

# CD Series

## 8mm DIP Coded Rotary Switches



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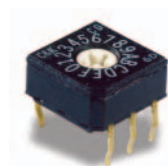
DIP

### Features/Benefits

- **Process sealed – withstands soldering and cleaning**
- **Thru-hole and surface mount models**
- **Compact size saves space – 36% smaller than traditional 10mm DIP**
- **Crisp, positive detent ensures actuation**
- **RoHS compliant**

### Typical Applications

- **Address switching applications**
- **Data storage devices**
- **Computer and peripherals**
- **Instrumentation**



### Specifications

CONTACT RATING: 0.4 VA max. @ 20 V AC or V DC max.

MECHANICAL AND ELECTRICAL LIFE:

CD10 & CD16: 20,000 actuations.

CD08: 12,000 actuations.

CONTACT RESISTANCE: 50 milliohms max. initial.

INSULATION RESISTANCE: 100 megohms min.  
@ 250 V AC min.

DIELECTRIC STRENGTH: 250 V RMS min. @ sea level.

OPERATING TEMPERATURE: -25°C to 85°C.

STORAGE TEMPERATURE: -40°C to 85°C.

SOLDERABILITY: Per MIL-STD-202F method 208D or EIA RS-186E, method 9 (1 hour steam aging).

PACKAGING: Switches supplied in rigid tubes in full-tube quantities only; this may affect order quantity. Tube quantity is 60 pieces per tube. Surface mount switches available in tape & reel packaging per EIA 481A, 800 per reel, "M0" actuator only.

### Materials

COVER: PPS (UL94V-0), Color; Black.

BASE: PPS (UL94V-0), Color; Black

ACTUATOR: LCP (UL 94V-0), Color White (CDXXR)  
Color Black (CDXXC)

Note: internal o-ring seal standard with all actuators.

MOVABLE CONTACTS: Copper alloy with gold plate over nickel plate.

STATIONARY CONTACTS: Copper alloy with gold plate over nickel plate.

TERMINALS: Copper alloy with gold plate over nickel plate.

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

### 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.

|                                                                                                                                                                                                                                  |  |                                                                                   |  |                                                                                                              |  |                                                                                   |  |                                                                                   |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|--|
| <div style="border: 1px solid black; padding: 2px; display: inline-block;">C D</div>                                                                                                                                             |  | <div style="border: 1px solid black; padding: 2px; display: inline-block;"></div> |  | <div style="border: 1px solid black; padding: 2px; display: inline-block;"></div>                            |  | <div style="border: 1px solid black; padding: 2px; display: inline-block;"></div> |  | <div style="border: 1px solid black; padding: 2px; display: inline-block;"></div> |  |
| <b>Switch Function</b><br><b>CD08R</b> 8 position, BCD<br><b>CD10R</b> 10 position, BCD<br><b>CD10C</b> 10 position, BCD complement<br><b>CD16R</b> 16 position, Hexadecimal<br><b>CD16C</b> 16 position, Hexadecimal complement |  | <b>Actuator</b><br><b>M0</b> Flush, screwdriver slot                              |  | <b>Terminations</b><br><b>A</b> Right Angle, PC Thru-hole<br><b>C</b> PC Thru-hole<br><b>S</b> Surface Mount |  | <b>Contact/Terminal Material</b><br><b>B</b> Gold/Gold                            |  | <b>Packaging</b><br><b>NONE</b> Tube<br><b>R</b> Tape & Reel (M0 actuator only)   |  |



Third Angle  
Projection

Dimensions are shown: Inch (mm)

Specifications and dimensions subject to change



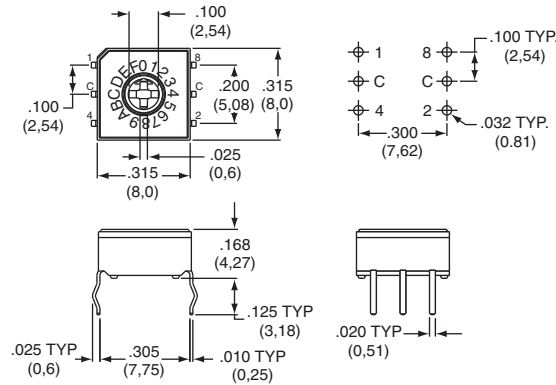
# CD Series 8mm DIP Coded Rotary Switches

