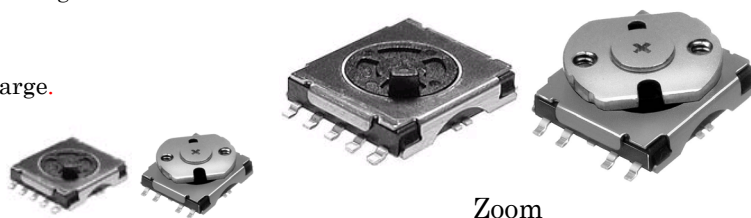


# Body height 2.45mm, Compact-sized Surface-mounting Type Encoders

## SSS-32MD Type

### Features

- ◇With 11x11.5mm dimension and 2.45mm height, these surface-mounting type encoders are ideal for high-density mounting.
- ◇A small encoder for setting the program codes of various digital circuits.
- ◇Permits reflow soldering.
- ◇Encoders are packaged in 24mm wide embossed taping.
- ◇Available with ground terminal for electrostatic discharge.
- ◇No click feeling type is also available.



### Applications

- ◇Digital still camera and digital video camera
- ◇Applicable as a timer switch for VCRs, audio equipment household electric appliances.

### Products Line

No	Products No.	Ground terminal	Standard codes	Positions	Step angle	Qty / reel(pcs.)
1	SSS-32MD-T9	Without	No.1	8	45 degree	900
2	SSS-32MD-GT9	With				
3	SSS-32MD-1-T9	Without				
4	SSS-32MD-1-GT9	With				
5	SSS-32MD-11-T9	Without	No.2			
6	SSS-32MD-11-GT9	With				

No click feeling type is also available for all the above types.

Concerning the Standard codes of the above products, please see the chart in the next page.

### Typical Specifications

Item	Specifications
Ratings (max.) (Resistive load)	1mA 5V DC (max.0.1A 15V DC)
Contact resistance	200 milliohm max. (Initial)
Insulation resistance	100 megohm min. 100V DC
Withstanding voltage	100V AC for 1 minute
Torque	1.3 N-cm (No click feeling type : < 0.4 N-cm)
Operating life	10,000 cycles
Operating temperature range	-20 to +70 degree Celsius
Storage temperature range	-40 to +85 degree Celsius (except carrier tape)

□ Standard codes

◇No.1

	Position							
	1	2	3	4	5	6	7	8
C-1					0	0		
C-2	0							0
C-3	0	0	0					
C-4			0	0	0			

The 0 marks show the ON position.

◇No.2

	Position							
	1	2	3	4	5	6	7	8
C-1					0			
C-2	0							0
C-3	0	0	0					
C-4			0	0	0			

The 0 marks show the ON position.

Output position of 6 and 7 are exactly same.(All OFF status)

□ Dimensions

Unit : mm

No	Style	P.C.B reference Land Dimensions Circuit Diagram (TOP VIEW)
1	<p>SSS-32MD-T9</p> <p>Terminal No.1</p> <p>8-45°</p> <p>1.55<sup>+0.07</sup>/<sub>+0.02</sub></p> <p>1.1<sup>+0.02</sup>/<sub>-0.01</sub></p> <p>(3) 3.5<sup>±0.1</sup></p> <p>2 - M1.7 P=0.35</p> <p>8<sup>±0.05</sup></p> <p>11.5</p> <p>0.7</p> <p>2.2 2.2 2.2</p> <p>9<sup>0</sup>/<sub>-0.2</sub></p> <p>4.5</p> <p>11</p> <p>MAX 1</p> <p>4.3<sup>+0.2</sup>/<sub>0</sub></p> <p>0.8</p> <p>0.8<sup>0</sup>/<sub>-0.05</sub></p> <p>1.2<sup>0</sup>/<sub>-0.05</sub></p> <p>8<sup>±0.05</sup></p> <p>14</p> <p>0.25</p> <p>2.45<sup>±0.1</sup></p> <p>0.4</p> <p>2. CO.15</p>	<p>0.9<sup>+0.1</sup>/<sub>0</sub></p> <p>1.3<sup>+0.1</sup>/<sub>0</sub></p> <p>8<sup>±0.05</sup></p> <p>11.5</p> <p>15.3</p> <p>9-1.5<sup>±0.1</sup></p> <p>2.2</p> <p>4</p> <p>4</p> <p>① ④</p> <p>② ③</p> <p>C</p> <p>CIRCUIT</p>
<p>The above drawings represent position 1, depending on the counter clockwise revolving of rotary plate by 45, the position changes one by one from 1 to 2,3....</p>		

