

**SERIES:** SJ1-4251X-SMT | **DESCRIPTION:** AUDIO JACK**FEATURES**

- right angle
- plastic bushing
- gold flash

**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**

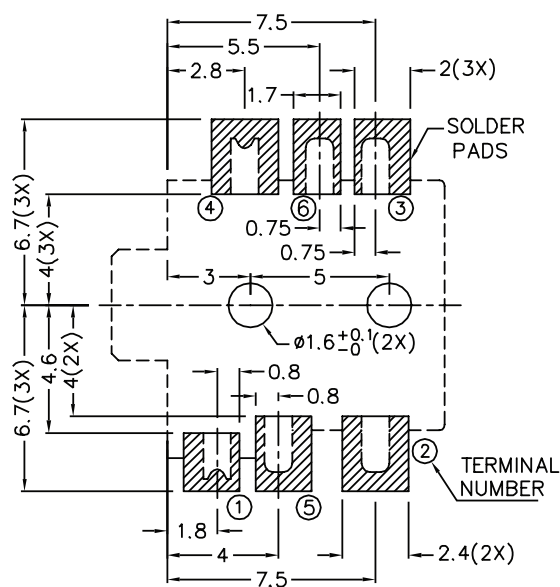
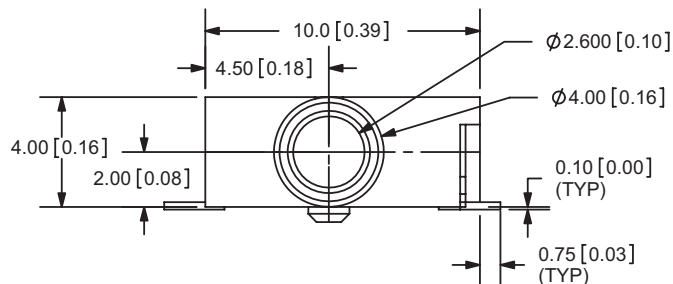
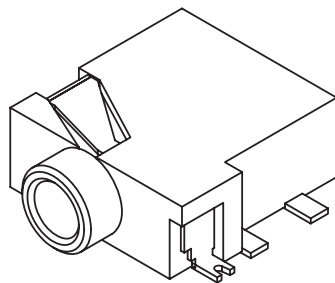
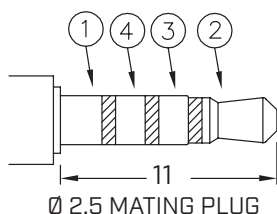
| parameter                       | conditions/description                                                   | min | typ   | max      | units    |
|---------------------------------|--------------------------------------------------------------------------|-----|-------|----------|----------|
| rated input voltage             |                                                                          |     | 12    |          | Vdc      |
| rated input current             |                                                                          |     |       | 1        | A        |
| contact resistance <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                            | 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.

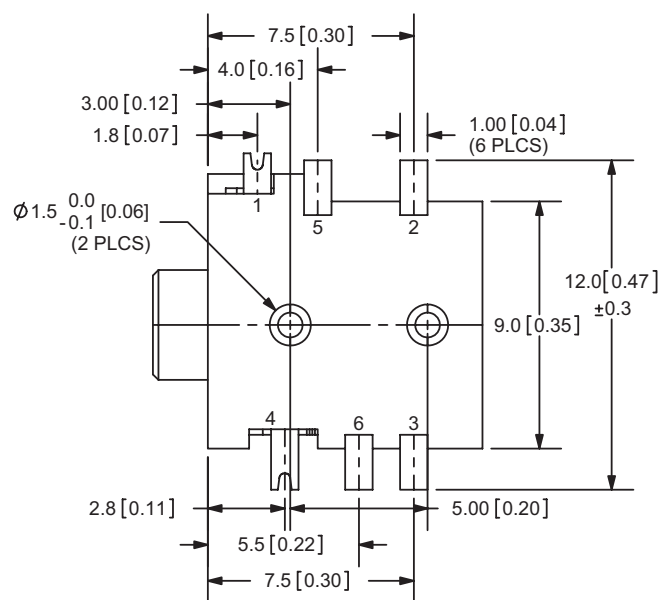
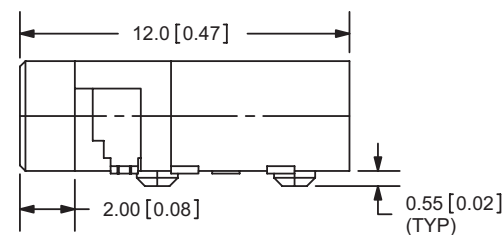
## MECHANICAL DRAWING

units: mm[inches]

TOLERANCE:

