# SMR•SMRR 

Hyper－Miniature Dip Rotary Switches（7．5mm sq．）〔Surface Mount〕

## Features

1．Hyper－miniature Size（ 7.5 mm sq．）
Designed for high density mounting．
2．Process Sealed
3．Gold Plated Contacts
4．Clearly Visible Legends and Position Indicator

Specifications

| Rating | Switching | Max． |
| :--- | :--- | :--- |
|  |  | Min． |
|  | Non－switching $1 \mu \mathrm{~mA} 20 \mathrm{mVDC}$ |  |
|  | 100 mA 50 VDC |  |
| Contact resistance | $100 \mathrm{~m} \Omega$ maximum |  |
| Dielectric strength | $250 \mathrm{VAC}, 60 \mathrm{~s}$ |  |
| Insulation resistance | $1,000 \mathrm{M} \Omega$ minimum（100VDC） |  |
| Load life | 20,000 steps 30mA 15VDC |  |
| Operating torque | $49 \mathrm{mN} \cdot \mathrm{m} 〔 500 \mathrm{gf} \cdot \mathrm{cm} 〕$ maximum |  |
| Operating temperature range | $-25 \sim+85^{\circ} \mathrm{C}$ |  |
| Storage temperature range | $-40 \sim+85^{\circ} \mathrm{C}$ |  |

Part Numberring


| None | Gull Wing |
| :---: | :---: |
| $\mathbf{R}$ | Right angle |



| $\mathbf{1 0}$ | 10 positions |
| :---: | :---: |
| $\mathbf{1 6}$ | 16 positions |
| $\mathbf{1}$ | Stick－Tube |
| $\mathbf{1 E}$ | Taping |

Table of Part Numbers


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## SMR8010C-1

## SMR8110C-1


(Gull Wing )

SMRR8010C-1(E) SMRR8110C-1(E)

(Right Angle)

SMR8016C-1
SMR8116C-1


SMRR8016C-1(E) SMRR8116C-1(E)

(Right Angle)


- Real code

| Actuator color: Yellow |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Part No. | Position | Terminal \# |  |  |  |
|  |  | 1 | 2 | 4 | 8 |
| $\begin{aligned} & \text { SMR8010C-1 } \\ & \text { SMRR8010C-1(E) } \end{aligned}$ | 0 |  |  |  |  |
|  | 1 | - |  |  |  |
|  | 2 |  | $\bullet$ |  |  |
|  | 3 | - | $\bullet$ |  |  |
|  | 4 |  |  | $\bullet$ |  |
|  | 5 | - |  | $\bullet$ |  |
|  | 6 |  | $\bullet$ | $\bullet$ |  |
|  | 7 | - | $\bullet$ | $\bullet$ |  |
|  | 8 |  |  |  | $\bullet$ |
|  | 9 | $\bullet$ |  |  | $\bigcirc$ |


| Actuator color: Red |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Part No. | Position | Terminal \# |  |  |  |
|  |  | 1 | 2 | 4 | 8 |
| $\begin{aligned} & \text { SMR8110C-1 } \\ & \text { SMRR8110C-1(E) } \end{aligned}$ | 0 | - | $\bullet$ | - | $\bullet$ |
|  | 1 |  | $\bullet$ | - | $\bullet$ |
|  | 2 | - |  | $\bullet$ | $\bullet$ |
|  | 3 |  |  | - | $\bullet$ |
|  | 4 | - | $\bullet$ |  | $\bullet$ |
|  | 5 |  | $\bullet$ |  | $\bullet$ |
|  | 6 | - |  |  | $\bullet$ |
|  | 7 |  |  |  | $\bullet$ |
|  | 8 | - | $\bullet$ | $\bullet$ |  |
|  | 9 |  | $\bullet$ | $\bullet$ |  |

Real code

| Actuator color: Yellow |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Part No. | Position | Terminal \# |  |  |  |
|  |  | 1 | 2 | 4 | 8 |
| SMR8016C-1 SMRR8016C-1(E) | 0 |  |  |  |  |
|  | 1 | - |  |  |  |
|  | 2 |  | $\bullet$ |  |  |
|  | 3 | - | $\bullet$ |  |  |
|  |  |  |  | - |  |
|  | 5 | - |  | $\bullet$ |  |
|  | 6 |  | $\bullet$ | $\bullet$ |  |
|  | 7 | - | $\bullet$ | $\bullet$ |  |
|  | 8 |  |  |  | $\bullet$ |
|  | 9 | - |  |  | $\bullet$ |
|  | A |  | $\bullet$ |  | $\bullet$ |
|  | B | - | $\bullet$ |  | $\bullet$ |
|  | C |  |  | - | $\bullet$ |
|  | D | - |  | - | $\bullet$ |
|  | E |  | - | - | $\bullet$ |
|  | F | - | $\bullet$ | $\bullet$ | $\bigcirc$ |

Complementary code

| Actuator color: Red |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Part No. | Position | Terminal \# |  |  |  |
|  |  | 1 | 2 | 4 | 8 |
| SMR8116C-1 <br> SMRR8116C-1(E) | 0 | - | - | - | $\bullet$ |
|  | 1 |  | - | - | $\bullet$ |
|  | 2 | $\bullet$ |  | - | $\bullet$ |
|  | 3 |  |  | - | $\bullet$ |
|  | 4 | - | $\bullet$ |  | $\bullet$ |
|  | 5 |  | - |  | $\bullet$ |
|  | 6 | - |  |  | $\bullet$ |
|  | 7 |  |  |  | $\bullet$ |
|  | 8 | - | - | $\bullet$ |  |
|  | 9 |  | - | $\bullet$ |  |
|  | A | $\bullet$ |  | $\bullet$ |  |
|  | B |  |  | - |  |
|  | C | - | $\bullet$ |  |  |
|  | D |  | $\bullet$ |  |  |
|  | E | $\bullet$ |  |  |  |
|  | F |  |  |  |  |

PCB Footprints
(Top view)
Terminal style $\quad$ Gull Wing

## Soldering Specifications

(1) Manual Soldering
$350^{\circ} \mathrm{C}, 3 \mathrm{sec}$. Max.
(2) Reflow

Peak temperature $255^{\circ} \mathrm{C}$ (Please refer to the profile below.)


Reflow soldering: 2 times max.

Flux Cleaning
After soldering, wait until the switches cool down to room temperature $\left(30^{\circ} \mathrm{C}\right.$ or below) before washing. If the switches are cleaned while still above $30^{\circ} \mathrm{C}$, a vacuum will occur which will cause the cleaning solution to be sucked into the switches.

Packaging Specifications
Series

Taping quantity: SMR series 1,000 pcs / reel, SMRR series $500 \mathrm{pcs} /$ reel.
Each reel is packed in a cardboard box.

- Minimum packaging quantity: Stick-Tube 50pcs, Taping 500pcs or 1,000pcs (refer to Packaging Specifications)


[^0]:    $\star$ ：Made－to－order products．

