

DATA SHEET

SUNGMUN CODE : GSPR-10S (LG)

DESCRIPTION : MINI ROTARY DIP SWITCH

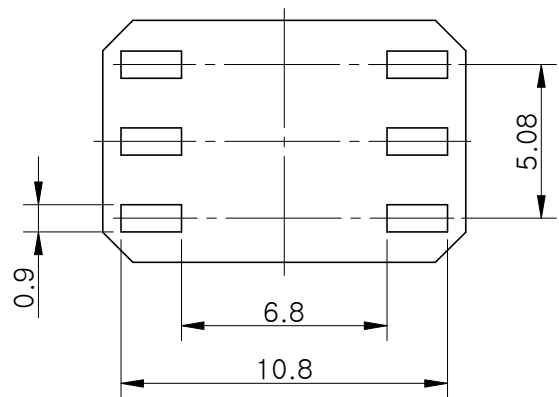
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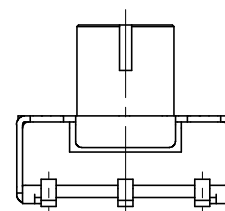
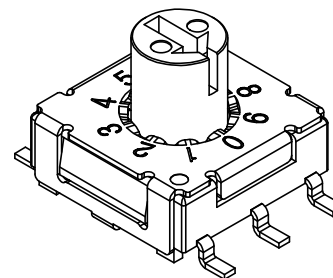
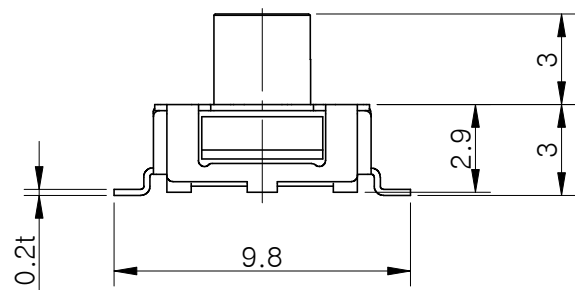
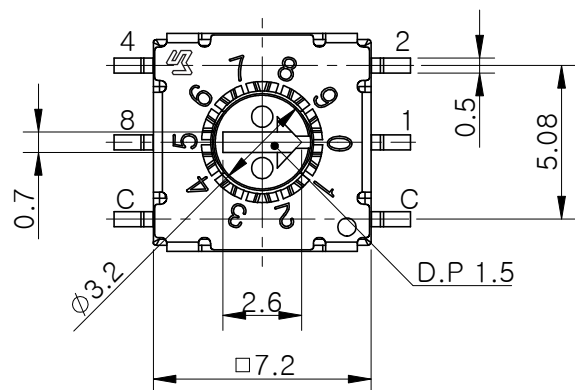


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MRK.	DATE	REVISION	SIGN
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P.C.B DIMENSION



Specification

1. Rating : 100mA, DC 50V(Switching)
100mA, DC 50V(None-Switching)
2. Contact Resistance : 100mΩ Max
3. Insulation Resistance : 100MΩ Min
4. Operating Force : 200gf Max
5. Life cycle : 10,000 steps
6. Sealing : Comparable IP67

		Real Code				
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	0	●				
	1	●	●			
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STANDARD LAYOUT

01	COMPACT ROTARY SWITCH		재질 <지정안함>		1	-
NO.	DESCRIPTION		MATERIAL		Q.TY	VENDOR
DRAW/DESIGNED	CHECKED	APPROVED		G.TOL ±0.1	TITLE	COMPACT ROTARY SWITCH
				UNIT mm	SCALE 4:1	MODEL
2020-11-09				SIZE A4	DRAW NO.	GSPR-10S (LG)
SUNGmun ELECTRONICS CO.,LTD						SHEET
						1/1

1. Style:

This specification describes "Compact Mini Rotary Dip Switch" which is G series.

1.1 Operating / Storage Temperature Range : -40°C ~ +85°C

2. Rating:

2.1 None-Switching : 100 mA, DC 50V

2.2 Switching : 100 mA, DC 5V

3. Type of Actuation : Rotating

4. Electrical Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
4-1	Visual Examination	By visual examination check without any out pressure & testing.	There shall be no defects that affect the serviceability of the product.
4-2	Contact Resistance	① To be measured between the two terminals associated with each switch pole. ② Measurements shall be made with a 1kHz shall current contact resistance meter.	100mΩ max. (initial)
4-3	Insulation Resistance	100V DC	100 MΩ min.
4-4	Dielectric withstanding Voltage	250V AC(50Hz or 60Hz)shall be applied between all the adjacent terminal and between the terminal and the frame for 1 minute.	There shall be no breakdown or flashover.

