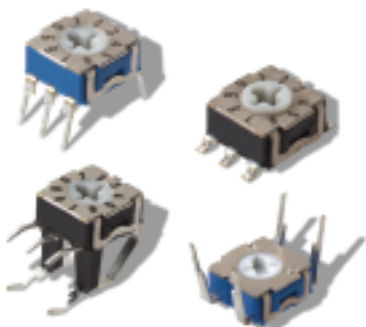


# C&K RTE Series Low Profile Rotary DIP Switches

DIP



## Features/Benefits

- Thru-hole and surface mount models
- Miniature size with robust stainless steel cover
- Rotary SPDT, SP3T, SP4T functions
- Rotary binary-decimal and hexadecimal coding
- RoHS compliant - options available

## Typical Applications

- Timers, automation components
- Computer and peripherals
- Alarms, access control
- Instrumentation

## Specifications

**CONTACT RATING:**  
Gold: 100 mA max. 10 $\mu$  A min. 30 V DC max. 20 mVDC min.  
Silver: 100 mA max. 1 mA min. 50 V DC max. 2 VDC min.

**MECHANICAL LIFE:** RTE02/03: 1,500 actuations; RTE04/10/16: 20,000 actuations

**CONTACT RESISTANCE:** 100 m $\Omega$  max. initial;  
150 m $\Omega$  after life

**INSULATION RESISTANCE:** RTE02/03: 10<sup>13</sup>  $\Omega$  min.  
RTE04/10/16: 10<sup>10</sup>  $\Omega$  min. initial

**DIELECTRIC STRENGTH:** RTE 02/03: 500 Vrms;  
RTE 10/16; 300 Vrms

**OPERATING TEMPERATURE:** -25°C to 85°C.  
**STORAGE TEMPERATURE:** -40°C to 85°C.

**PACKAGING:** N or R terminations in tube.  
V termination in box. G termination in reel, 750 pieces per reel. G termination with flush actuator, 1250 pieces per reel.

## Materials

**COVER & BASE:** Thermoplastic PPS  
**ACTUATOR:** PA Thermoplastic  
**KNOB:** Thermoplastic  
**MOVABLE CONTACTS:** Brass, gold or silver plated.  
**STATIONARY CONTACTS:** Brass, gold or silver plated.  
**TERMINALS:** See page I-24  
**O-RING:** Silicone

**NOTE:** For the latest information regarding RoHS compliance, please go to: [www.ittcannon.com/rohs](http://www.ittcannon.com/rohs).

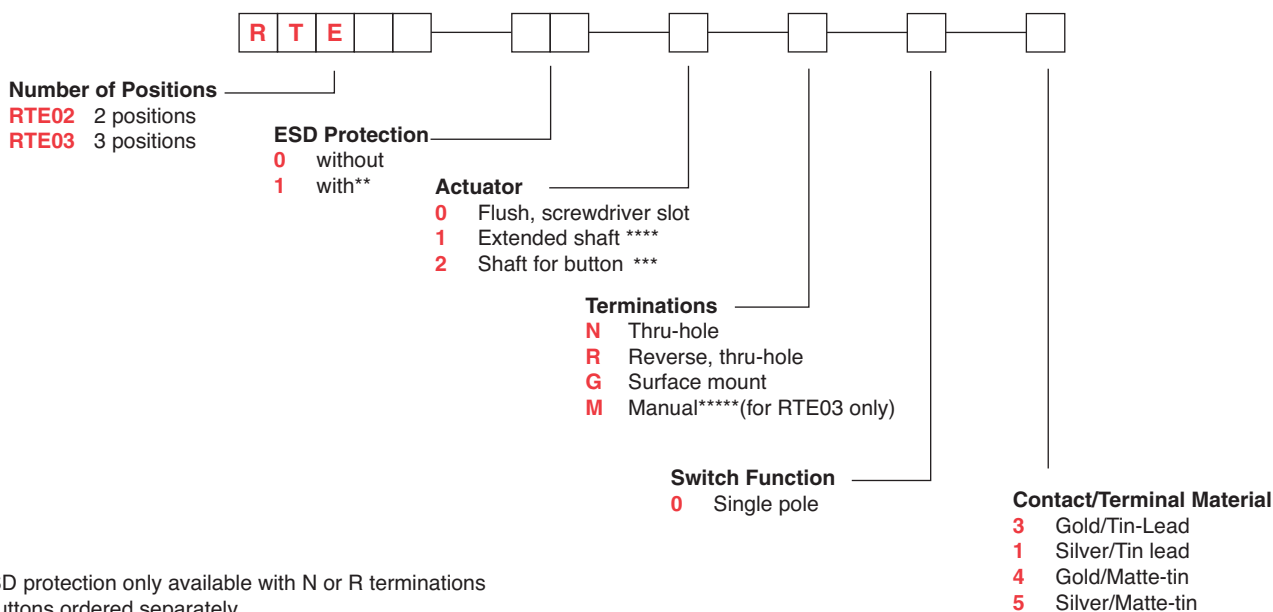
**Note:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Solderability: Wave soldering 260°/2s.

