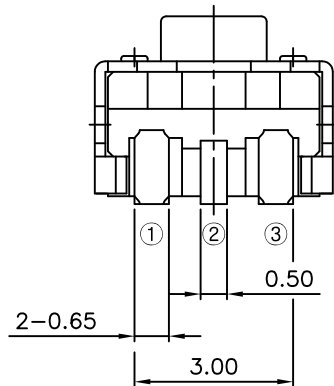
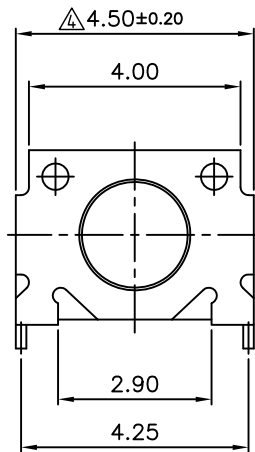
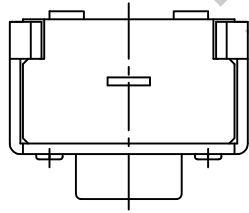
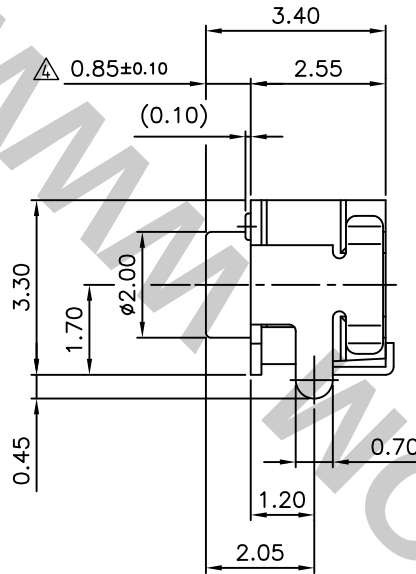


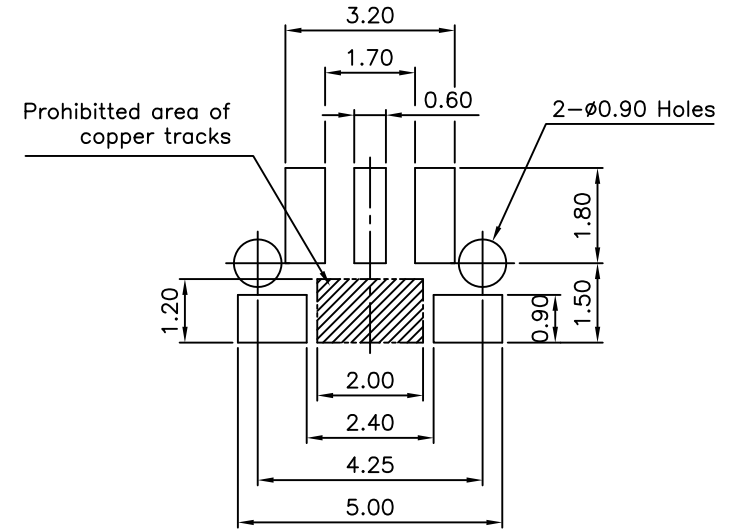
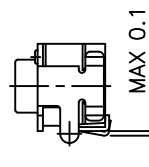


MODEL	ERP CODE	O/FORCE	STEM COLOR
JTP 1133R	110011133034	160 ± 50gf	IVORY
JTP 1133HR	110011133057	80 ± 40gf	GRAY
JTP 1133RE	110011133070	160 ± 50gf	RED

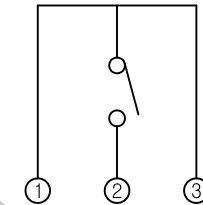


NOTE

1. RATING : 50mA , 12VDC
2. CONTACT RESISTANCE : 500mΩ Max
3. TRAVEL : 0.2 ±0.1mm
4. LIFE CYCLES : 100,000 CYCLES
5. GENERAL TOLERANCE : ±0.3
6. MANUFACTURING SPECIFICATION WOULD BE ACCORDANCE WITH JT0141-LF
7. TER' AND TER' VARIATION HAVE TO BE IN 0.1mm AFTER TER' BENDING



