

GENESIS ELECTRO-MECHANICAL LTD.

PRODUCT SPECIFICATION
GENESIS PN: 151-10152-01



genesis
connected solutions

SPECIFICATION FOR APPROVAL

CUSTOMER: _____

CUSTOMER PART NO: _____

PART NO: **151-10152-01**

REVISION: **PSA**

DESCRIPTION: **3P,DC POWER JACK Vertical DIP**

	MANUFACTURE SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY:	Ethan	
DATE:	2020.07.07	

GENESIS ELECTRO-MECHANICAL LTD.

4F-5, No. 51, Sec. 4, Zhongyang Rd.,
Tu-Cheng Dist, New Taipei City 236, Taiwan
TEL: +886-2-2268-9006
FAX: +886-2-2268-9005

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1 SCOPE

This specification covers the performance requirements of the **DC POWER JACK**

2 APPLICATION DOCUMENT

This following documents form a part of this specification to this extent specified herein. In the event of conflict between the requirements of the specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

- EIA-364

3 REQUIREMENTS

3.1 DESIGN AND CONSTRUCTION

Product shall be of the design, construction and physical dimensions specified on the applicable product drawing

3.2 MATERIAL

REF GENESIS 2D drawing

3.3 RATINGS

- A. voltage rating 30V/DC Max
- B. Current 1A DC Max.

3.4 STORAGE CONDITIONS

- A. Operating Temperature -25°C~+70°C

4 ELECTRICAL PERFORMANCE

项目 Items	说明 Explanation	测试程序 Testing procedures	性能要求 Technical requirements
4.1	接触电阻 Contact resistance	频率 Frequency : 1000Hz, 电流 Current : <100mA, 电压 Voltage : 20mV	Max 50mΩ
4.2	绝缘电阻 Insulation resistance	端子与外导体之间 DC 500V 1min, 漏电流 2mA。 Applying DC 500V Between pin And out conductor and test it atter 1min, Leakage current 2mA	Min 100MΩ
4.3	耐电压 Dielectric strength	AC 500V(50 Hz) 1min 2mA	无击穿、飞弧现象 No abnormality, no breakdown, no over arc.

5 Mechanical properties

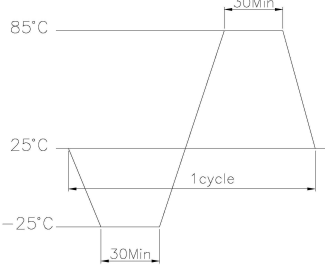
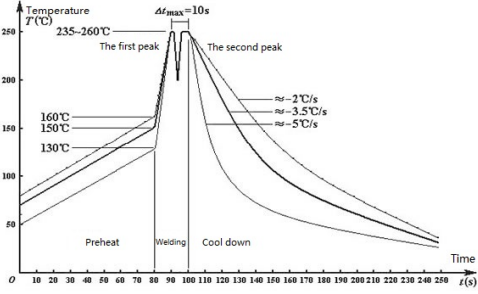
项目 Items	说明 Explanation	测试程序 Testing procedures	性能要求 Technical requirements
5.1	外观、结构、尺寸 Construction	根据附图，用目视和合适量具，对产品进行外观检视及尺寸测量。 The external dimensions of this product and its internal tolerances are based on relevant drawings.	符合图纸要求 Meet the requirements of the drawings
5.2	插入力 Insertion、 拔出力 Extraction force	使用标准插头对产品进行插入、拔出 3 次后用合适的量具进行测量。 Use standard plug. Measure it after 3 times of insertion.	插入力 Insertion force : max 3N ~ 20N 拔出力 Extraction force: min 3N ~ 20N
5.3	耐久性 Mechanical life	沿垂直方向，使用标准插头以(10~30)次/分钟的速度进行耐久性测试， Inserting and extracting without load at the speed of (10~30) cycles per 1 minute.	>5,000 次 >5,000 Cycle

6 Environmental properties

项目 Items	说明 Explanation	测试程序 Testing procedures	性能要求 Technical requirements
6.1	高温 Heat withstanding	在 85°C±2°C 温度环境中保持 96 小时在标准大气条件下，恢复 1 小时后测试。 Temperature: 85°C±2°C, keep 96 hours and measure after one hour recovery in standard atmospheric conditions.	1. 结构无变化 Structure unchanged 2. 接触电阻 Contact resistance: Max 50mΩ 3. 绝缘电阻 Insulation resistance: Min 50MΩ 4. 耐电压 Withstand voltage: 无击穿、飞弧现象 No breakdown, no over arc.
6.2	低温 Cold withstanding	在 -25°C±2°C 温度环境中保持 96 小时在标准大气条件下，恢复 1 小时后测试。 Temperature: -25°C±2°C, keep 96 hours and measure after one hour recovery in standard atmospheric conditions.	1. 结构无变化 Structure unchanged 2. 接触电阻 Contact resistance: Max 50mΩ 3. 绝缘电阻 Insulation resistance: Min 50MΩ 4. 耐电压 Withstand voltage: 无击穿、飞弧现象 No breakdown, no over arc.
6.3	Salt spray test 盐雾测试	At 5% NaCl liquor for 24 hours, after washing, keep in normal condition for 30 minutes. 5%的 NaCl 溶液中噴霧 24 小時, 用水清洗並在室溫下放置 30 分鐘.	Without excessive Corrosion or crack in appearance 表面無明顯腐蝕或鍍層脫落現象

