING    |
|------------|-----------------------|------------|
| terminal 1 | copper alloy          | gold flash |
| terminal 2 | copper alloy          | gold flash |
| terminal 4 | brass                 | gold flash |
| plastic    | PA6T or<br>equivalent |            |

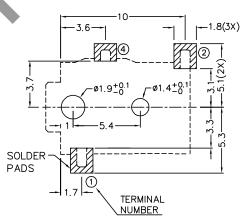


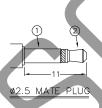












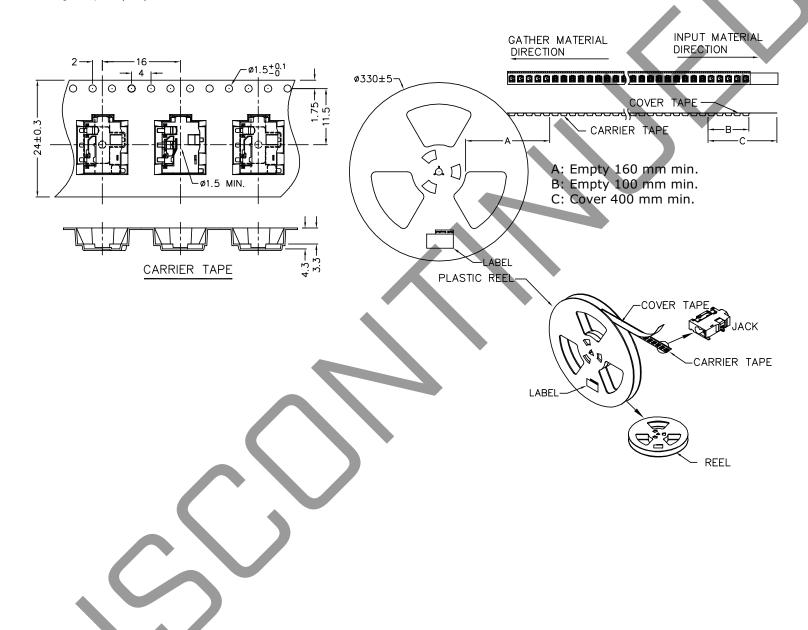
| Model No. | MJ1-2533-SMT-TR |
|-----------|-----------------|
| Schematic | 01<br>04<br>02  |
| PIN       |                 |
| 1         | sleeve          |
| 2         | tip             |
| 4         | tip switch      |
|           |                 |

Recommended PCB Layout Top View

## **PACKAGING**

units: mm

Reel Size: Ø330 mm Reel QTY: 1,000 pcs per reel



### **REVISION HISTORY**

| rev. | description  | date       |
|------|--|------------|
| 1.0  | initial release  | 04/11/2006 |
| 1.01 | housing updated  | 09/08/2010 |
| 1.02 | added TR package option  | 11/07/2012 |
| 1.03 | added storage and drying conditions, and tape and reel packaging details | 02/16/2018 |
| 1.04 | brand update   | 10/04/2019 |

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



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