



CHI FUNG ELECTRONICS CO., LTD.

志丰电子有限公司

SPECIFICATION 规格书		规格书编号	CF-SPE-MSH007-2
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		确认日期	
WRITTEN 制定	<i>张凡</i>	APP'D 审批	
MODEL SERIES NAME 系列名称:		MINIATURE HORIZONTAL SLIDE SWITCH	
MODEL NO 产品型号:		MSV-23N02	
1.RATING 额定值:		DC 12V 0.1A	
2.FUNCTION 接触型式:		2P3T	
3.TIMING 时间特性:		NON-SHORTING	
4.ELECTRICAL CHARACTERISTICS 电气性能规格:			
ITEM 项目	TEST CONDITIONS 测试条件		PERFORMANCE 表现
4.1	CONTACT RESISTANCE 接触电阻	MEASURED AT SMALL CURRENT (100mA OR LESS) 1000Hz 在微小电流(100mA)以下测试.	30mΩ Max 30毫欧以下
4.2	INSULATION RESISTANCE 绝缘电阻	APPLY A VOLTAGE OF 500V DC FOR 1 MIN.TO FOLLOWING PORTIONS AFTER WHICH MEASUREMENT SHALL BE MADE: (1) BETWEEN BODY AND CONDUCTOR. (2) BETWEEN CONDUCTORS NOT TO BE CONTACT. 输入 500V DC电压1分钟,按以下接触方法测试: (1)接触端子之间. (2)插座体与排脚之间.	100MΩ MIN. 100兆欧以上
4.3	DIELECTRIC STRENGTH 耐电压	AC 500V ims(50~60Hz)FOR 1 MIN TRIP CURRENT:0.5 mA (1) BETWEEN TERMINALS. (2) BETWEEN INDIVIDUAL TERMINALS AND FRAME. 输入AC 500V (50~60Hz) 电压,1分钟感应电流为0.5mA.按以下接触方法测试: (1)接触端子之间. (2)插座体与排脚之间.	NO DAMAGE TO PARTS ARCING OR BREAKDOWN ETC. 没有绝缘破坏等异常.
5	PRACTICAL TEMPERATURE RANGE 使用温度范围	-16℃~+60℃ 在-16℃~+60℃ 温度内使用	



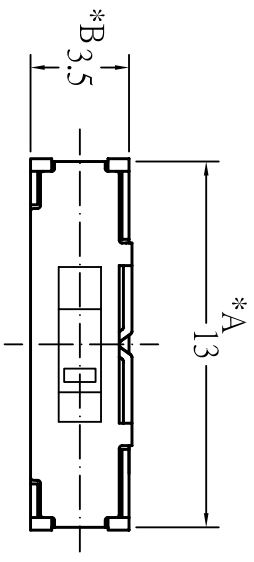
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6	STANDARD ATMOSPHEIC CONDITIONS 测试标准状态 NORMALLY, THE STANDARD RANGE OF ATMOSPHERIC CONDITIONS FOR MAKING MEASUREMENTS AND TESTS ARE AS FOLLOWS: (1) AMBIENT TEMPERATURE: 5°C TO 35°C (2) RELATIVE HUMIDITY: 45% TO 85% (3) AIR PRESSURE: 80Kpa TO 106Kpa 在没有指定的情况下测试温度,湿度,气压如下: (1) 温度为5°C~35°C (2) 湿度为45%~85% (3) 气压为80Kpa~106Kpa		
7. MECHANICAL CHARACTERISTICS 机械性能规格:			
ITEM 项目	TEST CONDITIONS 测试条件	PERFORMANCE 表现	
7.1	OPERATION FORCE 作动力		$\ast T_1 \longrightarrow T_2$ $T_2 \longrightarrow T_3$ 250gf±100gf 300gf±150gf
7.2	TERMINAL STRENGTH 端子强度	A STATIC LOAD OF 500gf SHALL BE APPLIED TO THE TIP OF 15 SEC. IN ANY DIRECTION. 在任意一个方向的先端加上500gf 力度测试,时间为15秒	ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED WITHOUT DAMAGE OR EXCESSIVE LOOSENESS OF TERMINALS. 在排脚中没有裂开,松动等异常,满足于机械,电器性能.
7.3	LIFE TESH 寿命测试	1. ENDURANCE WITHOUT LOADING: A SWITCH SHALL BE SUBJECTED TO 10,000 CYCLES AT A SPEED OF 25 TO 30 CYCLES PER MINUTE WITHOUT LOADING. 无负荷: 在无负荷的条件下以分钟25~30回的速度进行10,000次的测试. 2. ENDURANCE WITH LOADING: A SWITCH SHALL BE SUBJECTED TO 5,000 CYCLES AT A SPEED OF 25 TO 30 CYCLES PER MINUTE WITH LOADING. 负荷: 在负荷的条件下以分钟25~30回的速度进行5,000次的测试.	AFTER TESTING :(测试后) (1) CONTACT RESISTANCE SHALL BE 100mΩ MAX. 接触电阻不能超于100毫欧. (2) MECHANICAL AND ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED. 其它满足于机械,电器性能.
8. DURABILITY 耐久性:			
ITEM 项目	TEST CONDITIONS 测试条件	PERFORMANCE 表现	
8.1	SOLDERABILITY TEST 可焊性试验	THE TOP OF THE TERMINALS SHALL BE DIPPED 2mm IN THE SOLDER BATH OF 230±5°C FOR 3±0.5 SECONDS. 端子顶部被浸入锡焊池中2mm深,温度为230±5°C,时间为3±0.5秒.	AREA OF SOLDERING NEED BE SMOOTH AND GOOD PERFORMANCE. 焊锡部分粘锡均匀,饱满,锡面平滑.