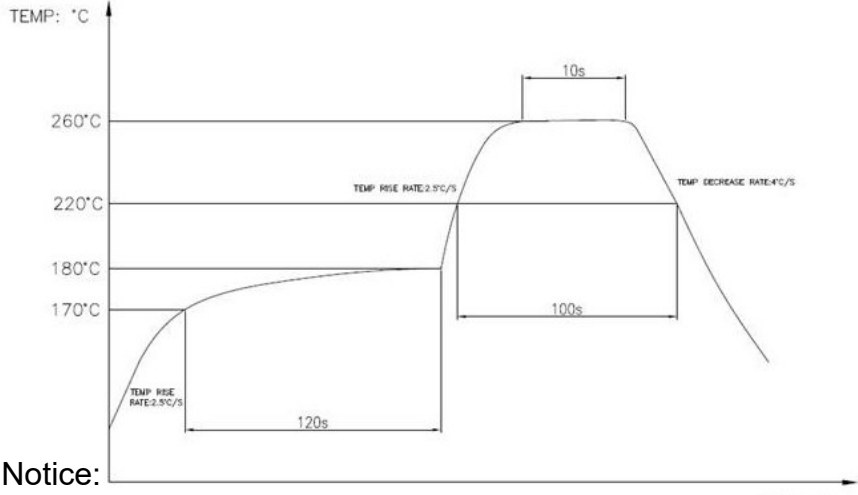
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项目 Items	说明 Explanation	测试程序 Testing procedures	性能要求 Technical requirements
6.4	温度变化 Temperature cycle	在 30 分钟内温度从 25℃减少到-25℃;保持 30 分钟后增加到 85℃为一个循环,共 5 个循环。在标准大气条件下,恢复 24 小时后测试。 Decrease from 25℃to-25℃ in 30 minutes; then increase from -25℃ to 85℃ to complete one cycle. Total 5 cycles.Measure after 24 hours of recovery in standard atmospheric conditions. 	1.结构无变化 Structure unchanged 2.接触电阻 Contact resistance: Max 50mΩ 3.绝缘电阻 Insulation resistance: Min 50MΩ 4.耐电压 Withstand voltage: 无击穿、飞弧现象 No breakdown, no over arc.
6.5	恒定湿热 Humidity withstanding	温度:40℃±2℃, 相对湿度: 90%~95% 时间:96 小时 在标准大气条件下, 恢复 1 小时后测试。 Temperature:40℃±2℃, Relative humidity:90%~95% Time:96hours Measure after one hour recovery in standard atmospheric conditions.	1.结构无变化 Structure unchanged 2.接触电阻 Contact resistance: Max 50mΩ 3.绝缘电阻 Insulation resistance: Min 50MΩ 4.耐电压 Withstand voltage: 5.无击穿、飞弧现象 No breakdown, no over arc.
6.6	可焊性 Soldering test	使用槽焊法: 温度: 235℃±5℃; 时间: 3 秒±0.5 秒 Solder bath method: Temperature:235℃ ±5℃ ; Time :3±0.5s 	沾锡面积应大于所浸总面积的 90% Solder covered surface >90%

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项目 Items	说明 Explanation	测试程序 Testing procedures	性能要求 Technical requirements
6.7	耐焊接热 Soldering withstanding	使用焊槽法: 温度: 260°C±5°C; 时间: 5 秒±1 秒 Solder bath method: Temperature: 260°C±5°C; Time: 5±1s	1.结构无变化 Structure unchanged 2.接触电阻 Contact resistance : Max 50mΩ 3.绝缘电阻 Insulation resistance: Min 50MΩ 4.耐电压 Withstand voltage: 无击穿、飞弧现象 No breakdown, no over arc.
6.8	The temperatu re of the Reflow without lead. 无铅回流焊 制程温度	 <p>Notice:</p> <p>1、Pre-heating temperature is 170 ~ 180°C, for a duration about 120 seconds。</p> <p>预热温度170 ~ 180°C · 时间120sec</p> <p>2、The peak temperature is 260°C, the duration for 10 seconds.</p> <p>锡炉峰值温度为 260°C · 持续时间为 10sec.</p>	

7 Storage and transport

7.1 存储 Storage

包装成箱的产品,应在环境温度-10°C~+40°C,相对湿度不大于 80%, 周围空气没有酸性、碱性或其它腐蚀性气体库的库房内贮存。

Packing boxes of the product should be at ambient temperature -10°C ~ +40°C, relative humidity less than 80%, the surrounding air is not acidic, alkaline or other storehouse corrosive gases library storage.

7.2 运输 transport

包装成箱的产品,在避免雨、雪直接淋袭的条件下, 可用任何运输工具运送。

Packing boxes of products, while avoiding the rain, snow hit the direct leaching conditions, using any means of transport delivery.