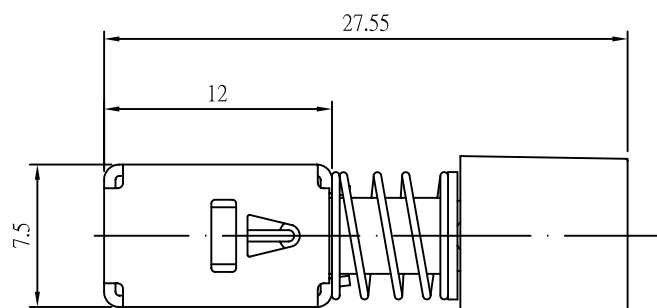
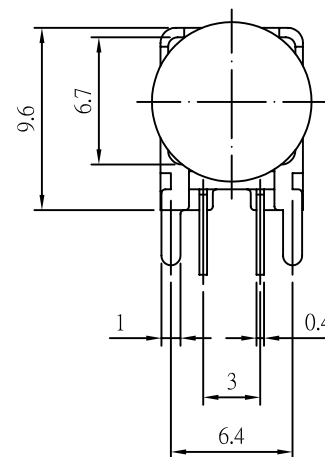
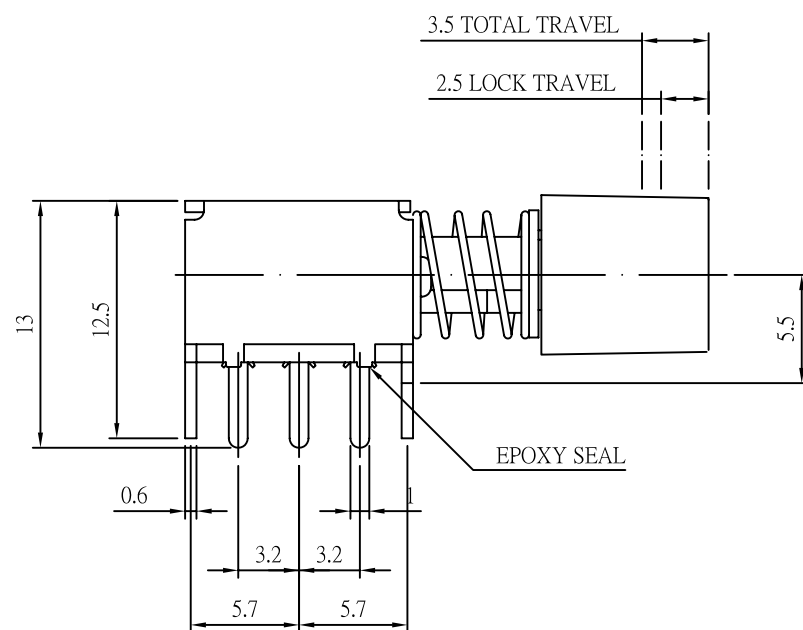
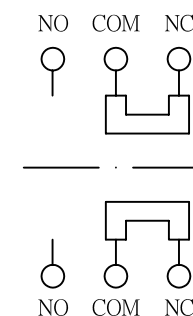


DIMENSION	TOLERANCE
BELOW 10 mm	± 0.3
10~100 mm	± 0.5
ABOVE 100 mm	± 0.8
ANGLE	± 3°

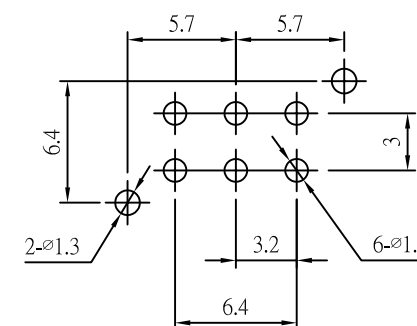


1. LOCK TYPE .
2. RATING : 30 V DC , 2 A .
3. CONTACT RESISTANCE : 50 mΩ MAX .
4. INSULATION RESISTANCE : 500 V DC , 100 MΩ MIN .
5. OPERATING FORCE : 800±200 gf .
6. OPERATING TEMPERATURE : -20℃ ~ 70℃ .
7. OPERATING LIFE : 6,000 CYCLES .

SCHEMATIC



P.C.B. LAYOUT



△					DATA	2007/08/02	UNIT	mm	MODE	PUSH BUTTON SWITCH	HUAI YANG CO., LTD. TEL:886-2-8261-0858 FAX:886-2-8261-1885
△					APPROVAL	KAVEN	SCALE	1 : 1	PART	M-B2PL-44	
△					CONFIRM	ALAN	VIEW	⌀	2D FILE NAME	M-B2PL-44	
	DATA	APPROVAL	DESIGN	ENGINEERING CHANGE DESCRIPTION	DESIGN	BILILLY	VER.	01	3D FILE NAME		

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 2A

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	800±200gf
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 6,000 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.

