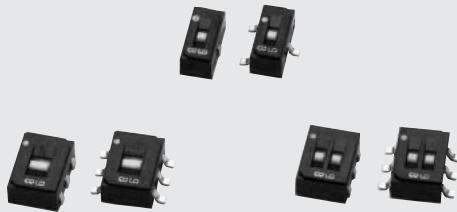


SLIDE SWITCHES (SMD)

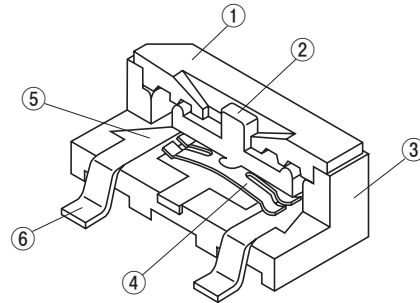
RoHS compliant



FEATURES

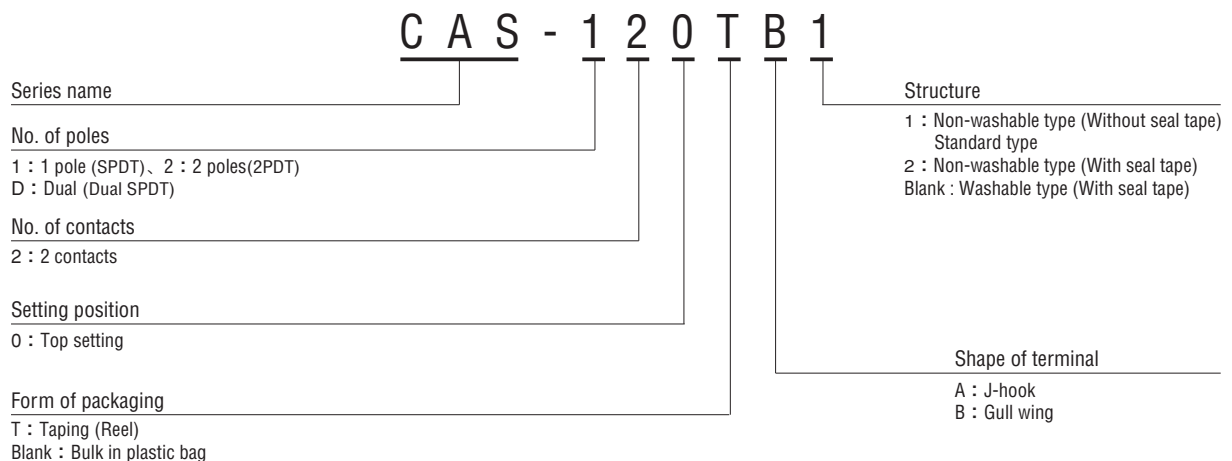
- RoHS compliant
- Compatible with most automatic pick & place machinery
- Compact and space saving SMD type
- Excellent contact stability by twin Gold-plated contact
- Low profile design of 2.5 mm

INTERNAL STRUCTURE



| Part name | Material | Flammability |
|------------------|----------------------------|--------------|
| ① Cover | PPS(Polyphenylenesulphide) | UL-94V-0 |
| ② Slider | PA(Polyamide) | |
| ③ Housing | PPS(Polyphenylenesulphide) | |
| ④ Slider contact | Copper alloy, Gold-plated | — |
| ⑤ Fixed contact | | |
| ⑥ Terminal pin | | |

PART NUMBER DESIGNATION



SPDT : Single Pole Double Throw 2PDT : Two Poles Double Throw

※ Please refer to the LIST OF PART NUMBERS when placing orders.

CAS

SLIDE SWITCHES (SMD)

LIST OF PART NUMBERS

| No. of poles | No. of contacts | Setting position | Form of packaging | Non-washable type (Without seal tape) | | Non-washable type (With seal tape) | | Pieces in package |
|--------------|-----------------|------------------|-------------------|---------------------------------------|---------------|------------------------------------|---------------|-------------------|
| | | | | A (J-hook) | B (Gull wing) | A (J-hook) | B (Gull wing) | |
| 1 | 2 | Top setting | Taping | CAS-120TA1 | CAS-120TB1 | CAS-120TA2 | CAS-120TB2 | 1000pcs./reel |
| | | | Plastic bag | CAS-120A1 | CAS-120B1 | CAS-120A2 | CAS-120B2 | 100pcs./pack |
| 2 | | | Taping | CAS-220TA1 | CAS-220TB1 | CAS-220TA2 | CAS-220TB2 | 1000pcs./reel |
| | | | Plastic bag | CAS-220A1 | CAS-220B1 | CAS-220A2 | CAS-220B2 | 100pcs./pack |
| Dual | | | Taping | CAS-D20TA1 | CAS-D20TB1 | CAS-D20TA2 | CAS-D20TB2 | 1000pcs./reel |
| | | | Plastic bag | CAS-D20A1 | CAS-D20B1 | CAS-D20A2 | CAS-D20B2 | 100pcs./pack |