P.C.B MOUNTING SOLDER LAND DIMENSION



CIRCUIT DIAGRAM

△	모델 파생	2009.07.22	L.F	
△	사양 추가	2008.12.10	U.H.KIM	
△	설계 변경	2008.07.24	U.H.KIM	
△	모델 파생	2008.07.03	U.H.KIM	
△	Ter'l 형상 혼돈에 따른 도면변경	2007.11.22		
△	T/Case Ter'l 형상 현실화 [도면 Redrawing]	2007.04.16		
RevNo	Revision note	Date	Signature	Checked

						
Item	material etc					
Designed by U.H.KIM		Checked by M.W.SHIN	Approved by T.H.OH	Filename	Date 2008.12.10	Scale 10/1
MODEL NAME TACT SWITCH			PART NAME ASS'Y DIAGRAM			
MODEL NO JTP-1133R SERIES			CODE NO.		Edition 3	Sheet 1/1

	SPECIFICATION	Page : 1 / 4
	TACT SWITCH	

1. GENERAL

1.1 Application : This specification is applied to current circuit tactile switch for electronic equipment.

1.2 Operating Temperature Range : $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$, 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 $5^{\circ}\text{C} \sim 35^{\circ}\text{C}$ in temperature, 45 ~ 85% RH and 860~1060mbar in atmospheric pressure. Should any doubt arise in judgment, tests shall be conducted at $20 \pm 2^{\circ}\text{C}$, $65 \pm 5\%$ RH and 860~1060mbar.

2. RATED VOLTAGE AND CURRENT

DC 12V 50mA

3. ELECTRIC 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 150% of Actuating force.	*less than $500\text{m}\Omega$
3.3	Insulation resistance	DC 100V is applied between terminals and between terminals and cover for 1 minute $\pm$ 5 seconds.	*greater than $100\text{M}\Omega$
3.4	Dielectric strength	AC 250V (50~60Hz) is applied between terminals and between terminals and cover for 1 minute.	*No insulation defect shall be observed.
3.5	Bounce	Measured by lightly striking the center of the stem at a rate of 3 operations/sec..	*less than 5m sec.

						APPD	CHKD	DSGD	TITLE
작동온도 변경	1	08.06.26			m.j.kim				DOCUMENT
ZONE	SYMB	DATE	APPD	CHKD	DSGD				NO. JT0141-LF

	SPECIFICATION	Page : 2 / 4
	TACT SWITCH	

4. MECHANICAL PERFORMANCE

	PROPERTY	TEST CONDITIONS	PERFORMANCE
4.1	Actuating force	A gradually increasing load is applied to the center of the stem.	*As per individual manufactured drawing.
4.2	Return force	After actuating, the load gradually decreased until the stem returns to its free position.	*greater than 50gf.
4.3	Stop strength	A static force of 3Kgf 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	Solderability	Dip in the solder bath of temperature $230\pm 2^{\circ}\text{C}$ for $2\pm 0.5(\text{sec})$ after dipping in the flux of room temperature for 5 sec to 10 sec. The solder shall be covered on 90% min of dipping area on the plating surface.	
4.6	Travel		*As per individual manufactured drawing.
4.7	Arrangement of action		*Tactile feed-back.

5. DURABILITY

	PROPERTY	TEST CONDITIONS	PERFORMANCE
5.1	Operating life	*100,000 cycle operation with a load of 150% of Actuating force at a rate of 15 ~ 20 cycles/min. with a resistive load supplying DC 12V 50mA	*Contact resistance : 500m Ω max. *Bounce : 20m sec max. *Actuating force : Within $\pm 30\%$ of the initial value.
5.2	Shock resistance	An impact load of 30g is applied according to the method 205. MIL-STD 202.	*The requirement in item 3 and 4 shall be met.

