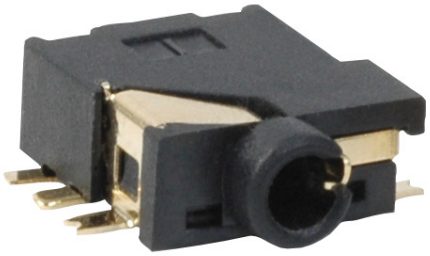
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# SERIES: SJ1-4251X-SMT | DESCRIPTION: AUDIO JACK

## FEATURES

- right angle
- plastic bushing
- gold flash



RoHS

## PART NUMBER KEY

SJ1 - 4251 X - SMT - TR

- Base Number
- Switch Options:
  4* = no switch
  5TS* = tip switch
  5RS* = ring switch
  6 = tip and ring switch
- Package Style:
  SMT = surface mount
- Packaging:
  TR = Tape & Reel

Notes: *Discontinued models SJ1-42515TS-SMT-TR, SJ1-42515RS-SMT-TR & SJ1-42514-SMT-TR

## SPECIFICATIONS

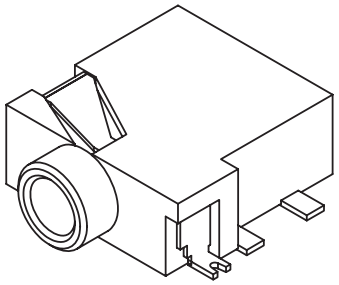
| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| rated input voltage | | | 12 | | Vdc |
| rated input current | | | | 1 | A |
| contact resistance[1] | between terminal and mating plug<br>between terminal in a closed circuit | | | 50<br>30 | mΩ<br>mΩ |
| insulation 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 | yes | | | | |

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.

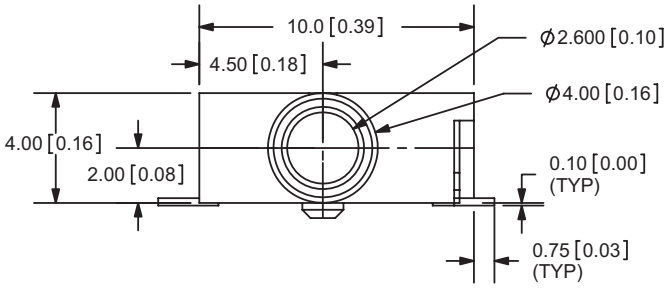
## MECHANICAL DRAWING

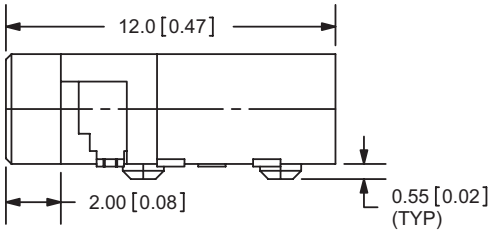
units: mm[inches]

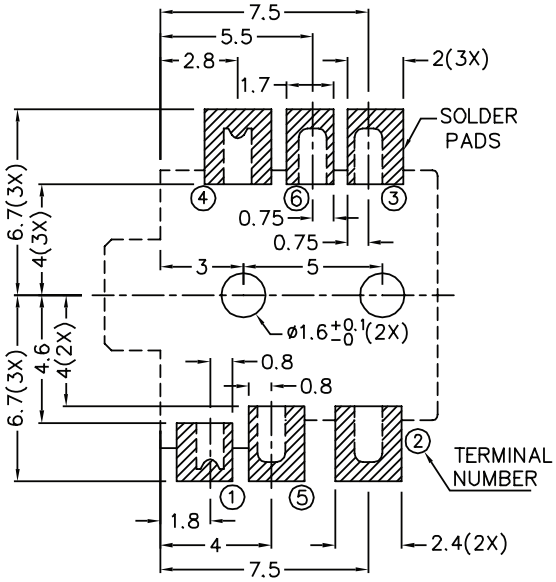
TOLERANCE:
X.X ±0.2mm
X.XX ±0.1mm
X.XXX ±0.05mm