| No. of poles | No. of contacts | Setting position | Form of packaging | Washable type (With seal tape) | | Pieces in package |
|--------------|-----------------|------------------|-------------------|--------------------------------|---------------|-------------------|
| | | | | A (J-hook) | B (Gull wing) | |
| 1 | 2 | Top setting | Taping | CAS-120TA | CAS-120TB | 1000pcs./reel |
| | | | Plastic bag | CAS-120A | CAS-120B | 100pcs./pack |
| 2 | | | Taping | CAS-220TA | CAS-220TB | 1000pcs./reel |
| | | | Plastic bag | CAS-220A | CAS-220B | 100pcs./pack |
| Dual | | | Taping | CAS-D20TA | CAS-D20TB | 1000pcs./reel |
| | | | Plastic bag | CAS-D20A | CAS-D20B | 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 (CAS-120) Approx. 0.08g (CAS-220/D20) |

ELECTRICAL CHARACTERISTICS

| | |
|---|--|
| Contact rating Non-switching Switching Minimum | DC50 V 100 mA DC6 V, 100 mA DC24 V, 25 mA DC20 mV 1 μA |
| Contact resistance | 50 mΩ maximum |
| Insulation resistance | 1000 MΩ (DC100 V) minimum |
| Dielectric strength | AC500 V, 60 s |

MECHANICAL CHARACTERISTICS

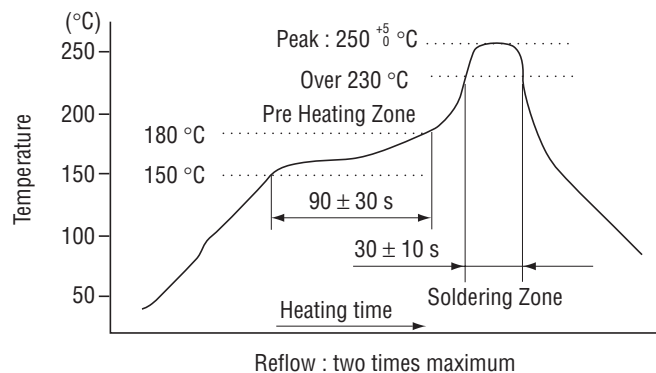
| | |
|-------------------|---|
| Operating force | 0.5 ~ 5 N {0.05 ~ 0.51 kgf} |
| Stop strength | 10 N {1.02 kgf}, 60 s |
| Solderability | 245 ± 3 °C, 2 ~ 3 s |
| Soldering heat | Reflow : 255 °C (Peak temperature) (Please refer to the profile below) |
| | Manual soldering : 350 ± 10 °C, 3 ~ 4 s |
| 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 1.5 mm or Acceleration 98 m/s ² , 10-500 Hz, 3 directions for 10 cycles each |
| Shock | 490 m/s ² , 11 ms 6 directions for 3 times each |
| Load life | Continuous load 2000 cycles, DC6 ± 0.5 V, 100 ± 10 mA |
| Humidity | -10 ~ 65 °C, Relative humidity 0 ~ 96 %, 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>

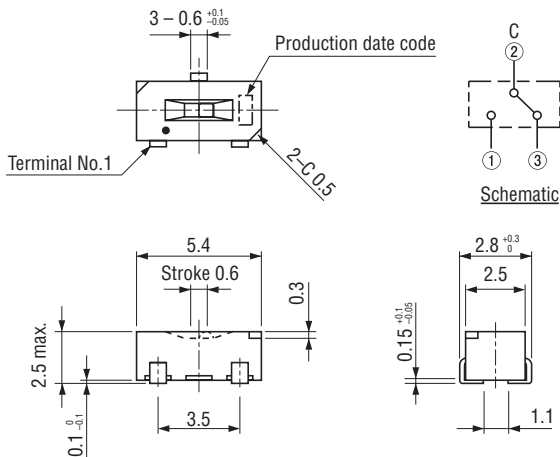


CAS SLIDE SWITCHES (SMD)

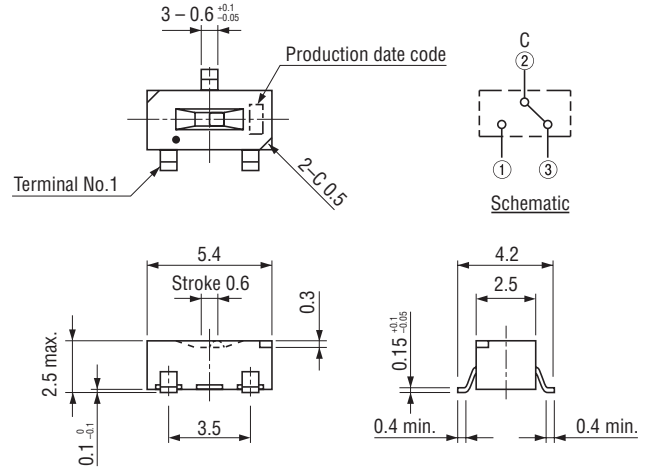
OUTLINE DIMENSIONS

Unless otherwise specified, tolerance : ± 0.3 (Unit : mm)