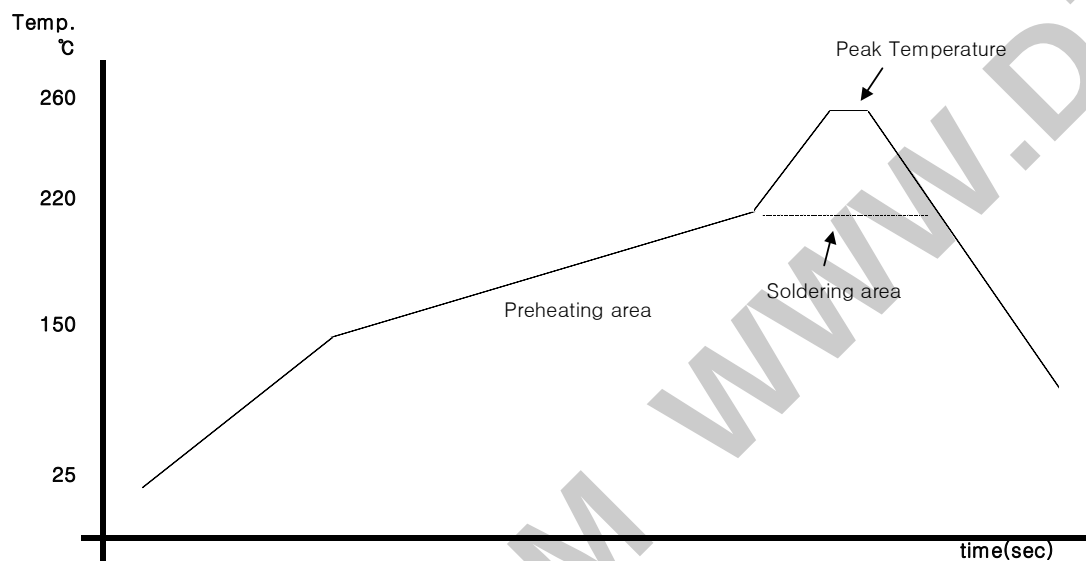
						APPD	CHKD	DSGD	TITLE
									
ZONE	SYMB	DATE	APPD	CHKD	DSGD				DOCUMENT NO. JT0141-LF

	SPECIFICATION	Page : 4 / 4
	TACT SWITCH	

7. SOLDERING CONDITIONS

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), 2 times (MAX)



< Temperature profile >



7.2 Manual soldering conditions

- 1) Soldering temperature : less than 350℃.
- 2) Soldering time : Within 3 seconds

						APPD	CHKD	DSGD	TITLE
Soldering 사양추가		07.05.09							DOCUMENT
ZONE	SYMB	DATE	APPD	CHKD	DSGD				NO. JT0141-LF

재 질 증 명 서
(CERTIFICATION OF MATERIAL)

결 재	작 성	검 토	승 인
			

일 자 2009년 05월 08일
DATE

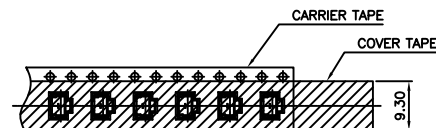
제품명 TACT SWITCH
ITEM

제품 번호 JTP-1133R
MODEL No.

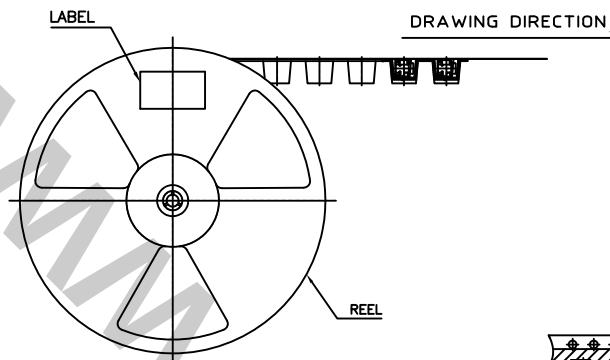
상기 제품은 하기재료를 사용하고 있음을 증명합니다.
(The above item is certified to use with following materials.)

