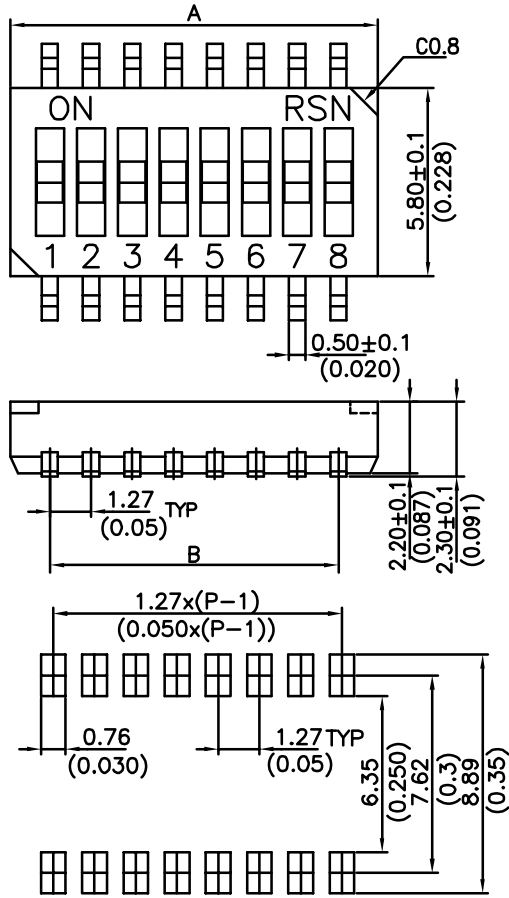
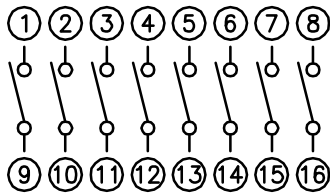


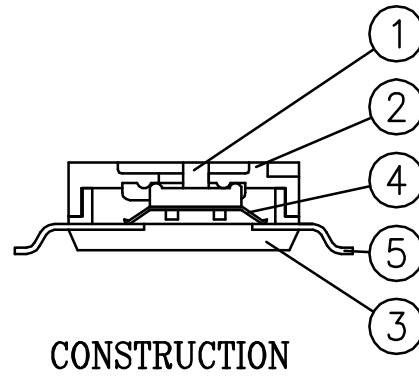
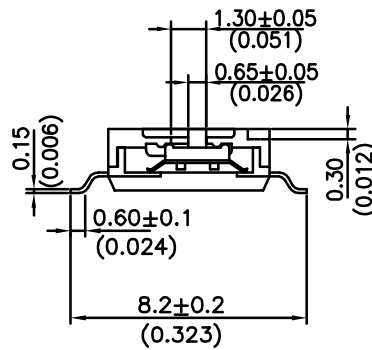
MODEL NO:HRM series
DIMENSION:(UNIT:mm/inches)



P.C.B. LAYOUT





CIRCUIT DIAGRAM



CONSTRUCTION

Prod No.	No.ofPOS	DIM.A	DIM.B
HRM-02	02	3.68(0.145)	1.27(0.050)
HRM-04	04	6.22(0.245)	3.81(0.150)
HRM-06	06	8.76(0.345)	6.35(0.250)
HRM-08	08	11.30(0.445)	8.89(0.350)
HRM-10	10	13.84(0.545)	11.43(0.450)
HRM-12	12	16.38(0.645)	13.97(0.550)

ITEM	DES	MATERIALS	TREATMENT
1	ACTUATOR	UL94V-0 NYLON	MOLDED WHITE
2	COVER	UL94V-0 NYLON	MOLDED BLACK
3	BASE	UL94V-0 NYLON	MOLDED BLACK
4	CONTACT	BERYLLIUM COPPER	GOLD PLATED AT CONTACT AREA
5	TERMINAL	BRASS	GOLD PLATING

一般公差		PART NAME: HALF PITCH TYPE DIP SWITCH	PART NO: HRM-□□□	
尺寸範圍	容許值		SCALE	
0-4	±0.05	 瑞森實業有限公司 RUEY SHEN ELECTRONICS INC.	UNIT	mm(IN)
4-16	±0.1		3RD	
16-50	±0.15			

Models: HRM SERIES HALF PITCH TYPE DIP SWITCH

1. SPECIFICATIONS.

- 1-1. External appearance: Ref. Attached print.
- 1-2. Material & treatment of parts: Ref. Attached print.
- 1-3. All materials are UL 94V-0 grade fire retardant plastics.
- 1-4. RoHS compliant.

2. FEATURES

- 2-1. Half pitch (1.27mm) terminal.
- 2-2. This switch is slide switch of one body type that each pole is parallel and it is constituted by one moving contact and two terminals.
- 2-3. Gold plated electrical contacts and terminals gives excellent results when soldering.

3. ELECTRICAL

- 3-1. Electrical Life: 1000 operation cycles per switch –24VDC, 25mA.
- 3-2. Non-switching Rating: 100mA, 50VDC.
- 3-3. Switching Rating: 25mA, 24VDC.
- 3-4. Contact Resistance: (a) 50mΩ max. at initial.
(b) 100mΩ max. after life test.
- 3-5. Insulation Resistance: 100MΩ min. at 500VDC.
- 3-6. Dielectric Strength: 500VAC/1 minute.
- 3-7. Capacitance: 5pF max.
- 3-8. Circuit: Single pole single throw.

