



苏州维森格电子有限公司

SU ZHOU WSG ELECTRONICS CO., LTD

碳膜软板电位器规格书

Specification for Carbon Film Soft Board Potentiometer

编号:

NO. 9161-DOC1

公司名称:

C O .Name: Suzhou WSG Electronics Co., Ltd

型号名称:

Mode 1 Name : (690823-01) 电位器 (690823-01) p o t e n t i o m e t e r

日 期:

DATE : 2025/8/5

一. ELECTRICAL CHARACTERISTICS 电气特性

序 号 NO.	项 目 ITEM	性 能 PERFORMAN CE	测 试 条 件 TE ST COND IT IONS
1.1	Total resistance 全阻值	10K Ω $\pm$ 10%	Between terminal 1 and terminal 3. 1-3 端子间.
1.2	Line error 线性 误差	Variation line shall be within $\pm$ 5%. 线性变化为 $\pm$ 5%	/

二. MECHANICAL CHARACTERISTICS 机械特性

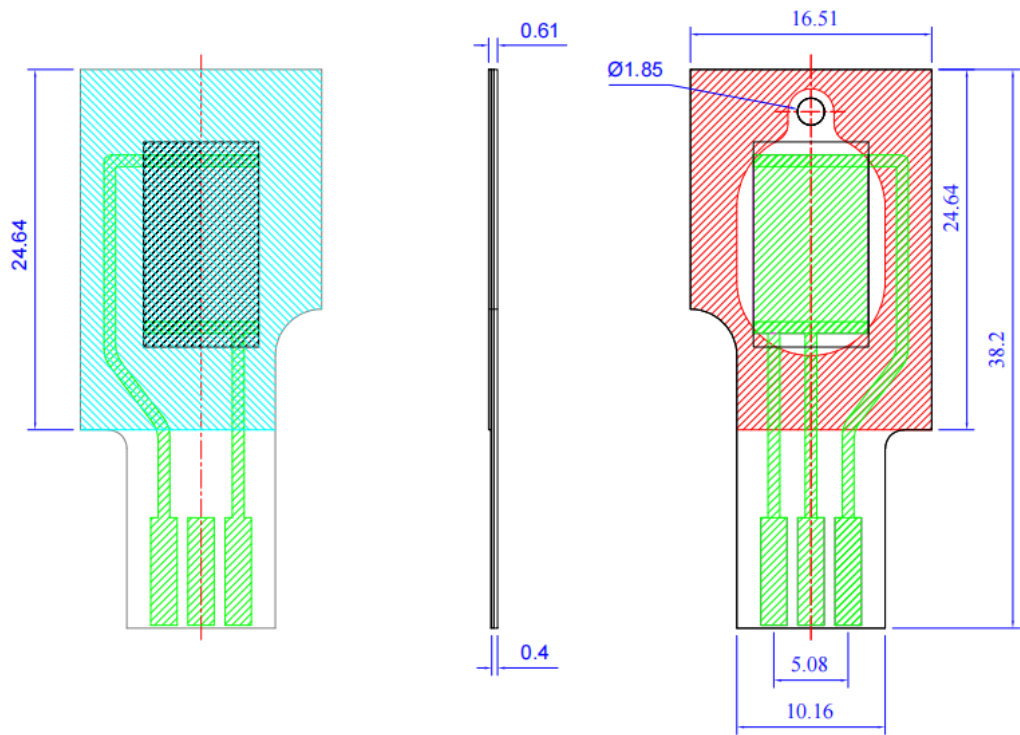
2.1	Effective angle of terminal bending端子折弯有效角度	$\leq 90^{\circ} \pm 3^{\circ}$	/
2.2	Solderability可焊性	With no less than 90%, the surface immersed into solder shall be covered with new solder, expect for cutting surface. 浸入的表面的新焊料所覆盖不少于90%，切断表面除外。	Immerse the sample in a solution of rosin alcohol for 3-5 seconds, and then immerse the sample in solder solution to rinse the end face for 3+0/-0.5 seconds Solder Temp. :245+0/-3° C 将样品浸入调好松香酒精的溶液 3~5 秒，然后将样品 浸入焊液冲洗端面 3+0/-0.5 秒。 焊接温度 :245 +0 /-3° C

