

SPECIFICATIONS OF PRODUCTS

DOCUMENT NO.	QI-MSK-026	ISSUED DATE	21-MAR-2006	VERSION	PAGE
				: 1.1	: 1/3
DRAWN	<i>hso</i>	CHECKED	<i>m</i>	APPROVED	<i>[Signature]</i>
MODEL NO.	MSK-12D18 ()	ITEM NAME	MINIATURE SIDE KNOB SLIDE SWITCH		

1.RATING : DC 12V 0.1A

2.OPERATING TEMPERATURE RANGE : -10°C ~ +60°C

3.ELECTRICAL CHARACTERISTICS :

ITEM		TEST CONDITIONS	PERFORMANCE
3.1	CONTACT RESISTANCE	MEASURED AT SMALL CURRENT (10mA OR LESS) 1000Hz.	70mΩ Max.
3.2	INSULATION RESISTANCE	APPLY A VOLTAGE OF 500V DC SHALL BE APPLIED FOR 1 MINUTE AFTER WHICH MEASUREMENT BE MADE: (1) BETWEEN TERMINALS. (2) BETWEEN INDIVIDUAL TERMINALS AND FRAME.	100MΩ Min.
3.3	DIELECTRIC STRENGTH	AC 100V rms (50-60Hz) FOR 1 MINUTE TRIP CURRENT: 0.5 mA (1) BETWEEN TERMINALS. (2) BETWEEN INDIVIDUAL TERMINALS AND FRAME.	WITHOUT DAMAGE TO PARTS ARCING OR BREAKDOWN ETC.

4. MECHANICAL CHARACTERISTICS :

ITEM		TEST CONDITIONS	PERFORMANCE
4.1	OPERATING FORCE		A-B:160gf±50gf
4.2	TERMINAL STRENGTH		

SPECIFICATIONS OF PRODUCTS

DOCUMENT NO.	QI-MSK-026	ISSUED DATE	21-MAR-2006	VERSION	PAGE
				: 1.1	: 2/3

ITEM		TEST CONDITIONS	PERFORMANCE
4.3	DISPLACEMENT OF ACTUATOR (KNOB)		
4.4	LIFE TEST	ENDURANCE WITHOUT LOADING: A SWITCH SHALL BE SUBJECTED TO 10,000 CYCLES AT A SPEED OF 15 TO 18 CYCLES PER MINUTE WITHOUT LOADING.	1. CONTACT RESISTANCE 200m Ω Max. 200 2. INSULATION RESISTANCE 50M Ω Min. 50 3. WITHSTAND VOLTAGE AC 100V 1 MINUTE 4. OPERATING FORCE +10% ~ -30% OF INITIAL VALUE 5. WITHOUT DAMAGE TO PARTS ARCING OR BREAKDOWN ETC.

5. ENVIRONMENT CHARACTERISTICS :

ITEM		TEST CONDITIONS	PERFORMANCE
5.1	SOLDERABILITY TEST	THE TOP OF TERMINALS SHALL BE DIPPED 2mm IN THE SOLDER BATH OF 245 \pm 5 $^{\circ}$ C FOR 3 \pm 0.5 SECOND.	THE AREA OF SOLDERING SHOULD BE OVER 75%.
5.2	RESISTANCE TO SOLDERING HEAT TEST	SOLDER BATH METHOD: SOLDER TEMPERATURE 255 \pm 5 $^{\circ}$ C IMMERSION TIME WITHIN 5 SEC. IMMERSION DEPTH UP TO THE SURFACE OF THE BOARD 0.8mm DIMENSIONS OF COMPONENT HOLES IN THE PRINTED WIRING BOARD SHALL BEING ACCORDANCE WITH THOSE SPECIFIED IN THIS SPECIFICATION.	WITHOUT DEFORMATION OF CASE OR EXCESSIVE LOOSENESS OF TERMINALS ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED.

SPECIFICATIONS OF PRODUCTS

DOCUMENT NO.		ISSUED DATE	VERSION	PAGE
QI-MSK-026		21-MAR-2006	: 1.1	: 3/3
ITEM		TEST CONDITIONS	PERFORMANCE	
5.3	COLD TEST	THE SWITCH SHALL BE STORED AT A TEMPERATURE OF $-25\pm 3^{\circ}\text{C}$ FOR 48 HOURS, THEN THE SWITCH SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITIONS FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE.	THERE SHALL BE NO DEFORMATION OR CRACKS IN MOLDED PART.	
5.4	HEAT TEST	THE SWITCH SHALL BE STORED AT A TEMPERATURE OF $70\pm 2^{\circ}\text{C}$ FOR 48 HOURS, THEN THE SWITCH SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITIONS FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE.		
5.5	HUMIDITY TEST	THE SWITCH SHALL BE STORED AT A TEMPERATURE OF $40\pm 2^{\circ}\text{C}$ AND A HUMIDITY OF 90% TO 95% FOR 48 HOURS, THEN THE SWITCH SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITIONS FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE.	THERE SHALL BE NO DEFORMATION OR CRACKS IN MOLDED PART.	

6. Test condition (UNLESS OTHERWISE SPECIFIED)

Temperature : $5^{\circ}\text{C} - 35^{\circ}\text{C}$;

Humidity : 45%—85%R.H;

Pressure : 86—106kPa

7. Construction : Shape and dimensions subject to attached chart regulation

8. Amendment

When the amendment of this specification comes into necessity, it shall be made by mutual consultation and agreement between manufacturer and customer.