## SWITCHES WITH STANDARD OPTIONS

### PC Mount



CD16RM0CB

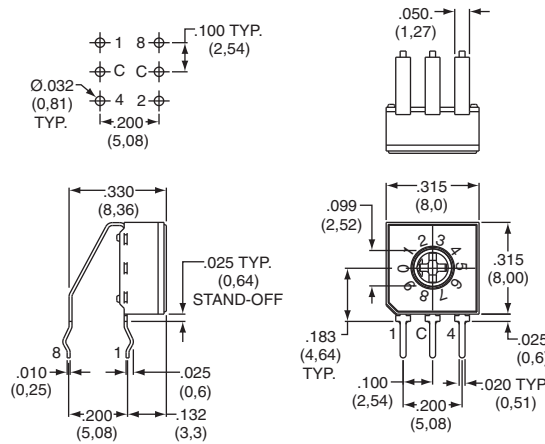


| PART NUMBER | NO. POS. | QUANTITY PER TUBE |
|-------------|----------|-------------------|
| CD08RM0CB   | 8        | 60                |
| CD10RM0CB   | 10       | 60                |
| CD16RM0CB   | 16       | 60                |

### Right Angle Mount



CD10RM0AB

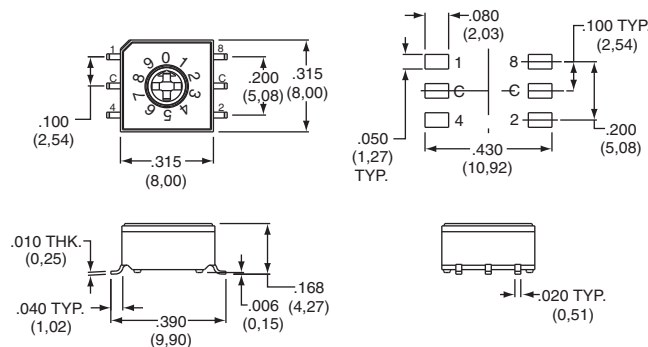


| PART NUMBER | NO. POS. | QUANTITY PER TUBE |
|-------------|----------|-------------------|
| CD08RM0AB   | 8        | 60                |
| CD10RM0AB   | 10       | 60                |
| CD16RM0AB   | 16       | 60                |

### Surface Mount



CD10RM0SB



| PART NUMBER | NO. POS. | QUANTITY PER TUBE |
|-------------|----------|-------------------|
| CD08RM0SB   | 8        | 60                |
| CD10RM0SB   | 10       | 60                |
| CD16RM0SB   | 16       | 60                |

Note: For tape and reel packaging, add 'R' to end of part number.



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



# CD Series

## 8mm DIP Coded Rotary Switches

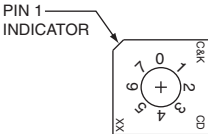


SWITCH FUNCTION



**CD08R** 8 POSITION, BCD  
ACTUATOR COLOR: WHITE

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



Switches ship and to be solder processed in position "0"

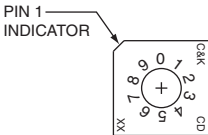
**CD10R** 10 POSITION, BCD  
ACTUATOR COLOR: WHITE

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

Switches ship and to be solder processed in position "0"

**CD10C** 10 POSITION, BCD COMPLEMENT  
ACTUATOR COLOR: BLACK

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



Switches ship and to be solder processed in position "7"

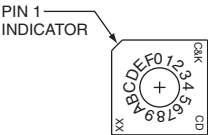
**CD16R** 16 POSITION, HEXADECIMAL  
ACTUATOR COLOR: WHITE

| POS. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C    | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 1    |   | ● |   | ● |   | ● |   | ● |   | ● |   | ● |   | ● |   | ● |
| 2    |   |   | ● |   | ● |   | ● |   | ● |   | ● |   | ● |   | ● |   |
| 4    |   |   |   | ● | ● | ● | ● |   |   |   |   | ● | ● | ● | ● |   |
| 8    |   |   |   |   |   |   |   | ● | ● | ● | ● | ● | ● | ● | ● | ● |

