

Additional Resources: Product Page

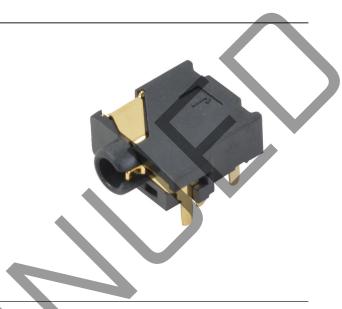
date 07/27/2023

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

#### **FEATURES**

- · low profile design
- switch options include:
- no switch
- tip switch
- ring switch
- tip and ring switch





### **PART NUMBER KEY**

SJ1 - 4251 X

Base Number

Switch Options
4 = no switch
5TS = tip switch
6 = tip and ring switch

#### **SPECIFICATIONS**

| parameter                 | conditions/description   | min | typ   | max      | units  |
|---------------------------|--|-----|-------|----------|--------|
| rated input voltage       |  |     | 12    |          | Vdc    |
| rated input current       |  |     |       | 1        | А      |
| contact resistance        | between terminal and mating plug<br>between terminal in a closed circuit |     |       | 50<br>30 | mΩ     |
| nsulation resistance      | at 500 Vdc   | 100 |       |          | МΩ     |
| oltage withstand          | at 50/60Hz for 1 minute  |     |       | 500      | Vac    |
| nsertion/withdrawal force |  | 0.3 |       | 3        | kg     |
| perating temperature      |  | -25 |       | 85       | °C     |
| fe                        |  |     | 5,000 |          | cycles |
| lammability rating        | UL94V-O  |     |       |          |        |
| RoHS                      | Ves  |     |       |          |        |

### SOLDERABILITY

| parameter      | conditions/description                  | min | typ | max | units |
|----------------|---|-----|-----|-----|-------|
| wave soldering | dipped in solder pot for 5 ±0.5 seconds | 255 | 260 | 265 | °C    |

DESCRIPTION

terminal 1

terminal 2

terminal 3

terminal 4

terminal 5

terminal 6

housing

PLATING/COLOR

gold flash

gold flash

gold flash

gold flash

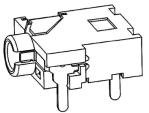
gold flash

gold flash

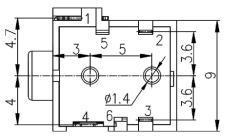
black

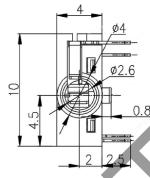
## **MECHANICAL DRAWING**

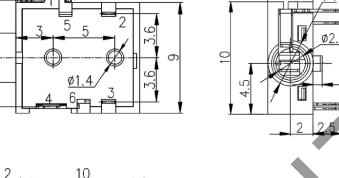
units: mm tolerance: X.X ±0.2 mm X.XX ±0.10 mm X.XXX ±0.050 mm unless otherwise specified

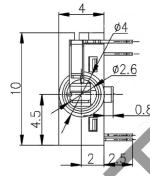


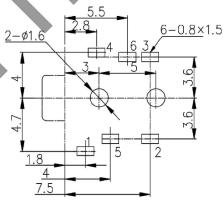
| 7 0 |
|-----|











MATERIAL

t=0.25

t=0.20

t=0.20

t=0.25

t=0.20

t=0.20

phosphorous bronze

phosphorous bronze

phosphorous bronze

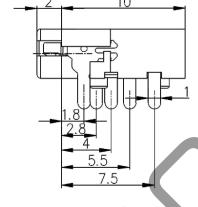
phosphorous bronze

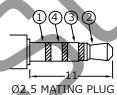
phosphorous bronze

phosphorous bronze

PA66 (UL94V-0)

Recommended PCB Layout Top View





| Model No. | SJ1-42514      | SJ1-42515TS                     | SJ1-42516                        |
|-----------|----------------|---------------------------------|----------------------------------|
| Schematic | 01<br>04<br>03 | 0 1<br>0 4<br>0 3<br>0 5<br>0 5 | 01<br>04<br>03<br>06<br>05<br>05 |
| PIN       |                |                                 |                                  |
| 1         | sleeve         | sleeve                          | sleeve                           |
| 2         | tip            | tip                             | tip                              |
| 3         | ring 1         | ring 1                          | ring 1                           |
| 4         | ring 2         | ring 2                          | ring 2                           |
| 5         | NP             | tip switch                      | tip switch                       |
| 6         | NP             | NP                              | ring switch                      |

### **REVISION HISTORY**

| rev. | description   | date       |  |
|------|---|------------|--|
| 1.0  | initial release   | 10/27/2005 |  |
| 1.01 | new template applied  | 12/15/2011 |  |
| 1.02 | brand update  | 01/31/2020 |  |
| 1.03 | discontinued model SJ1-42515RS; logo, datasheet style update                                  | 08/18/2022 |  |
| 1.04 | product reengineered for improved manufacturability and production yield, see PCN for details | 07/27/2023 |  |

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





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