KINGTEK ELECTRONICS TECHNOLOGY CORP.

STANDARD SPECIFICATION

TS 5487 TACT SWITCH

1. RATING: DC 12V. 50mA

2. OPERATION TEMPERATURE: -20deg C-70deg C (45-85%RH)

3. PRESERVATIVE TEMPERATURE: 40deg C~80deg C (96HOURS)

4. ELECTRICAL SPECIFICATIONS

	ITEMS	TEST CONDITIONS	AFTER TEST
4.1	CONTACT RESISTANCE	MEASURED AT 10mA 5V DC OR BY OHMMETER ALLOWING A SMALL CURRENT AT IKHZ WITH 200gf	50 mOhm MAX
4.2	CONTACT ARRANGEMENT		1 POLE 1 THROW
4.3	INSULATION RESISTANCE	100V DC IS APPLIED BETWEEN TERMINALS AND CASE FOR 1 MINUTE +/- 5 SECONDS	GREATER THAN 100MOhm
4.4	DIELECTRIC STRENGTH	250V AC (50~60HZ) IS APPLIED BETWEEN TERMINALS AND EARTH FOR 1 MINUTE.	NO INSULATION DEFECT SHALL BE OBSERVED.
4.5	BOUNCE	MEASURED BY LIGHTLY STRIKING THE CENTRE OF THE BUTTON STEM AT A RATE OF 3 OPERATIONS/SEC.	LESS THAN 10m SEC
5. MECHANICAL SPECIFICATION			
5.1	OPERATION FORCE	250+/-50gmf	AS PER INDIVIDUAL SPECIFICATION
5.2	TRAVEL TO CLOSURE		0.25 +/-0.1mm
5.3	STOP STRENGTH	A STATIC FORCE OF 3Kgf SHALL BE APPLIED TO THE DIRECTION OF OPERATION FOR 3 SECONDS	SHALL BE FREE FROM MECHANICAL AND ABNORMALITIES

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	ITEMS	TEST CONDITIONS	AFTER TEST
5.4	STEM WITHDRAWAL FORCE	A STATIC LOAD OF 500gf IS APPLIED TO THE DIRECTION OF PULLING FOR 3 SECONDS	SHALL BE FREE FROM MECHANICAL DEGRADATION
6.COLD HEAT PROOF			
6.1	COLD HEAT PROOF	AFTER TESTING AT -30deg C FOR 96HRS. THE SAMPLE IS ALLOWED TO STAND UNDER NORMAL TEMPERATURE AND HUMIDITY CONDITIONS FOR 1 HOUR AND MEASUREMENT IS PERFORMED WITHIN 1 HOUR AFTER THAT WATER DROPS SHOULD BE WIPED OFF.	THE RFQUIREMENT IN ITEM 4 ND 5 SHALL BE SATISFIED
6.2	DRY HEAT PROOF	AFTER TESTING AT 80deg C FOR 96HRS. THE SAMPLE IS ALLOWED TO STAND UNDER NORMAL TEMPERATURF FOR 1 HOUR AND MEASURFMENT IS PERFORMED WHHIN 1 HOUR AFEER THAT	
6.3	DAMP HEAT PROOF	AFTER TESTINGAT 60 +/-2deg C AND 80---95% IN RELATIVE HUMIDITY FOR 96HRS. THE SAMPLE IS ALLOWED TO STAND UNDER NORMAL TEMLPERATURE AND HUMIDITY CONDITIONS FOR 1 HOUR AND MEASUREMENT IS PERFORMED WITHIN 1 HOUR AFTER THAT WATER DROPS SHOULD BE WIPED OFF	INSULATION RESISTANCE: 10MOhm MIN DIELECTRIC STRENGTH SAME AS ITEM 4.4 CONTACT RESISTANCE SAME AS ITEM 4.1