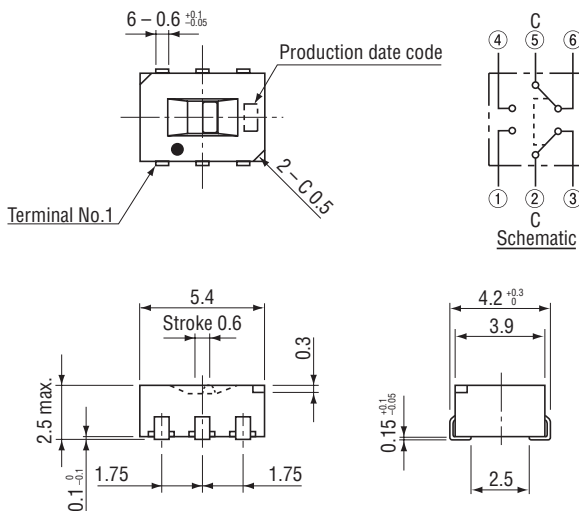
● CAS-120A1



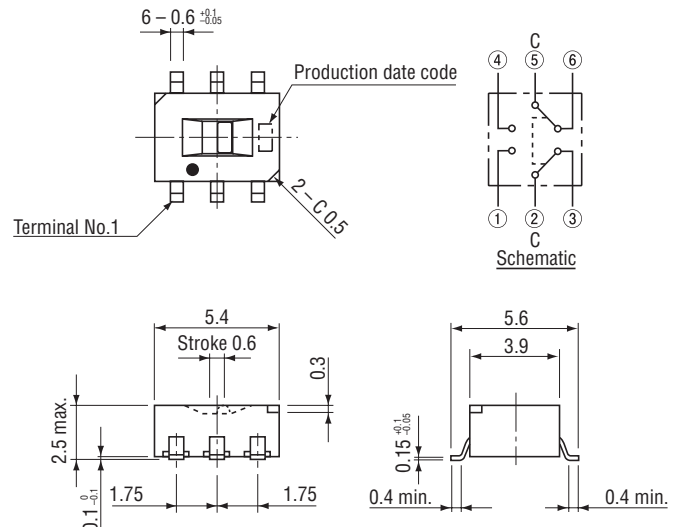
● CAS-120B1



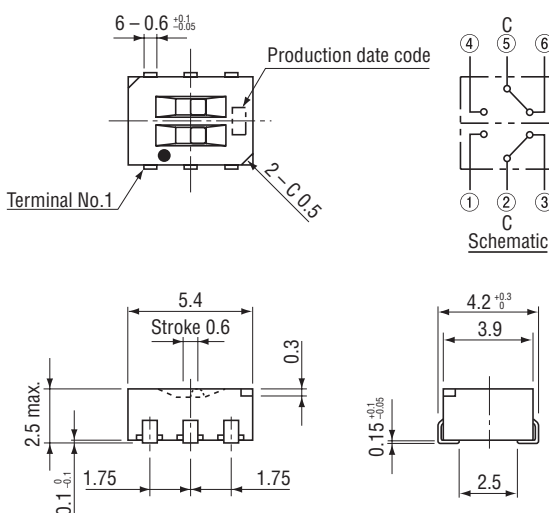
● CAS-220A1



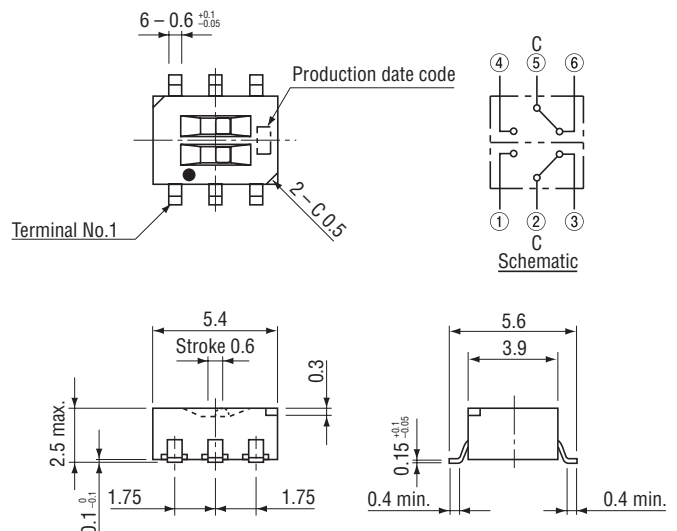
● CAS-220B1



● CAS-D20A1



● CAS-D20B1

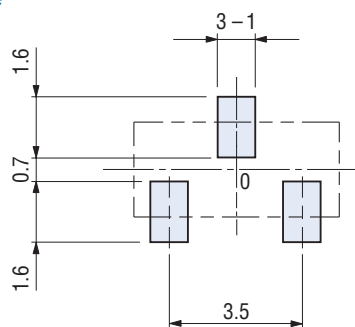


RECOMMENDED P.C.B. PAD OUTLINE DIMENSIONS

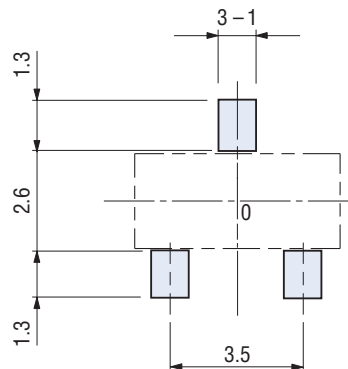
● CAS-120

(Unit : mm)

A type

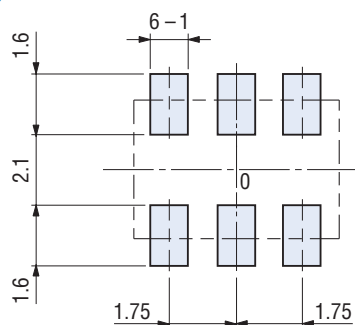


B type

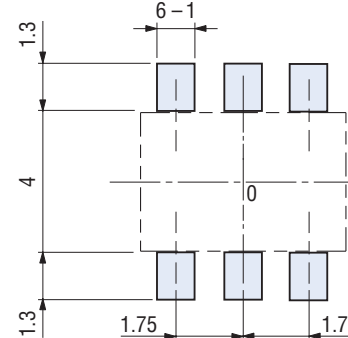


● CAS-220 • D20

A type



B type



Note) The zero point is the center of mounting.