Switches ship and to be solder processed in position "0"

**CD16C** 16 POSITION, HEXADECIMAL COMPLEMENT  
ACTUATOR COLOR: BLACK

| POS. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C    | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 1    | ● |   | ● |   | ● |   | ● |   | ● |   | ● |   | ● |   | ● |   |
| 2    | ● | ● |   |   | ● | ● |   |   | ● | ● |   |   | ● | ● |   |   |
| 4    | ● | ● | ● | ● |   |   |   |   | ● | ● | ● | ● |   |   |   |   |
| 8    | ● | ● | ● | ● | ● | ● | ● | ● |   |   |   |   |   |   |   |   |



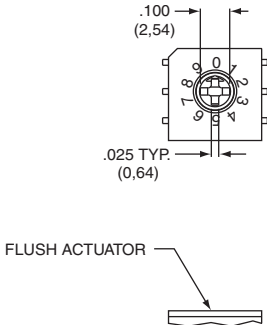
Switches ship and to be solder processed in position "F"



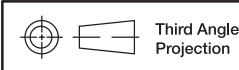
ACTUATOR



**M0** (STD.) FLUSH WITH SCREWDRIVER SLOT



NOTE: Designed for #0 Phillips screwdriver.

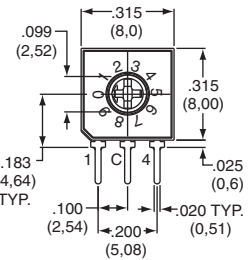
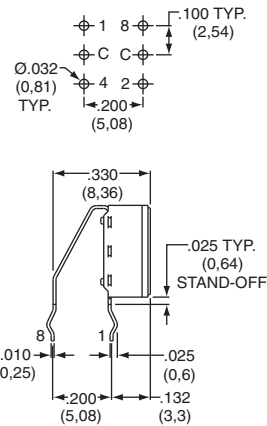


Dimensions are shown: Inch (mm)  
Specifications and dimensions subject to change



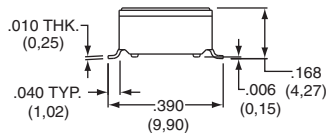


DIP

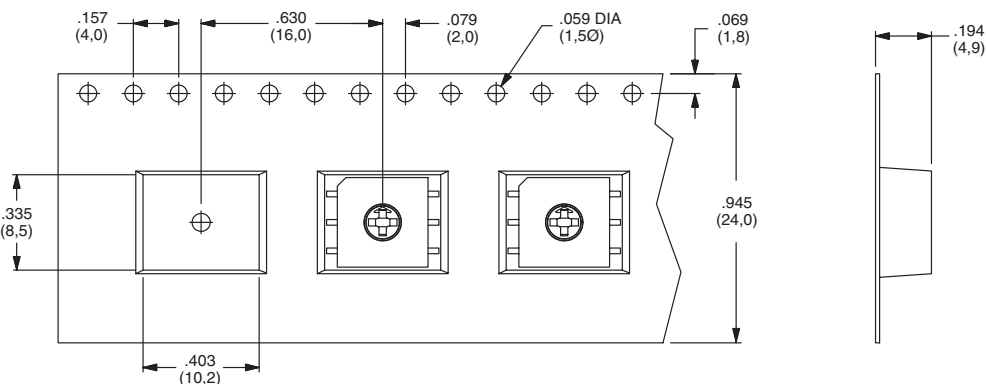


Technical drawing of a rectangular component with dimensions and tolerances:

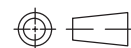
- Top width:  $.080$  (2,03)
- Top right corner radius:  $.100$  TYP. (2,54)
- Left side height:  $.050$  (1,27) TYP.
- Bottom width:  $.430$  (10,92)
- Bottom right corner radius:  $.200$  (5,08)
- Bottom center feature:  $.020$  TYP. (0,51)



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



|                  |               |
|------------------|---------------|
| Outside diameter | 13.00 (333,0) |
| Pilot hole       | .512 (13,0)   |



### Third Angle Projection

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