5. Mechanical Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
5-1	Operation Force	Operating direction shall be clockwise or counter clockwise direction	200gf•cm max (1.96N•cm max)
5-2	Operation Life	Measurements shall be made following the test set forth below: 1)100mA, 5V DC resistive load 2)Rate of operation: 15~20 cycles/ minute 3)Step of operation: 10,000 steps	1)As shown in item 3,4 2)Contact Resistance: 200mΩ max 3)Final-after test

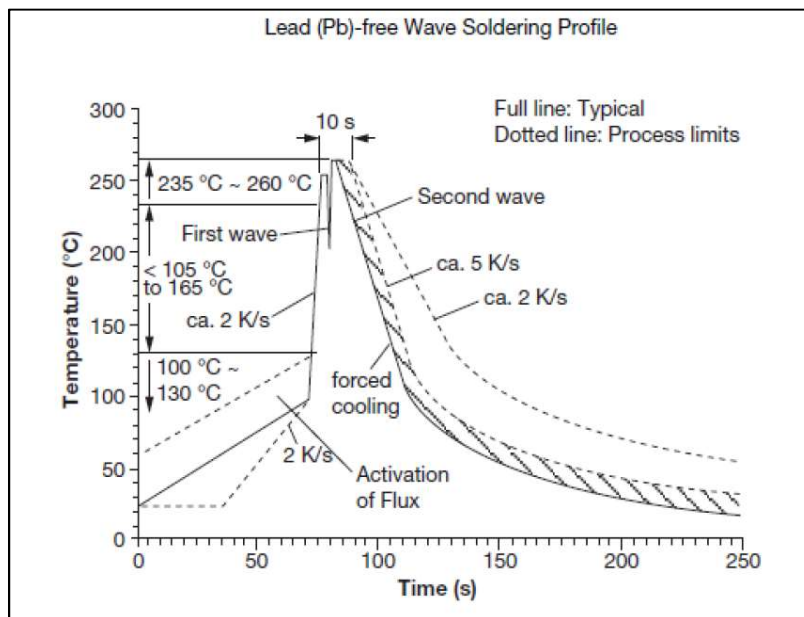
6. Environmental Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
6-1	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: -40°C ±3°C 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1 2)Contact Resistance: 200mΩ max
6-2	Resistance High Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: 85°C ±2°C 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1 2)Contact Resistance: 200mΩ max
6-3	Resistance Humidity	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: 40°C ±2°C 2)Relative humidity: 90~95% 3)Time: 240 hours	1)As shown in item 4-4, 5-1 2)Contact Resistance: 200mΩ max 3)Insulation Resistance: 10 MΩ min

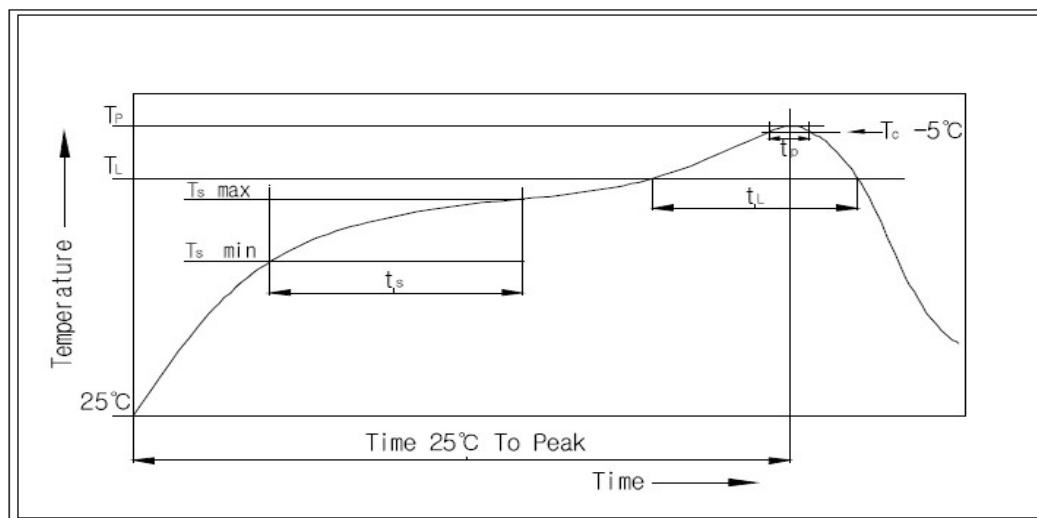
7. This item is "RoHS" Compliant

8. Manual Soldering : Max 350°C, 3 sec.

9. Wave Soldering Conditions:



10. Reflow Soldering Conditions:



10-1 Condition for Soldering

Profile Feature	Pb-Free Assembly
Average Ramp-UP Rate(Ts max to TP)	3°C/second max
Preheat <ul style="list-style-type: none"> - Temperature Min(Ts min) - Temperature Max(Ts max) - Time (ts min to ts max) 	150°C 200°C 60-180seconds
Time maintained above: <ul style="list-style-type: none"> - Temperature (TL) - Time (tL) 	217°C 60-150seconds
Peak/Classification Temperature(TP)	260°C +0°C/ -5°C
Time within 5°C of actual Peak Temperature(TP)	5~10 seconds
Ramp-Down Rate	6°C/sec max
Time 25°C to Peak Temperature	8 minutes max