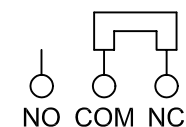
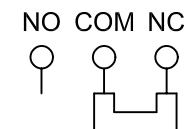
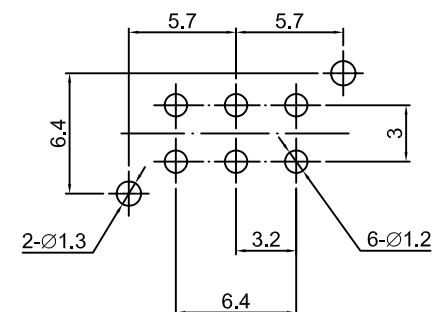


## SCHEMATIC



## P.C.B. LAYOUT



1. LOCK TYPE .
2. RATING : 30 V DC , 1 A .
3. CONTACT RESISTANCE : 50 mΩ MAX .
4. INSULATION RESISTANCE : 500 V DC , 100 MΩ MIN .
5. OPERATING FORCE : 200±150 gf (1P2T) , 300±150 gf (2P2T & 4P2T) .
6. OPERATING TEMPERATURE : -20°C ~ 70°C .
7. OPERATING LIFE : 10,000 CYCLES .

DIMENSION	TOLERANCE
BELOW 10mm	±0.3
10~100mm	±0.5
ABOVE 100mm	±0.8
ANGLE	±3°

△				DATE	DRAWN BY	CHECKED BY	APPROVAL BY
△				2005/03/01	OWEN		
△				UNIT:	SKIAGRAPHY:		
SYM	DATE	DESCRIPTION	REV.	mm			

HUAI YANG CO., LTD.  
TEL:886-2-8261-0858  
FAX:886-2-8261-1885

TITLE:  
M SERIES MINI PUSH  
BUTTON SWITCH

PART NO:  
M-B2PL-19

DWG NO:  
M-B2PL-19

**HUAI YANG CO., LTD.**  
**SPECIFICATIONS OF M SERIES**  
**PUSH BUTTON SWITCHES**

1. POLE - POSITION : 1P2T, 2P2T, 4P2T, MOMENTARY AND LOCK TYPE ARE AVAILABLE.

2. OPERATING TEMPERATURE RANGE : -20℃ ~ 70℃

3. RATING : 30V DC 1A

4. ELECTRICAL PERFORMANCE

	ITEM	TEST CONDITIONS	CRITERIA
4-1	CONTACT RESISTANCE	DC 1.5V 100mA, BY METHOD OF VOLTAGE DROP.	50 mΩ MAX.
4-2	INSULATION RESISTANCE	DC 500V	100 MΩ MIN.
4-3	DIELECTRIC STRENGTH	AC 500V FOR 1 MINUTE	BREAKDOWN IS NOT ALLOWABLE

5. MECHANICAL PERFORMANCE

	ITEM	TEST CONDITIONS	CRITERIA
5-1	OPERATING FORCE	1P2T 2P2T 4P2T	200±150gf 300±150gf 300±150gf
5-2	TRAVEL	LOCK TRAVEL	2.5 ± 0.3 mm
5-3	TIMING	NON-SHORTING TYPE	
5-4	ROBUSTNESS OF TERMINAL	ANY DIRECTION TO APPLY A STATIC LOAD 500gf AT END OF TERMINAL FOR 1 MINUTE. ONCE FOR A TERMINAL ONLY.	TERMINAL COULD BE BENT BUT LOOSENED TERMINAL OR BOARD BROKEN IS NOT ALLOWABLE.
5-5	ROBUSTNESS OF ACTUATOR	ALONG OPERATING DIRECTION TO APPLY A STATIC LOAD 5 Kgf AT END OF ACTUATOR FOR 1 MINUTE.	ACTUATOR BROKEN, DEFORMED OR ANY UNSUAL APPEARANCE OCCURRED ON SWITCH

			CONSTRUCTION IS NOT ALLOWABLE.
5-6	SOLDERABILITY	260±5°C IN 3 SECONDS	SOLDER COVERAGE 75% Min.

6. RESISTANCE OF SOLDERING HEAT

6-1 MANUAL SOLDERING : 300°C IN 3 SECONDS.

6-2 DIP SOLDERING : 260°C IN 3 SECONDS.

7. OPERATING LIFE WITHOUT LOAD AFTER 10,000 CYCLES

7-1 CONTACT RESISTANCE : 100 mΩ MAX.

7-2 OPERATING FORCE : WITHIN THE RANGE ±30% OF SPECIFICATION.

7-3 INSULATION RESISTANCE : 500V DC 100MΩ MIN.

7-4 DIELECTRIC STRENGTH : 500V AC FOR 1 MINUTE, BREAKDOWN IS NOT ALLOWABLE.

8. ENVIRONMENTAL PERFORMANCE

	ITEM	TEST CONDITIONS	CRITERIA
8-1	COLD	-20±2°C FOR 96 HOURS	1. IT SHOULD MEET REQUIREMENTS OF ITEM 4. 2. MECHANICAL PERFORMANCE SHOULD REMAIN TO NORMAL.
8-2	DRY HEAT	70±2°C FOR 96 HOURS	1. CONTACT RESISTANCE SHALL BE LESS THAN 100 mΩ. 2. IT HAS TO MEET THE REQUIREMENTS OF 4-2 AND 4-3. 3. MECHANICAL PERFORMANCE SHOULD REMAIN

			TO NORMAL.
8-3	DAMP HEAT	40°C±2°C 90% ~ 95%RH FOR 96 HOURS	1. CONTACT RESISTANCE SHALL BE LESS THAN 100 mΩ. 2. INSULATION RESISTANCE SHOULD BE HIGHER THAN 10 MΩ. 3. DIELECTRIC STRENGTH SHOULD MEET THE REQUIREMENTS OF 4-3. 4. MECHANICAL PERFORMANCE SHOULD REMAIN TO NORMAL.