No.	구성부품명 (Part name)	원재료(Material)				난연성 (Flame class)	UL (File No.)	색상 (Color)
		Material name	Treatment	Manufacturer	Nationality			
1	CASE	PPA		SOLVAY	USA	UL 94V0	E95746	BLACK
2	BRACKET	TIN PLATE	Sn Plating	DONG BU	KOREA			
3	STEM	PPA		SOLVAY	USA	UL 94HB	E95746	NATURAL (IVORY)
4	TERMINAL	BRASS	Ag Plating	POONG SAN	KOREA			
5	CONTACT	STAINLESS STEEL	Ag Clad	TOYO SEIHAKU	JAPAN			
6								
7								
8								
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10								
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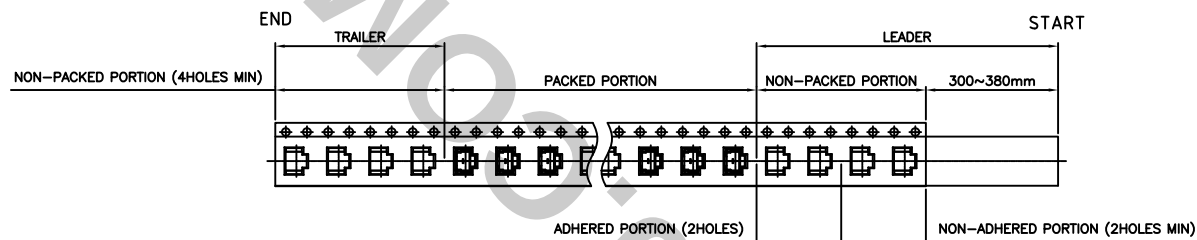
× THE DIRECTION OF PILOT HOLES ×



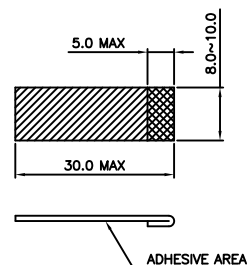
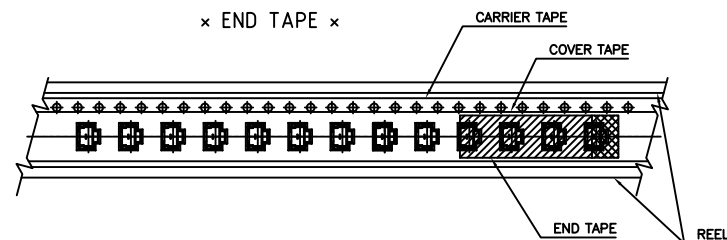
MODEL	CODE NO.	REMARKS
JTP 1133REM	110011133035	
JTP 1133RNEM	110011133037	
JTP 1133HREM	110011133058	
JTP 1133HRNEM	110011133060	
JTP 1133REEM	110011133071	



× THE SPECIFICATION FOR PACKAGING ×



× END TAPE ×



NOTE $\Delta 2,000$

1. ~~3,000~~ PCS SWITCHES PER 1 REEL
2. GENERAL TOLERANCE : ± 0.1
3. MATERIAL : CARRIER TAPE-POLYPROPYLENE,PC
OR POLYSTYRENE
COVER TAPE-POLYESTER
REEL-ABS
END TAPE COLOR-GREEN OR IVORY

	Pocket 형상변경 및 포장수량 현실화 [도면 Redrawing]	2007.04.16		
RevNo	Revision note	Date	Signature	Checked

						
Item	material etc					
Designed by G.S.KIM		Checked by	Approved by T.H.OH	Filename	Date 2007.04.16	Scale 1/1
MODEL NAME TACT SWITCH				PART NAME EMBOSSED TAPE ASS'Y		
MODEL NO JTP-1133R SERIES				CODE NO.		Edition 1 Sheet 1/1