SMT are reflow compatible according to CECC 00802-NORM.

## How To Order

Our easy Build-A Switch concept allows you to mix and match options to create the switch you need. Below is a complete listing of options shown in catalog. To order, simply select desired option from each category and place in the appropriate box.



\*\* ESD protection only available with N or R terminations  
\*\*\* Buttons ordered separately  
\*\*\*\* Not available in surface mount.  
\*\*\*\*\* Only possible in combination with actuator option "2"

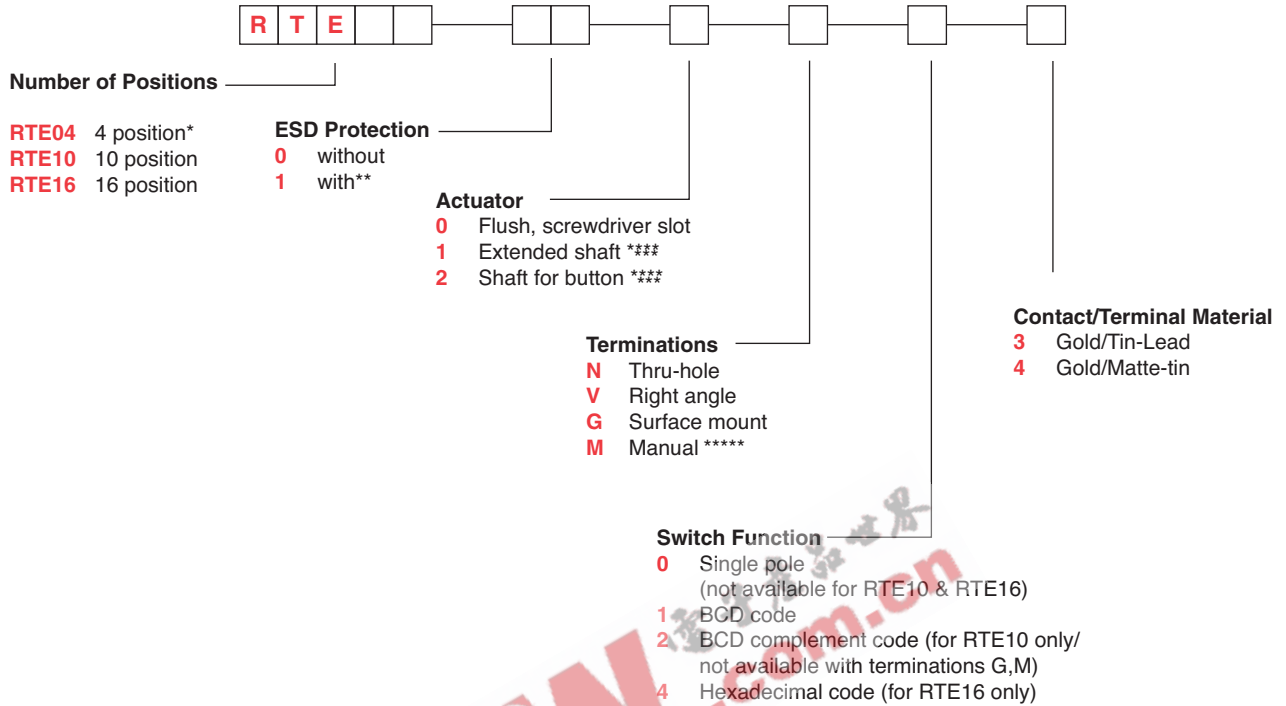


# C&K RTE Series Low Profile Rotary DIP Switches



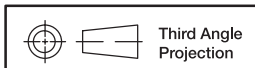
—

DIP



\* RTE04 version only available with screw driver slot acuator "0"  
 \*\* ESD protection only available with N termination  
 \*\*\* Buttons ordered separately  
 \*\*\*\* Not available in surface mount  
 \*\*\*\*\* Available with RTE 10, and RTE 16, with actuator option 2 only

Please note Gray code option available, consult ITT customer service for options and availability.



