勝 特 力 材 料 886-3-5753170
胜特力电子(上海) 86-21-34970699
胜特力电子(深圳) 86-755-83298787
Http://www.100y.com.tw

SWITCH TYPE:	Series 100 Miniature Toggle Switch
POLES/THROWS:	SPDT, DPDT, 3PDT, 4PDT

SWITCH FUNCTIONS:

	MODEL		SPDT	DPDT	3PDT	4PDT
ON-NONE-ON	SP1	DP1	*	*	*	*
	3P1	4P1				
ON-NONE-(ON)	SP2	DP2	*	*	*	*
	3P2	4P2				
ON-OFF-ON	SP3	DP3	*	*	*	*
	3P3	4P3				
(ON)-OFF-ON)	SP4	DP4	*	*	*	*
	3P4	4P4				
ON-OFF-(ON)	SP5	DP5	*	*	*	*
	3P5	4P5				
ON-ON-ON	DP6	4P6		*		*
(0N)-ON-(ON)	DP7	4P7		*		*
ON-ON-(ON)	DP8	4P8		*		*
OFF-ON-(ON)	DP9	4P9		*		*

ELECTRICAL CHARACTERISTICS	CONTACT RATING:	MAX. 5Amps @ 125VAC or 28VDC 2Amps @ 250VAC
	ELECTRICAL LIFE:	50,000 make-and-break cycles at full load
	CONTACT RESISTANCE:	10m-ohms max. initial @ 2-4VDC, 100mA for both silver and gold plated contacts
	INSULATION RESISTANCE:	Apply 500VDC for 1min±5sec. b/w live parts and dead-metal parts. The measurement shall be 1000M-ohms min.
	DIELECTRICAL STRENGTH:	1,500V (50Hz-60Hz) RMS @ sea level shall result no damage to parts arcing or flashover
	OPERATING TEMPERATURE:	-30Celsius degree to +85Celsius degree
RELAIBILITY PERFORMANCE	SOLDERING ABILITY:	Per MIL-STD-202F method 208D,max soldering temperature @ 260Celsius degree, flux 5-10sec, duration of solder immersion 5+/-1sec. shall result no anti-soldering and the coverage of dipping into solder must be more than 90%
	SOLDERING HEAT RESISTANCE:	Max soldering temperature @ 260Celsius degree, immersion time 5+/-1sec, frequency of soldering process @ 2 times max.
	COLD TEST:	Stored at temperature -30(+/-3)Celsius degree for 48 hours, then left at room temperature for an hr before electrical performance is measured.
	HOT TEST:	Stored at temperature 85(+/-3)Celsius degree for 48 hours, then left at room temperature for an hr before electrical performance is measured.
	HUMIDITY TEST:	Stored at temperature 85(+/-3)Celsius degree with relative humidity 90%~95% for 48 hours, then left at room temperature for an hr before electrical performance is measured.

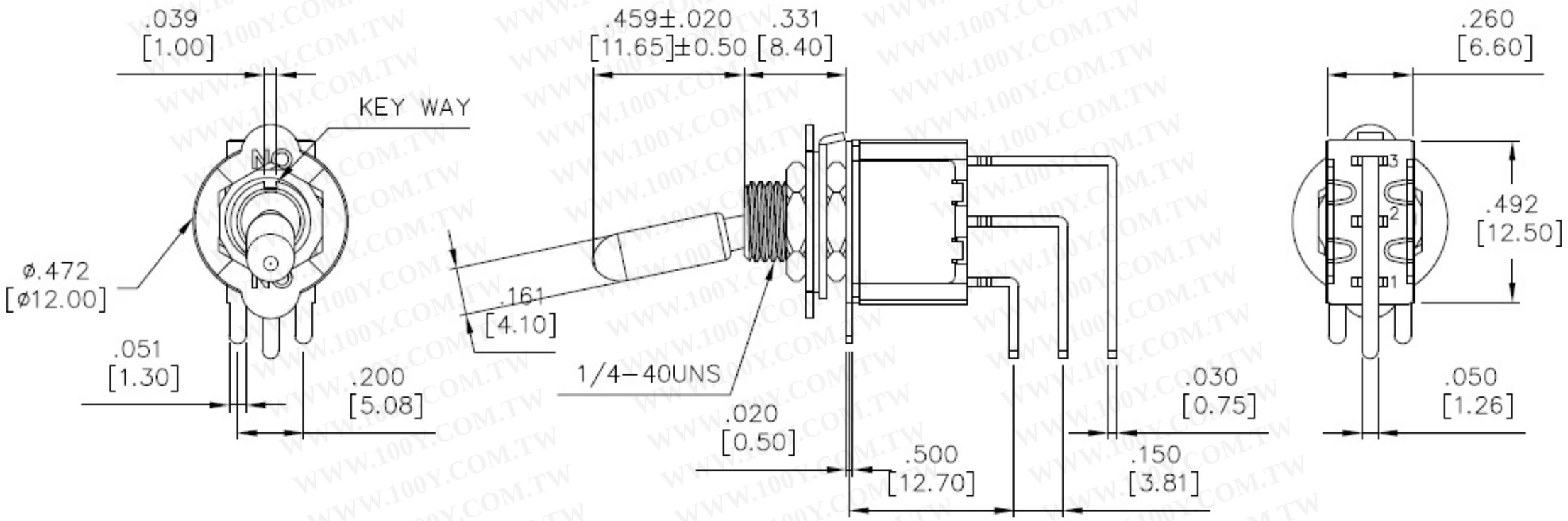
RELAIBILITY PERFORMANCE	SALT SPRAY RESISTANCE:	Stored at temperature @ 35(+/-3)Celsius degree, and salt solution concentration of 5% with full air temperature @ 47(+/-3) Celsius degree and air pressure 1.0kg for 48 hours. The switch shall result no corrosion as well as no apparent changes to its functional performance. Per ASTM-B117 & JIS-Z371 STD.
MATERIAL CHARACTERISTICS	CASE:	Diallyl phthalate (DAP)(UL 94V-0)
	TOGGLE HANDLE:	Brass, chrome plated Zinc alloy, nickel plated (locking lever types only)
	BUSHING:	Brass, nickel plated
	HOUSING:	Stainless steel
	SWITCH SUPPORT:	Brass, tin plated
	MOVABLE CONTACT:	Copper alloy, silver plated
	TERMINAL CONTACT:	Copper alloy, silver plated
	ALL TERMINALS:	Copper alloy, silver plated
	TERMINAL SEAL:	Epoxy sealed (std. type)
	HARDWARE:	Nut(brass), locking ring lock washer(stainless steel)
	ACCESSARY:	Cap - polyvinyl choride Locking lever cap - AL with anti-oxidation finish Rubber boot - silicone rubber, bronze or brass plated depending on toggle types
SOLDERING & CLEANING RECOMMENDATION	HAND SOLDERING:	Max. temperature @ 350Celsius degree (662F)with continuous soldering time @ 3sec. max. Recommend soldering irons of 25-40 watts max. and solder of 0.030~0.040 dia.
	WAVE (DIP) SOLDERING:	No-clean flux wave soldering is recommended so the switch does not require washing after soldering process. Noted, not to have flux migrate inside the switch through the top of the housing or actuator to prevent contamination. Max temperature @ 260Celsius degree (500F) for 10sec.
	CLEANING PROCESS:	Noted, the switch is “not totally sealed” so it is important not to immerse/spray or clean unsealed areas of the switch during flux removal. To clean after soldering, keep the switch in an up-right position and tape-sealed the non-washable area such as cover and actuator to prevent the cleaning solution from entering into the body of the switch. Improper cleaning could cause switch deficiencies such as intermittence or open contact failures