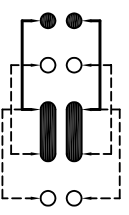
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8.DURABILITY 耐久性：			
ITEM 项目	TEST CONDITIONS 测试条件	PERFORMANCE 表现	
8.1 SOLDERABILITY TEST 可焊性试验	THE TOP OF THE TERMINALS SHALL BE DIPPED 2mm IN THE SOLDER BATH OF 230±5°C FOR 5 SECONDS. 端子顶部被浸入锡焊池中2mm深,温度为230±5°C,时间为5秒.	AREA OF SOLDERING NEED BE SMOOTH AND GOOD PERFORMANCE. 焊锡部分粘锡均匀,饱满,锡面平滑.	
8.2 RESISTANCE TO SOLDERING HEAT TEST 耐焊性试验	SOLDER BATH METHOD: SOLDER TEMPERATURE 265°C MAX , IMMERSION TIME 5±0.5 SEC ,IMMERSION DEPTH UP TO THE SURFACE OF THE BOARD THICKNESS OF PRINTED WIRING BOARD 1.6 mm DIMENSIONS OF COMPONENT HOLES IN THE PRINTED WIRING BOARD SHALL BEING ACCORDANCE THE SPECIFICATION. 焊炉焊接的时候温度控制在 265°C 以下, 过炉时间5±0.5秒,于(基板)厚度应1.6mm.	WITHOUT DEFORMATION OF CASE OR EXCESSIVE LOOSENESS OF TEMINALS ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED. 本体无变形,能满足于机械,电器性能.	
8.3 HEAT TEST 耐热试验	THE SWITCH SHALL BE STORED AT A TEMPERATURE OF 80±2°C FOR 96 HOURS. THEN THE SWITCH SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITION FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE. 放置在80±2°C中测试96小时后,再放置正常室温中1小时来测定.		
8.4 COLD TEST 耐冷试验	THE SWITCH SHALL BE STORED AT A TEMPERATURE OF -40±2°C FOR 96 HOURS, THEN THE SWITCH SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITION FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE. 放置在温度-40±2°C中96小时后,再放置常温中1小时来进行测试.		
8.5 HUMIDITY TEST 潮湿试验	THE SWITCH SHALL BE STORED AT A TEMPERATURE OF 40±2°C AND A HUMIDITY OF 90% TO 95% FOR 96 HOURS . THEN THE SWITCH SHALL BE MAINTAINED AT STANDARD ATMOSPHERE CONDITION FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE. 放置40±2°C试验的相对湿度为90%~95%环境中96小时后,再将样板放在正常环境1小时后进行测试.	THERE SHALL BE NO DEFORMATION OR CRACKS IN MOLDED PART. 外观无异常,满足于机械,电器性能.	
8.6 THE TESTT OFFSALT FOG 盐雾测试	35°C, 5%NaCl, 8Hours. 35°C, 5%的NaCl, 8小时	The rust area is less than 5% on the surface. 表面生锈面积小于5%	

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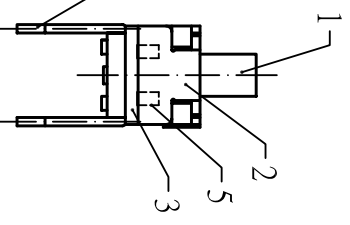
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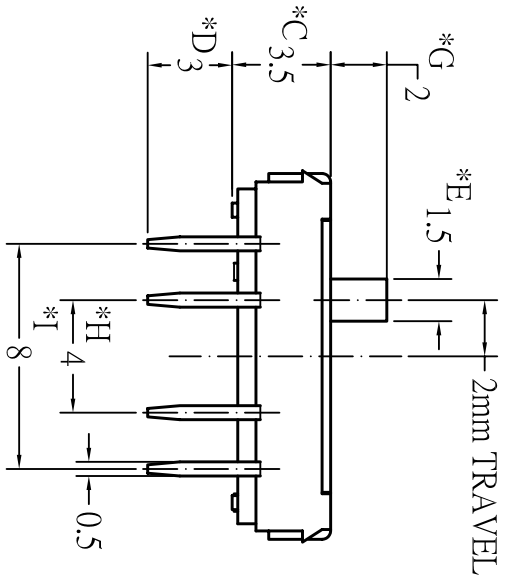
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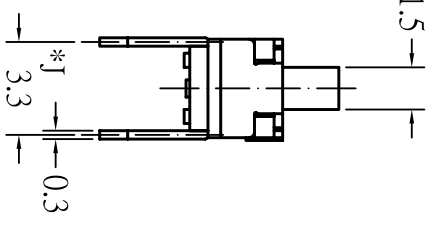


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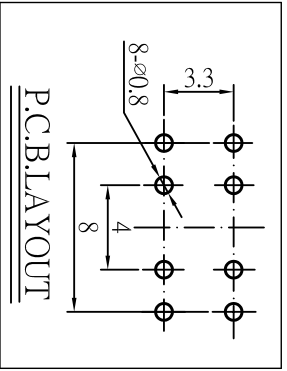


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*F 1.5



C



* CRITICAL DIMENSION

D

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SERIES : MINI SLIDE SWITCH	DRAWING NO. : CE-ENL-MSV4013
PART NAME: MSV-23N02	GENERAL TOLERANCE
UNIT : MM	WITHIN 0.XXmm±0.15mm
SCALE : 4:1	OVER 0.Xmm±0.25mm
REV : A/0	APPD.

NO.	PART NAME	MATERIAL	QTY	FINISHING
1	STEM	PA66	1	WHITE OR BLACK
2	COVER	SUS	1	NATURAL
3	CASE	PA66	1	BLACK
4	TERMINAL	BRASS	8	Ag COATING
5	CONTACT	C5210R-EH	2	Ag CLAD
6				
7				

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