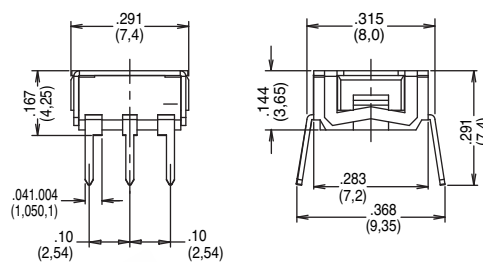
Dimensions are shown: Inch (mm)  
 Specifications and dimensions subject to change

# C&K RTE Series Low Profile Rotary DIP Switches

## SWITCHES WITH STANDARD OPTIONS

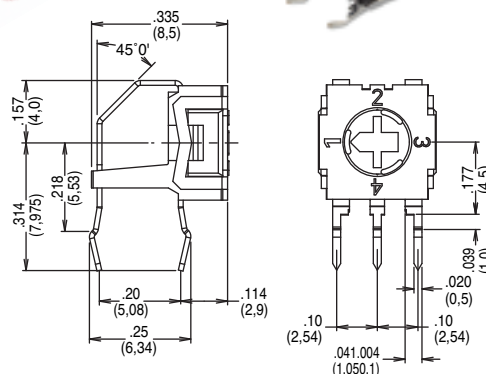
### PC Mount

| PART NUMBER WITHOUT ESD PIN | WITH ESD PIN      | NO. POS. | FUNCTION    | QTY PER TUBE |
|-----------------------------|-------------------|----------|-------------|--------------|
| <b>RTE0200N03</b>           | <b>RTE0210N03</b> | 2        | SPDT        | 65           |
| <b>RTE0300N03</b>           | <b>RTE0310N03</b> | 3        | SP3T        | 65           |
| <b>RTE0400N03</b>           | <b>RTE0400N03</b> | 4        | SP4T        | 65           |
| <b>RTE1000N13</b>           | <b>RTE1010N13</b> | 10       | BCD         | 65           |
| <b>RTE1600N43</b>           | <b>RTE1610N43</b> | 10       | HEXADECIMAL | 65           |



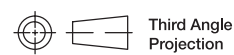
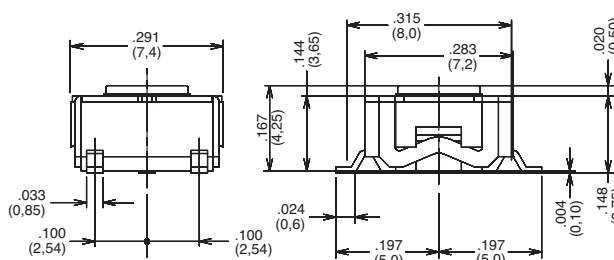
### Right Angle Mount

| PART NUMBER       | NO. POS. | FUNCTION    | QUANTITY    |
|-------------------|----------|-------------|-------------|
| <b>RTE0400V03</b> | 4        | SP4T        | 150 per box |
| <b>RTE1000V13</b> | 10       | BCD         | 150 per box |
| <b>RTE1600V43</b> | 16       | HEXADECIMAL | 150 per box |



### Surface Mount

| PART NUMBER       | NO. POS. | FUNCTION    | QUANTITY PER REEL |
|-------------------|----------|-------------|-------------------|
| <b>RTE0200G03</b> | 02       | SPDT        | 1250              |
| <b>RTE0300G03</b> | 03       | SPDT        | 1250              |
| <b>RTE0400G03</b> | 04       | SP4T        | 1250              |
| <b>RTE1000G13</b> | 10       | BCD         | 1250              |
| <b>RTE1600G43</b> | 16       | HEXADECIMAL | 1250              |