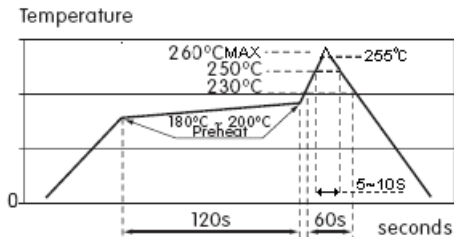
4. MECHANICAL

- 4-1. Mechanical life: 1000 operations per switch.
- 4-2. Operation Force: 500gf max.
- 4-3. Stroke: 0.65mm.
- 4-4. Operation Temp: - 25□ to 70□
- 4-5. Storage Temp: -40□ to 85□
- 4-6. Vibration Test: MIL-STD-202F METHOD 201A
Frequency: 10-55-10 Hz/1 min
Directions: X, Y, Z, three mutually perpendicular directions.
Time: 2 hours each direction.
High reliability.
- 4-7. Shock Test: MIL-STD-202F METHOD 213B CONDITION A.
- 4-8. Gravity: 50G (peak value), 11msec.
- 4-9. Direction and times: 6 sides and 3 times in each direction. High reliability.

5. SOLDERING PROCESSES.

- 5-1. Keep all switch contacts in their “OFF” position for all operation.
- 5-2. Condition for soldering HRM half pitch series:

Reflow Temperature Profile. (reference)



Remark: The switch's surface temperature not allow to exceed 255° .

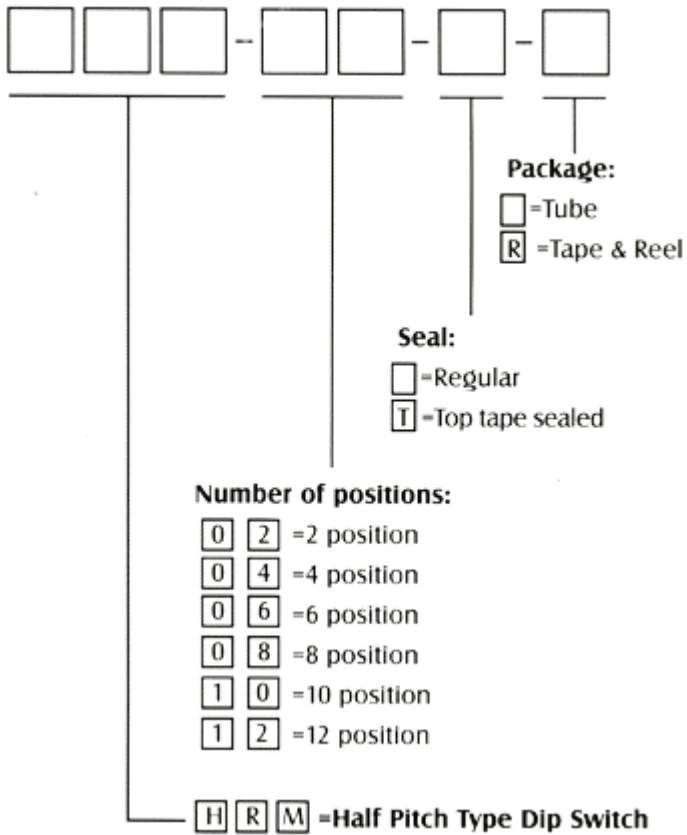
6. FLUX CLEANING :

- 6-1. Solvent: Fluorine or Alcohol type.
- 6-2. Cleaning shall be made when terminal temperature falls to 90° or lower, or leave the switch at normal temperature for 5 minutes or longer, before cleaning.
- 6-3. Do not apply ultrasonic cleaning.
- 6-4. “LE” type are not washable.
- 6-5. Do not operate the switch during soldering and cleaning.

7. WEATHER-PROFF

- 7-1. Resistance Low Temperature:
 - (1) Temperature: $-40^{\circ} \pm 3^{\circ}$.
 - (2) Time: 96 hours.
- 7-2. Resistance High Temperature:
 - (1) Temperature: $-85^{\circ} \pm 2^{\circ}$.
 - (2) Time: 96 hours.
- 7-3. Resistance Humidity:
 - (1) Temperature: $40^{\circ} \pm 2^{\circ}$.
 - (2) Relative Humidity: 90-95%
 - (3) Time: 96 hours.

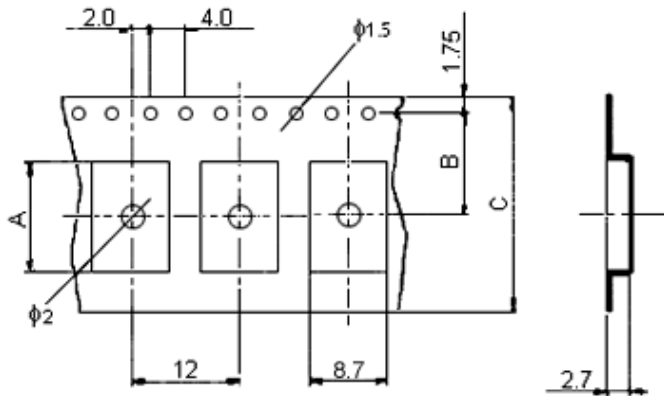
8. PART NUMBER SYSTEM



Example: HRM is slide type half pitch DIP switches, Recessed Actuator. The amount of actuators, contacts and terminals are based on position number.

PACKING All DIP switches are shipped in standard IC tubes or Tape & Reel Package with all poles in the "OFF" position.

CARRIER TAPE PACKING



PART NO.	NO. OF POS	A	B	C	Q'TY/REEL
HRM-02	02	4.10	5.5	12	2000 pcs
HRM-04	04	6.60	7.5	24	2000 pcs
HRM-06	06	9.20	7.5	24	2000 pcs
HRM-08	08	11.70	11.5	24	2000 pcs
HRM-10	10	14.30	11.5	24	2000 pcs
HRM-12	12	16.80	11.5	24	2000 pcs