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PACKAGE	INTERNAL PACKAGING:	Depending on the switch types, certain quantity of switches are seal-packed in PE bag.
	EXTERNAL PACKAGING:	The bags are packed in carton box [approx. dimension (L)19.5cm x (W)13.4cm (H)4.5cm] with label attached outside that identifies product part no./customer part no., quantity per box, order no./PI no., and date of quality inspection carried out.
	RoHS/Pb-free IDENTIFI-CATIONS:	A label marking "RoHS compliant" and "Pb-free" will be attached to the carton box.
PRODUCT HANDLING & STORING	The switch is suitable for power rated applications, rating recommendation is per aforementioned above (Contact rating section) Problem relates to terminal oxidization can be prevented by storing product in an environment that is dry and cool with the relative humidity less than 90%. Noted, prior to mounting products onto circuit board as well as for unused units, it is recommended to keep them in the bag and with the bag sealed.	

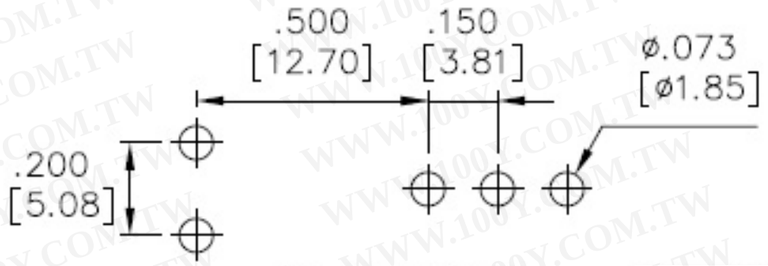
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REV. 更改	DESCRIPTION 說明	ENG. 修改人	APPROVE 審核



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MODEL NO.	SWITCH POSITION		
SP-1	ON	NONE	ON
SP-2	ON	NONE	(ON)
SP-3	ON	OFF	ON
SP-4	(ON)	OFF	(ON)
SP-5	ON	OFF	(ON)
Term. Comm.	2-3	OPEN	2-1



PC MOUNTING

SPECIFICATIONS:
1. MOVABLE CONTACT: Copper alloy, silver plated
2. TERMINALS: Copper alloy, silver plated
3. RATING: 5Amps with resistive load @ 125VAC or 28VDC
   2Amps with resistive load @ 250VAC
4. CONTACT RESISTANCE: 10m-ohms max. initial
5. INSULATION RESISTANCE: 1,000M-ohms min.
6. DIELECTRIC STRENGTH: 1,500V RMS @ sea level
7. ELECTRICAL LIFE: 50,000 make and break cycles at full load
8. OPERATING TEMPERATURE: -30°C to +85°C
9. Nut-brass nickel plated, Washer & Locking Ring-Steel, ON/ON plate-aluminum, Toggle Cap-PVC, red.

ITEM NO. 料 號	100-SP-1-T113B1M7Q5 1MS131B1E0M7Q5

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UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN MILLIMETERS
ANGULAR TOLERANCE: ±1.0°

DIMENSIONS	TOLERANCE
0.00 TO 10.00mm	±0.20mm
10.01 TO 20.00mm	±0.25mm
20.01 TO 30.00mm	±0.30mm
30.01 ↑	±0.40mm

MATERIAL

USED 用途	100		
FINISH 處理			
SCALE 比例	2 / 1	UNIT 單位	in(mm)
TITLE 名稱	TOGGLE SWITCH		
DWG NO. 圖號	1MS131B1E0M7Q5	SIZE 圖紙	A4
FILE NAME 檔案名稱	1MS131B1E0M7Q5.dwg	SHEET 張	1 / 1
REV. 更改	1		

DATE: 104.09.11

文號:ER-013b