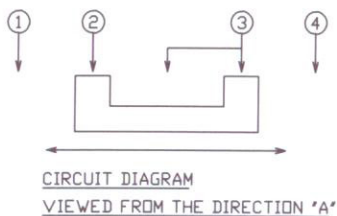


NOTE

- 1) RATING : DC 4V 0.3A
- 2) CONTACT RESISTANCE : 70m  $\Omega$  MAX
- 3) OPERATING FORCE
  - A -> B, C -> B = 150  $\pm$ 100gf
  - B -> A, B -> C = 200  $\pm$ 100gf
- 4) OPERATING LIFE : 10,000 CYCLES
- 5) MANUFACTURING SPECIFICATION WOULD BE ACCORDANCE WITH SS0001



PART NO	PART NAME	Q'TY	MATERIAL	STANDARD	DISPOSITION	REMARKS
△			TRIGON-OMETRY	UNIT	SCALE 10/1	SMD SLIDE SWITCH
△			APPD	CHKD	DSGD	
△						MODEL
△						INS-1300F0415
NO	CORRECTION					

# PART LIST

DESIGN	CHECK	APPR

모델명(MODEL NO.) : INS-1300F

NO.	부품명 PART NAME	원재료명 MATERIAL NAME	원재료업체 MATERIAL MANUFACTURER	원산지 ORIGIN	도금 PLATING	색상 COLOR	비고 REMARKS
1	TERMINAL	C2680R-EH	POONGSAN METAL CO., LTD.	KOREA	0.2micron		
2	CASE	LCP(VECTRA E130I)	POLYPLASTICS CO.,LTD	JAPAN		Black	T : 0.4mm
3	SPRING PLATE	SUS 301-EH	POONGSAN METAL CO., LTD.	KOREA			150±100gf
4	CLIP	AG/C5210R-EH	CHANG SUNG CORPORATION	KOREA			
5	SLIDE	N46(TW241F6)	DSM ENGINEERING PLASTIC	JAPAN			T : 1.5mm
6	COVER	C2680R-EH	POONGSAN METAL CO., LTD.	KOREA	NI+AG		

**1. GENERAL MATTERS**

- 1. 1 Application : This specification is applied to low current tactile switch for electronic equipment.
- 1. 2 Operating Temperature Range : -10°C ~ -80°C, 45 ~ 85% RH
- 1. 3 Test Condition : The standard test conditions shall be 5°C ~ 35°C in temperature, 45 ~ 85% RH and 860 ~ 1060mbar in atmospheric pressure.  
Should any doubt arise in judgment, tests shall be conducted at 20 ±2°C, 65 ±5% RH and 860 ~ 1060mbar.

**2. RATED VOLTAGE AND CURRENT**

30V DC, 20mA

**3. ELECTRICAL PERFORMANCE**

	PROPERTY	TEST CONDITION	PERFORMANCE
3. 1	Contact Resistance	Measured at 10mA, 2V DC or by ohmmeter allowing a small current at 1Khz.	70mΩ Max
3. 2	Insulation Resistance	DC 500C is applied between terminals and earth for 1 minute ±5 seconds.	100MΩ Min
3. 3	Withstand Voltage	250V AC( 50~ 60HZ ) is applied between terminals and earth for 1 minute.	No insulation defect shall be observed.

**4. MECHANICAL PERFORMANCE**

	PROPERTY	TEST CONDITION	PERFORMANCE
4. 1	Operating Force	A gradually increasing load is applied to the center of the button stem.	As per individual manufactured drawing.
4. 2	Terminal Strength	A static force of 500gf shall be applied to an arbitrary.	Shall be free from terminal looseness, damage and breakdown of insulator.
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	Solder Heat Resistance	Soldering temperature : 245 ~ 255°C soldering time : 10sec.	Shall be free from mechanical and electrical degradation.

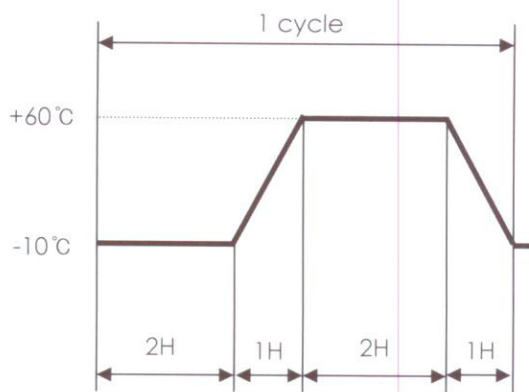
**5. DURABILITY**

	PROPERTY	TEST CONDITION	PERFORMANCE
5. 1	Operating Life	10,000 cycles operations with a load of 500gf at a rate of 15 ~ 20cycles/min. without load.	Contact resistance : 130mΩ Max  Actuating force : within ±30% of the initial value.