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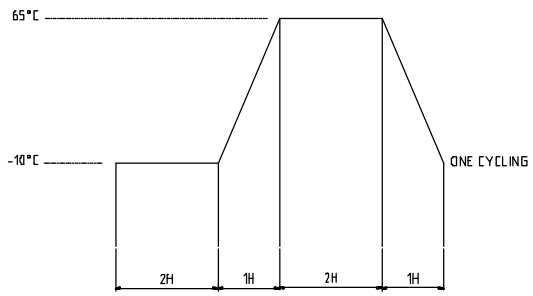
	ITEMS	TEST CONDITIONS	AFTER TEST
6.4	THERMAL CYCLING	 AFTER THE TEST CONDUCTED UNDER 5 CYCLES. THE SAMPLE IS ALLOWED TO STAND UNDER NORMAL TEMPERAIURE AND HUMIDITY CONDITIONS FOR 1 HOUR , AND THE MEASUREMENT IS PERFORMED WITHIN 1 HOUR	THE REQUIREMENT IN ITEM 4 AND 5 SHALL BE MET
7.DURABILITY			
7.1	OPERATING LIFE	500,000 CYCLES OPERATION WITH A LOAD OF 200gf AT A RATE OF 20/MIN WITH A RESISTIVE LOAD SUPPLYING 12V DC 50mA.	CONTACT RESISTANCE 200MOhm MAX BOUNCE: 20m SEC MAX ACTUATING FORCE:WITHIN +/-30% OF THE INITIAL VALUE.
7.2	SHOCK RESISTANCE	AN IMPACT LOAD OF 80g IS APPLIED ACCORDING TO THE METHOD 205, MIL-STD 202	THE REQUIREMENT IN ITEM 4 AND 5 SHALL BE MET
7.3	VIRRATION RESISTANCE	THE TEST IS CONDUCTED ACCORDING TO THE METHOD 201, MIL-STD 202	THE REQUIREMENT IN ITEM 4 AND 5 SHALL BE SATISFIED WITHOUT ANY DEGRATION IN BOTH APPEARANCE AND ACTUATION

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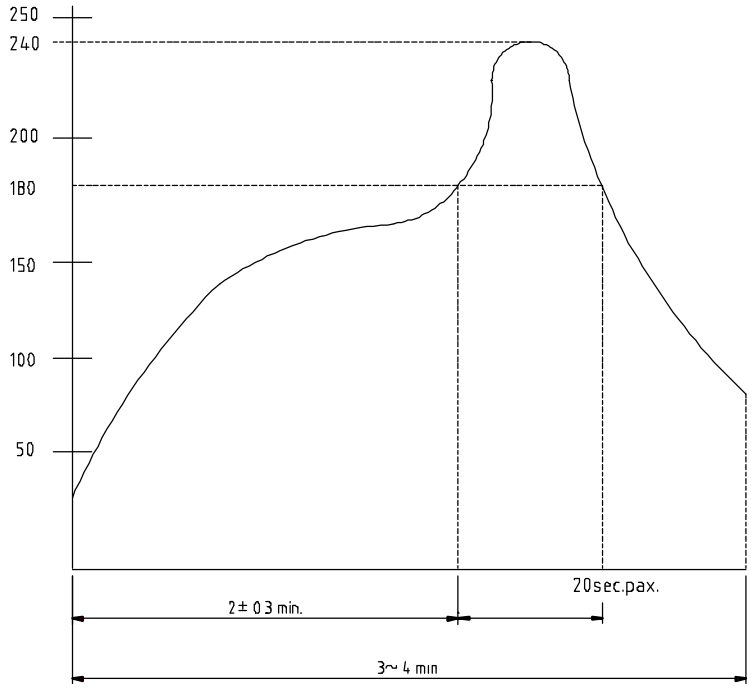
8.AUTOMATIC SOLDERING CONDITIONS (IN CASE THE AUTOMATIC FLOW SOLDERING IS TO BE USED)			
8.1	SOLDERING TEST	SOLDERING TEMPERATURE -255deg C MAX. SOLDERING TIME-WITHIN 5 SEC	NO DAMAGE
8.2	PREHEAT TEMPERATU-R E	100deg CMAX	
8.3	PREHEAT TIME	WITHIN 45 SEC	
8.4	FLUX STREAMING	FLUX STREAMING SHALL BE CONTROLLED SO THAT IT SHALL NOT SWELL BEYOND THE PRINTED WIRING BOARD WHERE COMPONENTS ARE INSTALLED	
8.5	OTHER PRECAUTIONS	FLUX SHALL NOT BE APPLIED TO THE SWITCH TERMINALS AND THE PART MOUNTING SUREACE OF TH P.W. BOARD BEFORE SOLDERING DO NOT WASH THE SWITCH AFTER SOLDERING	

9.REFLOW SOLDERING

9.1 REFLOW SOLDERING CONDITIONS

PREHEAT—TEMPERATURE ON THE COPPER FOIL SURFACE SHOULD PEACH 180deg C, 2+/-0.3 MINUTES AFTER THE PWB ENTERED INTO THE SOLDERING EQUIPMENT.

SOLDERING---TEMPERATURE ON THE COPPER FOIL SURFACE SHOULD FEACH THE PEAK TEMPERATURE OF 240deg C WITHIN 20 SECONDS AFTER THE PWB ENTERED INTO SOLDERING HEAT ZONE



Time inside Soldering Equipment

Temperature Profile