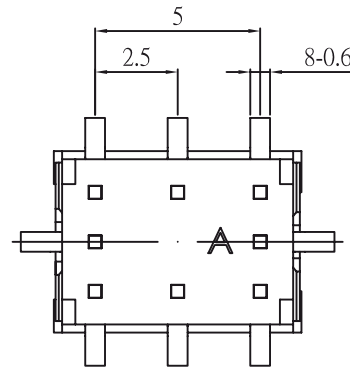
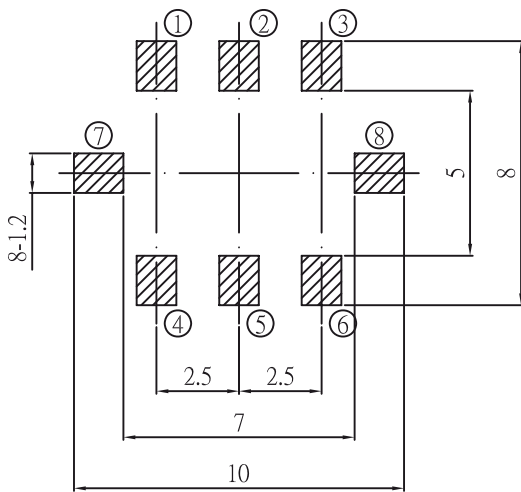
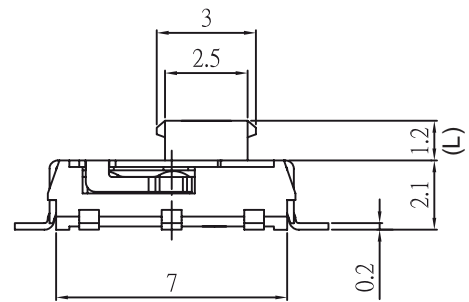
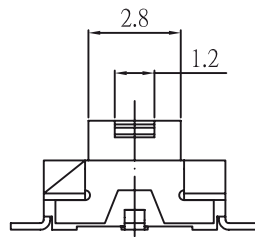
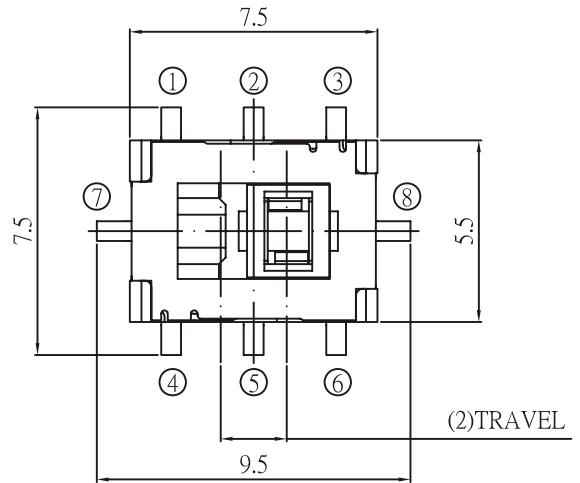
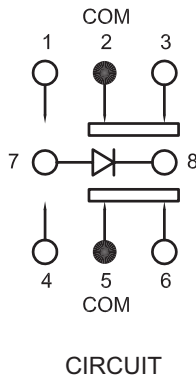
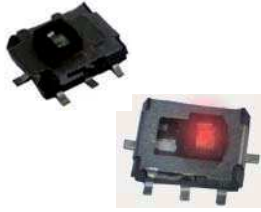


