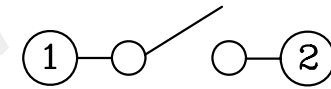
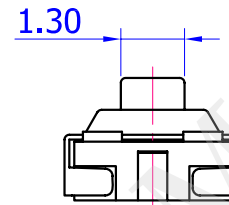
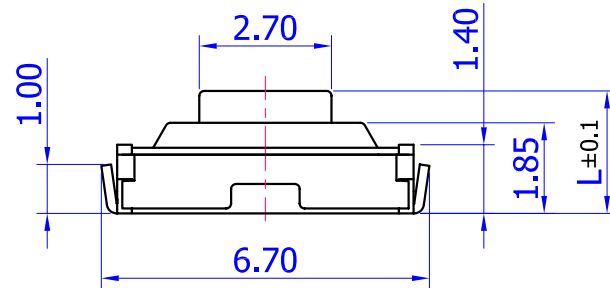
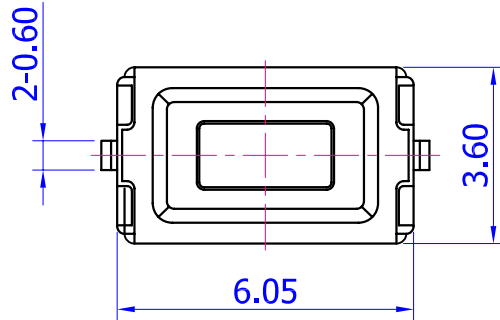
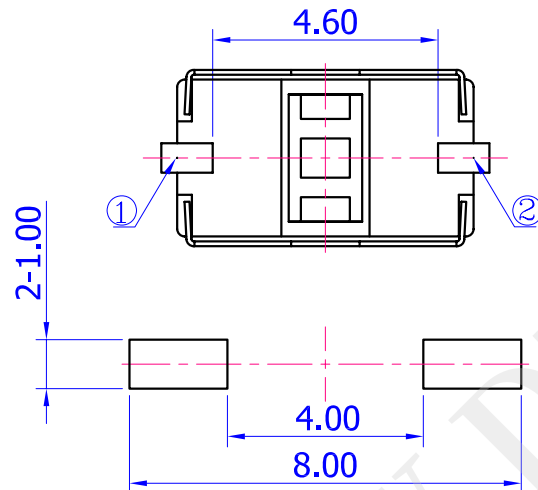


RevNo	Revision note	Date	Signature
△			



CIRCUIT DIAGRAM



P.C.B SOLDER LAND DIMENSIONS

NOTE:

- 1.RATING : DC 12V 50mA
- 2.CONTACT RESISTANCE : 100mΩ MAX
- 3.TRAVEL : 0.25±0.1mm
- 4.GENERAL TOLERANCE : ±0.3mm
- 5.MANUFACTURING SPECIFICATION WOULD BE ACCORDANCE WITH WT0160

JT1107MJ		180±30gf	BLACK	BLACK	2.5mm	50,000 Cycles	
JT1107MWJ	130010000261	250±50gf	BLACK	RED	2.5mm	50,000 Cycles	
MODEL NAME	CODE NO.	O/FORCE	CASE COLOR	STEM COLOR	"L"	LIFE CYCLE	REMARKS

Designed by								
Checked by								
Approved by		Unit	mm	Scale	N/S	Date	2015.06.15	
Item	TACTILE SWITCH		Tool	Au	Sheet	1/1	Rev.	0
Model	JT 1107J Series		Drawing name					ASSEMBLY

	SPECIFICATION	PAGE
	TACT SWITCH	1 / 4

1. GENERAL MATTERS

- 1.1 Application : This specification is applied to low current circuit tactile switch for electronic equipment.
- 1.2 Operating temperature range : $-20 \sim 70^{\circ}\text{C}$, 45 ~ 85% RH
- 1.3 Storage temperature range : $-30 \sim 80^{\circ}\text{C}$. However, 96 hours maximum for continuous storage over a range $-20 \sim -30^{\circ}\text{C}$ and a range $70 \sim 80^{\circ}\text{C}$.
- 1.4 Test conditions : The standard test conditions shall be $5 \sim 35^{\circ}\text{C}$ in temperature, 45 ~ 85% RH and 860 ~ 1060mbar in atmospheric pressure.
Should any doubt arise in judgement, tests shall be conducted at $20 \pm 2^{\circ}\text{C}$, $65 \pm 5\%$ RH and 860 ~ 1060mbar.