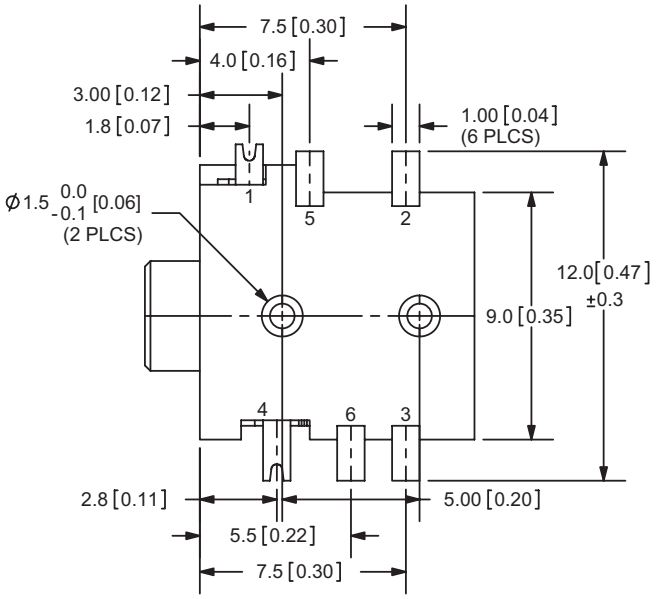
| | MATERIAL | PLATING |
|---|---|---|
| terminal 1 | copper alloy | gold |
| terminal 2 | copper alloy | gold |
| terminal 3 | copper alloy | gold |
| terminal 4 | copper alloy | gold |
| terminal 5 | brass | gold |
| terminal 6 | brass | gold |
| plastic | PA6T or equivalent | |

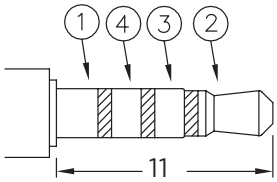


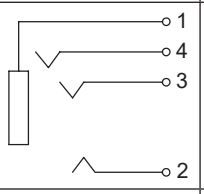
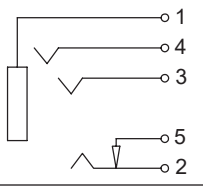
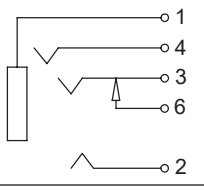
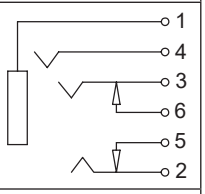




PCB LAYOUT
TOP VIEW



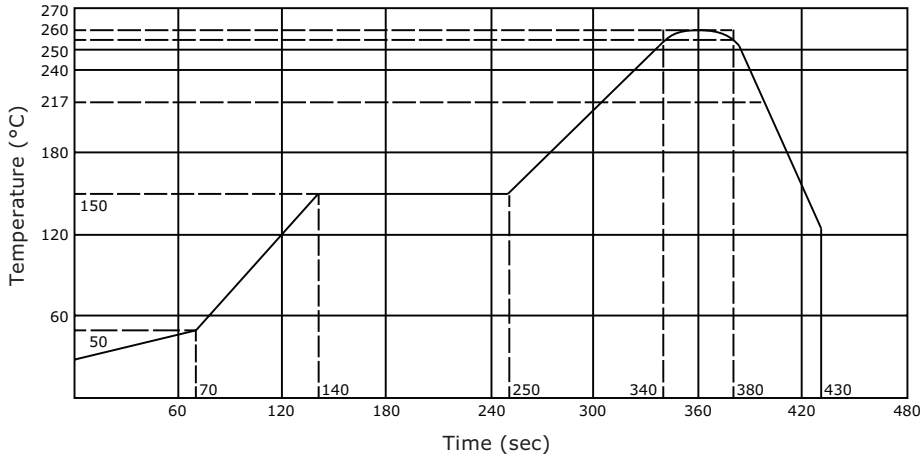

Ø 2.5 MATING PLUG

| Model No. | SJ1-42514-SMT | SJ1-42515TS-SMT | SJ1-42515RS-SMT | SJ1-42516-SMT |
|---|---|---|---|---|
| Schematic |  |  |  |  |
| PIN | | | | |
| 1 | sleeve | sleeve | sleeve | sleeve |
| 2 | tip | tip | tip | tip |
| 3 | ring 1 | ring 1 | ring 1 | ring 1 |
| 4 | ring 2 | ring 2 | ring 2 | ring 2 |
| 5 | NP | tip switch | NP | tip switch |
| 6 | NP | NP | ring switch | ring switch |

## SOLDERABILITY

| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| reel storage | at relative humidity <80% | | | 40 | °C |
| reflow soldering[1] | see reflow profile | 255 | 260 | 265 | °C |
| drying conditions[2] | 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 | | | | |