# Slide Switches

## SMT Slide Switches Illuminated

## SB54 Series



DIMENSION	TOLERANCE
BELOW 10 mm	± 0.3
10-100 mm	± 0.5
ABOVE 100 mm	± 0.8
ANGLE	± 3°

### How to order:

SB54

**1** TERMINATION:  
M SMT

**3** POSITION:  
2 2 Positions

**6** ACTUATOR MATERIAL:  
6 PA6T

**8** BRIGHTNESS LED:  
N Without LED  
S Ultra Bright (Standard)

**9** COLOR LED:  
N Without LED  
G Blue  
F Green  
C Red  
B White  
E Yellow



**2** POLE:  
D 2 Poles

**4** TIMING:  
N Non-Shorting

**7** ACTUATOR TYPE:  
S L = 1.2 mm (Standard)

**5** FRAME:  
S Standard Type

### SPECIFICATION

SWITCH SPECIFICATIONS		LED SPECIFICATIONS					
POLE - POSITION	3P2T , SMT TYPE , Momentary action	 ATTENTION LEDs are Electrostatic Sensitive devices	 (+) (-)	Unit	Value / LED Color		
CONTACT RATING	6 V DC , 0.3 A			Ultra Green	Ultra Yellow	Ultra Red	
CONTACT RESISTANCE	50 mΩ MAX. 1.5 V DC ; 100 mA , by Method of Voltage DROP	FORWARD CURRENT	I <sub>f</sub>	mA	20	20	20
INSULATION RESISTANCE	100 MΩ MIN. 500 V DC	REVERSE VOLTAGE	V <sub>r</sub>	V	5.0	5.0	5.0
DIELECTRIC STRENGTH	Breakdown is not Allowable ; 500 V AC for 1 Minute	REVERSE CURRENT	I <sub>r</sub>	μA	10	10	10
OPERATING FORCE	200 ± 150gf	FORWARD VOLTAGE@20mA	V <sub>f</sub>	V	2.1-2.5	2.0-2.5	2.0-2.5
OPERATING LIFE	10,000 cycles	LUMINOUS INTENSITY@20mA	I <sub>v</sub>	mcd	60	120	150
OPERATING TEMPERATURE RANGE	-20°C ~ 70°C						
TOTAL TRAVEL	2.0 ± 0.2 mm						

1. POLE - POSITION : 2P2T , SMT TYPE ◦
2. OPERATING TEMPERATURE RANGE : -20°C ~ 70°C ◦
3. RATING : 6V DC 0.3A ◦
4. ELECTRICAL PERFORMANCE

	ITEM	TEST CONDITIONS	CRITERIA
4-1	CONTACT RESISTANCE	DC 1.5V 100mA , BY METHOD OF VOLTAGE DROP ◦	50 mΩ MAX. ◦
4-2	INSULATION RESISTANCE	DC 500V ◦	100 MΩ MIN. ◦
4-3	DIELECTRIC STRENGTH	AC 500V FOR 1 MINUTE ◦	BREAKDOWN IS NOT ALLOWABLE ◦

5. MECHANICAL PERFORMANCE

	ITEM	TEST CONDITIONS	CRITERIA
5-1	OPERATING FORCE	ALONG OPERATIONAL DIRECTION , TO APPLY A STATIC LOAD HORIZONTALLY TO ACTUATOR FROM ONE POSITION TO ANOTHER ◦	200±150 gf ◦
5-2	TRAVEL	ALONG OPERATIONAL DIRECTION , TO APPLY A STATIC LOAD HORIZONTALLY TO ACTUATOR MEASURE ITS MOVEMENT FROM ONE POSITION TO ANOTHER ◦	2.0±0.2 mm ◦
5-3	TIMING	NON-SHORTING ◦	

5-4	TERMINAL STRENGTH	APPLY A STATIC LOAD 200 gf TO END OF TERMINAL ANY DIRECTION FOR 15 SECONDS , ONLY ONCE FOR A TERMINAL ALLOWABLE .	<ol style="list-style-type: none"> <li>1. TERMINAL BENT BUT NOT BROKEN IS ACCEPTABLE .</li> <li>2. DAMAGE ON SWITCH IS NOT ALLOWABLE .</li> <li>3. IT SHALL MEET THE REQUIREMENTS OF ITEM 4 &amp; 5 .</li> </ol>
5-5	ACTUATOR STRENGTH	ALONG ACTUATOR, FROM TOP OF IT TO APPLY A STATIC LOAD 1 Kg FOR 15 SECONDS .	<ol style="list-style-type: none"> <li>1. DAMAGE ON SWITCH IS NOT ALLOWABLE .</li> <li>2. IT SHALL MEET THE REQUIREMENTS OF ITEM 4 &amp; 5 .</li> </ol>
5-6	SOLDERABILITY	260±5°C IN 3 SECONDS .	SOLDER COVERAGE 75% MIN. .