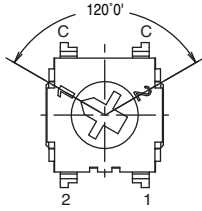


Dimensions are shown: Inch (mm)  
Specifications and dimensions subject to change

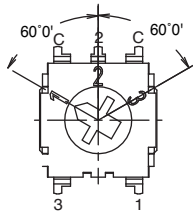
# C&K RTE Series Low Profile Rotary DIP Switches

## NUMBER OF POSITIONS

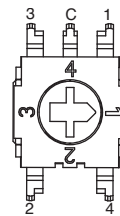
**RTE02\*** 2 POSITION



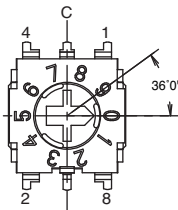
**RTE03\*** 3 POSITION



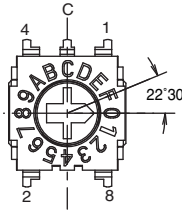
**RTE04** 4 POSITION



**RTE10** 10 POSITION

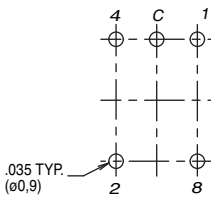
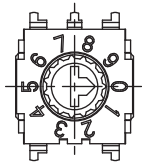


**RTE16** 16 POSITION

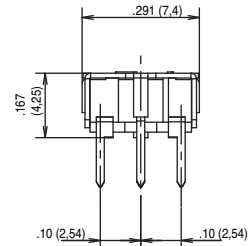
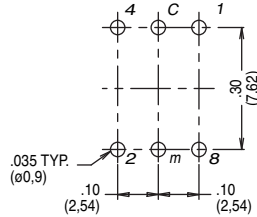
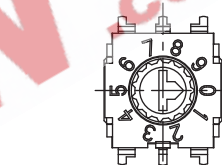
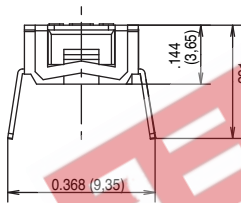


## ESD PROTECTION

**0** WITHOUT

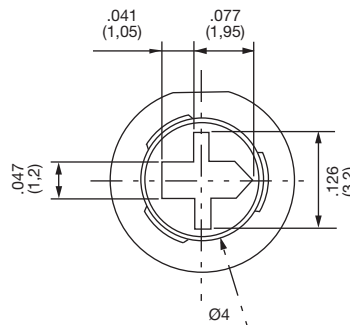


**1** WITH

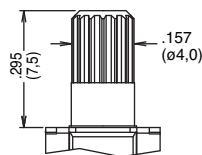


## ACTUATOR

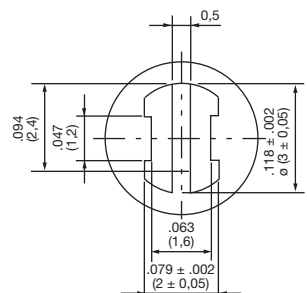
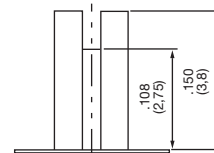
**0** FLUSH, SCREWDRIVER SLOT



