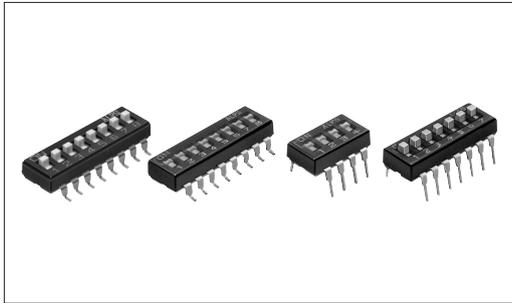


Dual In-line Package Type Switches 2 to 10 Circuits-designed

SSGM Series



Highly reliable IC-size type with gold contact supports automatic insertion.



Typical Specifications

Items		Specifications
Rating (max.) / (min.) (Resistive load)		25mA 24V DC (At opening and closing) 0.1A 50V DC (When energized) / 50μA 3V DC
Contact resistance (Initial performance/After lifetime)		50mΩ max./100mΩ max.
Operating force		3.5 ± 2.5N
Operating life	Without load	3,000cycles
	With load	3,000cycles (25mA 24V DC)

Product Line

Soldering	Actuator configuration	Packaging style	Poles	Minimum order unit (pcs.)	Product No.	Drawing No.
Insertion	Standard	Stick	2	7,000	SSGM120100	1
			3	5,200	SSGM130100	
			4	4,000	SSGM140100	
			5	3,300	SSGM150100	
			6	2,800	SSGM160100	
			7	2,500	SSGM170100	
			8	2,200	SSGM180100	
			9	1,900	SSGM190100	
			10	1,800	SSGM1A0100	
			Flat	Stick	4	
	6	2,800			SSGM260100	
	8	2,200			SSGM280100	
	10	1,800			SSGM2A0100	
	Reflow	Standard	Taping	4	3,200	SSGM640200
8				1,600	SSGM680200	
Flat		2		4,000	SSGM720101	4
		4			SSGM740101	
		6		2,000	SSGM760102	
		8			SSGM780103	

Notes

1. Products other than those listed in the above chart are also available. Please contact us for details.
2. Please place purchase orders per minimum order unit N (integer).

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

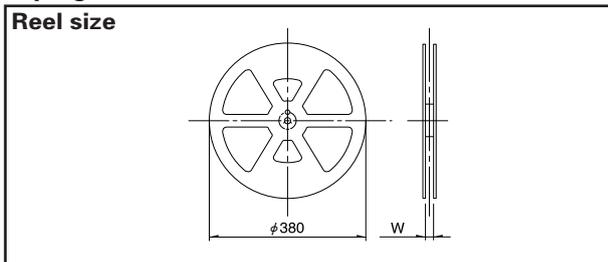
Custom-
Products



Automotive
Use

Packing Specifications

Taping Unit:mm



Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

Custom-
Products

Product No.	Number of packages (pcs.)			Reel width W (mm)	Tape width (mm)	Export package measurements (mm)	
	1 reel	1 case/Japan	1 case/export packing				
SSGM640200	800	1,600	3,200	25.4	24	406×406×190	
SSGM680200		800	1,600	45.4	44		
SSGM720101 SSGM740101	1,000	2,000	4,000	25.4	24		
SSGM760102		1,000	1,000	2,000	33.4		32
SSGM780103					45.4		44

Note

Please place purchase orders for taping products per minimum package units (1 reel or 1 case).

Stick

Product No.	Number of packages (pcs.)			Export package measurements (mm)
	1 stick	1 case /Japan	1 case /export packing	
SSGM120100	70	1,400	7,000	578×180×202
SSGM130100	52	1,040	5,200	
SSGM140100 SSGM240100	40	800	4,000	
SSGM150100	33	660	3,300	
SSGM160100 SSGM260100	28	560	2,800	
SSGM170100	25	500	2,500	
SSGM180100 SSGM280100	22	440	2,200	
SSGM190100	19	380	1,900	
SSGM1A0100 SSGM2A0100	18	360	1,800	



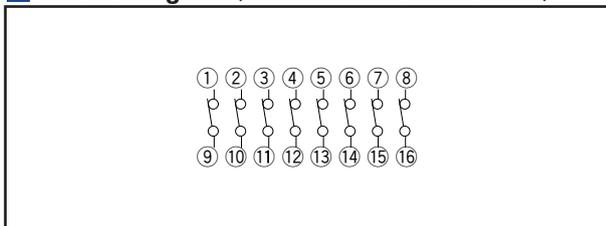
Automotive
Use

Dimensions

Unit:mm

No.	Style	PC board mounting hole dimensions (Viewed from direction A)
1	<p>Standard</p>	
2	<p>Flat</p>	
3	<p>Standard</p>	
4	<p>Flat</p>	