### 6. DURABILITY :

OPERATING LIFE WITHOUT LOAD AFTER 10,000 CYCLES .

6-1 CONTACT RESISTANCE : 200 mΩ MAX. .

6-2 OPERATING FORCE : IN THE RANGE ±30% OF OPERATING FORCE SPECIFICATION .

6-3 INSULATION RESISTANCE : DC 500V 10 MΩ MIN. .

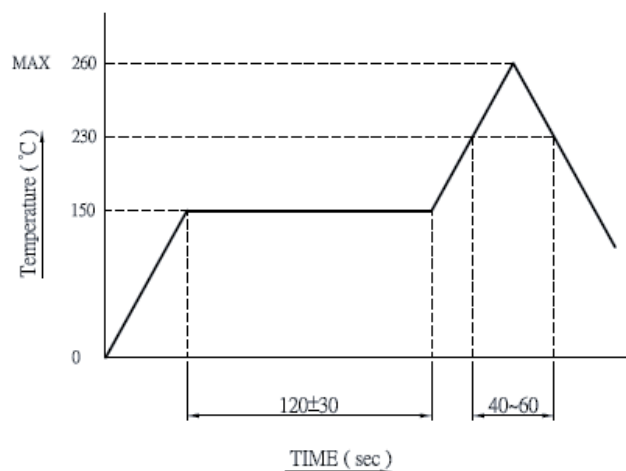
6-4 DIELECTRIC STRENGTH : AC 500V FOR 1 MINUTE .

### 7. SOLDERING HEAT RESISTANCE :

7-1 MANUAL SOLDER : 350±5°C IN 3 SECONDS .

7-2 WAVE SOLDERING : 260±5°C IN 3 SECONDS .

7-3 SOLDERING BY REFLOW :

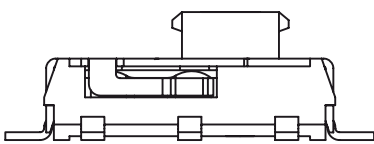


### 8. ENVIRONMENTAL PERFORMANCE

	ITEM	TEST CONDITIONS	CRITERIA
8-1	COLD	-20±2°C FOR 96 HOURS ◦	1. IT SHOULD MEET REQUIREMENTS OF ITEM 4 ◦ 2. MECHANICAL PERFORMANCE SHOULD REMAIN TO NORMAL ◦
8-2	DRY HEAT	70°C±2°C FOR 96 HOURS ◦	1. IT SHOULD MEET REQUIREMENTS OF ITEM 4 ◦ 2. MECHANICAL PERFORMANCE SHOULD REMAIN TO NORMAL ◦
8-3	HUMIDITY	40°C±2°C 90% ~ 95% RH FOR 96 HOURS	1. CONTACT RESISTANCE SHOULD BE LESS THAN 200 mΩ ◦ 2. INSULATION RESISTANCE SHOULD BE HIGHER THAN 10 MΩ ◦ 3. DIELECTIC STRENGTH SHOULD MEET REQUIREMENT OF 4-3 ◦ 4. MECHANICAL PERFORMANCE SHOULD REMAIN TO NORMAL ◦

### MATERIALS LIST

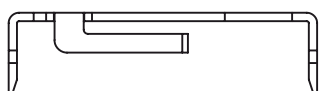
NO.	PART NAME	Q'TY	MATERIAL	SPECIAL DEAL
1	COVER	1	STAINLESS STEEL	SUS301-EH
2	SLIDER	1	PA6T	BLACK
3	MOVING CONTACT	2	BERYLLIUM	SILVER CLAD
4	MOVING CONTACT	2	BERYLLIUM	SILVER CLAD
5	BASE FRAME	1	PA6T ★	BLACK
6	LED	1		RED



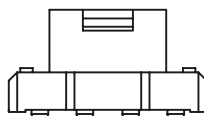
REVISION  
★

DESCRIPTION  
Change material to PA6T

DATE  
2013-02-22



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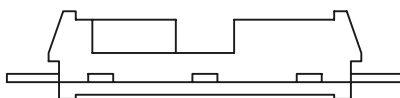
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