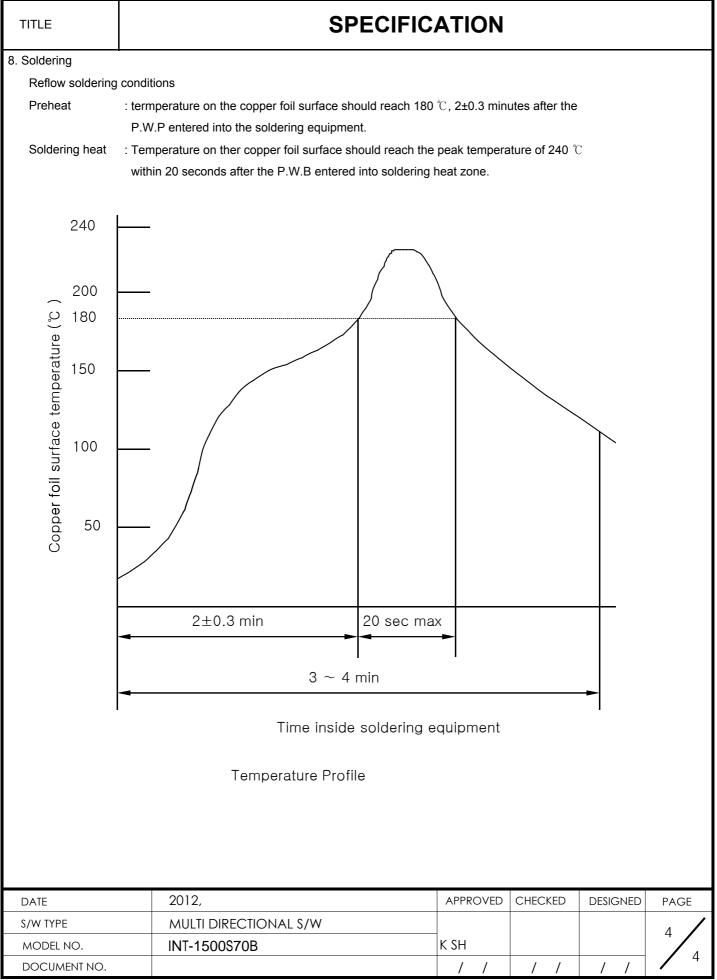
ТІТ	LE	SPECIFICATION				
1. Ge	neral					
1.1 S	Scope		This Specification describes the physical and electrical characteristics for a tact switch. It also defines test methods and sequencing for product qualification testing.			
1.2 C	Dperating tempera	ture range	-20 $^\circ C~\sim$ 70 $^\circ C$ (normal humidity, normal pressure)			
1.3 S	torage temperatu	re range	-40 $^\circ \mathrm{C}~\sim$ 85 $^\circ \mathrm{C}$ (norma	al humidity, normal pressure)		
1.4 T	est conditions		Test and measureme	ents shall be made by the following conditio	ns.	
			Temperature	:-5~35°C		
			Relative humidity	: 45~85%		
			Air pressure	: 86~106kPa (860~1060mbar)		
		In case of questions for the judgment made, tests				
		should be conducted by the following conditions.				
		Temperature : 20±2°C				
		Relative humidity : 60±5%RH				
		Air pressure : 86~106kPa (860~1060mbar)				
2. Ap	pearance, constru	ction and dimen	sions			
2-1. Appearance			There should be no defects that will degrade the switch's performance.			
2-2 C	onstruction and d	imensions	Refer to individual product drawing.			
3. Тур	be of actuation		Push, tilting tactile feedback			
4. Co	ntact arrangemen	t	1 poles 1 throws, 1 pole 4 throws			
5. Maximum Rating			DC 12V ,50mA			
6. Pe	rformance					
6-1 E	Electrical performa	ince				
	Items		Test	conditions	Criteria	
6.1.1	Contact	Measureme	Measurements shall be made by applying a static force which is 500gf		100mΩ MAX	
	resistance	actuating (p	actuating (push on and tilting such as FIG1 , FIG2) force with a 1KHz			
	ourrent or		tact resistance motor			

	resistance actuating (push on and tilting such as FIG1 , FIG2) force with a 1KHz					
		current contact resistance meter.				
6.1.2	.1.2 Insulation Measurements shall be made by applying a current of 100V DC between				100MΩ MIN	
	resistance	terminals and frame or each terminals for one minute.				
6.1.3	Dielectric	A current of AC 500V (50Hz or 60Hz) shall be applied betweem terminals			There should be no	
	withstanding and frame or each terminals for one minute.				breakdown.	
6.1.4	Bounce	Shall be tested during the transition of OFF to ON at a rate of three		10m Sec max		
		to four operations per second.				
