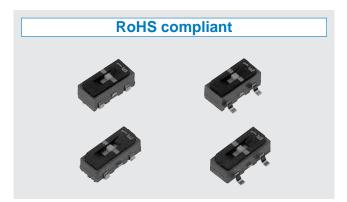
# **SLIDE SWITCHES (SMD)**



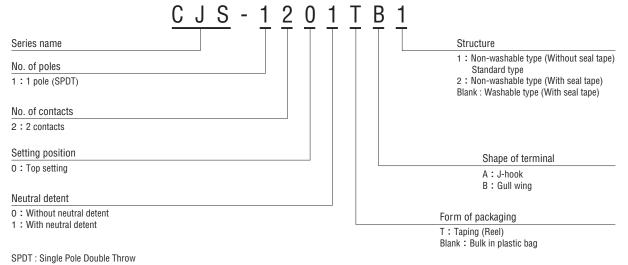


#### FEATURES

- RoHS compliant
- Easy to set slider with line marking
- With neutral detent type lined up to 1 pole 2contacts switch
- Compatible with most automatic pick & place machinery
- Compact and space saving SMD type

|           | INTERNAL STRUCTURE |                                             |              |  |  |
|-----------|--------------------|---------------------------------------------|--------------|--|--|
|           |                    |                                             |              |  |  |
| Part name |                    | Material                                    | Flammahilitu |  |  |
|           |                    | material                                    | Flammability |  |  |
| 1         | Cover              | PPS(Polyphenylenesulphide)                  |              |  |  |
| 1<br>2    | Cover<br>Slider    |                                             | UL-94V-0     |  |  |
|           |                    | PPS(Polyphenylenesulphide)                  |              |  |  |
| 2         | Slider             | PPS(Polyphenylenesulphide)<br>PA(Polyamide) |              |  |  |
| 2<br>3    | Slider<br>Housing  | PPS(Polyphenylenesulphide)<br>PA(Polyamide) |              |  |  |

## PART NUMBER DESIGNATION



#### **% Please refer to the LIST OF PART NUMBERS when placing orders.**



## LIST OF PART NUMBERS

| No. of | No. of   | Setting Neutral     |                   | Form of     | Non-washable type | (Without seal tape) | Non-washable typ | e (With seal tape)    | Pieces in    |
|--------|----------|---------------------|-------------------|-------------|-------------------|---------------------|------------------|-----------------------|--------------|
| poles  | contacts | position            | detent            | packaging   | A (J-hook)        | B (Gull wing)       | A (J-hook)       | ${\sf B}$ (Gull wing) | package      |
|        |          | Without             | Taping            | CJS-1200TA1 | CJS-1200TB1       | CJS-1200TA2         | CJS-1200TB2      | 1000pcs./reel         |              |
| 1      | 2        | Top ootting         | detent            | Plastic bag | CJS-1200A1        | CJS-1200B1          | CJS-1200A2       | CJS-1200B2            | 100pcs./pack |
|        | 2        | Top setting<br>With | Taping            | CJS-1201TA1 | CJS-1201TB1       | CJS-1201TA2         | CJS-1201TB2      | 1000pcs./reel         |              |
|        |          |                     | neutral<br>detent | Plastic bag | CJS-1201A1        | CJS-1201B1          | CJS-1201A2       | CJS-1201B2            | 100pcs./pack |

| No. of | No. of            | Setting       | Neutral Form of    |             | Washable type | Pieces in     |               |
|--------|-------------------|---------------|--------------------|-------------|---------------|---------------|---------------|
| poles  | contacts          | position      | detent             | packaging   | A (J-hook)    | B (Gull wing) | package       |
|        |                   | Top setting — | Without<br>neutral | Taping      | CJS-1200TA    | CJS-1200TB    | 1000pcs./reel |
| 1      | 2                 |               | detent             | Plastic bag | CJS-1200A     | CJS-1200B     | 100pcs./pack  |
| I      | 2                 |               | With               | Taping      | CJS-1201TA    | CJS-1201TB    | 1000pcs./reel |
|        | neutral<br>detent |               | Plastic bag        | CJS-1201A   | CJS-1201B     | 100pcs./pack  |               |

% Verify the above part numbers when placing orders. Taping version can be supplied only in reel unit.



## STANDARD SPECIFICATIONS

| Operating temp. range | – 40 ~ 85 °C                                         |  |
|-----------------------|------------------------------------------------------|--|
| Storage temp. range   |                                                      |  |
| Sealing               | Washable type available with seal tape               |  |
| Net weight            | Approx. 0.05g (CJS-1200)<br>Approx. 0.06g (CJS-1201) |  |

## ELECTRICAL CHARACTERISTICS

| Contact rating<br>Non-switching<br>Switching<br>Minimum | DC50 V 100 mA<br>DC6 V, 100 mA DC24 V, 25 mA<br>DC20 mV 1 μA |  |
|---------------------------------------------------------|--------------------------------------------------------------|--|
| Contact resistance                                      | 100 m $\Omega$ maximum                                       |  |
| Insulation resistance                                   | 100 M $\Omega$ (DC100 V) minimum                             |  |
| Dielectric strength                                     | AC250 V, 60 s                                                |  |