**1** EXTENDED SHAFT  
(not available in surface mount)



**2** SHAFT FOR BUTTON

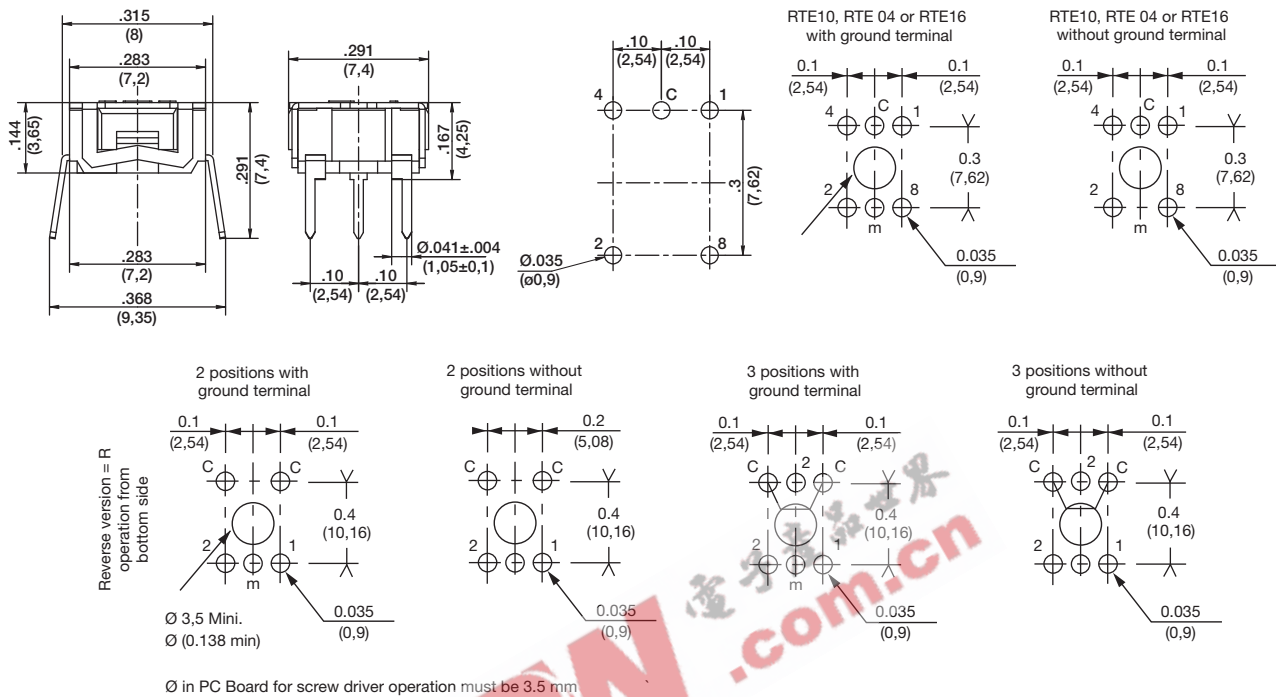


Dimensions are shown: Inch (mm)  
Specifications and dimensions subject to change

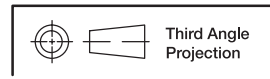
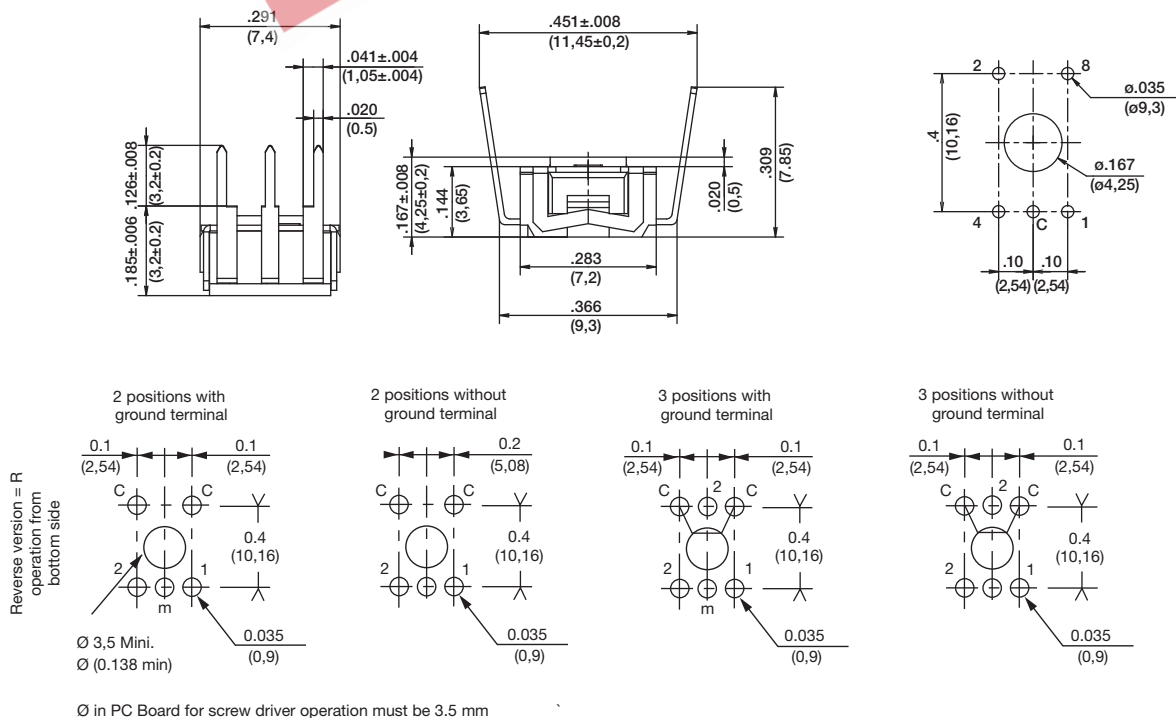
# C&K RTE Series Low Profile Rotary DIP Switches