■ PACKAGING SPECIFICATIONS

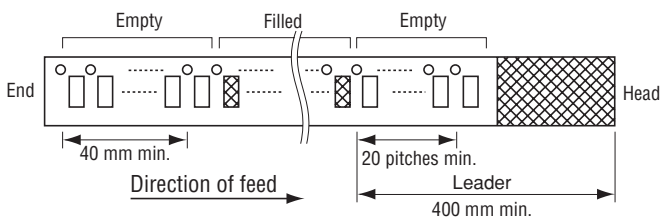
<Taping packaging specifications>

- 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:

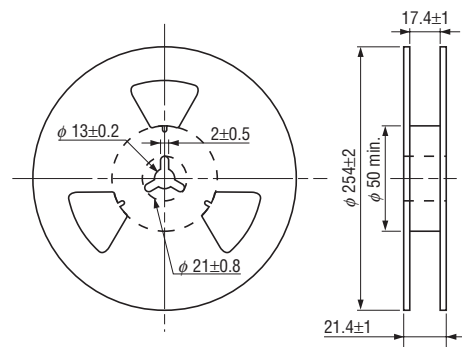
● Embossed tape dimensions



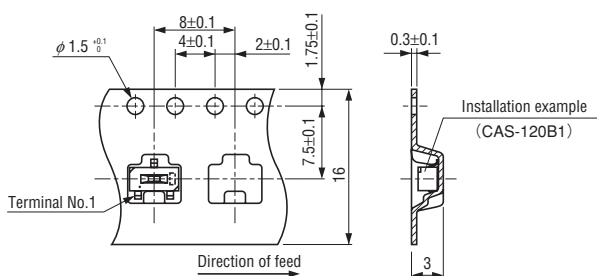
● Reel dimensions

(Unit: mm)

(Conforms to JIS C 0806-3)



● CAS-120TA, TB

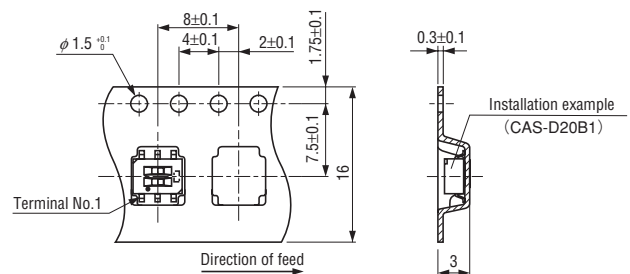


● CAS-220TA, TB • D20TA, TB

(Unit: mm)

(Conforms to JIS C 0806-3)

(In accordance with EIAJ ET-7200A)



<Bulk pack specifications>

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