


DATA SHEET

SUNGMUN CODE : QDR-08
DESCRIPTION : ROTARY DIP SWITCH

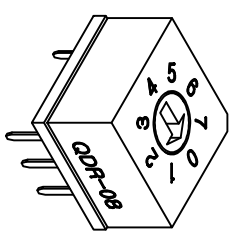
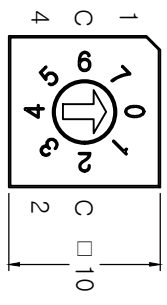
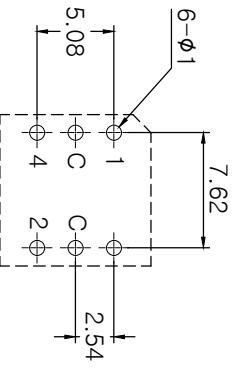
SUNGMUN ELECTRONICS CO., LTD.

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

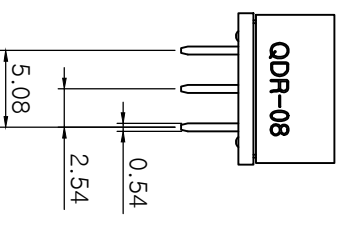
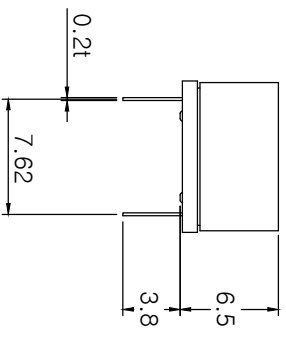
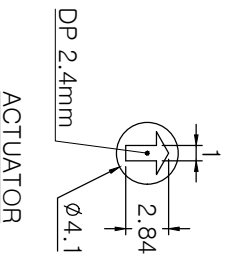
MRK. 	DATE	REVISION	SIGN
--	------	----------	------

SPECIFICATION

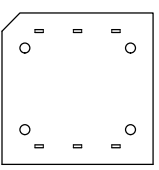
1. Rating : 150mA, DC 42V (Switching)
200mA, DC 42V (None-Switching)
2. Contact Resistance : 80mΩ Max
3. Insulation Resistance : 100MΩ Min at DC 250V
4. Operating Force : 700gf Max
5. Life cycle : 10,000 steps
6. Sealing : IP67 (Dust & Water proof)
7. Packing : 50pcs Tube





P.C.B DIMENSION (Top View)



08 P o s i t i o n	Real Code			
	C	1	2	4
0	●			0
1	●	●		1
2	●		●	2
3	●	●		3
4	●			4
5	●		●	5
6	●		●	6
7	●	●	●	7



DRAW/DESIGNED	CHECKED	APPROVED		G.TOL	TITLE
J.S YANG	W.J LEE	K.I LEE		±0.3	ROTARY DIP SWITCH
2022-01-25	2022-01-25	2022-01-25	UNIT	MODEL	REV.
			mm	QDR-08	03
 SUNGMUN ELECTRONICS CO.,LTD			SCALE	DRAW	
			2:1	NO.	
			SIZE	QDR-08-03	
			A4		

1. Description:

This specification describes "10X10 size of Rotary Dip Switches" which are S, T, F and Q,E 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, 42V 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 260°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)	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 :

[PT65503RT](#) [Y36D02243FPLFT](#) [RTAP31S12WFLSP](#) [MADR-16H1](#) [GSER-10](#) [6KF001B-3S10R4-0](#) [EC11E153442W](#) [EC11E1534441](#) [SC-2110](#) [SD-2010TB](#) [MER-16H](#) [EDR-08](#) [USR-10](#) [FSR-08](#) [FSR-04S](#) [ESR-16](#) [HAMR-10S](#) [SDR-10H](#) [QSR-16H](#) [HAMR-16](#) [FDR-04S](#) [EDR-16S](#) [ESR-10S](#) [QDR-08H1](#) [TDR-04](#) [EDR-08S](#) [ESR-16H](#) [QDR-10](#) [EDR-10S](#) [QSR-06S](#) [ESR-08S](#) [EC11E156040N](#) [EC11B15243DC](#) [EC35AH220501](#) [EC18AGB20406](#) [EC11E09244C3](#) [EC11G1534414](#) [EC11E156T402](#) [EC11E1564454](#) [EC11J0925501](#) [EC11E15204B1](#) [EC11E1564439](#) [EC50A0920403](#) [ED103180-FE14.5S7.5-A16-1010](#) [ED08E42S-FE15C7.0-A16-1020](#) [ED08C030-FE18C9.0-A16-1002X](#) [ED08C210-FE18A6.0-A16-1002](#) [ED08C110-FE18S9.0-A16-1040](#) [ED08C150-BM20S6.0-A16-1026](#) [ED103010-SP17S8.0-A16-1012](#)