

DATA SHEET

SUNGMUN CODE : NSI-20

DESCRIPTION : SLIDE SWITCH

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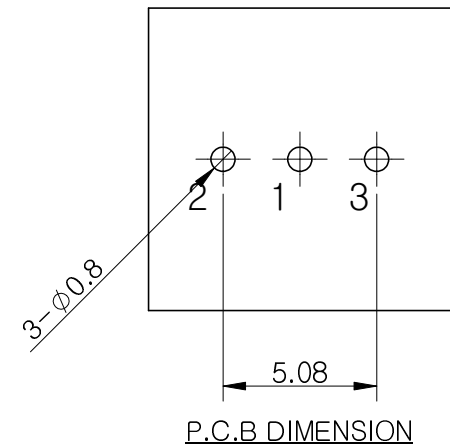
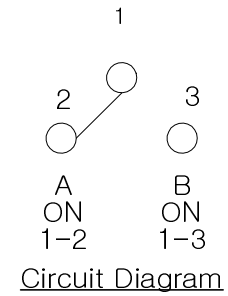
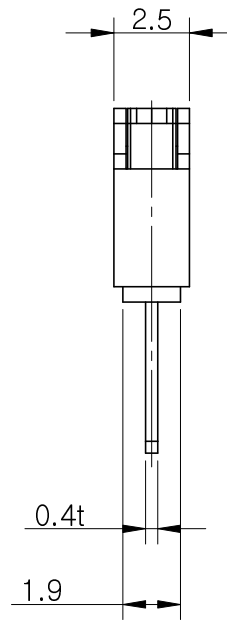
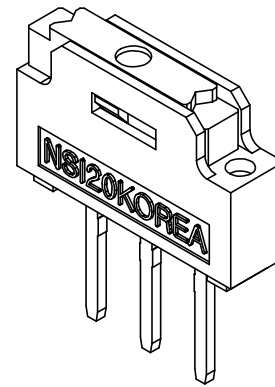
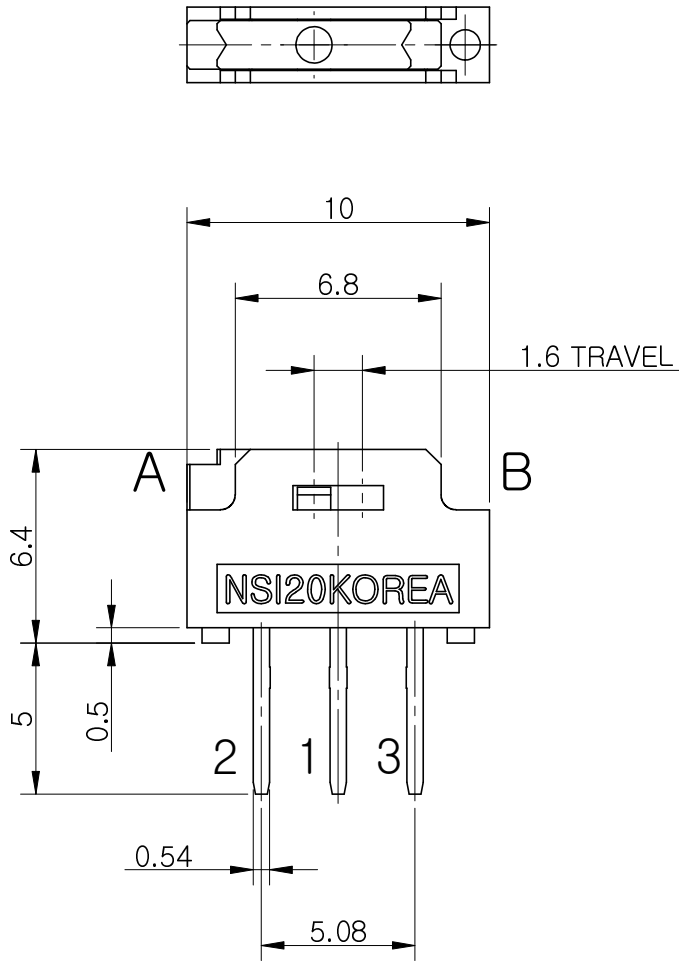
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MRK. △	DATE	REVISION	SIGN
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SPECIFICATION

1. Rating : 0.5A, DC 12V~0.3A, DC24V
2. Contact Resistance : 30mΩ Max
3. Travel : 1.6mm
4. Operating Force : 250gf±150gf
5. Life cycle : 2,000 Cycle(with load)



