

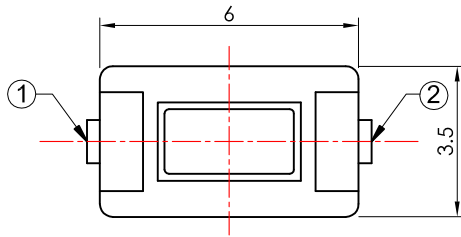
*開關產品未經SWITRONIC同意，請勿拆解，否則無法負品質及安全責任。

Please do not decompose the switch without any permission from SWITRONIC, otherwise the quality and safety responsibility could not be guaranteed.

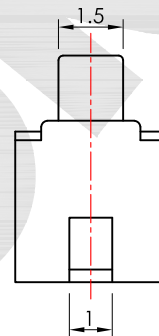
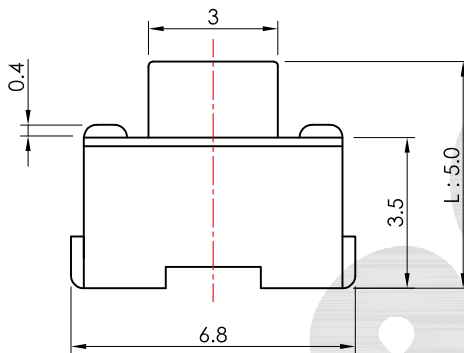
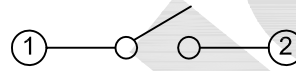
*本圖面若與目錄之規格尺寸不符，以本圖面規格尺寸為主。

Below is our main specification if different from catalog.

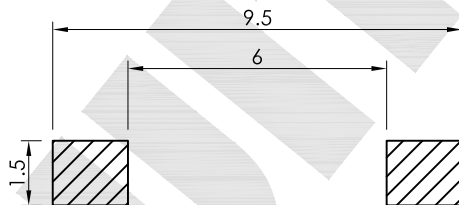
RoHS compliant



CIRCUIT DIAGRAM



P.C.B. LAYOUT



RoHS compliant

IT-1101NHX-XXXG-G

MODEL NO.	L	OPERATING FORCE
□	4.3	130, 160, 180, 250
A	5.0	

SPECIFICATION

Rating: 50mA 12V DC.

Circuit: SPST.

Function: OFF-(ON).

Travel: 0.25±0.1mm.

Contact resistance: 100mΩ Max.(initial)

Operating force: 160±50g.

Minimum load: 10mA 3.3V DC.(reference only)

Life: 50,000 Cycles Min.

Soldering temperature: 250°C Max. for 3 sec.

Soldering time: 1 time only.

Note1: Unwashable, don't be immersed by epoxy and organic solvent.

Note2: Please check the actual size, do not scale the drawing page.

產品 PRODUCT		Tact Switch		型號 MODEL NO.	IT-1101NHA-160G-G
比例 SCALE	6 : 1	單位 UNIT	mm		
公差 TOLERANCE	.X=±0.3mm, .XX=±0.2mm				
製圖 DRAWN BY	核圖 CHECKED BY	主管 APPROVED BY			
Peter Kuo	Chuck Young	Margaret Lee			
				一綺電子企業股份有限公司 總公司：110 台北市信義路四段415號13樓之3 13F-3 NO. 415, SEC. 4, HSIN YI ROAD, TAIPEI, TAIWAN TEL : 886-2-27290229 (Rep.) FAX : 886-2-27582086 URL : http://www.switronic.com.tw E-MAIL : switches@ms36.hinet.net	

一綺電子企業股份有限公司

SWITRONIC INDUSTRIAL CORP.

MODEL NO: IT-1101 Series

CV3.0

V.DATE:2012/03/12

1. Features

- 1-1 Horizontal mounting type and small, low profile design.
- 1-2 Reflow solderable.

2. Applications

From the operating various of Mobile phones, Digital camcorder, Digital camera and Audio devices for which Low profile and Light weight designs are required.

3. Temperature range

Parameter	Value	Unit
Operating temperature range	-10 ~ 60	°C
Preservative temperature range	-5 ~ 40	°C

4. Standard conditions

Parameter	Value	Unit
Ambient temperature	5 ~ 35	°C
Relative humidity	45 ~ 85	% Rh
Air pressure	860 ~ 1060	mBar

If doubt arises on the design based on the measured values under the above mentioned conditions, the following conditions shall be employed.

