

承认书

SPECIFICATION FOR APPROVAL

客户名称

CUSTOMER

产品名称

DESCRIPTION

PUSH BUTTON SWITCH

产品编号

MODEL NO.

GQ12F2-10L

送样日期

ISSUE DATE


客户/签批 (CUSTOMER/APPROVAL)

采购部 PURCHASE DEPT	工程部 ENGINEER DEPT	品质部 QUALITY DEPT

戴尔/签批 (YUEQING/APPROVAL)


DGN.制表人	CKD.校对	APPD.审核



	乐清市戴尔电子有限公司 YUEQING DAIER ELECTRON CO.,LTD		规 格 书 SPECIFICATION		编号 No.	
					版本号 ERSION	A0
产品名称 ERIES	按钮开关 PUSH SWITCH		产品型号 TYPE	GQ12F2-10L		
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项目 ITEM	测试条件 TEST CONDITIONS	要求 REQUIREMENT
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<p>1、温度范围</p> <p>Temperature Range</p> <p>使用温度范围: -25 °C ~ +55°C</p> <p>Operating Temperature Range -25°C ~+55°C</p> <p>2、测试环境条件:</p> <p>Test Circumstance Condition:</p> <p>环境温度: 25°C ± 5°C</p> <p>Ambient temperature : 25°C ± 5°C</p> <p>相对湿度: 45%~85%</p> <p>Relative humidity : 45%~85%</p> <p>空气压力: 102 千帕</p> <p>Air pressure: 102KPa</p> <p>3、外观、结构和尺寸</p> <p>Appearance, Structure and Dimension</p> <p>3.1 外观:</p> <p>Appearance:</p> <p>外观美观、没有生锈、伤痕、电镀不良、破裂, 剥离现象。动作正常, 换位清晰。</p> <p>Nice appearance; Free from Rust, Scratch, Bad plated, Denude; Smooth action, Clear conversion.</p> <p>3.2 结构和尺寸:</p> <p>Structure and Dimension:</p> <p>参照有关外形图</p> <p>Reference to the relative</p> <p>4、额定值: 3A 36VDC; 3A 250VAC</p> <p>Rating: 3A 36VDC; 3A 250VAC</p>	
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5、机械性能 Mechanical Performance			
5.1	动作力 Operating Force	<p>开关垂直于操作方向放置，在按钮一侧逐渐施力，测量开关导通所需的最大力度。</p> <p>Vertical placing the switch with the direction of switch operation, then gradually increasing the force, measure demanded maximum force that switch continuity.</p>	依图所示
5.2	端子强度 Terminal strength	<p>在端子的顶部施加一向内推的 40N 静负荷，持续 60 秒。</p> <p>Enforce push-inward static 40N load on the top of terminal, lasting 60 seconds</p>	<p>端子无损伤，脱落，开关功能动作正常。</p> <p>No damage, leafing, switch function action is normal.</p>
5.3	可焊性试验 Solder-Ability	<p>将端子浸入熔融的锡槽内，温度为 235±5℃，时间为 2±0.5 秒。</p> <p>Immerse the terminal to the molten solder tank, temperature reach to 235±5℃,time reach to 2±0.5 seconds</p>	<p>浸入的部分 90%以上表面被锡覆盖。</p> <p>90% of the surface will be covered by solder.</p>
5.4	耐焊性试验 Soldering resistance test	<p>端子的焊接部分浸入温度为 260±5℃熔融的锡炉内 2±0.5 秒。</p> <p>The welding part of terminal immerse molten solder at a temperature of 260±5℃ for 2±0.5 seconds.</p> <p>手工烙铁焊接：焊接温度 350±5℃，焊接时间 2±0.5 秒。焊接时在端子上不能施加异常压力。</p> <p>Manual iron welding: welding temperature: 350±5℃,welding time: 2±0.5 seconds. When welding, can't enforce anomaly pressure on the terminal.</p>	<p>本体无变形，能满足于机械、电气性能</p> <p>Without deformation of base, can satisfy mechanical, electronic performance.</p>
6、电气性能 Electronic Performance			
6.1	接触电阻 Contact resistance	<p>在 1KHz 小电流下测量。</p> <p>Being measured at 1KHz small current.</p>	50 毫欧姆以下 50mΩ MAX.