Dimensions

Unit : mm

No	Style	P.C.B reference Land Dimensions Circuit Diagram (TOP VIEW)
2	<p>SSS-32MD-GT9</p> <p>The above drawings represent position 1, depending on the counter clockwise revolving of rotary plate by 45, the position changes one by one from 1 to 2,3....</p>	<p>CIRCUIT</p>
3	<p>SSS-32MD-1-T9</p> <p>The above drawings represent position 1, depending on the counter clockwise revolving of rotary plate by 45, the position changes one by one from 1 to 2,3....</p>	<p>CIRCUIT</p>

Dimensions

Unit : mm

No	Style	P.C.B reference Land Dimensions Circuit Diagram (TOP VIEW)
4	<p>SSS-32MD-1-GT9</p> <p>Terminal No1</p> <p>8-45°</p> <p>11.5</p> <p>0.7</p> <p>2.2</p> <p>2.2</p> <p>2.2</p> <p>2.2</p> <p>2.2</p> <p>2.2</p> <p>7.5</p> <p>11</p> <p>2.5</p> <p>3.0</p> <p>1.05</p> <p>0.6</p> <p>1.2</p> <p>0.8</p> <p>0.8</p> <p>0.8</p> <p>1.2</p> <p>0.25</p> <p>0.4</p> <p>3.4</p> <p>1</p> <p>2.45</p> <p>0.15</p> <p>2-C0.15</p> <p>(6.5)</p> <p>8</p> <p>(9.5)</p> <p>14</p> <p>Ground terminal</p>	<p>0.9</p> <p>1.6</p> <p>10.3</p> <p>5.7</p> <p>9-1.5</p> <p>1.6</p> <p>4.8</p> <p>4.8</p> <p>1.6</p> <p>8</p> <p>11.5</p> <p>15.3</p> <p>1.3</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>C</p> <p>CIRCUIT</p>
5	<p>SSS-32MD-11-T9</p> <p>Terminal No1</p> <p>8-45°</p> <p>11.5</p> <p>0.7</p> <p>2.2</p> <p>2.2</p> <p>2.2</p> <p>2.2</p> <p>2.2</p> <p>7.5</p> <p>11</p> <p>2.5</p> <p>3.0</p> <p>1.05</p> <p>0.6</p> <p>1.2</p> <p>0.8</p> <p>0.8</p> <p>0.8</p> <p>1.2</p> <p>0.25</p> <p>0.4</p> <p>3.4</p> <p>1</p> <p>2.45</p> <p>0.15</p> <p>2-C0.15</p> <p>(6.5)</p> <p>8</p> <p>(9.5)</p> <p>14</p> <p>Ground terminal</p>	<p>0.9</p> <p>1.6</p> <p>10.3</p> <p>5.7</p> <p>9-1.5</p> <p>1.6</p> <p>4.8</p> <p>4.8</p> <p>1.6</p> <p>8</p> <p>11.5</p> <p>15.3</p> <p>1.3</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>C</p> <p>CIRCUIT</p>

The above drawings represent position 1, depending on the counter clockwise revolving of rotary plate by 45, the position changes one by one from 1 to 2,3....

The above drawings represent position 5, depending on the clockwise revolving of rotary plate by 45, the position changes one by one from 5 to 6,7....

Dimensions

Unit : mm

No	Style	P.C.B reference Land Dimensions Circuit Diagram (TOP VIEW)
6	<p>SSS-32MD-11-GT9</p> <p>The above drawings represent position 5, depending on the clockwise revolving of rotary plate by 45, the position changes one by one from 5 to 6,7....</p>	<p>CIRCUIT</p>

Notes

1. The appearance and specifications of the product may be modified to improve its performance without prior notice.
2. This catalog shows only outline specifications. When using the product, please obtain formal specifications.
3. Please see appendix [Cautions in Using Switches].
4. 900pcs/one reel is the minimum packing unit. It is requested that the quantity of order shall be an integer multiple of the minimum packing unit.
5. This push switch is not washable.
6. Care shall be taken so that the flux shall not attach at terminal portion and soldering flux shall not penetrate into the clearance at the root of the knob when soldering the dummy terminal.
7. Please set the reflow soldering condition confirming under the actual conditions of mass-production.
8. Characteristics of switch may change due to the warping of the circuit writing board. Consideration should be given to the pattern design and layout.
9. In manual soldering, consider that the abnormal pressure of the soldering iron shall not be applied to the tip of the terminal as well do not apply any pressure for more than 1 minute after soldering.
10. Consideration shall be taken to the chattering and bouncing in circuit design and soft setting.
11. The operating characteristic may change if force is exerted to the body of the switch.
12. Please confirm the performance on actual operation by simulation with actual environments for high reliability.