Parameter	Value	Unit
Ambient temperature	18 ~ 22	°C
Relative humidity	60 ~ 70	% Rh
Air pressure	860 ~ 1060	mBar

5. Contact arrangement

1 Pole / 1 Throw

6. Type of actuating

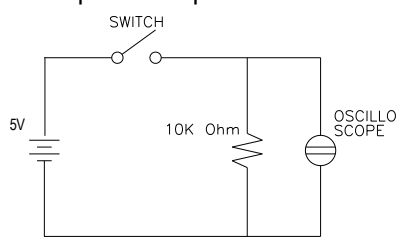
Tactile feedback



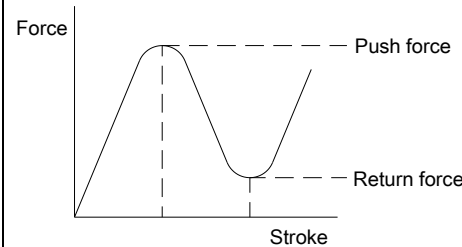
7. Rating

Maximum rating	12 V (DC) , 50 mA
Minimum rating	3.3 V (DC) , 10mA

8. Electrical characteristics

No	Item	Test conditions	Evaluation
1	Contact resistance	Push force : Operating force X 2 Small current contact resistance meter : 1Khz,20Mv,5-50mA	100mΩ MAX.
2	Insulation resistance	100V (DC) / 1 Minute (Between terminal)	100MΩ MIN.
3	Dielectric withstand voltage	AC 250V (50Hz OR 60Hz) / 1 Minute (Between terminal)	No break down
4	Bouncing	3 to 4 Operations per second  (Switch bouncing circuit)	On / Off : 10ms MAX.

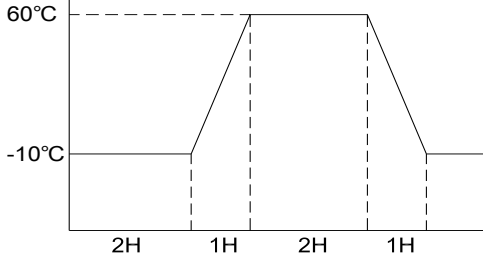
9. Mechanical characteristics

No	Item	Test conditions	Evaluation
1	Operating force	 Push by recommended operating conditions	Push force : As per assembly drawing Return force : 10gf MIN.
2	Travel	Force : Operating force	As per assembly drawing



3	Stop strength	0.5Kgf / 5sec	No break down
4	Stem strength	1Kgf for 15 sec.	No damage (Electrical and Mechanical)
5	Soldering heat test	Mounted the switch on P.W.B by adhesive. 1) Reflow process one time. 2) Standard conditions after test : 24 Hours	No damage (Electrical and Mechanical)

10. Environmental

No	Item	Test conditions	Evaluation
1	Storage heat	+80 ± 2°C , 96 HOURS	After the test the part shall satisfy. Specifications without any degradation in appearance and performance.
2	Storage cold	-30 ± 2°C , 96 HOURS	
3	Humidity	40 ± 2°C , 90 ~ 95% Rh , 96 Hours	
4	Temperature cycle	5 Cycles 	

11. Endurance

No	Item	Test conditions	Evaluation
1	Operating life	1) 5V (DC) , 50mA 2) 15-20 Cycles/min , Maximum value of operation Life. 3) Life : Assembly drawing.	After the test the part shall satisfy. Specifications without any degradation in appearance and performance.