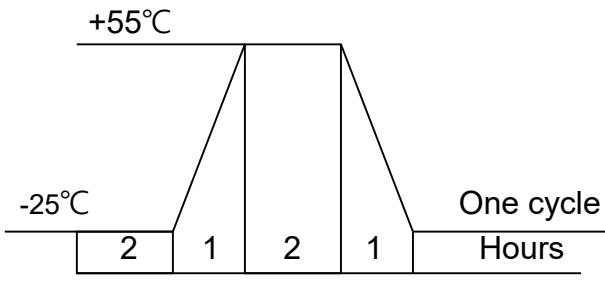
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6.2	绝缘电阻 Insulation resistance	在端子之间和端子与外壳之间施加 DC500V，一分钟后测量。 Measurement shall be made enforcing DC500V between terminals and between terminals and frame for 1 minute.	100 兆欧姆以上 100MΩ MIN.
6.3	耐电压 Withstand voltage	在极与极之间施加 AC1500V，0.5mA、1min，在极与操动件之间施加 AC1000V，0.5mA 1min。 Enforce AC1500V, 0.5mA between pole and pole in 1min ,enforce AC1000V , 0.5mA between pole and frame in 1min	无击穿现象出现。 No breakdown.
7、耐久性能 Durability			
7.1	机械寿命 Mechanical life	每分钟 30 次的速度连续工作 500,000 次 Operating 500,000 cycles at a rate of 30cycles per minute	外观，动作功能正常
7.2	电气寿命 Electrical life	额定负载条件下,每分钟 30 次的速度操作 ≥ 50,000 次.工作条件: 3A 36VDC Operating ≥ 50,000 cycles at a rate of 30cycles per minute under rate loading on conaition that the voltage is 36VDC and the current is 3A	1.耐电压≥1500VAC/1min Withstand voltage ≥1500VAC/1min
8、耐候性 Weather Ability			
8.1	耐高温试验 Heat test	在 55±2℃环境中放置 72 小时，再放在正常环境中 60 分钟后进行测试。 Putting at 55±2℃ for 72 hours. Test after keeping in normal condition for 60 minutes.	1、接触电阻 50 毫欧以下 Contact resistance 50mΩ MAX. 2、绝缘电阻 100 兆欧以

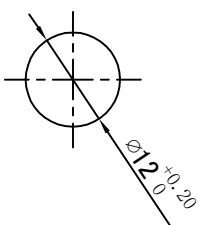
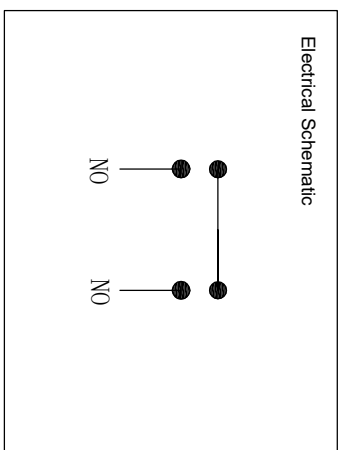
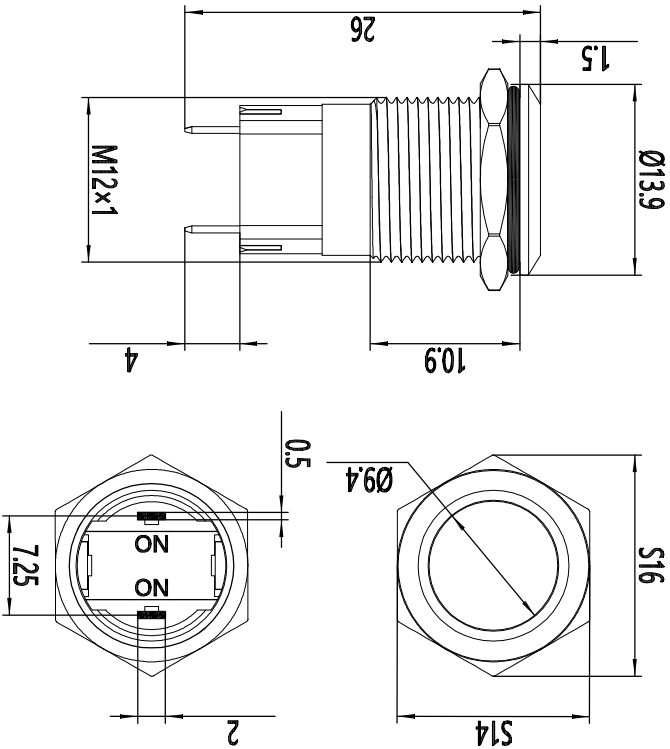
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8.2	耐湿试验 Anti-humid test	在温度为 $40 \pm 2^{\circ}\text{C}$ ，相对湿度为 91%-95%RH 的环境中放置 96 小时，再放在正常环境中 60 分钟后进行测试。 Putting at $40 \pm 2^{\circ}\text{C}$, 91%~95%RH for 96 hours. Test after keeping in normal condition for 60 minutes.	上 Insulation resistance 100MΩ MIN. 3、耐电压 1500VAC, 0.5mA、5S 无击穿 Withstand voltage 1500VAC,0.5mA,5S No breakdown. 4、无任何迹象显示机械 及电气性能之损坏 No sign of damage mechanical and electronic performance.
8.3	耐低温试验 Anti-low temperature test	在 $-25 \pm 3^{\circ}\text{C}$ 的环境中放置 16 小时，再放在正常环境中 60 分钟后进行测试。 Putting at $-25 \pm 3^{\circ}\text{C}$ for 16 hours. Test after keeping in normal condition for 60 minutes.	
8.4	温度交变试验 Temperature cycling test	在如图示之环境中，循环 5 次后，再置于正常环境中，30 分钟后进行测试。 In FIG. For 5 cycles, test after kept in normal condition for 30 minutes. 	

