DATA SHEET

SUNGMUN CODE : EDR-10

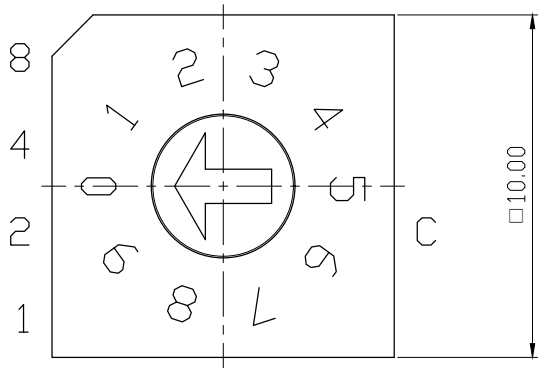
DESCRIPTION : ROTARY DIP SWITCH

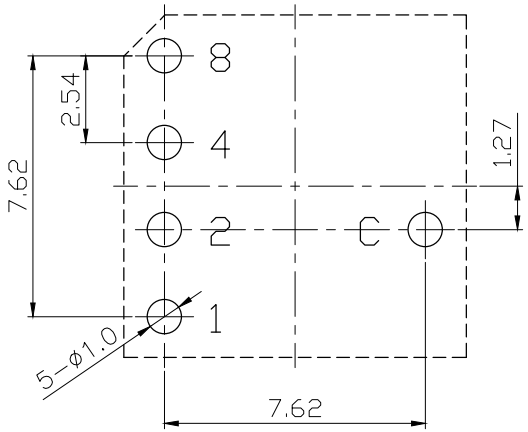
SUNGMUN ELECTRONICS CO., LTD.

Address 301-302,Bucheon Technopark 345, Seokcheon-ro, Ojeong-gu
Bucheon-si, Gyeonggi-do, Korea
TEL. +82-32-328-1941~4
FAX +82-32-328-1945
E-mail sungmun@sungmun.co.kr
Website www.sungmun.com

SUNGMUN ELECTRONICS

MARK	DATE	REMARKS
⚠		
⚠		

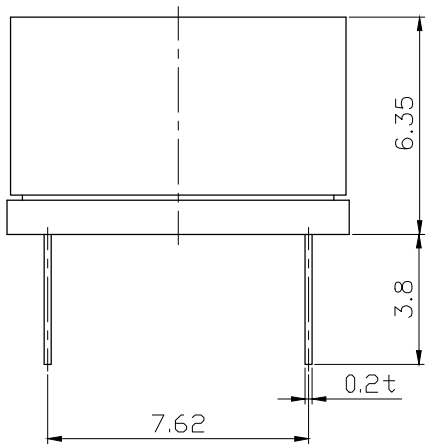


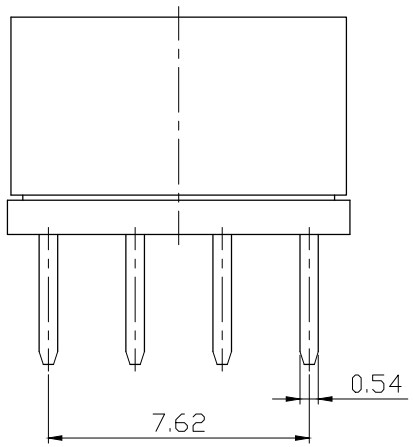


P.C.B DIMENSION (TOP VIEW)

SPECIFICATION

1. Rating : 150mA, 42V DC (Switching)
   200mA, 42V DC (None-Switching)
2. Contact Resistance : 80mΩ Max
3. Insulation Resistance : 100MΩ Min
4. Operating Force : 700gf Max
5. Life cycle : 10,000 steps





		Real Code				
		C	1	2	4	8
10 Position	0	●				
	1	●	●			
	2	●		●		
	3	●	●	●		
	4	●			●	
	5	●	●		●	
	6	●		●	●	
	7	●	●	●	●	
	8	●				●
	9	●	●			●
16 Position	A	●		●		●
	B	●	●	●		●
	C	●			●	●
	D	●	●		●	●
	E	●		●	●	●
	F	●	●	●	●	●

GENERAL TOLERANCE ±0.3 mm

APPD	CHKD	D'SGD	TITLE. ROTARY DIP SWITCH	
J.P ROH	S.M PARK	Y.N. JEON 2018.07.05	MODEL NO. EDR-10	REV 02
			SUNGMUN ELECTRONICS CO., LTD.	

