

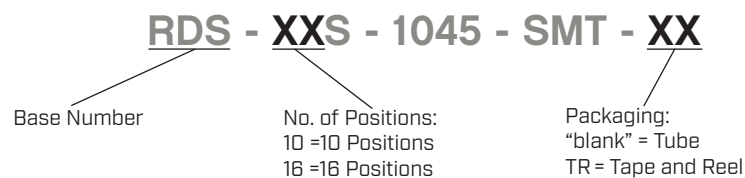
SERIES: RDS-1045-SMT | **DESCRIPTION:** ROTARY DIP SWITCH

FEATURES

- 10 and 16 positions
- flat actuator
- gold plated terminals
- surface mount
- tube or tape and reel packaging

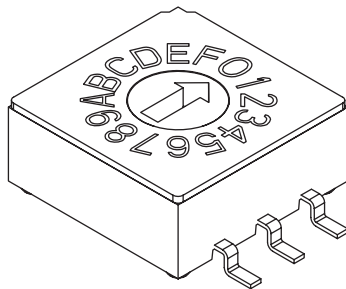

SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|-----------------------|------------------------|--------|-----|-----|---------|
| rated voltage | switching | | | 24 | Vdc |
| | non-switching | | | 50 | Vdc |
| rated current | switching | | | 25 | mA |
| | non-switching | | | 100 | mA |
| withstanding voltage | for 1 minute | | 250 | | Vac |
| contact resistance | initial | | | 50 | mΩ |
| | after life test | | | 100 | mΩ |
| insulation resistance | at 250 Vdc | 100 | | | MΩ |
| operating torque | | | | 500 | gf*cm |
| dial travel | continuous rotation | | 360 | | degrees |
| operating temperature | | -40 | | 85 | °C |
| storage temperature | | -40 | | 85 | °C |
| life | | 10,000 | | | steps |
| flammability rating | UL94V-0 | | | | |
| RoHS | yes | | | | |

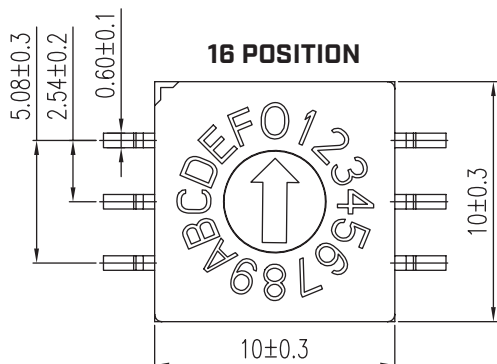
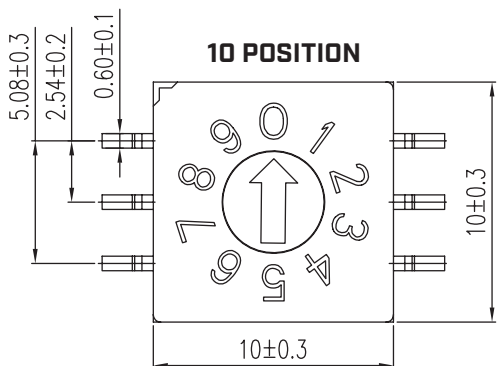
PART NUMBER KEY


MECHANICAL DRAWING

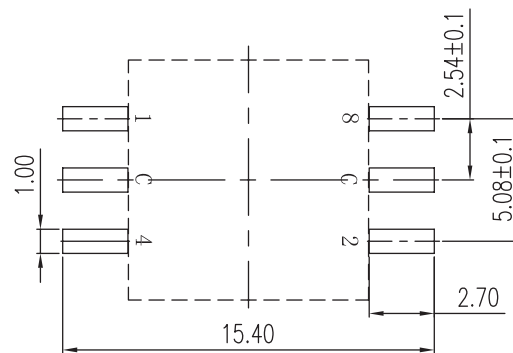
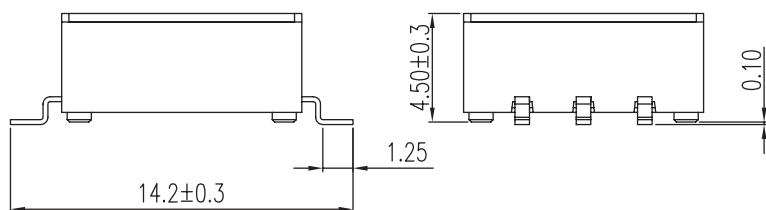
units: mm
 tolerance:
 $X \leq 0.5$: ± 0.25 mm
 $0.5 < X \leq 3.0$: ± 0.15 mm
 $3.0 < X \leq 6.0$: ± 0.20 mm
 $6.0 < X \leq 30.0$: ± 0.25 mm
 $30.0 < X \leq 120.0$: ± 0.30 mm
 $120.0 < X \leq 400.0$: ± 0.50 mm
 $X > 400.0$: ± 0.80 mm
 unless otherwise noted