## TERMINATIONS

**N** THRU-HOLE



**R** REVERSE, THRU-HOLE



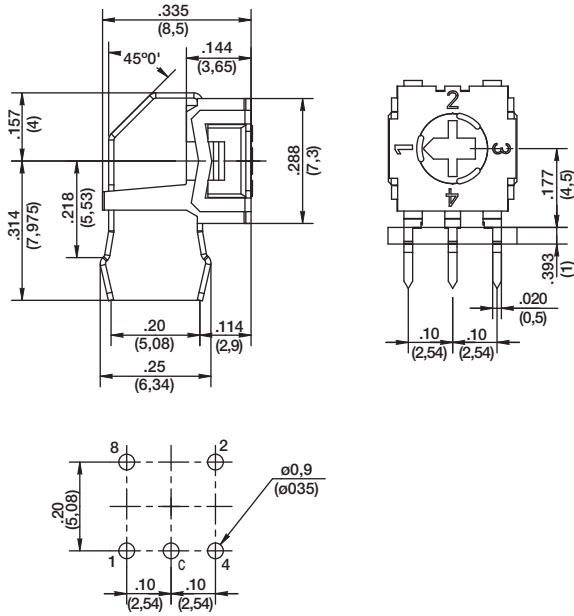
Dimensions are shown: Inch (mm)  
Specifications and dimensions subject to change



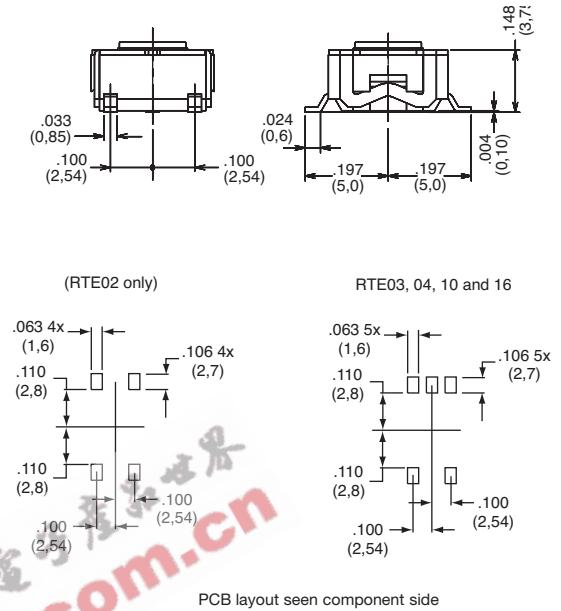
# C&K RTE Series Low Profile Rotary DIP Switches

## TERMINATIONS

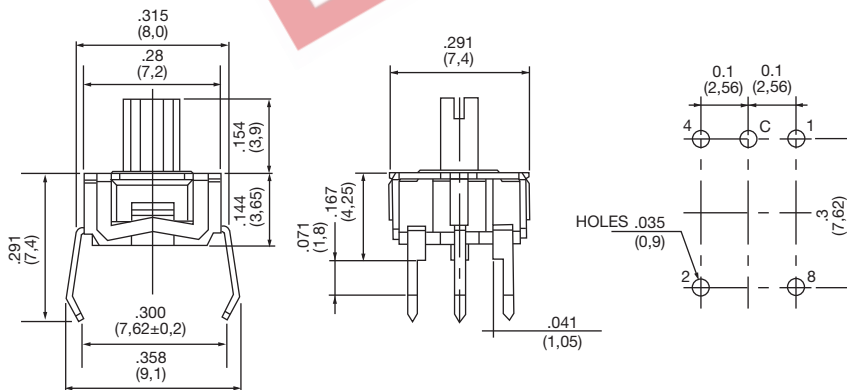
**V** RIGHT ANGLE, THRU-HOLE



**G** SURFACE MOUNT



**M** OPTION



Dimensions are shown: Inch (mm)  
Specifications and dimensions subject to change

