



东一部品仕样承认书

APPROVAL SHEET

客 户 CUSTOMER	
客户产品编码/规格 PRODUCT SPECIFICATION	
品 名 PART NAME	拨轮开关
型 号 MODEL	TP-1305
制 样 DSGD BY	叶玉兰
审 核 CHKD BY	富 胜
担 当 APPD BY	富 胜
送 样 日期 SENDING DATE	日期:
承认印 APPD PRINT	

深 圳 市 东 一 部 品 电 子 有 限 公 司

TONER PARTS ELECTRONICS CO.,LTD

ADD: 深圳市龙岗区坪地镇黄竹工业区

HUANGZHU INDUSTRIAL PARK PINGDI TOWN

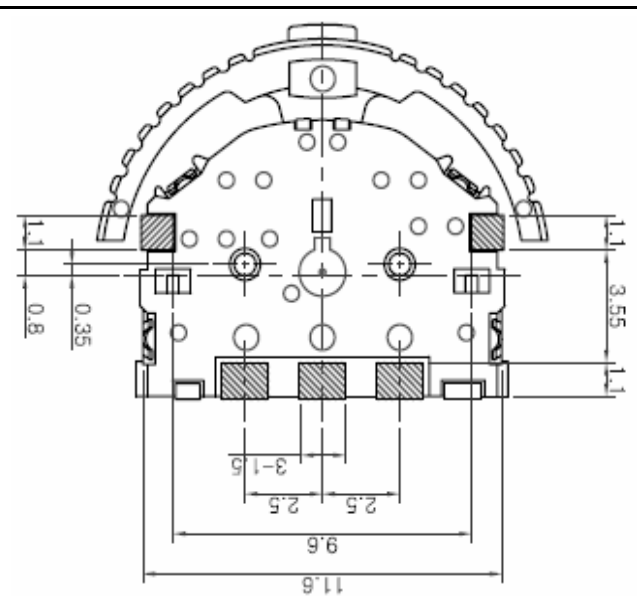
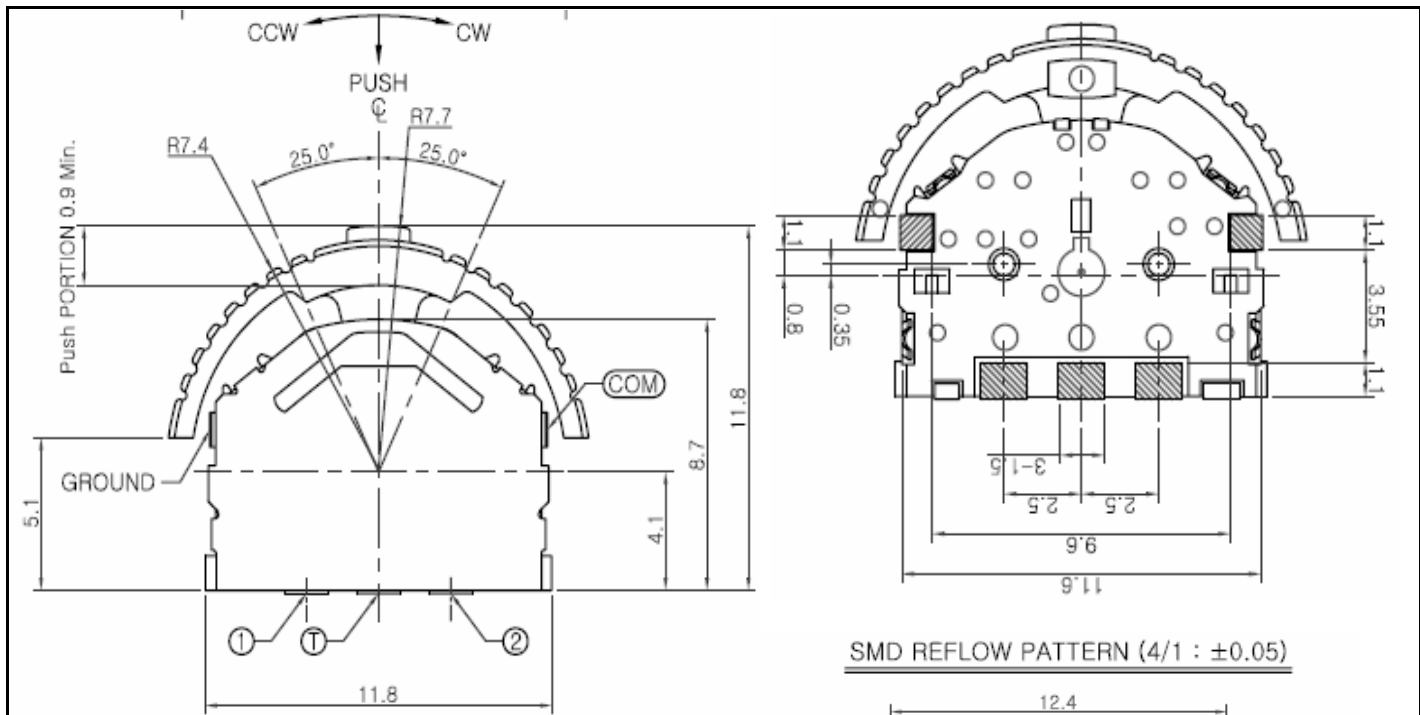
LONGGANG AREA SHENZHEN CITY CHINA

