

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
 Http://www.100y.com.tw

## PUSH BUTTON SWITCH WITH LED ML SERIES



### Feature

- LED illumination
- Two color available
- 2 Pole, 4 Pole
- Lock/Non-lock available

### Applications

- Instrumentations
- Computer Product
- Communication Equipments

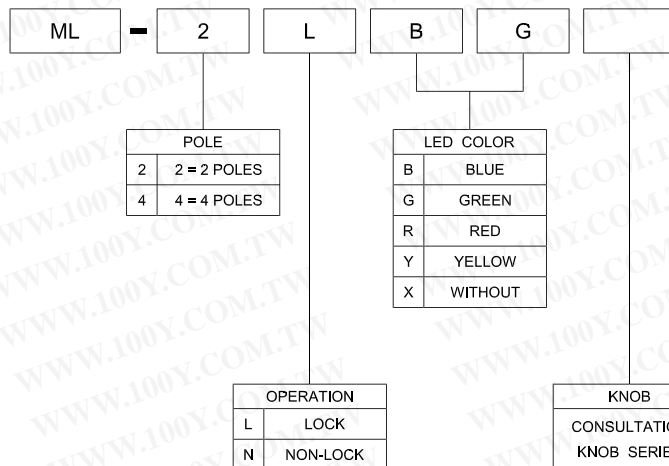
### SPECIFICATIONS

SWITCH SPECIFICATIONS	
POLE - POSITION	2P2T , 4P2T LOCK / NON-LOCK Action with LED
CONTACT RATING	30 V DC , 0.3 A
CONTACT RESISTANCE	20 mΩ max . 1.5 V DC ; 100 mA , by Method of Voltage DROP
INSULATION RESISTANCE	100 MΩ min . 500 V DC
DIELECTRIC STRENGTH	Breakdown is not Allowable ; 500 V AC for 1 Minute
OPERATING FORCE	200 ± 100 gf
OPERATING LIFE	10,000 cycles
OPERATING TEMPERATURE RANGE	-20°C ~ 70°C
TOTAL TRAVEL	LOCK TRAVEL - 2.5 ± 0.3 mm FULL TRAVEL - 3.3 ± 0.3 mm

LED SPECIFICATIONS						
ATTENTION LEDs are Electrostatic Sensitive devices	Symbol	Unit	Value / LED Color			
			Blue	Green	Red	Yellow
FORWARD CURRENT	$I_f$	mA	30	30	15	20
REVERSE VOLTAGE	$V_r$	V	5.0	5.0	5.0	5.0
REVERSE CURRENT	$I_r$	μA	50	10	10	10
FORWARD VOLTAGE@20mA	$V_f$	V	3.5-4.0	1.7-2.6	1.7-2.6	1.7-2.6
LUMINOUS INTENSITY@10mA	$I_v$	mcd	@20mA 350-700	4.7-7.8	1.6-2.6	4.7-7.8

- Physical and electrical information of LED will be provided upon customer's request on switches.

