

- 1. LOCK TYPE.
- 2. RATING: 30 V DC, 1 A.
- 3. CONTACT RESISTANCE : $50 \text{ m}\Omega$ MAX .
- 4. INSULATION RESISTANCE : 500 V DC , 100 M Ω 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.

						,		ING LIFE
ANGLE ±3°							. OI LIVA	IIIVO LII L
Δ					DATE	DRAWN BY	CHECKED BY	APPROVAL BY
Δ					2005/03/01	OWEN		
\triangleleft					UNIT:	SKIAGRAPH'	A	
SYM	DATE	DES	CRIPTION	REV.	mm		₩	\forall

DIMENSION

10~100mm

BELOW 10mm

ABOVE 100mm

TOLERANCE

±0.3

±0.5

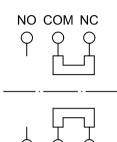
±0.8

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

M SERIES MINI PUSH
BUTTON SWITCH

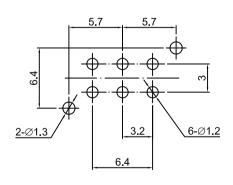
PART NO:	DWG NO:
M-B2PL-19	M-B2PL-19

SCHEMATIC



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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° C $\sim 70^{\circ}$ C

3. RATING: 30V DC 1A

4. ELECTRICAL PERFORMANCE

	ITEM	TEST CONDITIONS	CRITERIA		
4-1	CONTACT	DC 1.5V 100mA, BY METHOD OF	$50 \mathrm{m}\Omega$ MAX.		
	RESISTANCE	VOLTAGE DROP.			
4-2	INSULATION	DC 500V	100 M Ω MIN.		
	RESISTANCE				
4-3	DIELECTRIC	AC 500V FOR 1 MINUTE	BREAKDOWN		
	STRENGTH		IS NOT		
			ALLOWABLE		

5. MECHANICAL PERFORMANCE

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

				CONSTRUC	CTION 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 : $100 \text{ m}\Omega$ MAX.

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

7-3 INSULATION RESISTANCE : 500V DC 100M Ω 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℃ FOR 96 HOURS	1. IT SHOULD MEET
			REQUIREMENTS OF
			ITEM 4.
			2. MECHANINCAL
			PERFORMANCE
			SHOULD REMAIN TO
			NORMAL.
8-2	DRY HEAT	70±2℃ FOR 96 HOURS	1. CONTACT
			RESISTANCE
			SHALL BE LESS
			THAN 100 m Ω .
			2. IT HAS TO MEET
			THE
			REQUIREMENTS OF
			4-2 AND 4-3.
			3. MECHANICAL
			PERFORMANCE
			SHOULD REMAIN

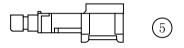
							TO NORMAL.
8-3	DAMP HEAT	40°C ±2°C	90% ~	95%RH	FOR	96 1.	CONTACT
		HOURS					RESISTANCE
							SHALL BE LESS
							THAN 100 m Ω .
						2.	INSULATION
							RESISTANCE
							SHOULD BE
							HIGHER THAN 10 M
							Ω .
						3.	DIELECTRIC
							STRENGTH SHOULD
							MEET THE
							REQUIREMENTS OF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

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













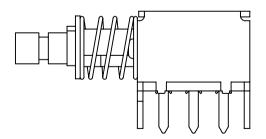












NO.	PART NAME	QTY	MATERIAL	SPECIAL DEAL	RoHS REPORT No.
1	SPRING STOPPER	1	STEEL PLATE	NICKEL PLATING	GZ0705068639/CHEM ;SZTYR070204116/LP
2	SPRING	1	STAINLESS STEEL		F690501/LF-CTSULP06-0176
3	SPRING PLATE	1	PHOSPHOR BRONZE		CE/2006/A1258
4	LOCK PIN	1	PHOSPHOR BRONZE		JP/2007/610237
5	ACTUATOR	1	POM	YELLOW	CE/2007/12424
6	CLIP	2	PHOSPHOR BRONZE	SILVER CLAD 0.7 µ m MIN	CE/2007/44197
7	TERMINAL BOARD	1	P+CARBAMIDE	COFFEE	CE/2007/17604
8	TERMINAL	2	BRASS	SILVER PLATING 5µm	CE/2006/96799; SZTYR060306334/LP
9	FRAME	1	STEEL PLATE	TIN PLATING 5μm MIN	SZTYR060514243/LP; SZTYR070100879/LP

					DATA	2007/09/17	UNIT	mm	MODE	PUSH BUTTON SWITCH
					APPROVAL	KAVEN	SCALE	1 : 1	PART	M-B2PL-19
\triangle					CONFIRM	ALAN	VIEW	₩ 🖶	2D FILE NAME	M-B2PL-19 MATERIALS LIST
	DATA	APPROVAL	DESIGN	ENGINEERING CHANGE DESCRIPTION	DESIGN	JUN	VER.	01	3D FILE NAME	

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