2. RATED VOLTAGE AND CURRENT.

As per individual manufactured drawing.

3. ELECTRICAL PERFORMANCE

	PROPERTY	TEST CONDITIONS	PERFORMANCE
3.1	Contact arrangement		* 1 pole, 1 throw.
3.2	Contact resistance	Measured at DC 5V 10mA or by ohmmeter allowing a small current at 1KHz with a load of 150% of the actuating force.	* As per individual manufactured drawing.
3.3	Insulation resistance	DC 100V is applied between terminals and between terminals and earth for 1minute ± 5 seconds.	* Greater than 100 M Ω .
3.4	Dielectric strength	AC 250V (50 ~ 60Hz) is applied between terminals and between terminals and push for 1 minute.	* No insulation defect shall be observed.
3.5	Bounce	Measured by lightly striking the center of the button stem at a rate of 3 operations/sec...	* less than 10 msec.

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	TACT SWITCH	2 / 4

4. MECHANICAL PERFORMANCE

	PROPERTY	TEST CONDITIONS	PERFORMANCE
4.1	Actuating force	A gradually increasing load is applied to the center of the button stem.	* As per individual manufactured drawing.
4.2	Return force	After actuating, the load is gradually decreased until the stem returns to its free position.	* 160gf,180gf,250gf,260gf : greater than 50gf. * 100gf,130gf : greater than 30gf.
4.3	Stop strength	A static force of 3 Kgf shall be applied to the direction of operation for 3 seconds.	* Shall be free from mechanical and electrical abnormalities.
4.4	Stem withdrawal force	A static load of 500gf is applied to the direction of pulling for 3 seconds.	* Shall be free from mechanical and electrical degradation.
4.5	Travel		* As per individual manufactured drawing.
4.6	Arrangement of action		* Tactile feed-back.

5. DURABILITY

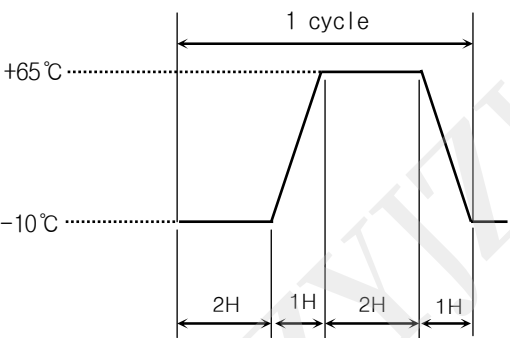
	PROPERTY	TEST CONDITIONS	PERFORMANCE
5.1	Operating life	The test is conducted according to the below. (1) DC 5V 5mA resistive load. (2) Rate of operation : 60 cycle/min (3) Actuating force : 150% of actuating force (4) Operating cycle : As per individual manufactured drawing.	* Contact resistance : 500mΩ maximum. * Bounce : 20m sec max. * Actuating force : within ± 30% of the initial value. * Insulation resistance : 10 MΩ minimum.

6. WEATHER PROOF

6.1	Cold heat proof	After testing at -30℃ for 96hours, the sample is allowed to stand under normal temperature and humidity conditions for 1hour and measurement is performed within 1hour after that. Water drops should be wiped off.	* The requirement in item 3 and 4 shall be satisfied.
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	TACT SWITCH	3 / 4

	PROPERTY	TEST CONDITIONS	PERFORMANCE
6.2	Dry heat proof	After testing at 85℃ for 96hours, the sample is allowed to stand under normal temperature for 1hour and measurement is performed within 1 hour after that.	* The requirement in item 3 and 4 shall be satisfied.
6.3	Damp heat proof	After testing at 60±2℃ and 90 ~ 95% in relative humidity for 96hours, the sample is allowed to stand under normal temperature and humidity conditions for 1hour and measurement is performed within 1hour after that. Water drops should be wiped off.	* Insulation resistance : 10 MΩ minimum.. * Dielectric strength : same as item 3.4. * Contact resistance : same as item 3.2.
6.4	Thermal cycling	 After the test conducted under 5 cycles the sample is allowed to stand under normal temperature and humidity conditions for 1 hour, and the measurement is performed within 1 hour.	* The requirement in item 3 and 4 shall be met.