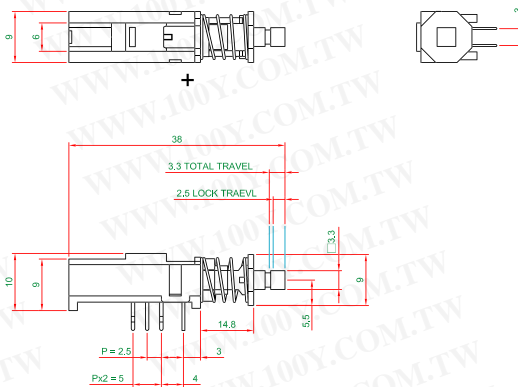
### HOW TO ORDER



DIMENSION



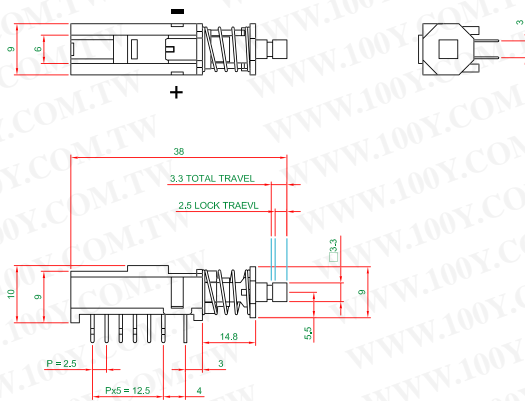
ML - 2N □ □



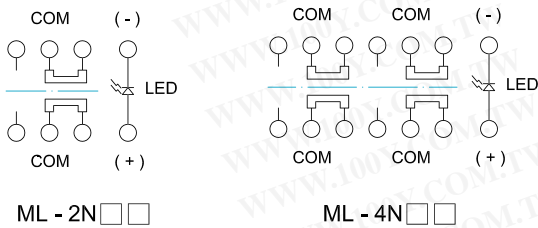
DIMENSION



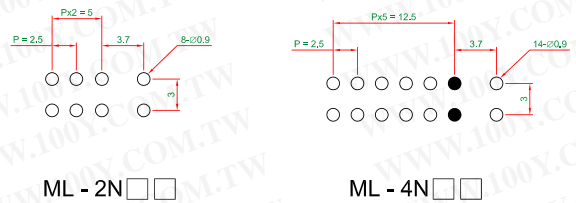
ML - 4N □ □



CIRCUIT



P.C.B LAYOUT

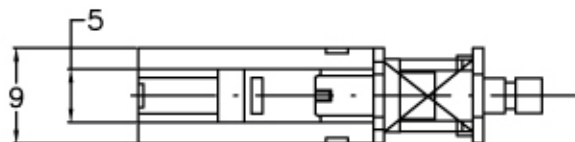


MATERIAL

- COVER - POM
- ACTUATOR - POM
- BASE FRAME - PBT + GF
- TERMINAL - BRASS SILVER

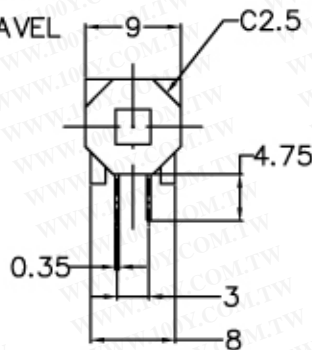
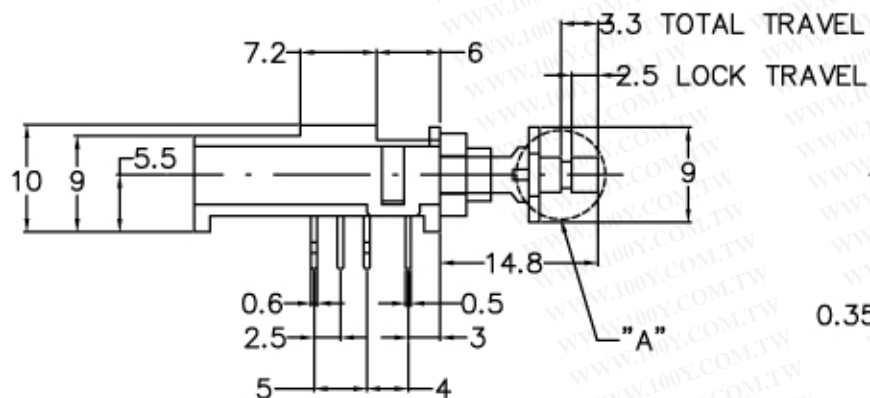
UNIT WEIGHT

- ML - 2N □ □ : 2.45 ± 0.05 g / pcs
- ML - 4N □ □ : 2.5 ± 0.05 g / pcs

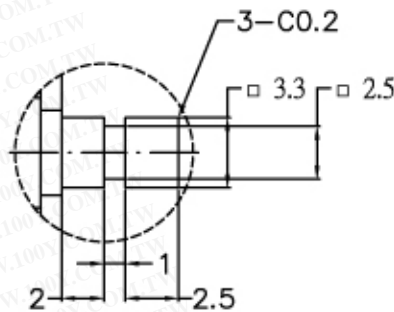


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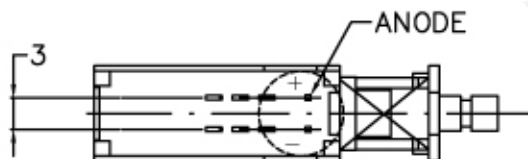
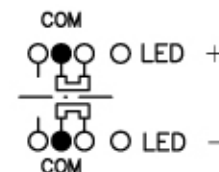
DATE	DESCRIPTION	REV.
2003/01/06		01



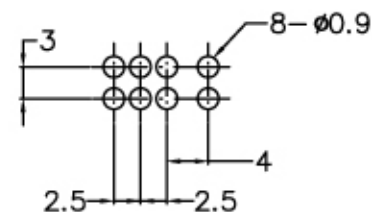
SECTION "A" DETAIL



SCHEMATIC



P.C.B HOLE DETAIL



LED			
BI COLOR	max V	max mA	
RED	2.0	20	Power + → LED + Power - → LED -
GREEN	2.8	20	Power + → LED - Power - → LED +

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

CUSTOMER:	DATE	DRAWN BY	CHECKED BY	APPROVAL BY	TITLE:	PART NO:	DWG NO:
	2003/01/06	KAVEN					
	UNIT:						
	m/m						