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# SERIES: RDS7-1065-SMT-67 | DESCRIPTION: ROTARY DIP SWITCH

## FEATURES

- 4, 8, 10 & 16 position
- suface mount
- IP67



RoHS IP67

## SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| rated voltage | switching<br>non-switching | | | 42<br>42 | Vdc<br>Vdc |
| rated current | switching<br>non-switching | | | 150<br>200 | mA<br>mA |
| withstanding voltage | for 1 minute | | 250 | | Vac |
| contact resistance | | | | 80 | mΩ |
| insulation resistance | for 1 minute at 250 Vdc | 100 | | | MΩ |
| operating torque | | | | 700 | gf*cm |
| actuator travel | continuous rotation | | 360 | | degrees |
| operating temperature | | -40 | | 85 | °C |
| storage temperature | | -40 | | 85 | °C |
| life | at 42 Vdc, 150 mA, 15~20 cycles/minute | | 10,000 | | steps |
| flammability rating | see material tables | | | | |
| RoHS | yes | | | | |
| IP level | IP67 | | | | |

## PART NUMBER KEY

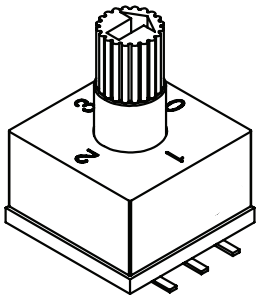
RDS7 - XXS - 1065 - 73 - SMT - TR - 67

Base Number

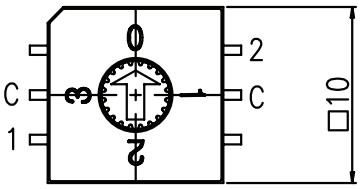
No. of Positions:
4 = 4 Positions
8 = 8 Positions
10 = 10 Positions
16 = 16 Positions

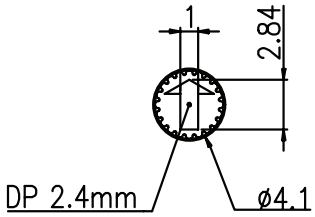
## MECHANICAL DRAWING (4 POSITION)

units: mm
tolerance: ±0.3 mm
unless otherwise specified



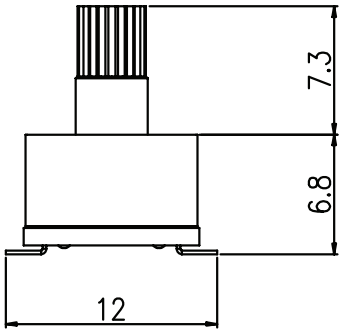

| DESCRIPTION | MATERIAL | PLATING/COLOR |
|---|---|---|
| actuator | PA66 (UL94V-0) | ivory |
| cover | LCP (UL94V-0) | gray |
| base | LCP (UL94V-0) | gray |
| terminals | phosphorus bronze | Ni/Au |

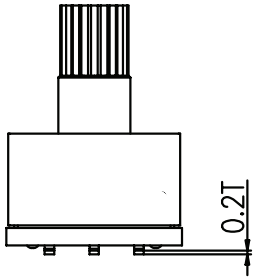


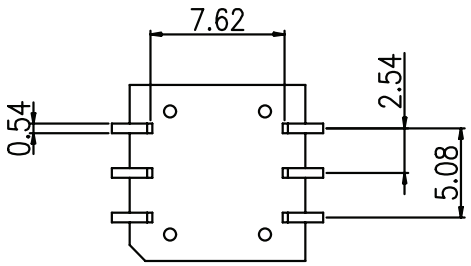



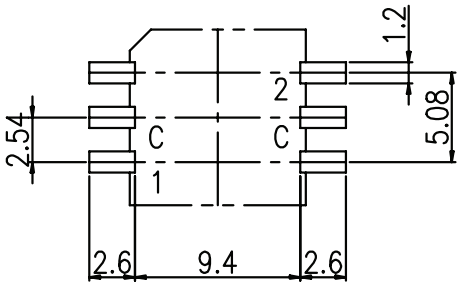

ACTUATOR

| ON ● | | | | |
|---|---|---|---|---|
| OFF ○ | | CODE | | |
| TYPE | POS | C | 1 | 2 |
| 4 POSITION | 0 | ● | ○ | ○ |
| | 1 | ● | ● | ○ |
| | 2 | ● | ○ | ● |
| | 3 | ● | ● | ● |



