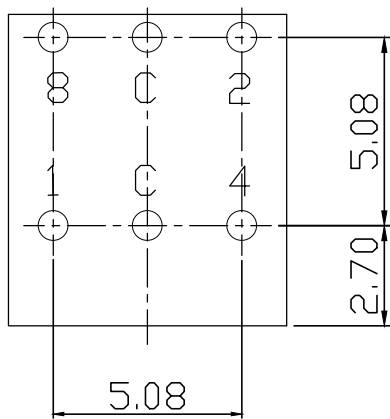
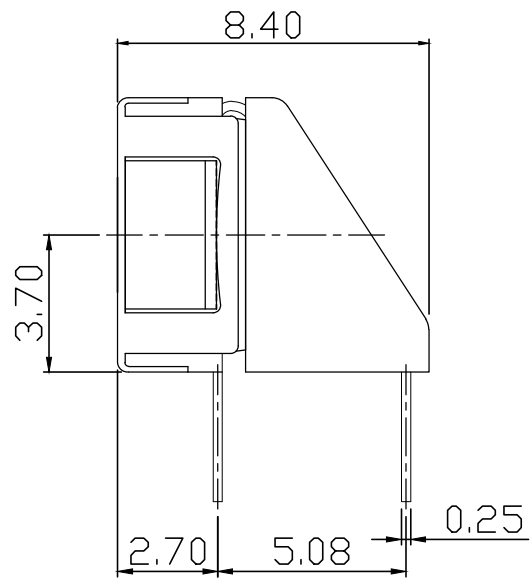
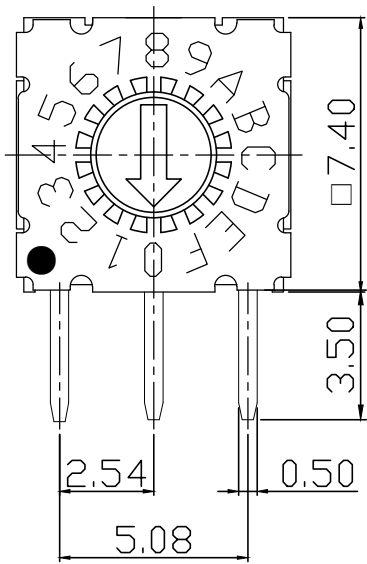


DATA SHEET

SUNGMUN CODE : MADR-16H
DESCRIPTION : MINI 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 (TOP VIEW)

- SPECIFICATION
1. Operation (Non-switch)
 2. Contact
 3. Insulation
 4. Operation
 5. Life
 6. Seal

APPD	CHKD
K.L LEE	J.P ROH

1. Style:

This specification describes "7.4X7.4 size of Mini Rotary Dip Switch" which is M series.

1.1 Operating / Storage Temperature Range : -60°C ~ +125°C

2. Rating:

2.1 None-Switching : 400 mA, DC 42V

2.2 Switching : 100 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. (initial)
4-3	Insulation Resistance	250V 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	120gf·cm ±30 max
5-2	Operation Life	Measurements shall be made following the test set forth below: 1)100mA, 42V DC resistive load 2)Rate of operation: 15~20 cycles/ minute 3)Step of operation: 25,000 steps	1)As shown in item 4-3,4-4 2)Contact Resistance: 200mΩ max 3)Final-after test

6. Environmental Characteristics

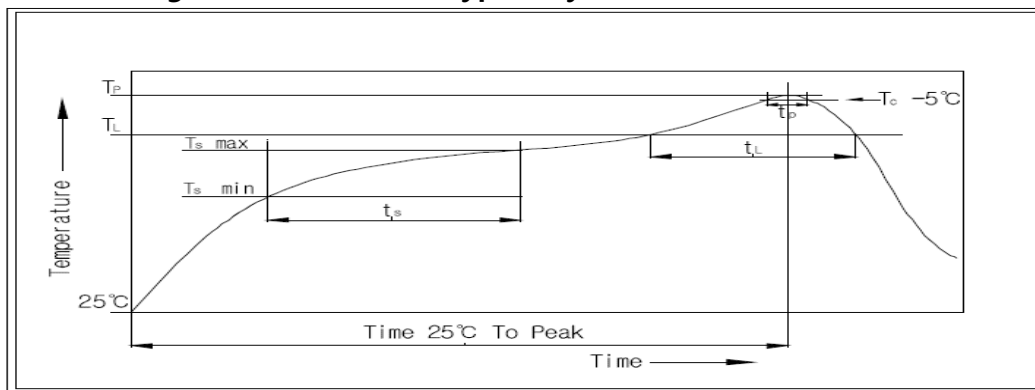
ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
6-1	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: -60°C ±3°C 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1 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: 125°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(Ts max to TP)	3°C/second max
Preheat	
- Temperature Min(Ts min)	150°C
- Temperature Max(Ts max)	200°C
- Time (ts min to ts max)	60-180seconds
Time maintained above:	
- Temperature (TL)	217°C
- Time (tL)	60-150seconds
Peak/Classification Temperature(TP)	260°C +0°C/ -5°C
Time within 5°C of actual Peak Temperature(TP)	Min 30 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 [Sungmun](#) manufacturer:

Other Similar products are found below :

[MADR-10S](#) [SP-12FH-S](#) [TSR-04S](#) [TSR-06H1](#) [TSR-08H](#) [FER-16H](#) [TER-06S](#) [TDR-06S](#) [TER-06](#) [TSR-08S](#) [GSPR-16MS](#) [TDR-06H1](#) [TER-04H](#) [TER-08H1](#) [TSR-04H](#) [TSR-06H](#) [UADR-10S](#) [TDR-06](#) [TDR-10H](#) [TSR-10S](#) [TER-08H](#) [GSDR-10S](#) [STP-1236D](#) [STP-1236B](#) [TDR-16H1](#) [MSDM-04S](#) [GSMR-10S](#) [STP-1117](#) [TSR-08S-TR](#) [TDR-10H1](#) [STP-1194R](#) [STP-1230D](#) [STP-1236V](#) [MSDR-16H1](#) [TSR-04](#) [MSKR-10](#) [NSI-10HS](#) [NSI-20](#) [TSR-10H1](#) [TSR-08H1](#) [FSR-16H1](#) [MSSM-04](#) [NSI-20H](#) [NSI-10S](#) [FDR-16S](#) [MSSR-16S-TR](#) [SP-12SH](#) [MSDR-16S](#) [SP-12SH-S](#)
[HADR-10](#)