# C&K RTE Series Low Profile Rotary DIP Switches

## SWITCH FUNCTION

### 0 SINGLE POLE

| POS. | 1 | 2 | 3 | 4 |
|------|---|---|---|---|
| C    | ● | ● | ● | ● |
| 1    | ● |   |   |   |
| 2    |   | ● |   |   |
| 3    |   |   | ● |   |
| 4    |   |   |   | ● |

### 1 BCD CODE

| POS. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------|---|---|---|---|---|---|---|---|---|---|
| C    | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 1    |   | ● |   | ● |   | ● |   | ● |   | ● |
| 2    |   |   | ● | ● |   |   | ● | ● |   |   |
| 4    |   |   |   |   | ● | ● |   | ● | ● |   |
| 8    |   |   |   |   |   |   |   |   | ● | ● |

### 2 BCD COMPLEMENT CODE

| POS. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------|---|---|---|---|---|---|---|---|---|---|
| C    | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 1    | ● |   |   |   | ● |   |   |   | ● |   |
| 2    |   | ● |   |   |   | ● |   |   |   | ● |
| 4    |   |   | ● |   |   |   | ● |   |   | ● |
| 8    |   |   |   | ● |   |   |   | ● |   | ● |

Other codes available by request.

### 4 HEXADECIMAL CODE

| POS. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|------|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| C    | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ●  | ●  | ●  | ●  | ●  | ●  |
| 1    |   | ● |   | ● |   | ● |   | ● |   | ● |    | ●  |    | ●  |    | ●  |
| 2    |   |   | ● | ● |   |   | ● | ● |   |   | ●  | ●  |    |    | ●  | ●  |
| 4    |   |   |   |   | ● | ● |   |   | ● | ● |    |    | ●  | ●  |    |    |
| 8    |   |   |   |   |   |   |   |   | ● | ● |    |    | ●  | ●  |    |    |

## CONTACT MATERIAL

| OPTION CODE | RoHS COMPLIANT * | RoHS COMPATIBLE * | CONTACT MATERIAL | TERMINAL PLATING | RATINGS     |            |              |
|-------------|------------------|-------------------|------------------|------------------|-------------|------------|--------------|
| <b>3</b>    | NO               | **                | GOLD             | TIN LEAD         | 100 mA max. | 10μ A min. | 30 V DC max. |
| <b>1</b>    | NO               | **                | SILVER           | TIN LEAD         | 100 mA max. | 1 mA min.  | 50 V DC max. |
| <b>*4</b>   | YES              | **                | GOLD             | MATTE TIN        | 100 mA max. | 10μ A min. | 30 V DC max. |
| <b>*5</b>   | YES              | **                | SILVER           | MATTE TIN        | 100 mA max. | 1 mA min.  | 50 V DC max. |

\* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

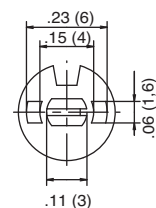
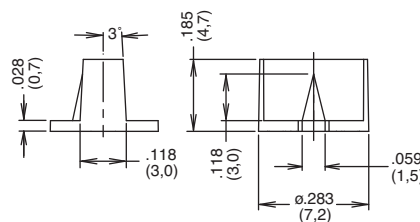
\*\* When selecting contact material option 4 and 5 with RTE02, RTE03 and or "V" terminations, these combinations are RoHS compliant but not compatible (i.e. they do not sustain the high temperatures of the leadfree soldering process). All other options and terminations are RoHS compatible. (Compliant with 4 and 5 contact material only).

## BUTTONS AVAILABLE

Buttons are ordered separately, shipped in bulk.