9、包装、储存			
9.1	包装 Packing	每 100 只产品装 1 盒,1 纸箱装 2000 只产品,每个箱用胶带封口,并用扎带捆牢固;纸箱要干燥,盒子在纸箱内无晃动	100pcs/Box; 2000pcs/Carton
9.2	储存 Storage	包装成箱的开关,应在环境温度 $-10^{\circ}\text{C} \sim 40^{\circ}\text{C}$ 、相对湿度不大于 80%、周围没有酸性、碱性或其他腐蚀性气体的房间内储存。	Should be stored in where the ambient temp is $-10^{\circ}\text{C} \sim 40^{\circ}\text{C}$, Relative humidity $\leq 80\%$, and no acid, alkaline or other corrosive gases nearby

更改	说明	修改人	审核
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PANEL CUTOUT
MAX. PANEL THICKNESS
8.5mm

Specifications
Function: LATCHING
Contact Arrangement: SPST 1NO
Mounting Type: Threaded Front Panel Mount
Torque For Threaded Body: 5-14Nm
LED Illumination: No LED.

Mechanical
Operating Life: ≥ 500,000 Cycles
Total Travel: About 1.6mm
Operating Force: 2.5±1N

Electrical
Contact Rating: 3A 250VAC ; 6A 125VAC
3A 36VDC; 6A 12VDC
Operating Life: ≥50,000 Make-and-Break Cycles at Full Load
Dielectric Strength: 2,000V RMS @Sea Level
Insulation Resistance: 1,000MΩ Min @500VDC
Contact Resistance: 50mΩ max

Materials
Bushing: Stainless Steel / Brass Nickel Plated / Aluminum Alloy
Base: PBT (UL94-V0)
Actuator: Stainless Steel / Brass Nickel Plated / Aluminum Alloy
Internal Assembly: POM/PA66
Spring: Steel
Sealing/O-Ring: Silicone
Terminals: Brass with Gold Plated
Contact: Copper Silver Plated

Operating Environment
Operating Temperature: -25 °C to +55 °C
Sealing/Protection: IP65

NOTE: Specifications and materials listed above are for switches with standard options.
For information on specific and custom switches, please contact Customer Service.

<p>乐清市戴尔电子有限公司 YUEQING DAIER ELECTRON CO., LTD</p>		DR. 制图	APPD 审核	
DE. 设计		CHKD 校对		
DIMENSIONS	Tolerance	SCALE	1.5/1	UNIT mm
0.00 ~ 10.00mm	±0.15mm	TITLE	PUSH BUTTON SWITCH	
10.01 ~ 30.00mm	±0.20mm	名称		
30.01 ~ 80.00mm	±0.25mm	DWG NO.	GQ12F2-10L	
80.01 ~ 150.00mm	±0.30mm	图号		
150.01mm ¹	±0.40mm	FILE NAME	档案名称	
		SHEET	1 / 1	REV. 更改
		张		1