01	SLIDE SWITCH NSI-20	재질 <지정안함>	1	-
NO.	DESCRIPTION	MATERIAL	COLOR/FINISH	VENDOR
DRAW/DESIGNED	CHECKED	APPROVED	G.TOL ±0.1	TITLE SLIDE SWITCH NSI-20
			UNIT mm	SCALE 4:1
2017-01-19			SIZE A4	MODEL NSI-20
SUNGMUN ELECTRONICS CO.,LTD			DRAW NO.	NSI0-20000-01
			SHEET	1/1

1. Electrical Characteristics :

- 1.1 Rating : AC, DC 12V 0.5A~24V 0.3A (Minimum current: 1mA)
- 1.2 Contact Resistance : Max 30 mΩ
- 1.3 Insulation Resistance : Min 10,000 MΩ at DC 500V
- 1.4 Withstanding Voltage : 1min at AC 500V

2. Mechanical Characteristics :

- 2.1 Operating Force : 250gf ± 150gf
- 2.2 Travel : 1.6mm
- 2.3 Insulator :
 - 2.3.1 Case : Glass Fiber resin
 - 2.3.2 Slide : Glass Fiber resin
- 2.4 Terminal : Nickel, Gold Plate

3. Life Test :

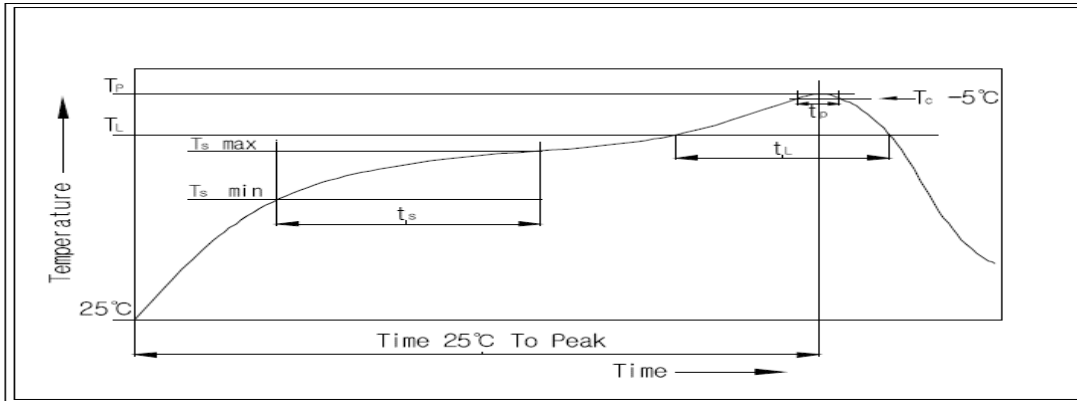
- 3.1 Test Condition : Operations at a rate of 15-20 cycles in 1 minute
 - 3.1.1 With load : 2,000 cycles
 - 3.1.2 Without load : 10,000 cycles
- 3.2 Operating Force : With +40%, -40% of Initial Value
- 3.3 Contact Resistance : Max 200mΩ

4. Environmental Characteristics :

- 4.1 Operating Temperature : -40°C to +85°C
- 4.2 Storage Temperature : -40°C to +85°C
- 4.3 Humidity Test :
 - 4.3.1 Test Conditions : Measured 1hour after exposure to ambient
After 96hours exposure at 40±2°C, 90-95% R.H
 - 4.3.2 Insulation Resistance : Min 100MΩ, at DC 500V
 - 4.3.3 Withstanding Voltage : 1min at AC 250V

5. Solder Conditions :

- 5.1 Hand Solder : 3~4 sec. at 350°C (Dipping type)
- 5.2 Wave Solder : 5 sec. at 260°C (Dipping type)
- 5.3 Reflow Solder (SMD type)



5.3.1 Condition for Soldering

Profile Feature	Pb-Free Assembly
Average Ramp-UP Rate($T_{s \text{ max}}$ to T_P)	3°C/second max
Preheat	
- Temperature Min($T_{s \text{ min}}$)	150°C
- Temperature Max($T_{s \text{ max}}$)	200°C
- Time ($t_{s \text{ min}}$ to $t_{s \text{ max}}$)	60-180seconds
Time maintained above:	
- Temperature (T_L)	217°C
- Time (t_L)	60-150seconds
Peak/Classification Temperature(T_P)	260°C +0°C/ -5°C
Time within 5°C of actual Peak Temperature(T_P)	5~10 seconds
Ramp-Down Rate	6°C/sec max
Time 25°C to Peak Temperature	8 minutes max