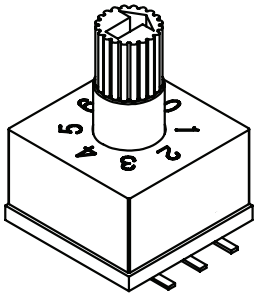



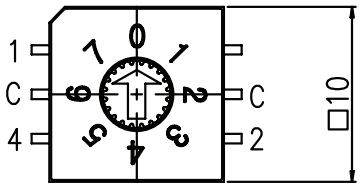

Recommended PCB Layout
Top View

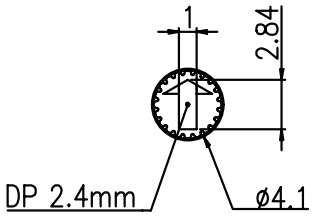
## MECHANICAL DRAWING (8 POSITION)

units: mm
tolerance: ±0.3 mm
unless otherwise specified



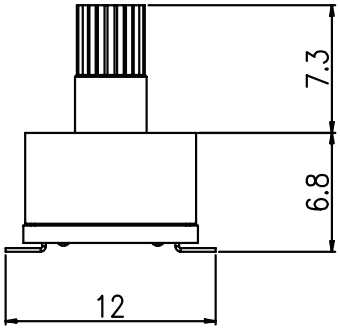

| DESCRIPTION | MATERIAL | PLATING/COLOR |
|---|---|---|
| actuator | PA66 (UL94V-0) | ivory |
| cover | LCP (UL94V-0) | gray |
| base | LCP (UL94V-0) | gray |
| terminals | phosphorus bronze | Ni/Au |

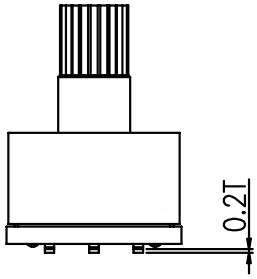


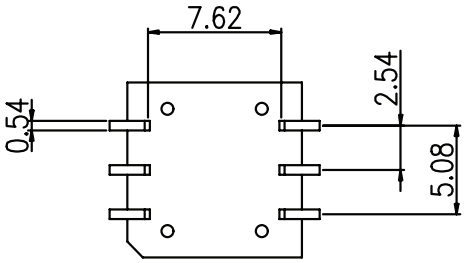



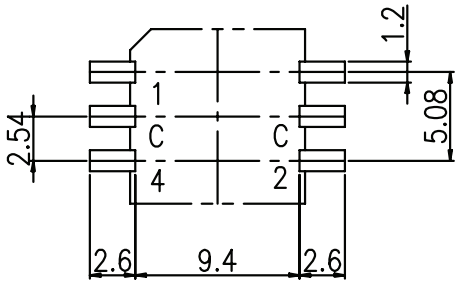

ACTUATOR

| ON ● | | | | | |
|---|---|---|---|---|---|
| OFF ○ | | CODE | | | |
| TYPE | POS | C | 1 | 2 | 4 |
| 8 POSITION | 0 | ● | ○ | ○ | ○ |
| | 1 | ● | ● | ○ | ○ |
| | 2 | ● | ○ | ● | ○ |
| | 3 | ● | ● | ● | ○ |
| | 4 | ● | ○ | ○ | ● |
| | 5 | ● | ● | ○ | ● |
| | 6 | ● | ○ | ● | ● |
| | 7 | ● | ● | ● | ● |