TEL: 0755-84091585 84090865

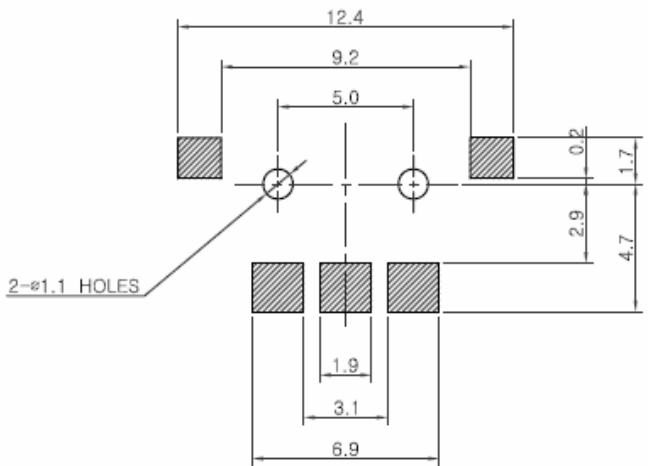
FAX: 0755-84090796

HTTP: //www.e-hanxing.com

E-mail:root@e-hanxing.com



SMD REFLOW PATTERN (4/1 : ±0.05)



* NOTES

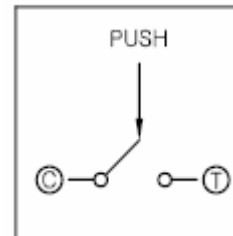
1. RATINGS : DC 5V / 10mA
2. OUT PUT VOLTAGE : 1V MAX. @ DC 5V 1mA
3. TRAVEL : 0.9 MIN. (Push Portion)
4. OPERATION FORCE : Push Portion 200 ±100gf
Lever Portion 70 ±50gf
5. OPERATING LIFE : 100,000 CYCLES (WITHOUT LOAD)
6. NON SPECIFIED DIMENSIONS TOLERANCE : ± 0.2

CODE TABLE

ANGEL TERMINAL	0°		0°	
	(25°)	(18°)	(18°)	(25°)
1				
2				
COM				

(■ = ON)

