

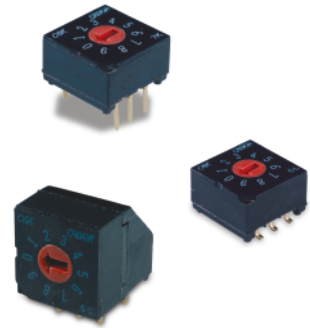
# CRD Series 10mm DIP Coded Rotary Switches

## Features/Benefits

- **Process sealed – withstands soldering and cleaning**
- **Thru-hole and surface mount models**
- **Crisp, positive detent ensures actuation**
- **Computer and peripherals**
- **RoHS compliant**

## Typical Applications

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



H

DIP

## Specifications

CONTACT RATING: 0.4 V AC, DC 20 V max.  
ELECTRICAL LIFE: 20,000 steps min. @ 5 V DC 10 mA.  
MECHANICAL LIFE: 30,000 steps min.  
CONTACT RESISTANCE: 100 milliohms max. initial @ 2 V DC 10 mA.  
INSULATION RESISTANCE: 1000 megohms min. @ 100 V DC  
DIELECTRIC STRENGTH: 300 V AC for 1 minute.  
OPERATING TEMPERATURE: -20°C to 85°C.  
STORAGE TEMPERATURE: -40°C to 85°C.  
OPERATING FORCE: 1000 grams max.  
PACKAGING: Switches supplied in anti-static tubes in full quantities only. This may affect order quantity. Surface mount models with MO actuators available in tape and reel, 500 pieces per reel.

## Materials

COVER: PPS (black)  
HOUSING: PPS (black)  
ACTUATOR: PA 6T M0 actuator option; PBT L1 and W1 actuator option.  
CONTACTS: Beryllium Copper with Gold over Nickel plate  
TERMINALS: Brass with Gold 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

The 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;"> <b>C</b> <b>R</b> <b>D</b>    <span style="border: 1px solid black; padding: 2px 10px;"> </span> <span style="border: 1px solid black; padding: 2px 10px;"> </span> <span style="border: 1px solid black; padding: 2px 10px;"> </span> </div> |  | <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; padding: 2px 10px;"> </span> <span style="border: 1px solid black; padding: 2px 10px;"> </span> </div> |  | <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; padding: 2px 10px;"> </span> </div> |  | <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; padding: 2px 10px;"> </span> </div> |  | <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <span style="border: 1px solid black; padding: 2px 10px;"> </span> </div> |  |
| <b>Switch Function</b><br><b>CRD10R</b> 10 position, BCD<br><b>CRD10C</b> 10 position, BCD complement<br><b>CRD16R</b> 16 position, Hexadecimal<br><b>CRD16C</b> 16 position, Hexadecimal complement                                                                                                                      |  | <b>Actuator</b><br><b>M0</b> Flush, screwdriver slot<br><b>L1*</b> Extended, screwdriver slot<br><b>W1*</b> Wheel                                                                                                        |  | <b>Terminations</b><br><b>A</b> Right angle, PC thru-hole<br><b>C</b> PC Thru-hole<br><b>S</b> Gull wing                                              |  | <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<br>(M0 actuator only)                                                                  |  |

\* Note - L1 and W1 actuators are not available in termination "S"



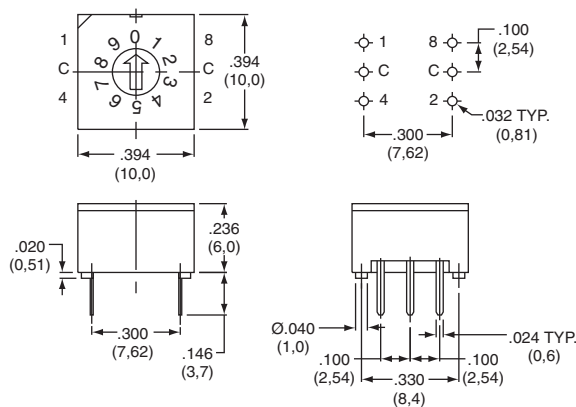
Dimensions are shown: Inch (mm)  
Specifications and dimensions subject to change