### Part Number Color

|                   |       |
|-------------------|-------|
| <b>BTN RTE 40</b> | Red   |
| <b>BTN RTE 50</b> | Green |
| <b>BTN RTE 90</b> | Black |



Dimensions are shown: Inch (mm)  
Specifications and dimensions subject to change

# C&K RTE Series Low Profile Rotary DIP Switches

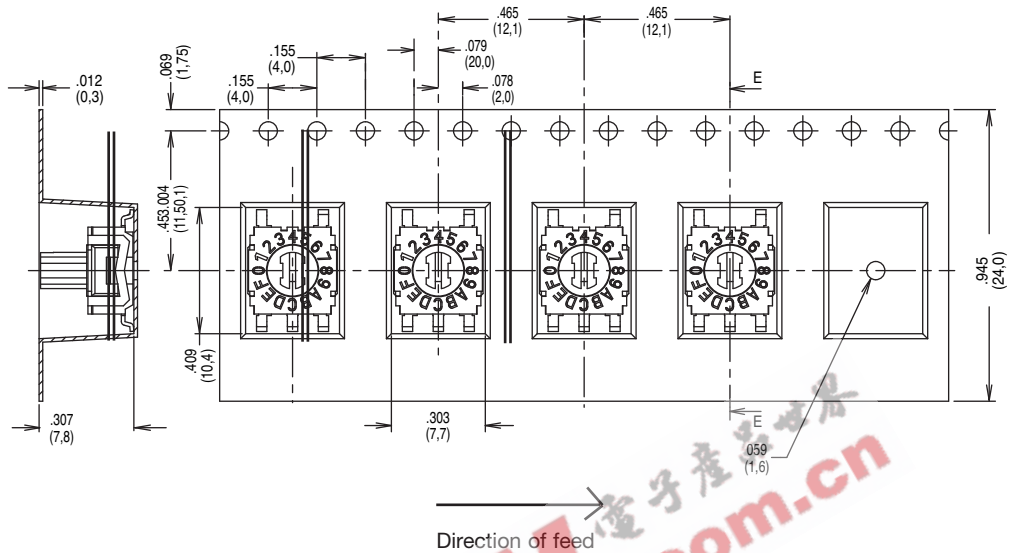
## TAPE AND REEL



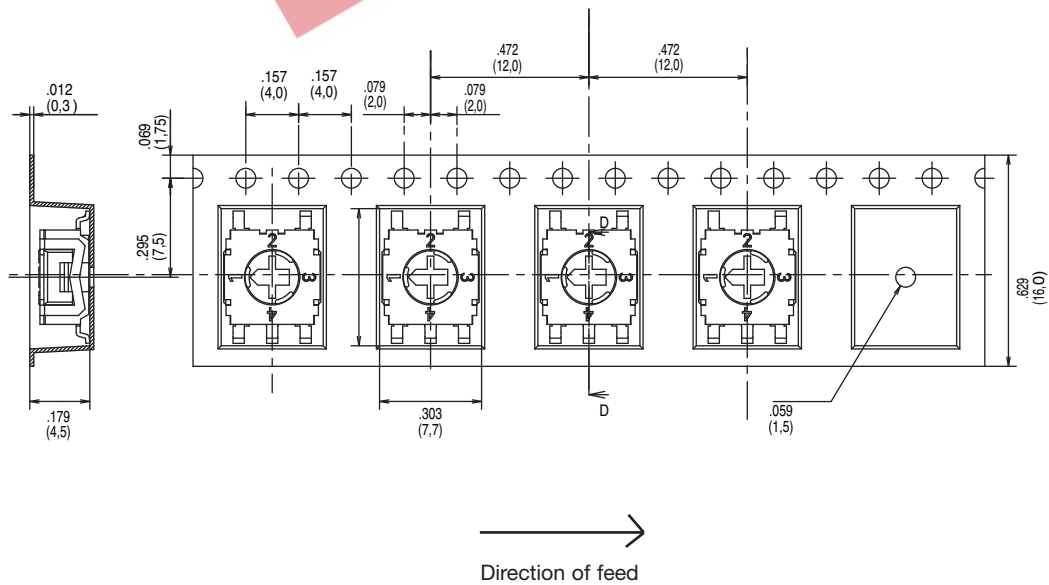
—

DIP

Tape and reel for RTExx02Gxx  
750 pieces per reel.



Tape and reel for RTExx00Gxx  
1,250 pieces per reel.



Note: Dimensions in:  $\frac{\text{inches}}{\text{mm}}$



Third Angle  
Projection

Dimensions are shown: Inch (mm)  
Specifications and dimensions subject to change