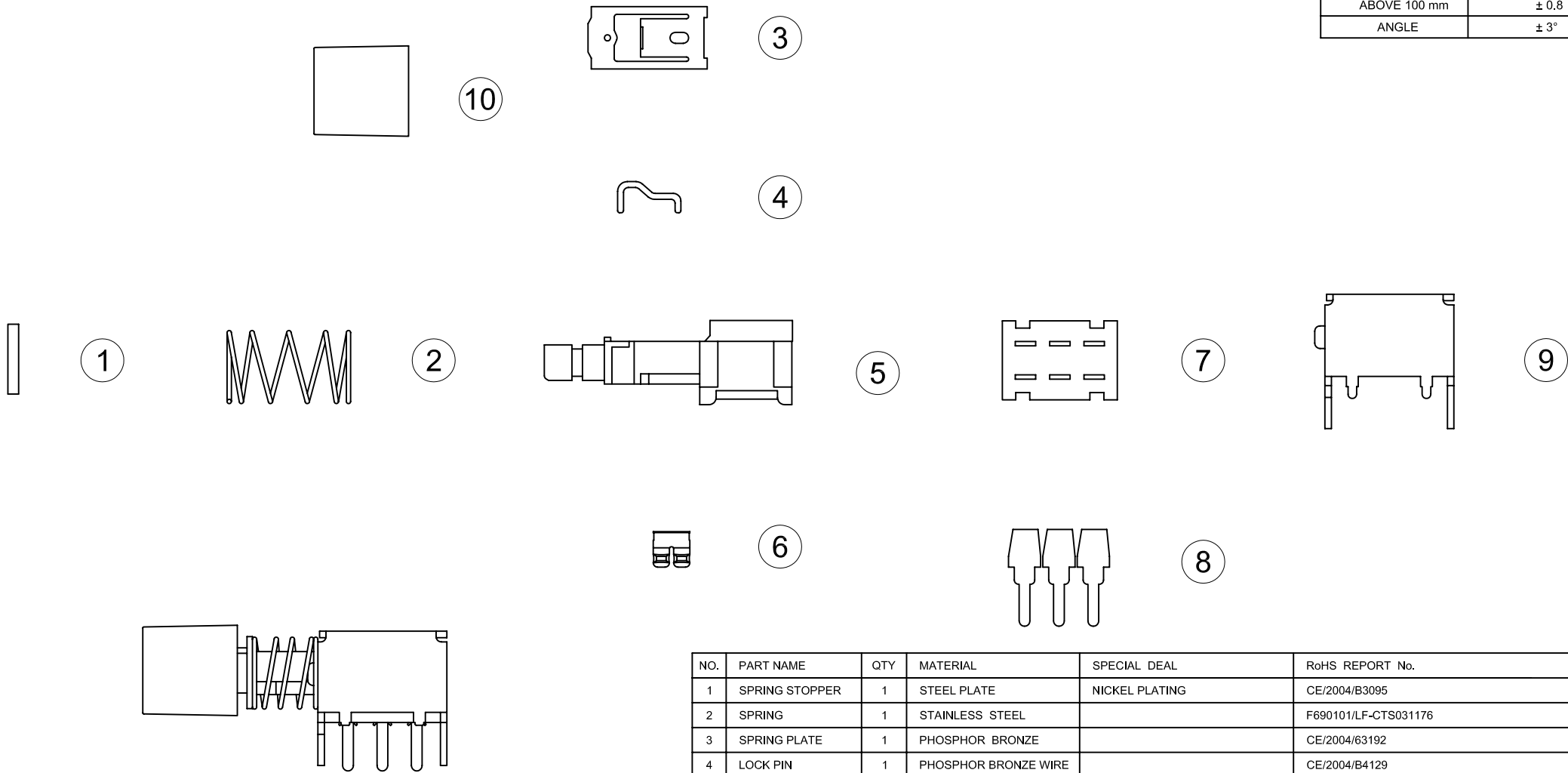
7-4 DIELECTRIC STRENGTH : 500V AC FOR 1 MINUTE, BREAKDOWN IS NOT ALLOWABLE.

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.

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	CE/2004/B3095
2	SPRING	1	STAINLESS STEEL		F690101/LF-CTS031176
3	SPRING PLATE	1	PHOSPHOR BRONZE		CE/2004/63192
4	LOCK PIN	1	PHOSPHOR BRONZE WIRE		CE/2004/B4129
5	ACTUATOR	1	POM	BLUE	CE/2004/62677 ; CE/2004/B5431 ; CE/2005/91877
6	CLIP	2	Be-BRONZE	Pd PLATING 10 μ" MIN. ; Ag PLATING 10μm MIN.	CE/2007/11859 ; CE/2006/B3100A
				PIEZOMETRY : 23 +/- 3 gf	
7	TERMINAL BOARD	1	P+CARBAMIDE	COFFEE	CE/2005/21653
8	TERMINAL	6	PHOSPHOR BRONZE	Pd PLATING 10 μ" MIN. ; Ag PLATING 10μm MIN.	CE/2006/A1258 ; CE/2006/B3100A
9	FRAME	1	STEEL PLATE	TIN PLATING	SZTY050514737-LP
10	KNOB	1	PA66	BLACK	REFERENCE APPENDIX (BASF REPORT)

					DATE	2007/08/02	UNIT	mm	MODE	PUSH BUTTON SWITCH
					APPROVAL	KAVEN	SCALE	1 : 1	PART	M-B2PL-44
					CONFIRM	ALAN	VIEW		2D FILE NAME	M-B2PL-44
	DATE	APPROVAL	DESIGN	ENGINEERING CHANGE DESCRIPTION	DESIGN	BILILLY	VER.	01	3D FILE NAME	

HUAI YANG CO., LTD.

TEL:886-2-8261-0858

FAX:886-2-8261-1885