# CRD Series

## 10mm DIP Coded Rotary Switches

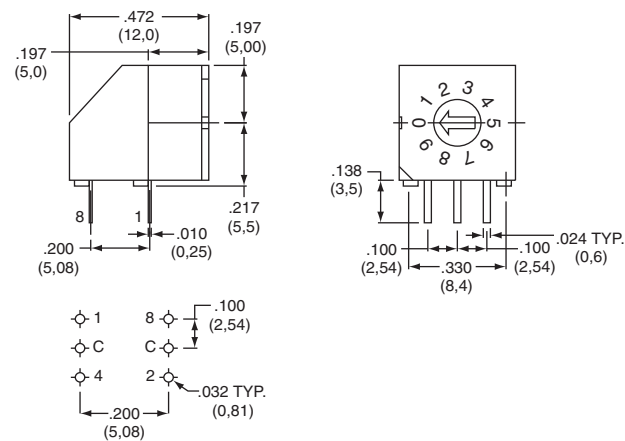
### SWITCHES WITH STANDARD OPTIONS

#### PC Mount



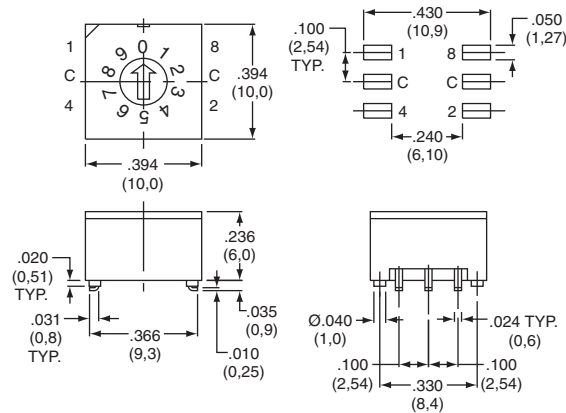
| PART NUMBER       | NO. POS. | QUANTITY PER TUBE |
|-------------------|----------|-------------------|
| <b>CRD10RM0CB</b> | 10       | 45                |
| <b>CRD16RM0CB</b> | 16       | 45                |

#### Right Angle Mount



| PART NUMBER       | NO. POS. | QUANTITY PER TUBE |
|-------------------|----------|-------------------|
| <b>CRD10RM0AB</b> | 10       | 45                |
| <b>CRD16RM0AB</b> | 16       | 45                |

#### Surface Mount



| PART NUMBER       | NO. POS. | QUANTITY PER TUBE |
|-------------------|----------|-------------------|
| <b>CRD10RM0SB</b> | 10       | 45                |
| <b>CRD16RM0SB</b> | 16       | 45                |



Third Angle  
Projection

# CRD Series 10mm DIP Coded Rotary Switches

## SWITCH FUNCTION



### CRD10R

10 POSITION, BCD  
ACTUATOR COLOR: RED

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

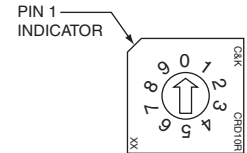
Switches ship and to be solder processed in position "0"

### CRD10C

10 POSITION, BCD COMPLEMENT  
ACTUATOR COLOR: ORANGE

| 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"



### CRD16R

16 POSITION, HEXADECIMAL  
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    |   |   |   |   |   |   |   | ● | ● | ● | ● | ● | ● | ● | ● | ● |

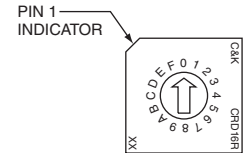
Switches ship and to be solder processed in position "0"

### CRD16C

16 POSITION, HEXADECIMAL COMPLEMENT  
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    | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

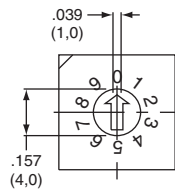
Switches ship and to be solder processed in position "F"



## ACTUATOR



(STD.) FLUSH WITH SCREWDRIVER SLOT

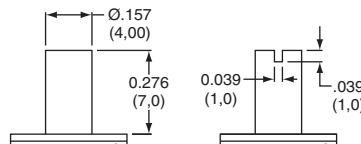
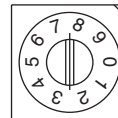


FLUSH ACTUATOR



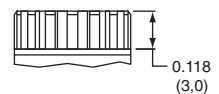
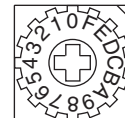
### L1\*

EXTENDED WITH SCREWDRIVER SLOT



### W1\*

WHEEL



**NOTE:** Designed for #0 Phillips screwdriver.

\* L1 and W1 actuators are not available in termination "S"