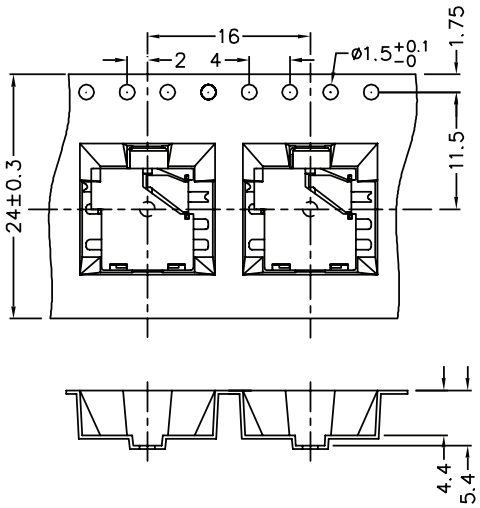
Note: 1. Must reflow solder within 72 hours from opening vacuum packaging at a temperature <30°C & relative humidity <60%.
2. When exceeding floor life by >72 hours.

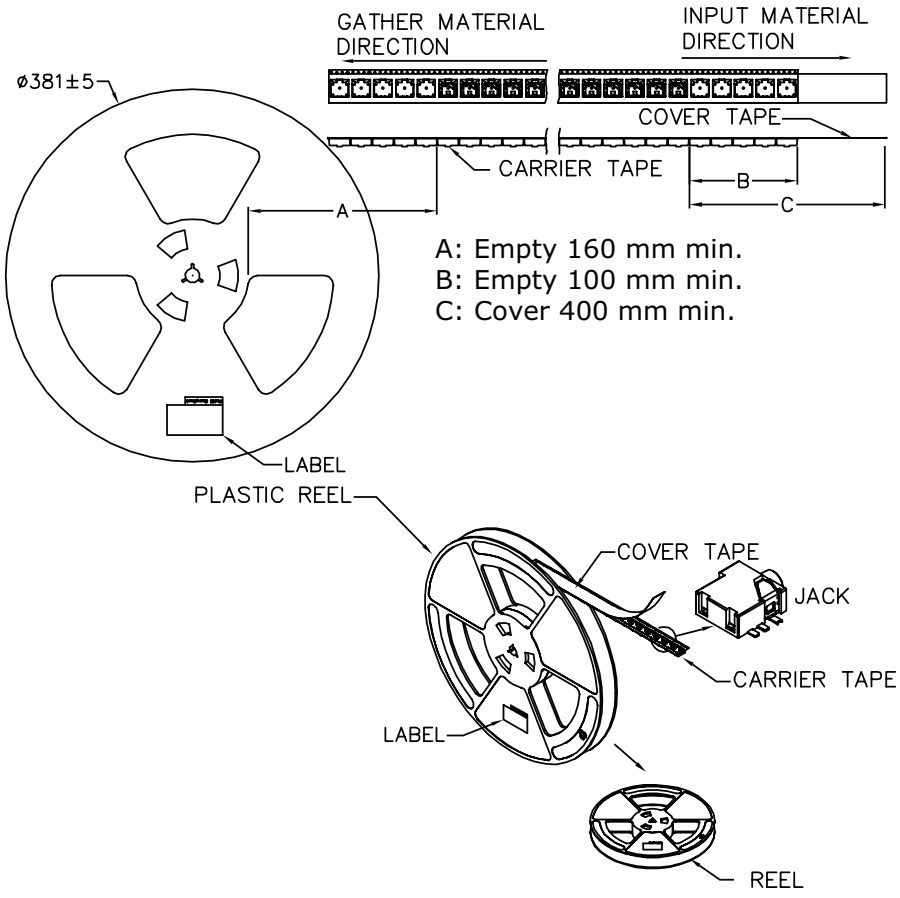



## PACKAGING

units: mm

Reel Size: Ø381 mm
Reel QTY: 1,000 pcs per reel



## REVISION HISTORY

| rev. | description | date |
|---|---|---|
| 1.0 | initial release | 10/27/2005 |
| 1.01 | new template applied | 02/17/2012 |
| 1.02 | added TR package option | 11/01/2012 |
| 1.03 | added storage and drying conditions, and tape and reel packaging details | 01/03/2018 |
| 1.04 | brand update | 10/04/2019 |
| 1.05 | discontinued models SJ1-42515TS-SMT-TR, SJ1-42515RS-SMT-TR & SJ1-42514-SMT-TR ; logo, datasheet style update | 08/18/2022 |

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

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