CCW ← → CW



公差: 0~4: ±0.1; 4~16: ±0.15; 16~64: ±0.25mm

拨轮开关
LEVER SWITCH

型号 TP-1305

标记 处数 更改文号 签名 日期 数量 质量 比例 04:01

图号

设计/日期 李建强 2004.9.1

校对/日期 李建强 2004.9.1 审核/日期 张云 2004.9.1

工艺/日期 李建强 2004.9.1 批准/日期 富胜 2004.9.1

东一部品电子有限公司
TONE PARTS ELECTRONICS CO., LTD

SPECIFICATION

规格书

1/3

TITLE (产品系列) : TACT SWITCH

MODEL (产品型号) : 拨轮开关

1. RATING (额定值) : DC 5V 10mA

ITEM 项目	TEST CONDITIONS 测试条件	SPECIFICATIONS 规格
2. ELECTRICAL PERFORMANCE (电气性能规格):		
2A	CONTACT RESISTANCE 接触电阻 MEASURED AT SMALL CURRENT (10mA OR LESS) 1000Hz 在微型电流 (100mA) 以下测试	300mΩ MAX. 300 毫欧以下
2B	INSULATION RESISTANCE 绝缘电阻 APPLY A VOLTAGE OF 100 DC FOR 1 MIN. TO FOLLOWING PORTIONS AFTER WHICH MEASUREMENT SHALL BE MADE: BETWEEN BODY AND CONDUCTOR BETWEEN CONDUCTORS NOT TO BE CONTACT BETWEEN CONDUCTORS NOT TO BE WHEN PLUG IS INSERTED DC 100V 1MIN. 输入 100V DC 电压 1 分钟,按以下接触方法测试: (1) 接触端子之间 (2) 本体与排脚之间.	100MΩ MIN 100 兆欧以上。
2C	DIELECTRIC STRENGTH 耐电压 AC 250V rms (50-60Hz) FOR 1 MIN TRIP CURRENT: 2mA 1 分钟感度电流 BETWEEN TERMINALS BETWEEN INDIVIDUAL TERMINALS AND FRAME 输入 250V AC 电压 1 分钟,按以下接触方法测试: (1) 接触端子之间. (2) 本体与端子之间.	WITHOUT DAMAGE SUCH AS INSULATION BREAKDOWN. 没有绝缘破坏等异常.
3.MECHANICAL PERFORMANCE (机械性能规格):		
3A	OPERATING FORCE 动作力	200gf ± 50gf
3B	TERMINAL STRENGTH 端子强度 A STATIC LOAD OF (500gf) SHALL BE APPLIED TO THE TIP OF THE TERMINAL FOR 1MIN. IN ANY DIRECTION 在任意一个方向的先端上加力度(500gf) 1 分钟.	ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED. WITHOUT DAMAGE OR EXCESSIVE LOOSENESS OF ACTUATOR 在端子中没裂开,松动等异常满足于电器性能.
3C	STANDARD ATMOSPHERIC CONDITIONS 使用标准状态 UNLESS OTHERWISE SPECIFIED. THE STANDARD RANGE OF ATMOSPHERIC CONDITIONS FOR MAKING MEASUREMENTS AND TESTS ARE AS FOLLOWS: AMBIENT TEMPERATURE: 5°C TO 35°C RELATIVE HUMIDITY: 45% TO 85% AIR PRESSURE: 80Kpa TO 106Kpa	在没有指定的情况下测试温度、湿度、气压如下: (1) 温度为 5~35°C (2) 湿度为 45%~85% (3) 气压为 80Kpa ~ 106Kpa

