

Customer : C&K

Date : 2013.03.06

Attention :

Your part No :

SPECIFICATIONS

MODEL : TACT SWITCH

Model No. : JT 1141WEM,CKEM

Sample No. : 1303003

PURPOSE OF THIS DOCUMENT.

Preliminary copy.

Request for your Approval

REMARKS:

CHINA FACTORY : QINGDAO NAMA E ELECTRONICS INC.

266427 LINGSHANWEI COUNTY, JIAONAN CITY, QINGDAO, SHANDONG, CHINA

TEL : (0532)8318-3600 615,612

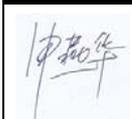
FAX : (0532)8318-3627

HEAD OFFICE : SwitchKOREA Co., Ltd

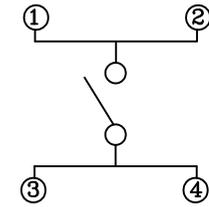
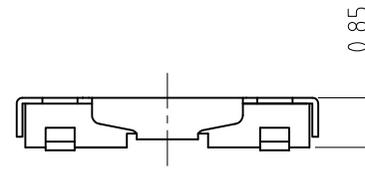
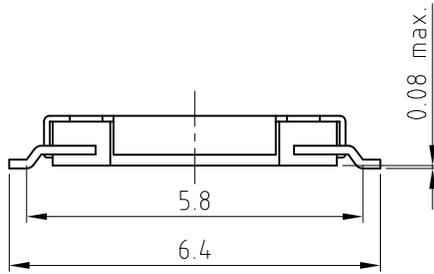
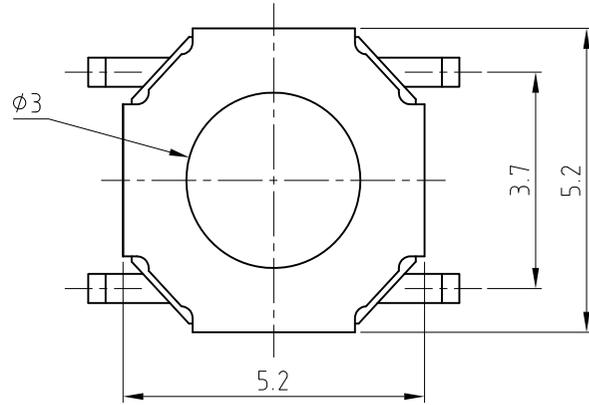
436-7 NONHYUN-DONG, NAMDONG-GU, INCHEON, KOREA

TEL : (032) 814-9000/4

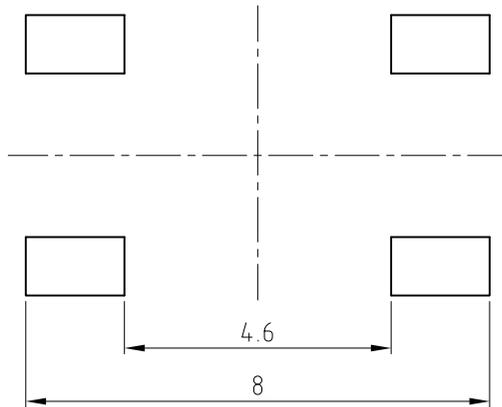
FAX : (032) 814-9005

DRAWN BY	CHECKED BY	APPROVED BY
		

RevNo	Revision note	Date	Signature
△	모델 파생	2013.01.21	



CIRCUIT DIAGRAM



PCB SOLDER LAND DIMENSIONS

NOTE

1. RATING : DC 15V, 20mA
2. CONTACT RESISTANCE : 100mΩ max.
3. TRAVEL : 0.25+0.1/-0.2mm
4. GENERAL TOLERANCE : ±0.2
5. MANUFACTURING SPECIFICATION WOULD BE ACCORDANCE WITH WT0159

JT-1141W	130010000204	NATURAL(IVORY)	260±50gf	200,000 Cycles
JT-1141CK	130010000202	BLACK	160±50gf	1,000,000 Cycles
MODEL NAME	CODE NO.	CASE COLOR	O/FORCE	LIFE CYCLE

Designed by	B.SAGONG							
Checked by								
Approved by	T.H.OH	Unit	mm	Scale	N/S	Date	2013.01.21	
Item	TACTILE SWITCH		Tool	Au	Sheet	1/1	Rev.	0
Model	JT-1141 Series		Drawing name		ASS'Y DIAGRAM			

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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 ~ 70°C, 45 ~ 85% RH

1.3 Storage temperature range : -30 ~ 80°C. However, 96 hours maximum for continuous storage over a range -20 ~ -30°C and a range 70 ~ 80°C.

1.4 Test conditions : The standard test conditions shall be 5 ~ 35°C in temperature, 45 ~ 85% RH and 860 ~ 1060mbar in atmospheric pressure.

