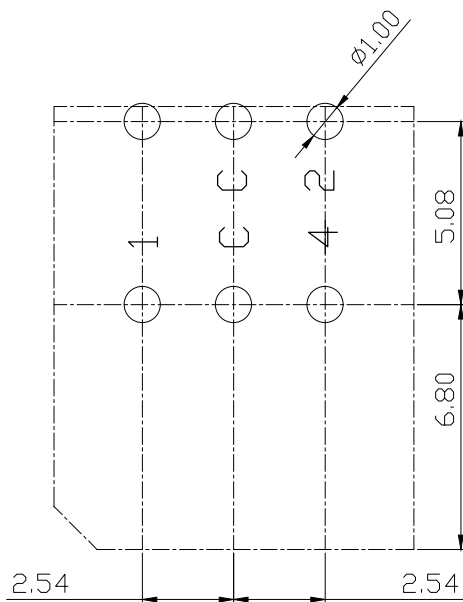
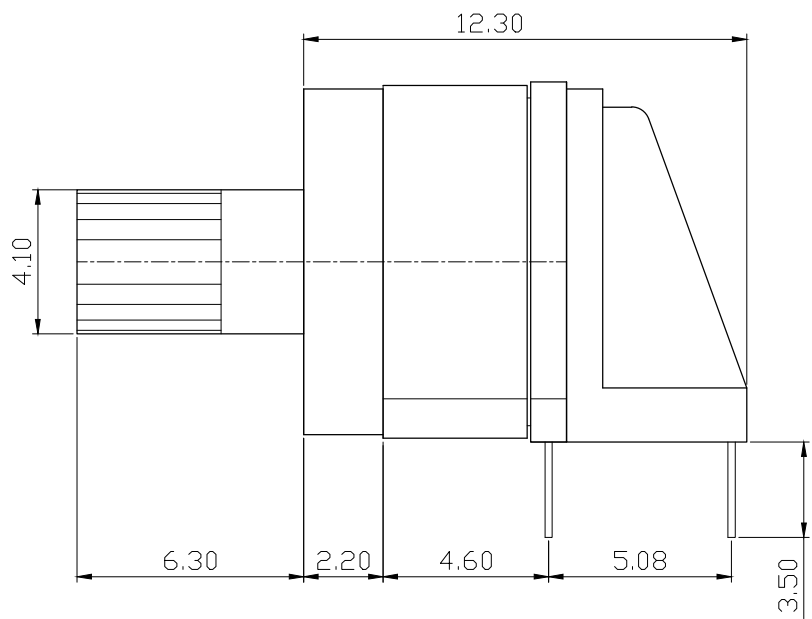
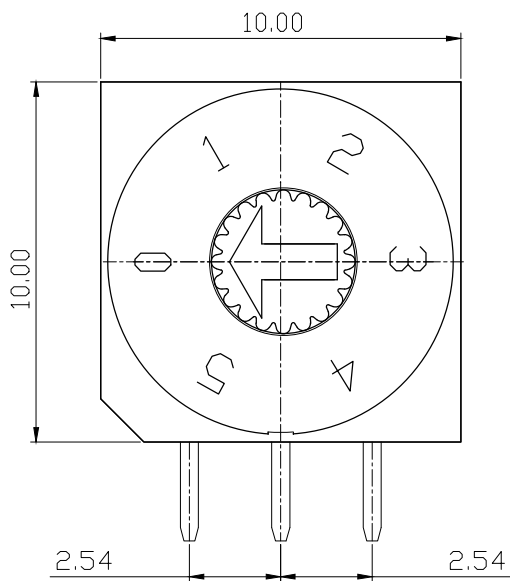


# DATA SHEET

**SUNGMUN CODE :** TSR-06H  
**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



P.C.B. DIMENSION

**SPECIFICA**

1. Rating
2. Contact
3. Insulat
4. Operat
5. Life cy

APPD	CHKD	
K.L LEE	J.P ROH	S

## 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°C ~ +85°C

## 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 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	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

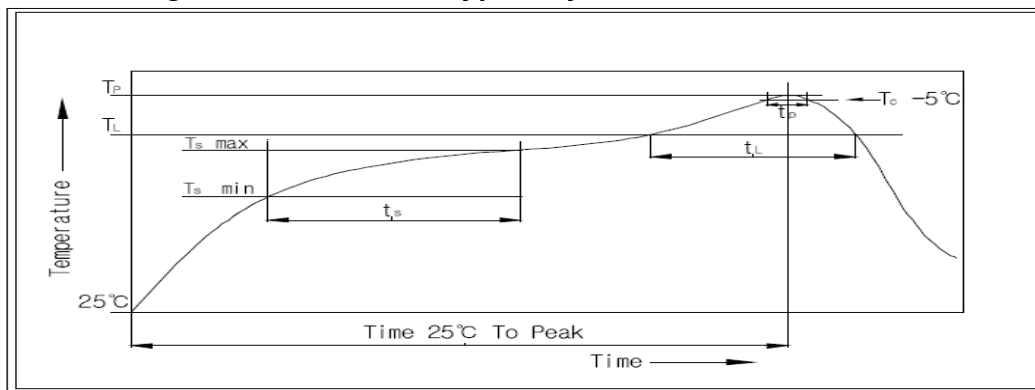
ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
6-1	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: -40°C ±3°C 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1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

9. Wave Soldering : Max 280°C, 5 sec.

10. Reflow Soldering Conditions: (SMD type only)



### 10-1 Condition for Soldering

Profile Feature	Pb-Free Assembly
Average Ramp-UP Rate( $T_s$ max to $T_P$ )	3°C/second max
Preheat	
- Temperature Min( $T_s$ min)	150°C
- Temperature Max( $T_s$ max)	200°C
- Time ( $t_s$ min to $t_s$ 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

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Coded Rotary Switches](#) category:*

*Click to view products by [Sungmun](#) manufacturer:*

Other Similar products are found below :

[PT65SG178](#) [PT65SG23](#) [DRS4010](#) [CW1S-2E11](#) [S-1031A](#) [SBS1004](#) [P36S101TR](#) [P65THR101L254](#) [RM3AF-10R-V-T/R](#) [RH3HAF-10R-V-B](#)  
[PT65501RT](#) [P25SMT101TR](#) [P65SMT101](#) [P65THR101V](#) [MSDR-10H1](#) [GSDR-10S](#) [01-1433](#) [07-3153](#) [07-3154](#) [CRD10CM0SBR](#) [DRS4116](#)  
[94HCB16RAT](#) [94HCB10T](#) [94HBB16WT](#) [94HBB16RAT](#) [94HBB10WT](#) [94HBB10RAT](#) [94HBB08RAT](#) [94HAC10T](#) [94HAB16WT](#)  
[94HAB16T](#) [94HAB10WT](#) [94HAB10RAT](#) [94HAB08WT](#) [94HAB08RAT](#) [ND3FR10P](#) [ND3FR16B-R](#) [DRR3110](#) [94HEB08WRT](#)  
[94HCB16WT](#) [94HCB16T](#) [94HCB10RAT](#) [94HCB08T](#) [94HBB16T](#) [94HBB10T](#) [94HBB08T](#) [94HAB16RAT](#) [94HAB10T](#) [94HAB08T](#) [S-2011A](#)