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## 6. WEATHER PROOF

	PROPERTY	TEST CONDITION	PERFORMANCE
6. 1	Resistance to Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for one hour before measurements are made : *temperature/time : $-30 \pm 2^{\circ}\text{C}/96\text{hr}$ *waterdrops shall be removed.	Item 3. 1 Item 3. 2 Item 3. 3
6. 2	Heat Resistance	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for one hour before measurements are made : *temperature/time : $80 \pm 2^{\circ}\text{C}/96\text{hr}$	Item 3. 1 Item 3. 2 Item 3. 3
6. 3	Moisture Resistance	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for one hour before measurements are made : *temperature/time : $80 \pm 2^{\circ}\text{C}/96\text{hr}$	Contact resistance : 200m $\Omega$ Max Insulation resistance : 10M $\Omega$ Min Item 3. 3, 3. 4 Item 4. 1, 4. 5
6. 4	Temperature Cycling	Following 5 cycles of the temperature cycling test set forth below the sample shall be left in normal temperature and humidity conditions for one hour during this test, waterdrops shall be removed.	Item 3. 1 Item 4. 1 Item 4. 5



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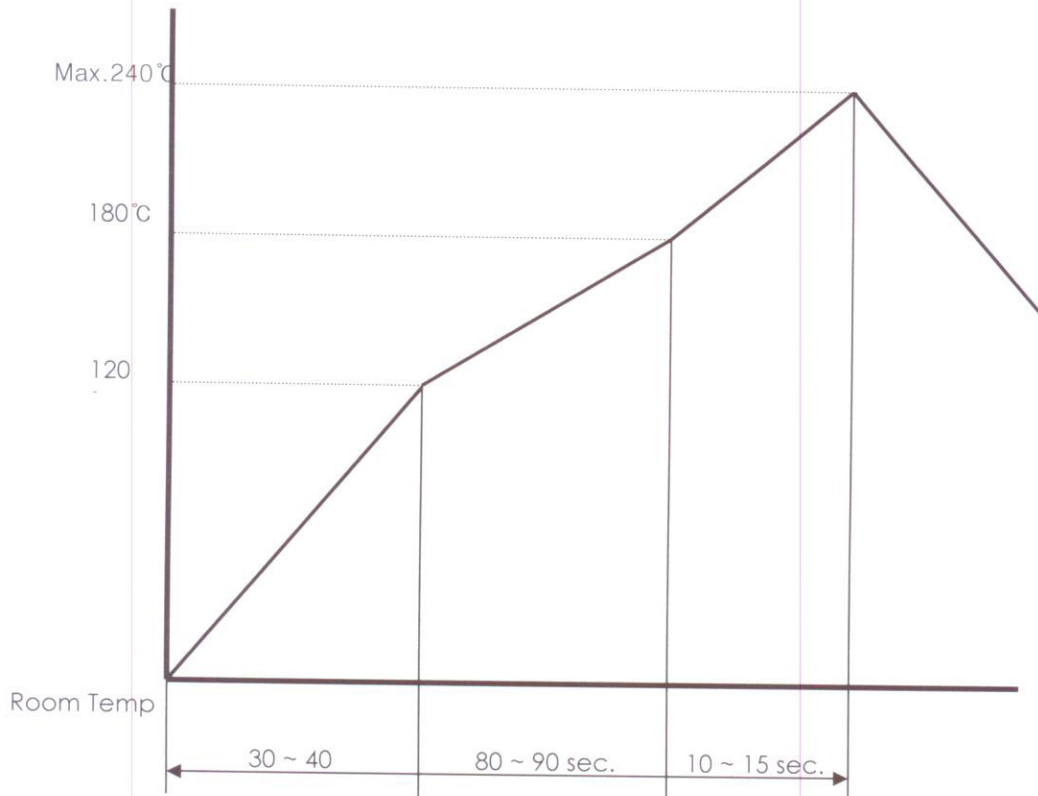
**7. REFLOW SOLDERING**

7. 1 Refer to the following time temperature chart.

It is recommended to determine soldering conditions through verification test and on prior agreement of LINK PEACE E.N.G., since surface temperature varies depending upon material, size and thickness PCB.

7. 2 Other precautions

- 1) Switch shall not be washed after soldering with solvent or the like.
- 2) Soldering shall be controlled so as not to allow flux penetrates switch at its upper face.
- 3) Switch terminals and PCB upper face shall be free from flux prior to soldering.



Above-mentions time-temperature chart is based on the temperature in the part mounting surface of PCB.

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