## MECHANICAL CHARACTERISTICS

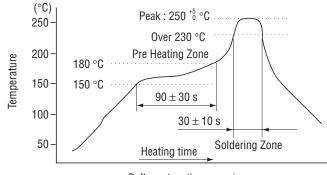
| Operating force   | 5.9 N {0.6 kgf} maximum                                                 |  |  |
|-------------------|-------------------------------------------------------------------------|--|--|
| Stop strength     | 10 N {1.02 kgf}, 60 s                                                   |  |  |
| Solderability     | 245 ± 3 °C, 2 ~ 3 s                                                     |  |  |
| Soldering heat    | Reflow:255 °C (Peak temperature)<br>(Please refer to the profile below) |  |  |
|                   | Manual soldering : 350 $\pm$ 10 °C, 3 ~ 4 s                             |  |  |
| Shear (Adhesion)  | 5 N {0.51 kgf} 10 s                                                     |  |  |
| Substrate bending | Width 90 mm, bend 3 mm, 5 s, 1 time                                     |  |  |
| Pull-off strength | 5 N {0.51 kgf} 10 s                                                     |  |  |

{ }: Reference only

### **ENVIRONMENTAL CHARACTERISTICS**

| Vibration           | Amplitude 1.5mm or Acceleration 98m/s <sup>2</sup> , 10-500 Hz, 3 directions for 10 cycles each |
|---------------------|-------------------------------------------------------------------------------------------------|
| Shock               | 490 m/s <sup>2</sup> , 11 ms<br>6 directions for 3 times each                                   |
| Load life           | Continuous load 200 cycles, DC6 $\pm$ 0.5 V, 100 $\pm$ 10 mA                                    |
| Humidity            | –10 ~ 65 °C, Relative humidity 0 ~ 96 %,<br>24 h for 10 cycles                                  |
| High temp. exposure | 85 °C, 96 h                                                                                     |
| Low temp. exposure  | −40 °C, 96 h                                                                                    |
| Thermal shock       | -40 (0.5 h) ~ 85 °C (0.5 h), 5 cycles                                                           |

#### <Reflow profile for soldering heat evaluation>



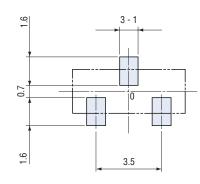
Reflow : two times maximum

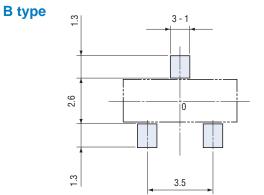


#### **OUTLINE DIMENSIONS** Unless otherwise specified, tolerance : $\pm$ 0.3 (Unit : mm) CJS-1200A1 • CJS-1200B1 <u>3-0.6</u> +0.1 3-0.6 +0.1 Production date code С C ② Production date code (2) .C.,5 F Ó Ì Ċ 3 Terminal No.1 Terminal No.1 Schematic Schematic 2.8 +0.3 5.4 5.4 4.2 Stroke 0.6 2.5 Stroke 0.6 2.5 0.3 0.3 0.15 +0.1 0.15 +0.1 2.5 max. 2.5 max. ╓ L\_ L\_ 0.1 -0.1 3.5 1.1 0.1 3.5 0.4 min. 0.4 min. • CJS-1201A1 CJS-1201B1 3-0.6 +0.1 3-0.6 $^{+0.1}_{-0.05}$ Production date code С Production date code С 2 Н 60,5 0.5 3 1 3 Terminal No.1 Terminal No.1 Schematic Schematic Stroke Stroke 2.8 +0.3 4.2 2.5 2.5 0.6 0.6 0.6 0.6 0.3 0.3 0.15 +0.1 0.15 +0.1 2.5 max. max. 2.5 r 0.1 -01 0.1 -0.1 1.1 3.5 3.5 0.4 min. 0.4 min

## RECOMMENDED P.C.B. PAD OUTLINE DIMENSIONS

A type





Note) The zero point is the center of mounting.

(Unit : mm)

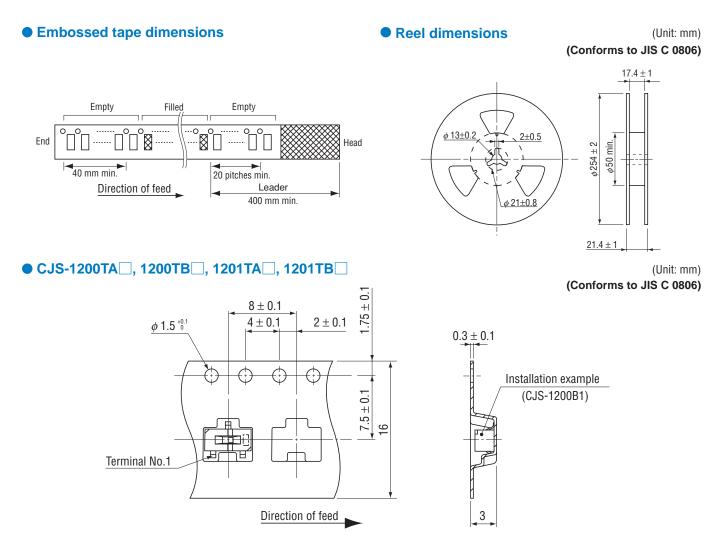


## PACKAGING SPECIFICATIONS

#### <Taping packaging specifications>

- Taping version is packaged in 1000 pcs. per reel.
- Orders will be accepted for units of 1000 pcs., i.e., 1000, 2000, 3000 pcs., etc.
- Taping version is boxed with two reels (2000 pcs.).

Maximum number of consecutive missing pieces=2 Leader length and reel dimension are shown in the diagrams below:



#### <Bulk pack specifications>

• Boxing of bulk pack in a plastic bag is performed with 100 pcs. (standard 500 pcs.) per box.