Should any doubt arise in judgement, tests shall be conducted at 20±2°C, 65±5% RH and 860 ~ 1060mbar.

2. RATED VOLTAGE AND CURRENT.

DC 15V 20mA

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.	* less than 100mΩ.
3.3	Insulation resistance	DC 100V is applied between terminals and between terminals and earth for 1minute ±5seconds.	* greater than 100 MΩ.
3.4	Dielectric strength	AC 250V (50 ~ 60Hz) is applied between terminals and between terminals and earth 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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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, 260gf : greater than 40gf. * 100gf, 130gf : greater than 20gf.
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		* 0.25 +0.1/-0.2 mm
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) DC12V 50mA 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 : 200mΩ max. * Bounce : 20m sec max. * Actuating force : within ± 30% of the initial value.

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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						APPD	CHKD	DSGN	TITLE
									
ZONE	SYMB	DATE	APPD	CHKD	DSGD				DOCUMENT NO.
									WT 0159

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	PROPERTY	TEST CONDITIONS	PERFORMANCE
6.2	Dry heat proof	After testing at 85°C 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°C 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 : 10MΩ minimum. * Dielectric strength : same as item 3.4. * Contact resistance : same as item 3.2.
6.4	Thermal cycling	<p>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.</p>	* The requirement in item 3 and 4 shall be met.

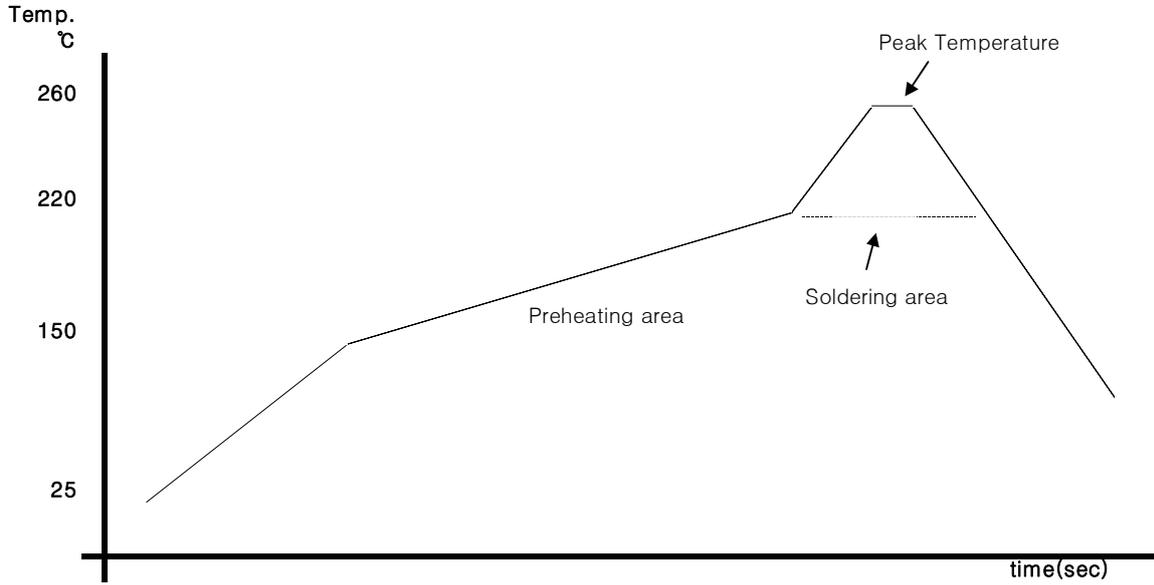
7. REFLOW SOLDERING

7.1 Reflow soldering conditions

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

						APPD	CHKD	DSGN	TITLE
ZONE	SYMB	DATE	APPD	CHKD	DSGD				DOCUMENT NO. WT 0159

	SPECIFICATION	PAGE
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< Temperature profile >

