

**MODEL:** MJ-2509N | **DESCRIPTION:** 2.5 MM 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<br>between terminal in a closed circuit |     |       | 30<br>50 | mΩ<br>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                            | 2011/65/EU                                                               |     |       |          |          |

Note:

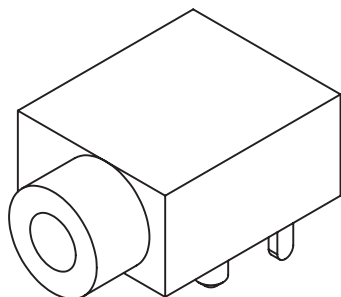
1. When measured at a current of less than 100 mA/1 kHz
2. All specifications measured at 5~35°C, humidity at 45~85%, under standard atmospheric pressure, unless otherwise noted.

**SOLDERABILITY**

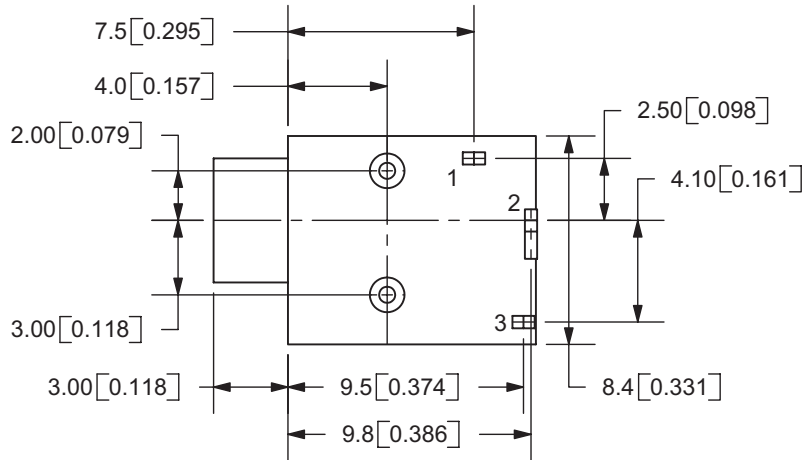
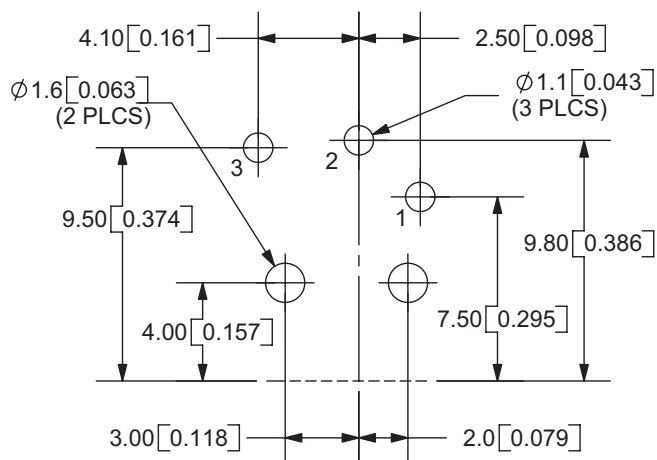
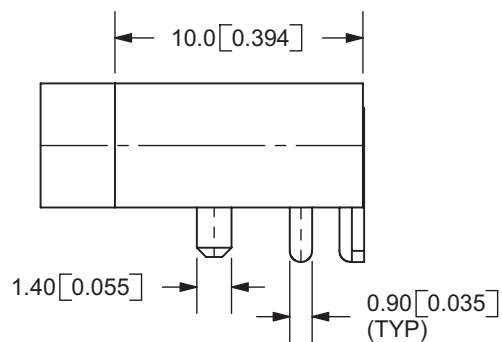
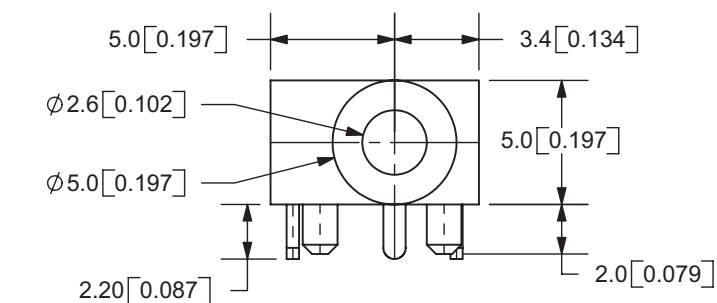
| parameter      | conditions/description                  | min | typ | max | units |
|----------------|-----------------------------------------|-----|-----|-----|-------|
| hand soldering | for 6 seconds                           |     |     | 390 | °C    |
| wave soldering | dipped in solder pot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

## MECHANICAL DRAWING

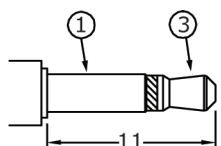
units: mm  
 tolerance:  
 X.  $\pm 0.5$  mm  
 X.X  $\pm 0.3$  mm  
 X.XX  $\pm 0.15$  mm



|            | 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 |

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



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