| ITEM | DESCRIPTION | MATERIAL | PLATING/COLOR |
|------|-------------|----------------|---------------|
| 1 | dial | PA9T [UL94V-0] | gray |
| 2 | housing | PA9T [UL94V-0] | black |
| 3 | base | PA9T [UL94V-0] | black |
| 4 | terminals | copper alloy | gold |



| ON ○ | | | | | | |
|---------|-----|------|---|---|---|--|
| OFF ● | | CODE | | | | |
| TYPE | POS | 1 | 2 | 4 | 8 | |
| 10 STEP | 0 | ● | ● | ● | ● | |
| | 1 | ○ | ● | ● | ● | |
| | 2 | ● | ○ | ● | ● | |
| | 3 | ○ | ○ | ● | ● | |
| | 4 | ● | ● | ○ | ● | |
| | 5 | ○ | ● | ○ | ● | |
| | 6 | ● | ○ | ○ | ● | |
| | 7 | ○ | ○ | ○ | ● | |
| | 8 | ● | ● | ● | ○ | |
| | 9 | ○ | ● | ● | ○ | |
| 16 STEP | A | ● | ○ | ● | ○ | |
| | B | ○ | ○ | ● | ○ | |
| | C | ● | ● | ○ | ○ | |
| | D | ○ | ● | ○ | ○ | |
| | E | ● | ○ | ○ | ○ | |
| | F | ○ | ○ | ○ | ○ | |

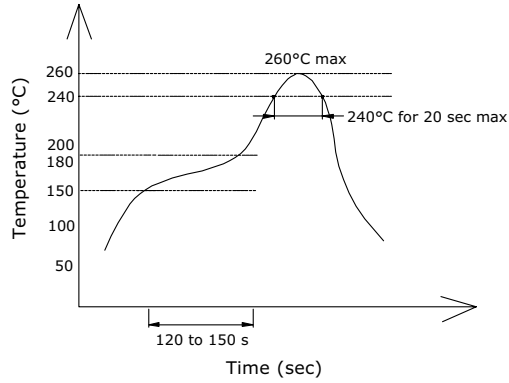


Recommended PCB Layout
Top View

SOLDERABILITY

| parameter | conditions/description | min | typ | max | units |
|-------------------------------|-----------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 3 seconds | 315 | 320 | 325 | °C |
| reflow soldering ¹ | 240-260 °C (20 seconds max) | | | 260 | °C |

Notes: 1. It is recommended to reflow solder within 6 months.

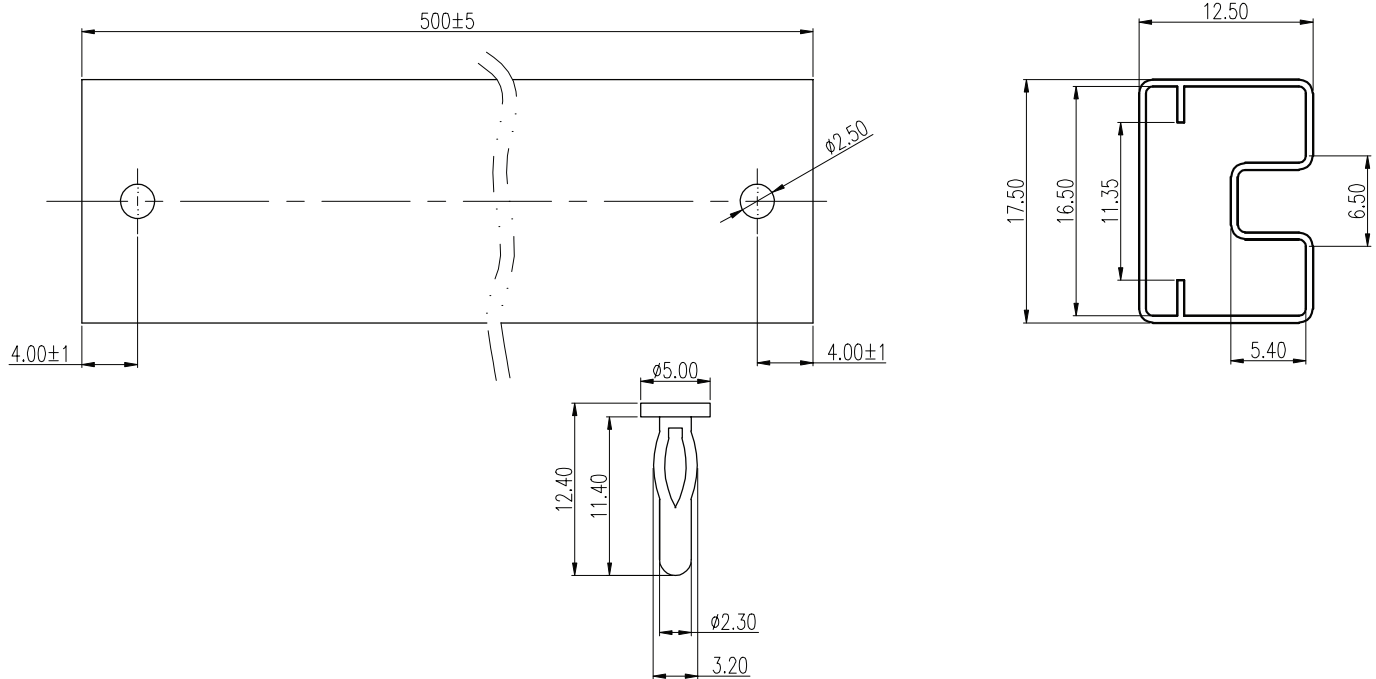


PACKAGING (TUBE)