X.X  $\pm 0.2$ mmX.XX  $\pm 0.1$ mmX.XXX  $\pm 0.05$ mmPCB LAYOUT  
TOP VIEW

|            | 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 |         |



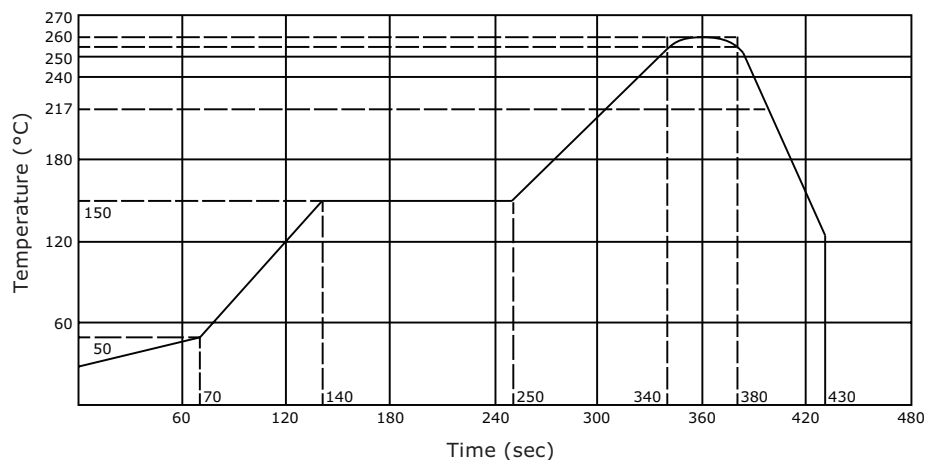
| Model No. | SJ1-42514-SMT | SJ1-42515TS-SMT | SJ1-42515RS-SMT | SJ1-42516-SMT |
|-----------|---------------|-----------------|-----------------|---------------|
| Schematic |               |                 |                 |               |
| PIN       |               |                 |                 |               |
| 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 <sup>1</sup>  | see reflow profile                                                                                       | 255 | 260 | 265 | °C    |
| drying conditions <sup>2</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:

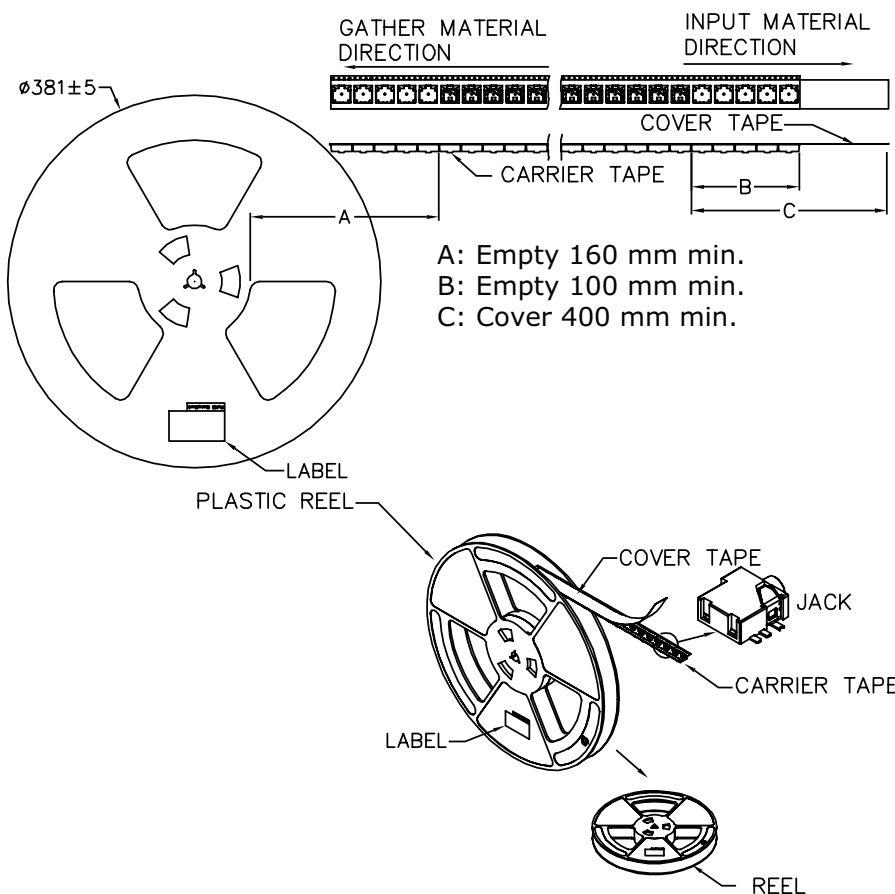
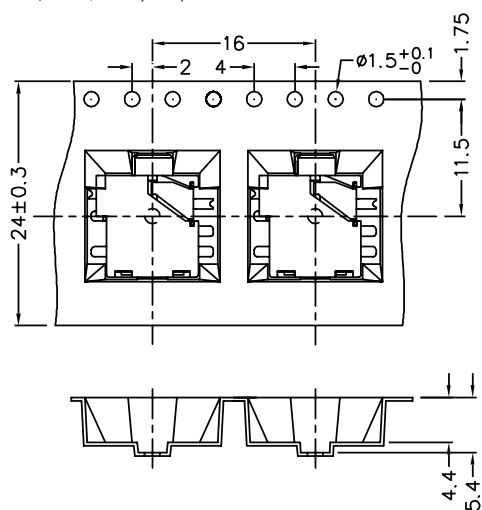
1. Must reflow solder within 72 hours from opening vacuum packaging at a temperature <30°C & relative humidity <60%.
2. When exceeding floor life by >72 hours.



## 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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