SUNGMUN	ROTARY DIP SWITCH SPECIFICATION (10X10)	Rev. 06 P : 1 / 3

1. Description:

This specification describes "10X10 size of Rotary Dip Switches" which are S, T, F and Q series.

1-1 Operating / Storage Temperature Range : -40℃ ~ +85℃

2. Rating:

2-1 None-Switching : 200 mA, DC 42V

2-2 Switching : 150 mA, DC 42V

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.	80mΩ max.
4-3	Insulation Resistance	250V DC, 1minute ±5seconds	100 ㏁ 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	700gf•cm max
5-2	Operation Life	Measurements shall be made following the test set forth below: 1)150mA, 24V DC resistive load 2)Rate of operation: 15~20 cycles/ minute 3)Step of operation: 10,000 steps	1)As shown in item 4-3, 4-4 2)Contact Resistance: 200mΩ max

6. Environmental Characteristics

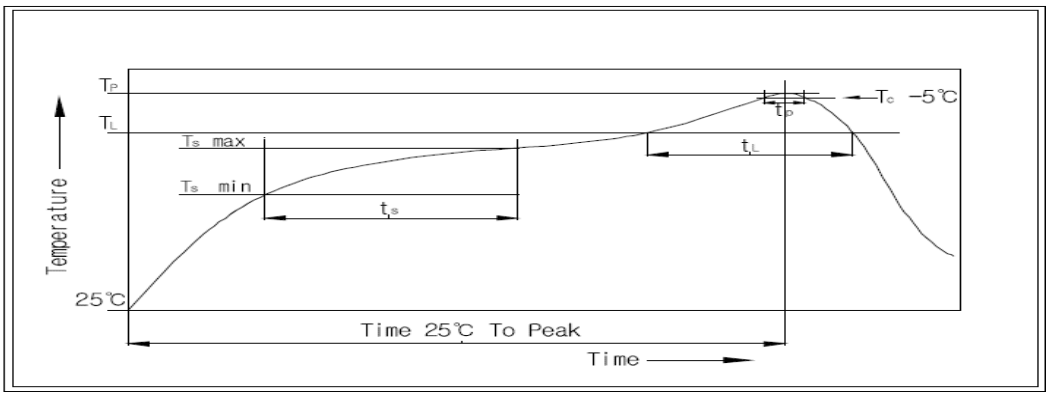
ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
6-1	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: -40℃ ±3℃ 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1 2)Contact 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℃ ±2℃ 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℃ ±2℃ 2)Relative humidity: 90~95% 3)Time: 96 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℃, 3 sec.

9. Wave Soldering : Max 280℃, 5 sec.

10. Reflow Soldering Conditions: (SMD type only)



10-1 Condition for Soldering

Profile Feature	Pb-Free Assembly
Average Ramp-UP Rate(Ts max to TP)	3℃/second max
Preheat - Temperature Min(Ts min) - Temperature Max(Ts max) - Time (ts min to ts max)	 150℃ 200℃ 60-180seconds
Time maintained above: - Temperature (TL) - Time (tL)	 217℃ 60-150seconds
Peak/Classification Temperature(TP)	260℃ +0℃/ -5℃
Time within 5℃ of actual Peak Temperature(TP)	5~10 seconds
Ramp-Down Rate	6℃/sec max
Time 25℃ to Peak Temperature	8 minutes max