SPECIFICATION

规格书

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4. DURABILITY (耐久性)			
4A	SOLDERABILITY TEST 可能性焊性试验	<p>THE TOP OF THE TERMINALS SHALL BE DIPPED 1mm IN THE SOLDER BATH OF 230±10℃ FOR 3±0.5 SECONDS.</p> <p>端子顶部被浸入锡焊池中 1mm 深，温度为 230±10℃，时间 3±0.5 秒</p>	<p>(1) SOLDER WETTING TIME SHALL BE 3 SEC OR LESS 焊接时间应少于 3 秒</p> <p>(2) THE AREA OF SOLDERABILITY SHOULD BE OVER 75% 焊接面积要有 75% 以上。</p>
4B	RESISTANCE TO SOLDERING HEAT TREAT 耐焊性试验	<p>SOLDER BATH METHOD: SOLDER TEMPERATURE 260±5℃ IMMERSION TIME 3±0.5 SEC IMMERSION DEPTH UP TO THE SURFACE OF THE BOARD THICKNESS OF PRINTED WIRING BOARD 1mm DIMENSIONS OF COMPONENT HOLES IN THE PRINTED WIRING BOARD SHALL BE IN ACCORDANCE WITH THOSE SPECIFIED IN THIS SPECIFICATION.</p> <p>焊炉焊接的时候温度控制在 260±5℃，过炉时间为 3±0.5 秒， 于基板厚度为 1.0mm</p> <p>SOLDERING IRON METHOD: BIT TEMPERATURE 320±5℃ APPLICATION TIME OF SOLDERING IRON 3±5 SEC THE SPECIMEN SHALL BE SUBJECT TO STANDARD ATMOSPHERIC CONDITIONS WHICH MEASUREMENT SHALL BE MADE.</p> <p>手焊接的时候温度需控制在 320±5℃，时间为 3±0.5 秒</p>	<p>THERE SHALL BE NO DEFORMATION OF THE SWITCH. MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED.</p> <p>本体无变形，满足于机械、电气性能。</p>
4C	LIFE TEST 寿命试验	<p>WITHOUT LOAD: AN ACTUATOR SHALL BE SUBJECT TO 100,000 CYCLES AT A SPEED OF 60 CYCLES FOR 1 MIN.</p> <p>无负荷： 每分钟 30 次的频率作 100,000 回之无负荷测试。</p>	<p>(1) CONTACT RESISTANCE SHALL BE 200mΩ MAX.</p> <p>(2) MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED.</p> <p>(1) 接触电阻不能超于 500mΩ (2) 其它、满足于机械、电器性能。</p>

SPECIFICATION

规格书

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4D	HEAT TEST 耐热试验	<p>THE SWITCH SHALL BE STORED AT A TEMPERATURE OF $85\pm 2^{\circ}\text{C}$ FOR 96 HOURS. AND THEN IT SHALL BE SUBJECTED TO THE CONTROLLED RECOVERY CONDITIONS FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE.</p> <p>放置在温度 $85\pm 2^{\circ}\text{C}$ 中测试 96 小时后, 再放置下常室温中 1 小时来测定。</p>	<p>THERE SHALL BE NO DAMAGE ON APPEARANCE.</p> <p>MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED.</p> <p>外观无异常, 满足于机械, 电器性能。</p>
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4E	HUMIDITY TESH 潮湿试验	<p>THE SWITCH SHALL BE STORED AT A TEMPERATURE OF $40\pm 2^{\circ}\text{C}$ AND HUMIDITY OF 90% TO 96% FOR 96 Hr. THEN THE SWITCH SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITION FOR 1 Hr FOR OTHER PROCEDURES BE MADE.</p> <p>放置 $40\pm 2^{\circ}\text{C}$. 的相对湿度为 90~96% 环境中 96 小时后, 再将样板放在下常环境 1 小时后进行测试。</p>	<p>THERE SHALL BE NO DAMAGE ON APPEARANCE.</p> <p>MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED.</p> <p>外观无异常, 满足于机械, 电器性能。</p>
4F	COLD TEST 耐冷试验	<p>THE SWITCH SHALL BE STORED AT A TEMPERATURE OF $-25\pm 3^{\circ}\text{C}$ FOR 96 HOURS. AND THEN IT SHALL BE SUBJECTED TO THE CONTROLLED RECOVERY CONDITIONS FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE.</p> <p>放置在温度 $-25\pm 3^{\circ}\text{C}$ 中 96 小时后, 再放置常温常湿中 1 小时来测定。</p>	

5. MATERIAL SPECIFICATIONS (材料规格书)

Item (编号)	Part Name (名称)	Material (材料)	Finish (表面状态)
1	CASE	Nylon +F.G	Black
2	COVER	SUS	Natural
3	KNOB	NYLON	BLACK
4	TERMINAL	PBS	AG COATING
5	CONTACT	SUS	AG COATING
制表人	校对	审核	工程 部 确认
QIANG LI	YUN ZHANG	FUSHENG	
日期:2004.91	日期:2004.9.1	日期:2004.9.1	