Detector Switch Compact Two-way Detection Type

SSCM Series



Low-profile 1.5mm body with detection from both left/right directions.



Typical Specifications				
Items		Specifications		
Rating (max.) / (min.) (Resistive load)		1mA 5V DC/50μA 3V DC		
Contact resistance (Initial /After operating life)		2Ω max./5Ω max.		
Operating force		0.35N max.		
Operating life	Without load	50,000cycles		
Operating me	With load	50,000cycles (1mA 5V DC)		

Detector Push Slide **Rotary**

Encoders

Power

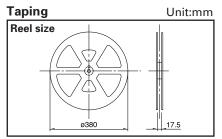
Dual-in-line Package Type

TACT Switch™ **Custom-Products**

Product Line

Poles	Positions	Total travel (mm)	Terminal type	Location lug	Minimum order unit (pcs.)	Product No.
1	1 2	1.57	For PC board	With	12.000	SSCM110100
1 2	2 1.57	(Reflow)	Without	12,000	SSCM120100	

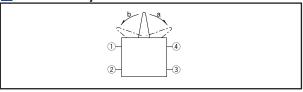
Packing Specifications



Number of packages (pcs.)			Tape width	Export package	
1 reel	1 case /Japan	1 case /export packing	(mm)	measurements (mm)	
3,000	6,000	12,000	16	417 × 409 × 139	

Dimensions Unit:mm PC board mounting hole and land dimensions Style (Viewed from direction A) On starting position Terminal No.1 3.89 Total travel position Center of rotation

Terminal Layout (Viewed from Direction A)



Circuit Diagram (Common) (Common)

- 1. Above dimensions indicate "with location lug" version.
- 2. Please place purchase orders per minimum order unit N (integer).

List of Varieties (General-purpose Type)

Series			General-purpose Type						
		SSCT	SSCF	SSCM	SPVP	SPVN	SPVS		
Photo						Ac salan			
Operation type		e	2-way	2-direction	₹>= 2-direction	1-way	2-way	2-way	
Ope tempera	rating ture rang	je	-40°C to	+85°C	-10°C to +60°C	-40°C to +85°C			
Autom	otive us	e	•	•		•	•	•	
Ratin	gmax.)	1)	0.1A 1	2V DC		1mA !	5V DC		
Ratin	gmin.)			50μA 3V DC		100µA 3V DC	50μA	3V DC	
	Initial con	tact	200mΩ max.	100mΩ max.	2Ω max.	5Ω max.	2Ω ι	nax.	
Electrical performance	Insulat		100MΩ min. 250V DC		100MΩ min. 100V DC				
cal	Volta		250V AC for 1 minute		10	0V AC for 1 minu	te		
Mechanical performance	Termi streng		3N for 1 minute	5N for 1 minute	0.5N for 1 minute				
nical nance	Actua		20N	10N	2N	5N			
Dura	Operating without L		10,000cycles 500mΩ max.	50,000cycles 300mΩ max.	50,000cycles 5Ω max.	$50,000$ cycles 10Ω max. $50,000$ cycles 5Ω max.			
Durability	Operating with Lo	j life ad	(0.1A 12V DC) 10,000cycles 500mΩ max.	(0.1A 12V DC) 50,000cycles 300m Ω max.	(1mA 5V DC) 50,000cycles 5Ω max.	(1mA 5V DC) 50,000cycles 10Ω max.		5V DC) es 5Ω max.	
			-40±2°C	for 500h	-20±2°C for 96h	5h −40±2°C for 500h			
Environmenta performance	Dry hea	t	85±2℃	for 500h	85±2°C for 96h 85±2°C for 500h				
ental ance	Dam hea		60±2℃, 90 to 95%RH for 500h		40±2°C, 90 to 95%RH for 96h	60±2℃, 90 to 95%RH for 500h			
D:	_•	W	12.5	11	5	3.5	3.8	3.5	
Dimen (mr		D	5	5.8	4	5.65	3.6	3.3	
	H		11.5	12.4	1.5	1.2		1	
	Manu solderi		$350\pm5^{\circ}\text{C}$, $350\pm10^{\circ}\text{C}$, 3^{+0}s		350±5℃, 3s max.				
Soldering	Dip		260±5℃, 5±1s						
Reflow soldering			_	Please see P.97					
Number of poles 1									
Operat	ion for	се	0.7±0.3N	0.7N max.	0.35N max.	0.55N max.	0.35N	max.	
Pa	age		59	60	62	63	64	66	

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.

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line

Package Type

TACT Switch™

Custom-Products

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

Detector

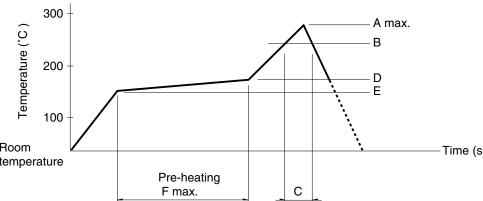
Push

Slide

Rotary

Encoders

Power Dual-in-line Package Type TACT Switch™ Custom-**Products**



flow type)	A (℃) 3s max.	B (℃)	C (s)	D (℃)	E (℃)	
emperature (°C)	_	Pre-heating F max.	c	A m B D E	ax. Time (s	∍)

Series (Reflow type)	A (℃) 3s max.	B (℃)	C (s)	D (℃)	E (℃)	F (s)
SPPB	250	230	40		150	120
SPPW8		200	20			
SPVE		230	40	180		
SPVG						
SPVL						
SPVM	260					
SPVN						
SPVP						
SPVR						
SPVS						
SPVT						
SSCM						
SPPY5	240		20	150	Room temperature	180

- 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, surface 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.