		ON OFF	Oscilloscope	2		
DATE		2012,	APPROVED	CHECKED	DESIGNED	PAGE
S/W TYPE		MULTI DIRECTIONAL S/W				1 /
МС	DEL NO.	INT-1500S70B				
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TITLE		SPECIFICATION					
6-2. I	Mechanical performa	nce					
	Items	Test conditions			Criter	ia	
6.2.1 Actuating force		Actuating force should be applied horizontal and vertica	al to the ste	n as	Push on : 50	0±70gf	
		shown in Fig1 , Fig2. When actuate the stem, force should be applied gradually.		ied	Tilting : 270±50g		
6.2.2 Stroke		The travel distance should be measured to the stem as shown in			Push on : 0.15±0.1mm		
		Fig1(Push on) and Fig2(Tilting). When actuate the stem force should			Tilting: 0.25	£0.1mm	
6.2.3	Doturn force	be applied gradually.			Duch on : 50	of Min	
0.2.3	3 Return force The force of the stem to return to its free position shall be measured after actuating force is applied as shown in Fig1, Fig2.				Push on : 50gf Min Tilting :20gf Min		
6.2.4	Stop strength	A static load of 3Kgf is applied to the horizontal and vertical direction		on	There shall be no sign		
					of damage mechanicall		
					and electrically		
6.2.5	Stem strength	A static load is applied to the pull direction there should	d be no dam	ages.	500gf Min		
			iltin	 J g			
	Note.	Fig 1	Fig 2				
	Really, an electrica	al signal processing be made 5° \sim 9° tilting degree ever	n under the I	Maximum Til	ting 12°		
6-3. I	Environmental perfor						
	Items	Test conditions			Criter	ia	
6.3.1	Resistance to	When test being done under these condition , it should	be tested a	fter	Item 6-1 Item 6-2-1		
	low Temperature						
		(1)Temperature : -40± 2 ℃			Item 6-2-2		
		(2)Time : 96 hours			Item 6-2-3		
		(3)Water drops shall be removed					
6.3.2	Heat resistance			fter	Item 6-1		
		one hour leave in normal temperature and humidity.			Item 6-2-1		
		(1)Temperature : +85± 2 ℃			Item 6-2-2		
	(2)Time : 96 hours				Item 6-2-3		
5.3.3	Moisture	When test being done under these condition, it should be tested after		Item 6-1			
	resistance	one hour leave in normal temperature and humidity.	Item 6-2-1 Item 6-2-2				
		(1)Temperature : +60± 2 ℃					
					Item 6-2-3		
		(2)Relative humidity : 90 to 95% RH					
		(3)Time : 96 hours					
		(3)Time : 96 hours (4)Water drops shall be removed					
DA		(3)Time : 96 hours(4)Water drops shall be removed2012,	APPROVED	CHECKED	DESIGNED	PAGE	
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TITLE		SPE	CIFICATION			
	Items	Test condit	ions	Criteria		
6.3.4	Temperature cycling	The test being conducted five times as shown in figure. It should be tested after one hour leave in normal temperature and humidity. During this test , water drops shall be removed.		Item 6-1 Item 6-2-1 Item 6-2-2		
		+60 ℃ -10 ℃	E	Item 6-2-3		
		2H 1H	2H 1H			
6-4. E 6.4.1	Endurance Operating life	Measurements shall be made by followin (1)DC 5V 5mA resistive load. (2)Rate of operation : 2 to 3 operations p	Contact resistance :100mΩ Max. Insulation resistance			
		(3)Depression : 500gf Max (4)Cycle of operation : For each direction 100,000 cycles				
6.4.2	Vibration resistance	Measurements shall be made by followin (1)Range of oscillation : 10 to 55Hz (2)Amplitude, peak-to-peak : 1.5mm (3)Cycle of sweep : 10-55-10Hz in one m (4)Mode of sweep : Logarithmical sweep (5)Direction of oscillation : Three mutuall including the direction of stem travel (6)Duration of testing : 2 hours each, for	ninute approximate. or uniform sweep y perpendicular directions	Item 6-1 Item 6-2-1 Item 6-2-2 Item 6-2-3		
6.4.3	Impact shock Resistance	Measurements shall be made by followin (1)Acceleration : 80G (2)Cycles of test : 3 cycles each in 6 dire	g the test set.	Item 6-1 Item 6-2-1 Item 6-2-2 Item 6-2-3		
	erials 1) HOUSING (BAS 2) COVER 3) ACTUATOR 1 (S 4) ACTUATOR 2 (S 5) CONTACT	: SUS TEM 1) : LCP	īNG			
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S/W	TYPE	MULTI DIRECTIONAL S/W		3		
MO	DEL NO.	INT-1500\$70B				



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