

**MODEL:** MJ-2509N | **DESCRIPTION:** AUDIO JACK**FEATURES**

- through-hole design
- low profile

**SPECIFICATIONS**

| parameter                       | conditions/description                                | min | typ   | max | units  |
|---------------------------------|-------------------------------------------------------|-----|-------|-----|--------|
| rated input voltage             |                                                       |     | 12    |     | Vdc    |
| rated input current             |                                                       |     |       | 1   | A      |
| contact resistance <sup>1</sup> | between terminal and mating plug                      |     |       | 30  | mΩ     |
|                                 | between terminal in a closed circuit                  |     |       | 50  | mΩ     |
| insulation resistance           | at 500 Vdc                                            | 100 |       |     | MΩ     |
| voltage withstand               | at 0.5 mA, 50/60Hz for 1 minute                       |     |       | 500 | Vac    |
| insertion/withdrawal force      |                                                       | 0.3 |       | 2.0 | kg     |
| operating temperature           |                                                       | -20 |       | 60  | °C     |
| storage temperature             |                                                       | -25 |       | 70  | °C     |
| life                            | at a rate of 20 to 30 cycles per minute under no load |     | 5,000 |     | cycles |
| flammability rating             | UL94V-0                                               |     |       |     |        |
| RoHS                            | yes                                                   |     |       |     |        |

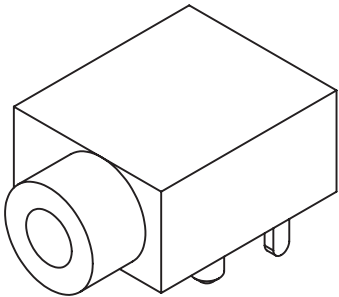
Note: 1. When measured at a current of less than 100 mA/1 kHz  
2. All specifications measured at 5-35°C, humidity at 45-85%, under standard atmospheric pressure, unless otherwise noted.

**SOLDERABILITY**

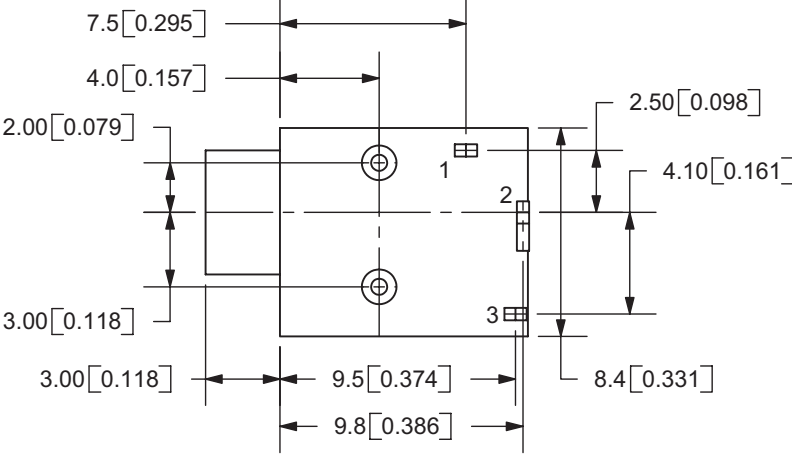
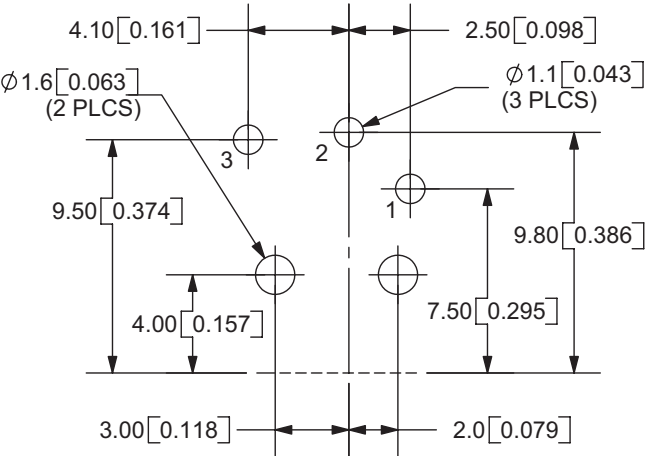
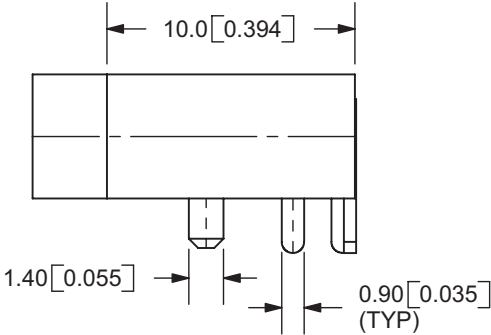
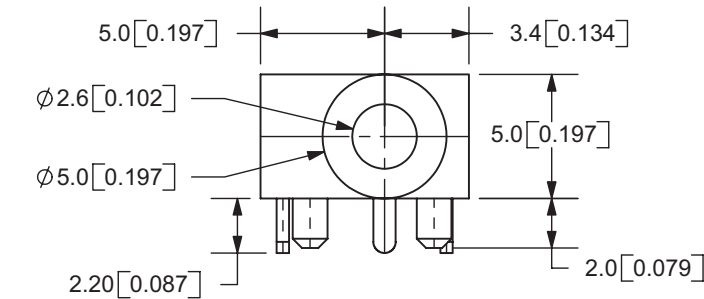
| parameter      | conditions/description                  | min | typ | max | units |
|----------------|-----------------------------------------|-----|-----|-----|-------|
| hand soldering | for 6 seconds                           |     |     | 390 | °C    |
| wave soldering | dipped in solder pot for 3 ±0.5 seconds | 240 | 245 | 250 | °C    |

MECHANICAL DRAWING

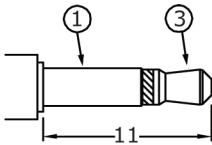
units: mm  
tolerance:  
X, ±0.5 mm  
X.X ±0.3 mm  
X.XX ±0.15 mm



|            | MATERIAL | PLATING |
|------------|----------|---------|
| terminal 1 | PBS      | tin     |
| terminal 2 | brass    | tin     |
| terminal 3 | PBS      | tin     |
| plastic    | PBT      |         |



PCB LAYOUT  
TOP VIEW



Ø2.5 MATING PLUG

|           |            |
|-----------|------------|
| Model No. | MJ-2509N   |
| Schematic |            |
| PIN       |            |
| 1         | sleeve     |
| 2         | tip switch |
| 3         | tip        |

REVISION HISTORY

| rev. | description                       | date       |
|------|-----------------------------------|------------|
| 1.0  | initial release                   | 11/30/2005 |
| 1.01 | updated datasheet                 | 02/06/2018 |
| 1.02 | brand update                      | 10/04/2019 |
| 1.03 | CUI Devices rebranded to Same Sky | 09/12/2024 |

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



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

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

Same Sky 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.

**sameskydevices.com**