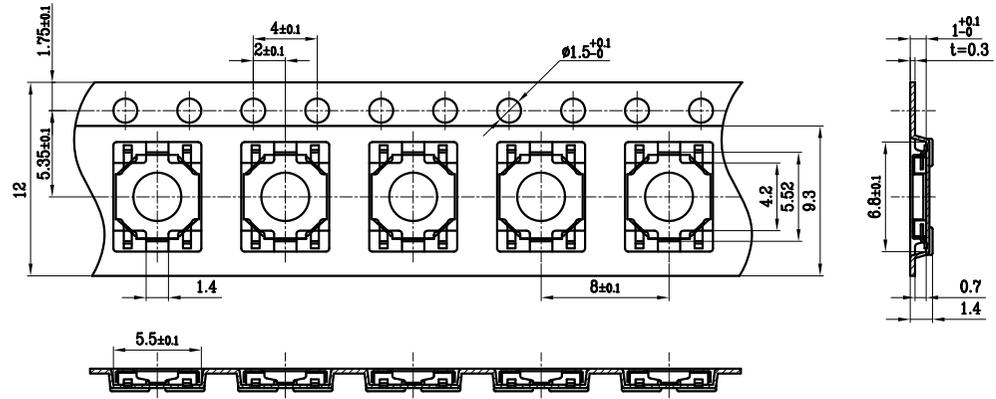
8. Manual soldering

8.1 Soldering temperature ----- 350°C ± 5°C

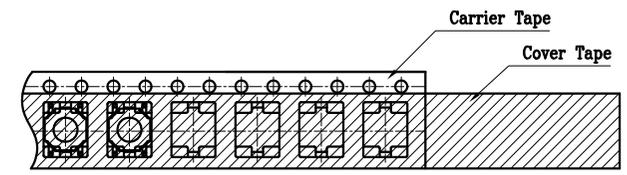
8.2 Soldering time ----- 5(sec)

						APPD	CHKD	DSGN	TITLE
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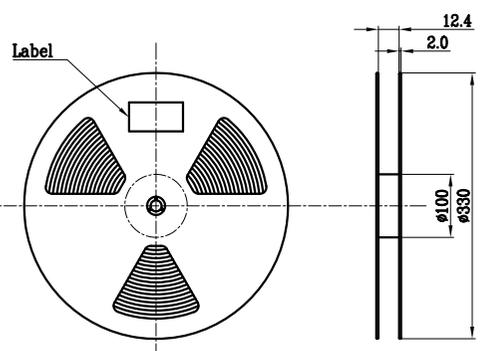
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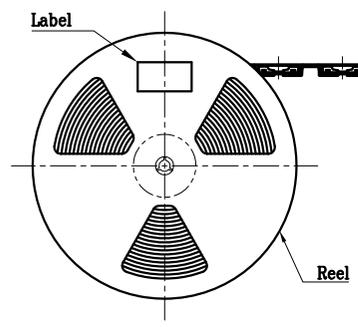
* THE SPECIFICATION FOR PACKAGING *



DRAWING DIRECTION

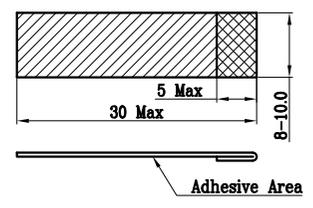
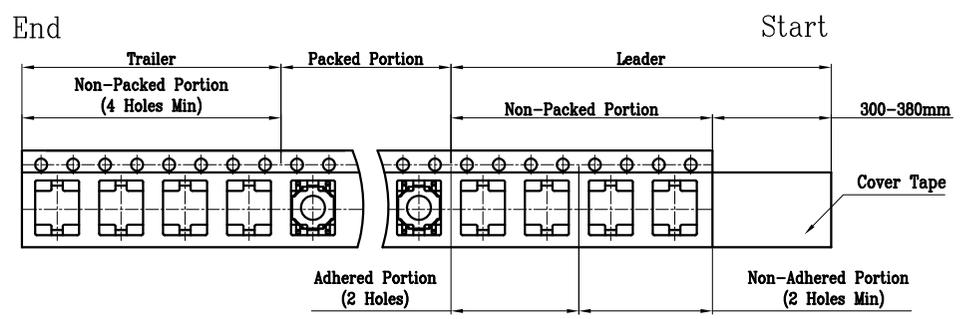
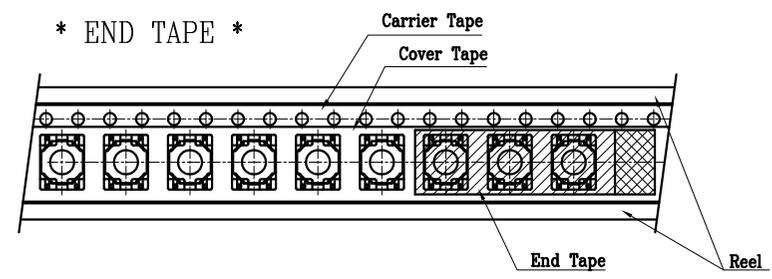


MODEL NAME	CODE NO.
JT-1141CKEM	130010000203
JT-1141WEM	130010000205



* THE SPECIFICATION FOR PACKAGING *

* END TAPE *



NOTE
 1. 5,000 pcs SWITCHES PER 1 REEL
 2. GENERAL TOLERANCE : 0.2mm

RevNo	Revision note	Date	Signature
△	모델 파생	13. 01. 21	

Designed by	B. SAGONG	
Checked by		
Approved by	T. H. OH	Unit mm Scale N/S Date 2013. 01. 21
Item	TACTILE SWITCH	Tool Sheet 1/1 Rev. 0
Model	JT-1141EM Series	Drawing name EMBOSSED TAPE ASS'Y