三. Material characteristics材料特性				
序号 NO.	项目project	单位unit	典型值Typical values	测试方法test method
1	Tensile strength (MD/TD) 拉伸强度(MD/TD)	MPa	190/180	ASTM D 882
2	Thermal shrinkage rate (MD/TD) 150 ℃, 30min 热收缩率 (MD/TD) 150℃ , 30min	%	1.0/0.1	ASTM D 1204
3	Elongation at break (MD/TD) 断裂伸长率 (MD/TD)	%	190/170	ASTM D 882
4	Haze ratio 雾度	%	27	ASTM D 1003
5	Power frequency electrical strength 工频电气强度	V/μm	65	IEC 60674-3-2
6	Dielectric loss factor (50Hz) 介质损耗因数(50Hz)		2.1×10 ⁻³	IEC 60674-3-2
7	Relative permittivity (50Hz) 相对电容率(50Hz)		3.1	IEC 60674-3-2
8	Thickness 厚度	μm	250	DIN 53370

四. ENDURANCE CHARACTERISTICS 耐久性能

4.1	Dry heat 耐热性	The total resistance change should be within $\pm 10\%$. Variation line shall be within $\pm 5\%$. 全阻值变化要在 $\pm 10\%$ 以内， 线性变化为 $\pm 5\%$	Temperature: $+95 \pm 3^\circ\text{C}$ Time: 168 ± 4 hours The controller shall be subjected to standard atmospheric conditions for $24+8/-0$ hours after which measurement shall be made. 温度在 $95 \pm 3^\circ\text{C}$ 放置 168 ± 4 小时， $24+8/-0$ 小时后正常状态下测试。
4.2	Cold 耐寒性	The total resistance change should be within $\pm 10\%$. Variation line shall be within $\pm 5\%$. 全阻值变化要在 $\pm 10\%$ 以内， 线性变化为 $\pm 5\%$	Temperature: $-40 \pm 3^\circ\text{C}$ Time: 168 ± 4 hours surface moisture shall be removed, and then the controller shall be subjected to standard atmospheric conditions for $24+8/-0$ hours after which measurement shall be made 温度在 $-40 \pm 3^\circ\text{C}$ 放置 168 ± 4 小时，表面水份摄取后 $24+8/-0$ 小时正常状态下测试。
4.3	Humidity (Steady state) 耐湿(稳定状态)	The total resistance change should be within $\pm 10\%$. Variation line shall be within $\pm 5\%$. 全阻值变化要在 $\pm 10\%$ 以内， 线性变化为 $\pm 5\%$	The specimens shall be subjected in a test chamber at $85 \pm 2^\circ\text{C}$, $90 \sim 95\%$ r. hat no load for 250 ± 8 hours and then left in the standard conditions for 24 to 32 hours. 温度 $85 \pm 2^\circ\text{C}$ ，湿度 $90 \sim 95\%$ 之槽内，无负载放置 250 ± 8 小时后，在常温常湿放置 $24 \sim 32$ 小时后测量。

五.Product size structure产品尺寸结构



序号 NO.	零件名称 Parts name	材质 Material	表面处理 Surface treatment
1	端子 Terminal	stainless steel 不锈钢	/
2	软板 Soft board	PET (聚对苯二甲酸乙二醇酯)	/
3	粘合剂 adhesive	合成橡胶 synthetic rubber	/
4			

六.General 一般事项		
序号 NO.	项 目 ITEM	
5.1	Appearance, Style and Dimensions 外观、形状、尺寸	
	Appearance 外观	shall be no defects that affect the serviceability of the product. 不可有影响产品服务性的瑕疵存在。
	Style and Dimensions 形状和尺寸	Refer to the assembly drawings. 参考成品图
	Contact arrangement 回路形式	Refer to the assembly drawings. 参考成品图
七.Notice on usage 使用注意事项		
序号 NO.	项 目 ITEM	
6.1	Due to the material used such as poly-carbonate and/or ABS of non-crystalline polymer, the unit may be damaged when it will touch some kinds of organic solvents , grease or inorganic chemicals. 由于材质用是塑料类，故当产品接触到有机溶剂、润滑油或无机化学物可能会损坏装置。	
6.2	Strafe under being packed 去除包装的损害 After being received, the products packed shall be stored under 85% max. r.h. at 5 to 35° C shall not be stored in the place where dew and /or harmful gas are not to deserved. Please use the products within 3 months after the receipt. 在收到之后，包装的产品应储存在最大湿度85%以下，温度在 5~35° C，不得储存在有露水或者有害气体的地方。请在收到产品 3 月内使用。	
核 准 Approved by		审 查 Checked by
		经 办 者 Designed by 罗志云