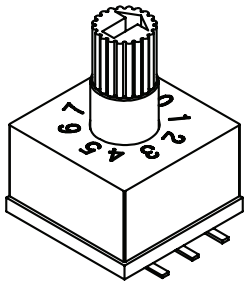



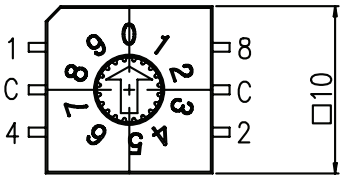

Recommended PCB Layout
Top View

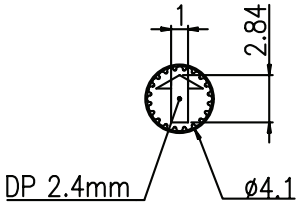
## MECHANICAL DRAWING (10 POSITION)

units: mm
tolerance: ±0.3 mm
unless otherwise specified

| DESCRIPTION | MATERIAL | PLATING/COLOR |
|---|---|---|
| actuator | PA66 (UL94V-0) | ivory |
| cover | LCP (UL94V-0) | gray |
| base | LCP (UL94V-0) | gray |
| terminals | phosphorus bronze | Ni/Au |

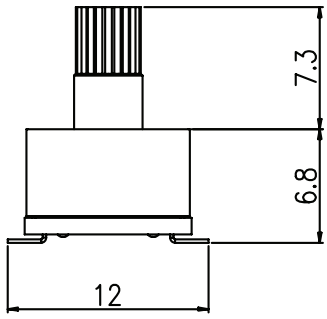


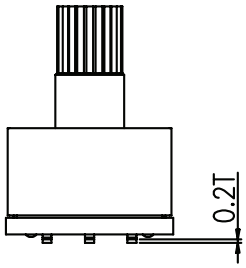



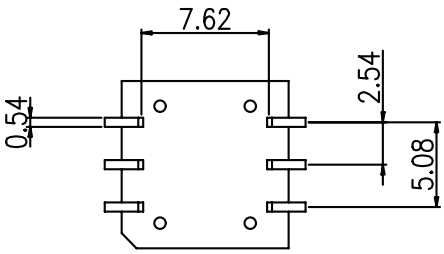



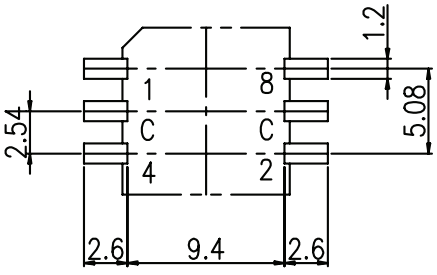

ACTUATOR

| ON ● | | | | | | |
|---|---|---|---|---|---|---|
| OFF ○ | | CODE | | | | |
| TYPE | POS | C | 1 | 2 | 4 | 8 |
| 10 POSITION | 0 | ● | ○ | ○ | ○ | ○ |
| | 1 | ● | ● | ○ | ○ | ○ |
| | 2 | ● | ○ | ● | ○ | ○ |
| | 3 | ● | ● | ● | ○ | ○ |
| | 4 | ● | ○ | ○ | ● | ○ |
| | 5 | ● | ● | ○ | ● | ○ |
| | 6 | ● | ○ | ● | ● | ○ |
| | 7 | ● | ● | ● | ● | ○ |
| | 8 | ● | ○ | ○ | ○ | ● |
| | 9 | ● | ● | ○ | ○ | ● |



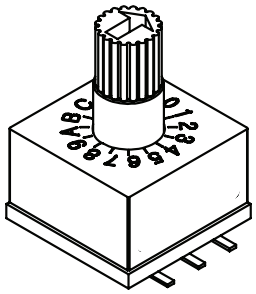



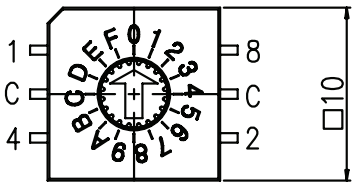

Recommended PCB Layout
Top View

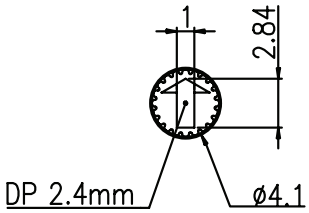
## MECHANICAL DRAWING (16 POSITION)