units: mm

Tube Size: 17.50 x 12.50 x 500 mm

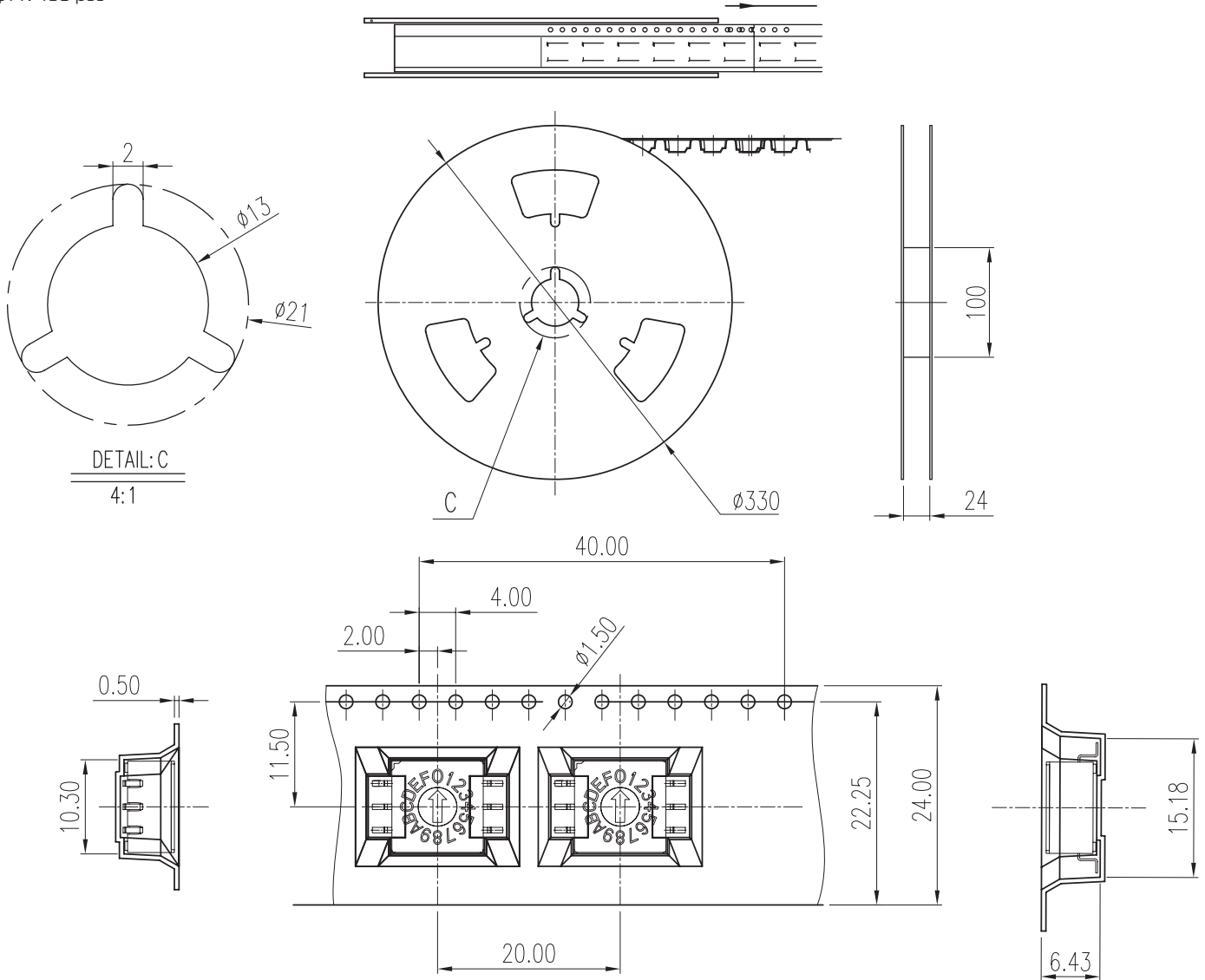
Tube QTY: 47 pcs



PACKAGING (TAPE & REEL)

units: mm

Reel Size: $\varnothing 330$ mm
 Reel QTY: 450 pcs



REVISION HISTORY

| rev. | description | date |
|------|------------------------------|------------|
| 1.0 | initial release | 05/21/2020 |
| 1.01 | logo, datasheet style update | 08/05/2022 |

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



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