Circuit Diagram (Viewed from Direction A)



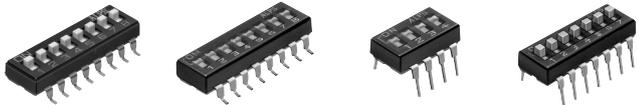
Number of Poles and Outline Dimension (L)

Number of poles (N)	2	3	4	5	6	7	8	9	10
L (mm)	6.9	9.4	11.9	14.5	17	19.6	22.1	24.6	27.2

- Detector
- Push
- Slide
- Rotary
- Encoders
- Power
- Dual-in-line Package Type
- TACT Switch™
- Custom-Products



List of Varieties

Items		Series	SSGM
Photo			
Operating temperature range			-40°C to +85°C
Automotive use			●
Rating (max.)/(min.) (Resistive load)			25mA 24V DC (At opening and closing) , 0.1A 50V DC (When energized) , 50μA 3V DC
Electrical performance	Contact resistance (Initial performance/After life time)		50mΩ max./100mΩ max.
	Insulation resistance		100MΩ min. 500V DC
	Voltage proof		500V AC for 1minute
Mechanical performance	Terminal strength		5N for 1minute
	Actuator strength	Operating direction	10N
		Pulling direction	10N
	Resistance to soldering heat	Manual soldering	350±5°C, 5s max.
		Dip soldering	270±5°C, 10±1s
Reflow soldering		Please see P.273	
Durability	Operating life	Without load	3,000cycles
		With load	3,000cycles (25 mA 24V DC)
Environmental performance	Cold		-40±2°C for 250h
	Dry heat		85±2°C for 250h
	Damp heat		40±2°C, 90 to 95%RH for 250h
Page			270

- Soldering Conditions273
- Dual In-line Package Type Switches Cautions274

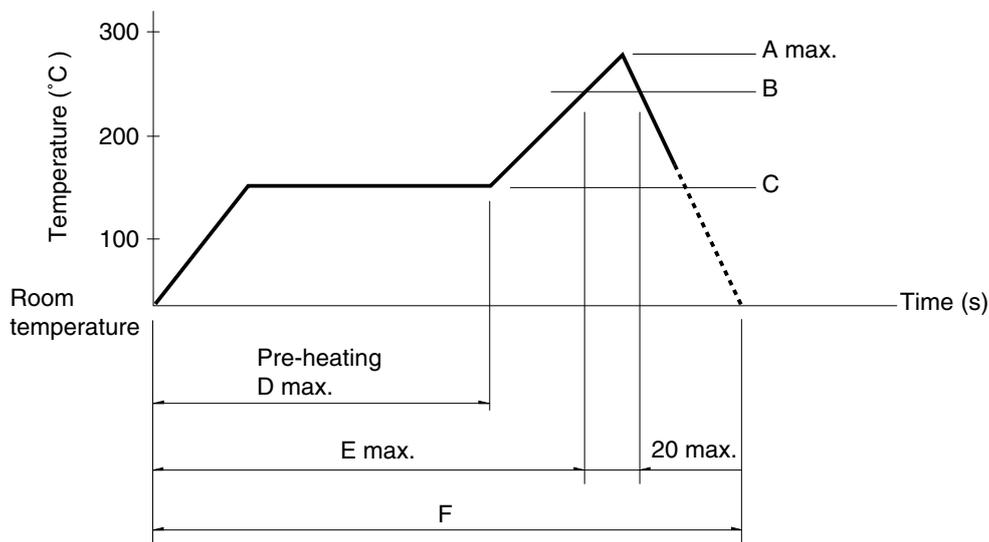
Note

●marks in "Available for automotive use" indicate that all of the series products can work at the operating temperature range from -40°C to +85°C.

Soldering Conditions

Example of Reflow Soldering Condition

1. Heating method: Double heating method with infrared heater.
2. Temperature measurement: Thermocouple 0.1 to 0.2 ϕ CA (K) or CC (T) at soldering portion (copper foil surface). A heat resisting tape should be used for fixed measurement.
3. Temperature profile



Series (Reflow type)	A (°C) 3s max.	B (°C)	C (°C)	D (s)	E (s)	F (s)
SSGM	240	230	150	120	————	————

Notes

1. The condition mentioned above is the temperature on the mounting surface of a PC board. There are cases where the PC board's temperature greatly differs from that of the switch, depending on the PC board's material, size, thickness, etc. The above-stated conditions shall also apply to switch surface temperatures.
2. Soldering conditions differ depending on reflow soldering machines. Prior verification of soldering condition is highly recommended.

- Detector
- Push
- Slide
- Rotary
- Encoders
- Power
- Dual-in-line Package Type
- TACT Switch™
- Custom-Products