units: mm
tolerance: ±0.3 mm
unless otherwise specified

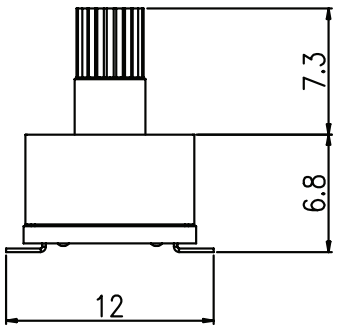


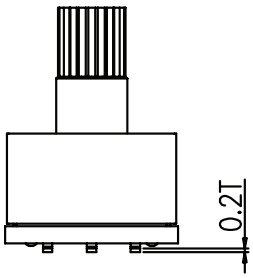
| DESCRIPTION | MATERIAL | PLATING/COLOR |
|---|---|---|
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| cover | LCP (UL94V-0) | gray |
| base | LCP (UL94V-0) | gray |
| terminals | phosphorus bronze | Ni/Au |



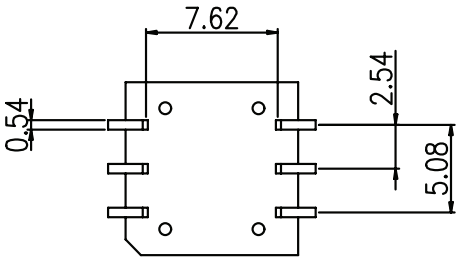



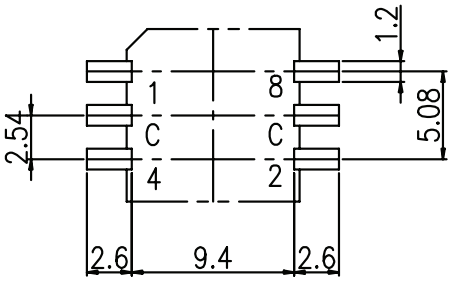

ACTUATOR




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

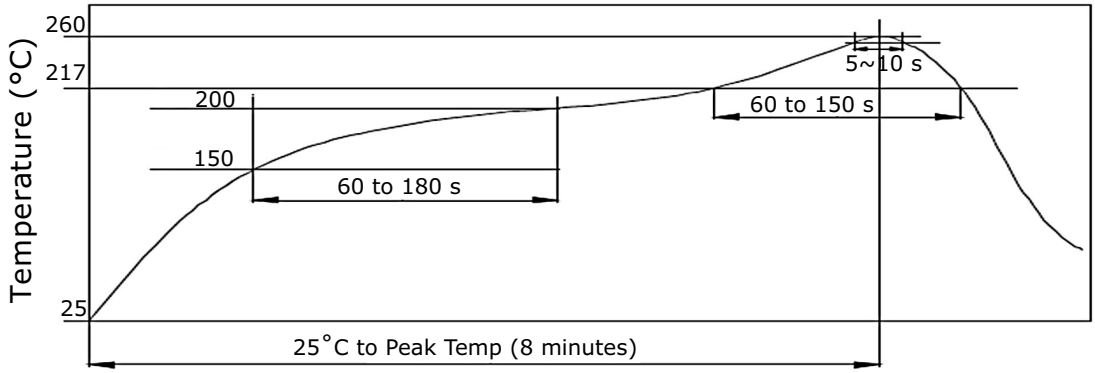



Recommended PCB Layout
Top View

## SOLDERABILITY

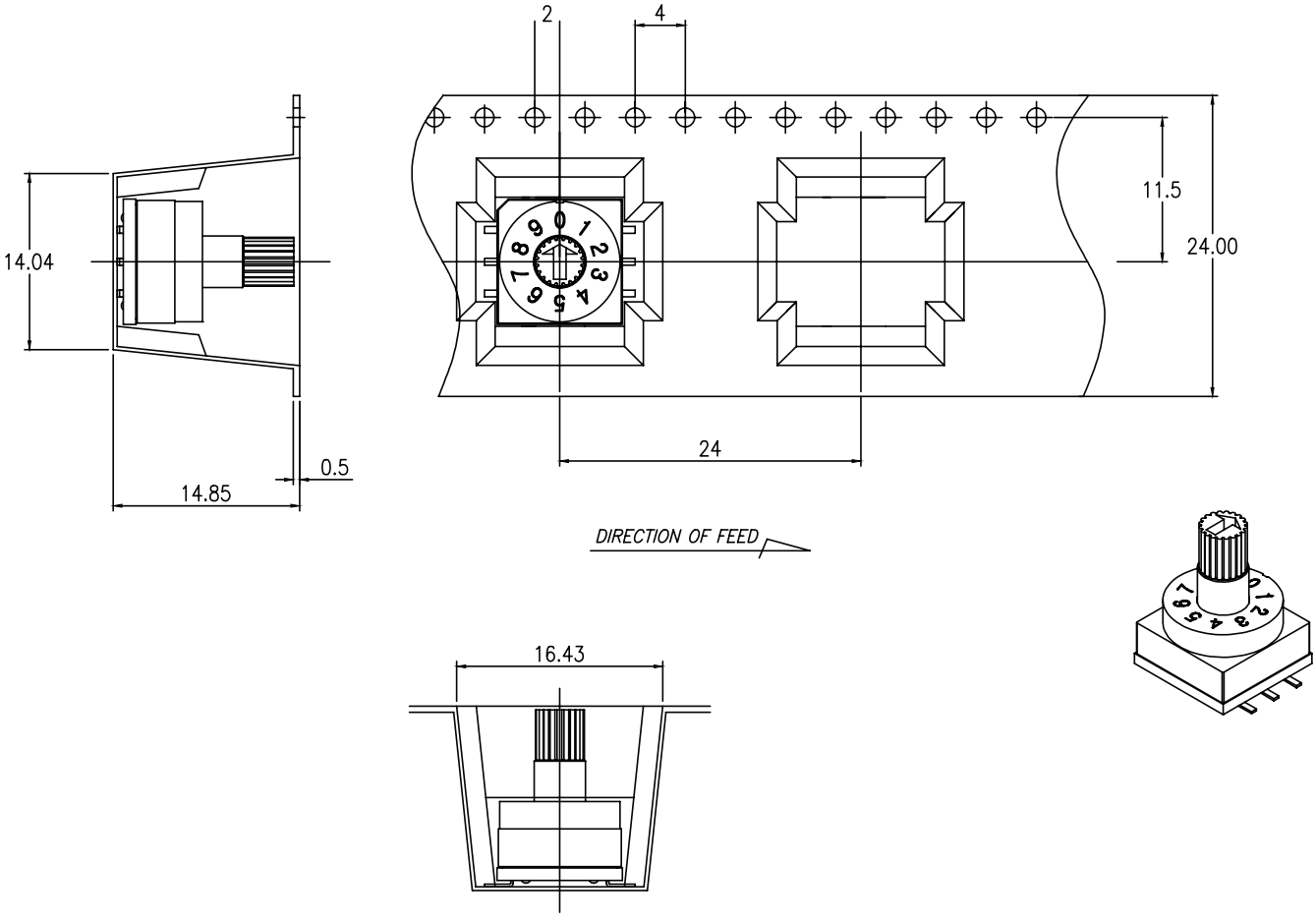
| parameter | conditions/description | min | typ | max | units |
|---|---|---|---|---|---|
| hand soldering | for maximum 3 seconds | | | 350 | °C |
| reflow soldering | | | | 260 | °C |




## PACKAGING

units: mm

Reel Size: Ø330 mm
Reel QTY: 180 pcs per reel



## REVISION HISTORY

| rev. | description | date |
|---|---|---|
| 1.0 | initial release | 05/31/2023 |
| 1.01 | CUI Devices rebranded to Same Sky | 09/12/2024 |

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

Same Sky offers a one (1) year limited warranty. Complete warranty information is listed on our website.

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.