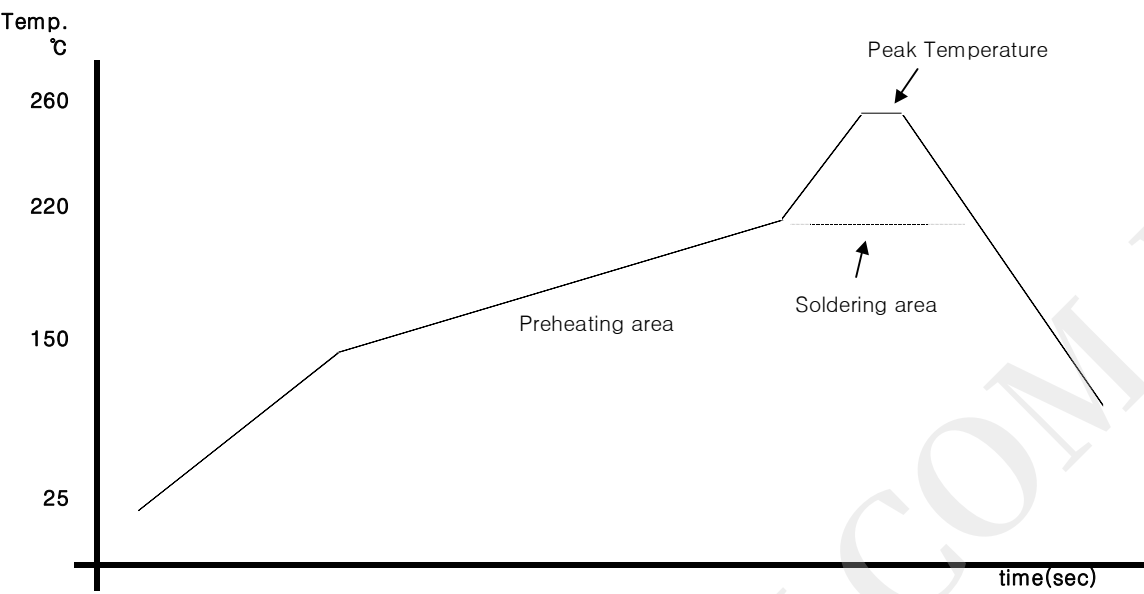
7. REFLOW SOLDERING

7.1 Reflow soldering conditions

- 1) Preheat ----- 150℃ ~ 200℃, 120 ±20 (sec)
- 2) Peak temperature --- 260℃ max. 10 (sec)
- 3) Soldering area temperature ----- 217℃, 90 ~ 120 (sec)

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< Temperature profile >

8. Manual soldering

- 8.1 Soldering temperature ----- 350℃±5℃
- 8.2 Soldering time ----- 5(sec)

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ZONE	SYMB	DATE	APPD	CHKD	DSGD				WT 0160

재 질 증 명 서

(CERTIFICATION OF MATERIAL)

결 재	작 성	검 토	승 인

일 자
DATE 2015.06.19

제품명
ITEM TACT SWITCH

제품 번호
MODEL No. JT1107MJEM

상기 제품은 하기재료를 사용하고 있음을 증명합니다.
(The above item is certified to use with following materials.)

No.	구성부품명 (Part name)	원재료(Material)				난연성 (Flame class)	UL (File No.)	색상 (Color)
		Material name	Treatment	Manufacturer	Nationality			
1	CASE	LCP		POLYPLASTICS	JAPAN	UL 94V-0	E106764	BLACK
2	TERMINAL	BRASS	Ag Plating	CHINALCO	CHINA			
3	DOME CONTACT	STAINLESS STEEL	Ag clad	CHANGSUNG	KOREA			
4	STEM	PPA		SOLVAY	U.S.A	UL 94V-0	E95746	BLACK
5	COVER	STAINLESS STEEL		SAMSUNG	KOREA			
6	TAPE	PI FILM		JIABANG	CHINA			
7								
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