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



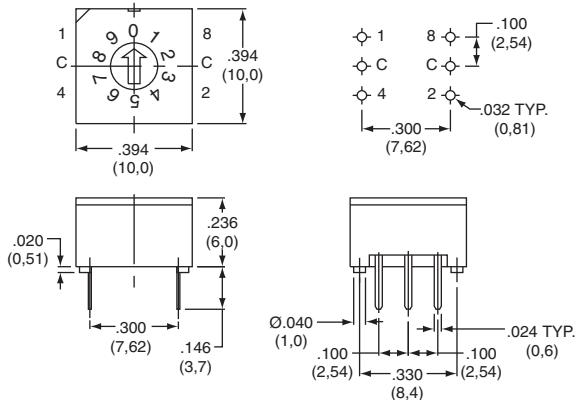
# CRD Series

## 10mm DIP Coded Rotary Switches

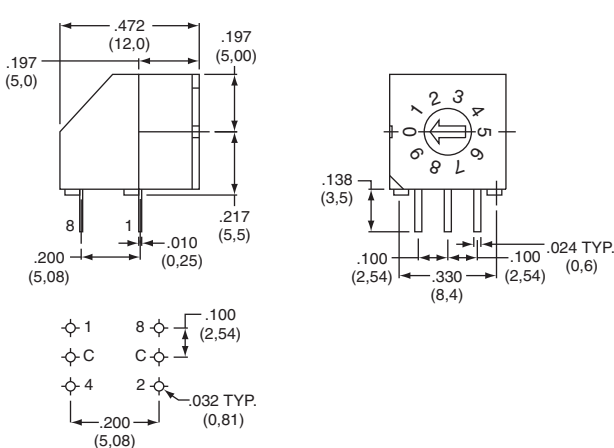
### TERMINATIONS



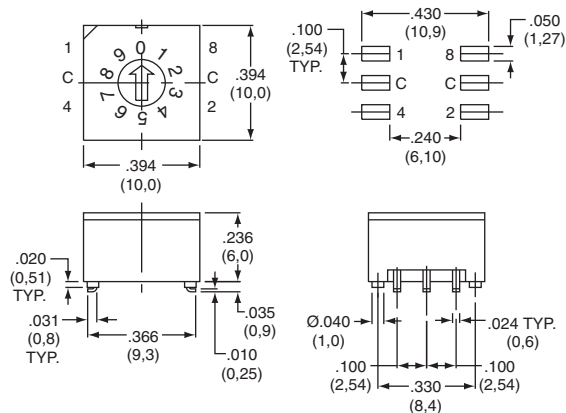
#### C PC, THRU-HOLE



#### A RIGHT ANGLE, PC THRU-HOLE



#### S SURFACE MOUNT



#### M0

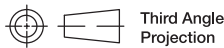
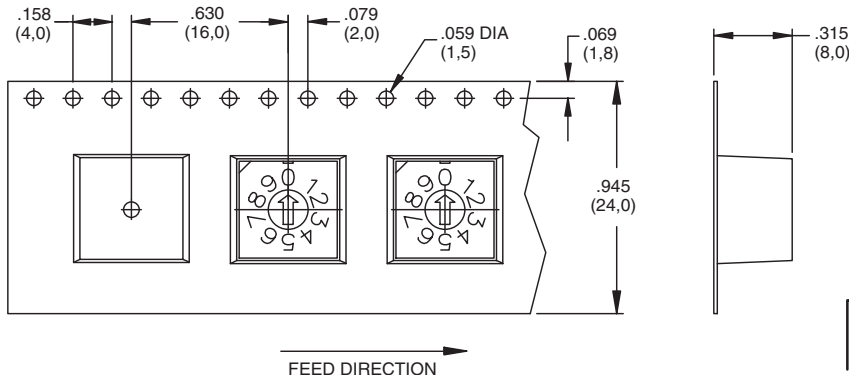
### CONTACT MATERIAL



| OPTION CODE | RoHS COMPLIANT* | RoHS COMPATIBLE* | CONTACT MATERIAL | TERMINAL PLATING | RATING                |                                  |
|-------------|-----------------|------------------|------------------|------------------|-----------------------|----------------------------------|
| B           | YES             | YES              | GOLD             | GOLD             | LOW LEVEL/DRY CIRCUIT | 0.4 VC MAX. @ 20 V AC or DC MAX. |

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

### TAPE & REEL



Third Angle Projection

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



# Mouser Electronics

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[CRD16RM0SK](#) [CRD16RM0CK](#) [CRD16CM0CK](#) [CRD16CM0SK](#) [CRD16CM0AK](#) [CRD10CM0AB](#) [CRD10CM0CB](#)  
[CRD10CM0SB](#) [CRD10RM0AB](#) [CRD10RM0CB](#) [CRD10RM0SB](#) [CRD16CM0AB](#) [CRD16CM0CB](#) [CRD16CM0SB](#)  
[CRD16RM0AB](#) [CRD16RM0CB](#) [CRD16RM0SB](#) [CRD10RW1AK](#) [CRD10RW1AB](#) [CRD10CM0SBR](#) [CRD10RM0SBR](#)  
[CRD16CM0SBR](#) [CRD16RM0SBR](#) [CRD10RL1AB](#) [CRD10RL1CB](#) [CRD16RL1AB](#) [CRD16CL1AB](#) [CRD10CL1CB](#)  
[CRD16RL1CB](#) [CRD10RW1CB](#) [CRD16CW1CB](#) [CRD16CW1AB](#) [CRD16RW1CB](#) [CRD16RW1AB](#)