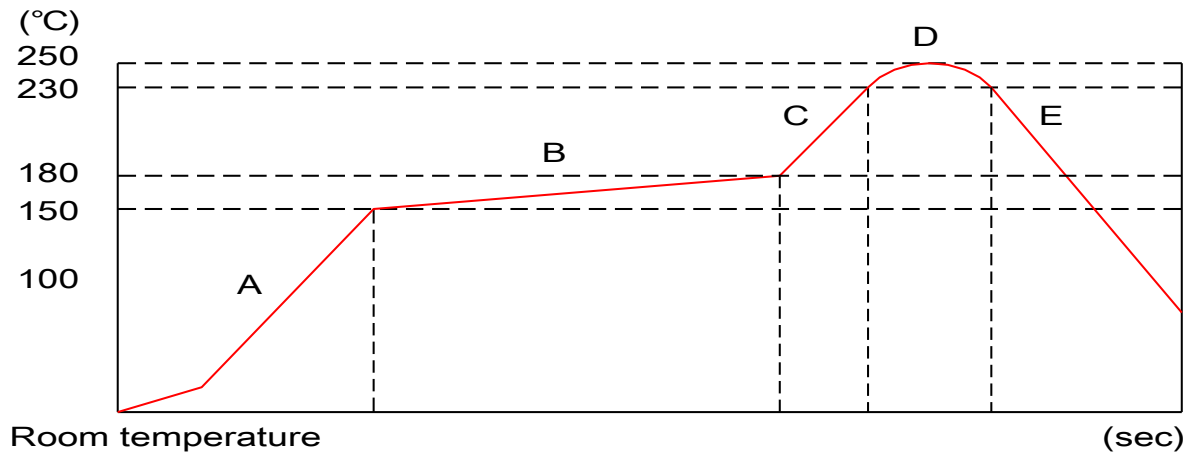
Notes

As this product is not protected from foreign material entering please make sure that any foreign material (E.G Magnetic powder, Washing solvent, Flux, Corrosive gas) Do not enter this product in your production process.



12. Solder conditions

12-1 SMD Reflow



Parts	Temperature (°C)	Time at temperature(sec)	Treatments
A	NO - 150		
B	150 - 180	90 ± 30	Pre-heating zone
C	180 - 230		
D	230 – 250 - 230	30 ± 10 (Peak : 3 MAX.)	Soldering zone
E	230 to NO		Cooling zone

** NO : Normal conditions

Soldering time: 1 time only.

12-1-1 Cream solder : H 0.12 ± 0.03mm

12-2 Manual soldering

12-2-1 Iron tip temperature : 350°C MAX.

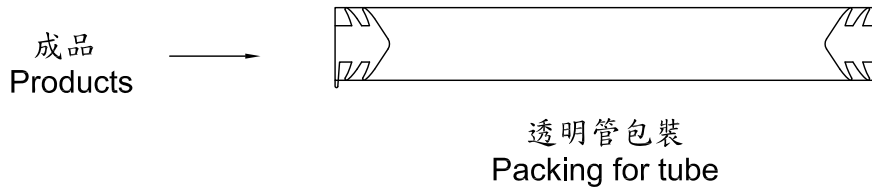
12-2-2 Duration : 3 sec MAX.



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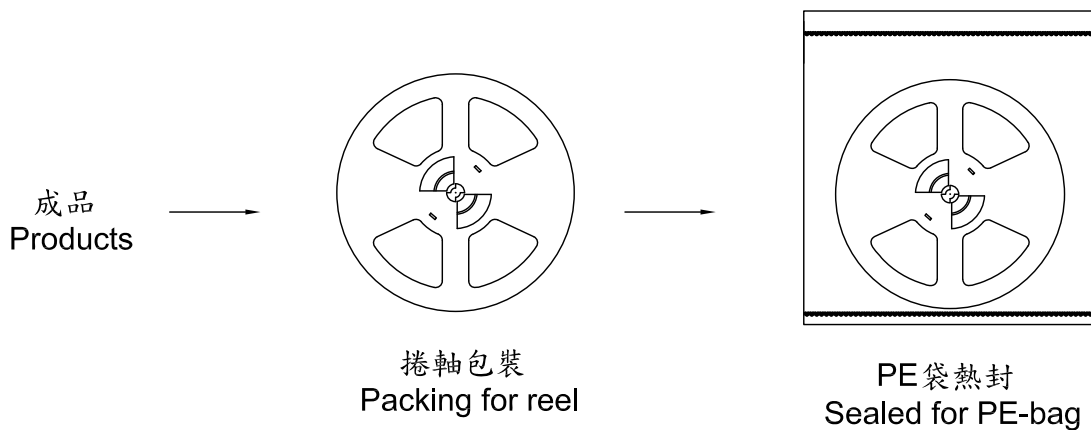
入料包裝方式 Packing for Products

管裝方式 Packing for tube



Packing for tube : _____ pcs / tube.

捲裝方式 Packing for reel



Packing for reel : 1,500 pcs / reel , 1 reel / polybag.

Quantity thickness for polybag : 0.08 mm , Quantity desiccating agent : 1 pcs.

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產品綠色環保標章

"G" Mark for All RoHS Compliant Products

環保標章式樣

Initial "G": Standing for Green Label



外箱標示

Marked on The Outside of Carton As:

