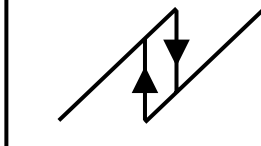




TITLE		PRODUCT SPECIFICATIONS										
MODEL No.		MICRO SWITCH							PAGE		1/3	
1. GENERAL												
1.1 Switch action		: PUSH-ON TYPE S.P.D.T										
1.2 Switch rating		: DC 30V 0.5A MAX, AC 125V 3A MAX										
1.3 Operation temperature range		: -20 ~ +80										
1.4 Appearance and dimensions		: See outside drawing page										
1.5 Standard conditions		: Unless otherwise specified, the test and measurements shall be carried out as follows: Ambient temperature : 5 ~ 35 Relative humidity : 45 ~ 85% RH Air pressure : 86 ~ 106kPa (860 ~1060mbar) However,if doubt arises on the decision based on the measured values under the above-mentioned conditions, the following conditions shall be employed. Ambient temperature : 20 ± 2 Relative humidity : 65 ± 5% RH Air pressure : 86 ~ 106kPa (860 ~1060mbar)										
2. PERFORMANCE												
2.1 Electrical characteristics												
NO	ITEM	TEST CONDITION						PERFORMANCE				
2.1.1	Contact resistance	Measurements shall be made with a 1KHz ± 200Hz DC 5V 1A contact resistance meter.						* 100 m max				
2.1.2	Insulation resistance	Measurements shall be made following application of DC 500 V potential across terminals and across terminals and frame for one minute.						* 100M Min				
2.1.3	Dielectric withstandin voltage	50Hzor 60Hz, 2mA shall be applied to the be lowing parts for one minute * Between terminals : AC 600V through 1 min. * Between terminals and other exposed metal part : AC 1000V through 1 min * Between terminals and ground : AC 1000V through 1 min						* There shall be no breakdown				
2.2 Mechanical characteristics												
NO	ITEM	TEST CONDITION						PERFORMANCE				
2.2.1	Operation force	push by recommended operating condition force <div></div> storke						Details are given in the assembly drawings.				
								APPD.	CHKD.	DSGE.		
												
PAGE	MARK	REVISION	DATE	APPD	CHKD	DSGE	2004.1.6.	2004.1.6.	2004.1.6.			
PQS-1001-10(REV.0)				MYUNG DO SYSTEM					(210x297)			

TITLE		PRODUCT SPECIFICATIONS	
MODEL No.		MICRO SWITCH	PAGE 2/3
	PROPERTY	TEST CONDITION	PERFORMANCE
2.2.2	Travel force	The travel distance for the plunger to come to a stop shall be measured.	* Details are given in the assembly drawings.
2.2.3	Stop strength	A static load of 2 kgf shall be applied in the direction of plunger operation for a period of 15 seconds	* No damage (Electrical and mechanical)
2.2.4	Plunger Strength	The maximum force to withstand a pull applied opposite to the direction of plunger operation shall be measured.	* 1 kgf min
2.2.5	Terminal strength	A force of 2 kgf being applied in one direction on the tip of the terminal for one minute and only one time to each terminal.	* The terminal may be deformed but shall not sustain any trouble such as deviation and breaking of terminal and breaking of insulation material. Electrical performance shall be assured
2.2.6	Vibration test	1) Amplitude : 1.5mm 2) Sweep rate : 10-55-10Hz for 1 minute. 3) Sweep method : Logarithmic frequency sweep rate. 4) Vibration direction : X. Y. Z (3directions) 5) Time : Each direction 1 hours (Total 3 hours)	* No 2.1 and 2.2.1 to 2.2.2 shall be satisfied.
2.2.7	Soldering heat test	Soldering area : t/2 of P.W.B thickness (P.W.B : t = 1.6) Soldering temperature : 260 ± 5 Soldering time : 5 ± 1 sec	* No damage * (Electrical and mechanical)
2.3 Climatic characteristics			
NO	ITEM	TEST CONDITION	PERFORMANCE
2.3.1	Cold test	1) temperature : 25 ± 3 2) Duration of test : 96 hours 3) Take off a drop water 4) Standard condition after test : 1 hour	* No 2.1.1 to 2.1.3 shall be satisfied
2.3.2	Heat test	1) Temperature : 80 ± 2 2) Duration of test : 96 hours 3) Standard condition after test : 1 hour	* No 2.1.1 to 2.1.3 shall be satisfied
2.3.3	Humidity test	1) Temperature : 60 ± 2 2) Relative humidity : 90 ~ 95% 3) Duration of test : 96 hours 4) Take off a drop water 5) Standard conditions after test : 1 hour	* No 2.1.1 to 2.1.3 shall be satisfied

TITLE		PRODUCT SPECIFICATIONS	
MODEL No.		MICRO SWITCH	PAGE 3/3
	PROPERTY	TEST CONDITION	PERFORMANCE
2.3.4	Operating life test	1) Electrical (1) DC30V,0.5A Resistance load (2) Operation speed : 30 cycles / min (3) Push force : Maximum value of operation force (4) Cycle of operation 1,000,000 cycles 2) Mechanical (1) without load (2) Operation speed : 200 cycles /min (3) Push force : Maximum value of operation force (4) Cycle of operation 5,000,000 cycles	* Contact resistance : 500 m max * Actuating force : ±30% initial force * No 2.1.2 to 2.1.3 and 2.2.2 shall be satisfied
2.3.5	Withstand H ₂ S	1) Density : 3± 1 ppm 2) Temperature : 40± 2 3) Relative humidity : 90 ~ 95% 4) Duration of test : 24 hours 5) Standard conditions after test : 1hour	* Contact resistance : 100 m max * No 2.1.2 to 2.1.3 and 2.2.1 to 2.2.2 shall be satisfied.
2.3.6	Withstand SO ₂	1) Density : 10 ± 2 ppm 2) Temperature : 40± 2 3) Relative humidity : 90 ~ 95% 4) Duration of test : 24 hours 5) Standard conditions after test : 1hour	* Contact resistance : 100 m max * No 2.1.2 to 2.1.3 and 2.2.1 to 2.2.2 shall be satisfied.
3. Auto soldering conditions			
ITEM		CONDITION	
preheat temperature		110 max(Environmental temperature of soldering surfacr of P.W.B)	
Preheat time		60 sec max	
Area of flux		1/2 max of P. W.B thinkness	
Temperature solder		255 max	
Time of immersion		Within 5 sec	
Soldering number		Within 2 times(But should bring down heat of the first soldering)	
Printed wiring board		Single sided copper-clad laminates	
1) After switches were soldred, please be careful not clean switches with solvent. 2) in the case of using soldering iron,soldering conditions shall be 280 max and 3 sec max 3) After switches were soldered, please be careful not to load the knobs of switches.			
3.1 MANUAL SOLDERING CONDOTIONS			
TEMPERATURE : 350 ± 10			
Time : 3+1 sec max			