



样品承认书

Specification of Approval

客户名称 Customer Name: _____

产品名称 Part Name: _____

样品编号 Sample Number: _____

认定盖章 Approved Signatures			
核准 Approval	品管 QC	工程 Engineer	业务 Salesman

承认单位 Recognition Unit: _____

客户反馈意见 Customer Feedback: _____

认定盖章 Approved Signatures			
核准 Approval	品管 QC	工程 Engineer	采购 Buyer

电话 Tel:

邮箱 E-mail:

传真 Fax:

地址 Add:



1、描述 Descriptions

- SLLT2696ND是一种高功率红外发射二极管，采用透明环氧树脂（带透镜）贴片封装成型，具有响应速度快、辐射强度高、寿命长、可靠性高等优点。广泛应用于红外遥控系统或红外触摸屏作为红外光源。

SLLT2696ND is a high power Infrared Emitting Diode, Molded in clear epoxy (with lens) SMD package, with the advantages of fast response time, high radiant intensity, long life and high reliability etc. It is widely used in Infrared Remote Control System or IR Touch Panel as Infrared light Source.

2、特性 Features

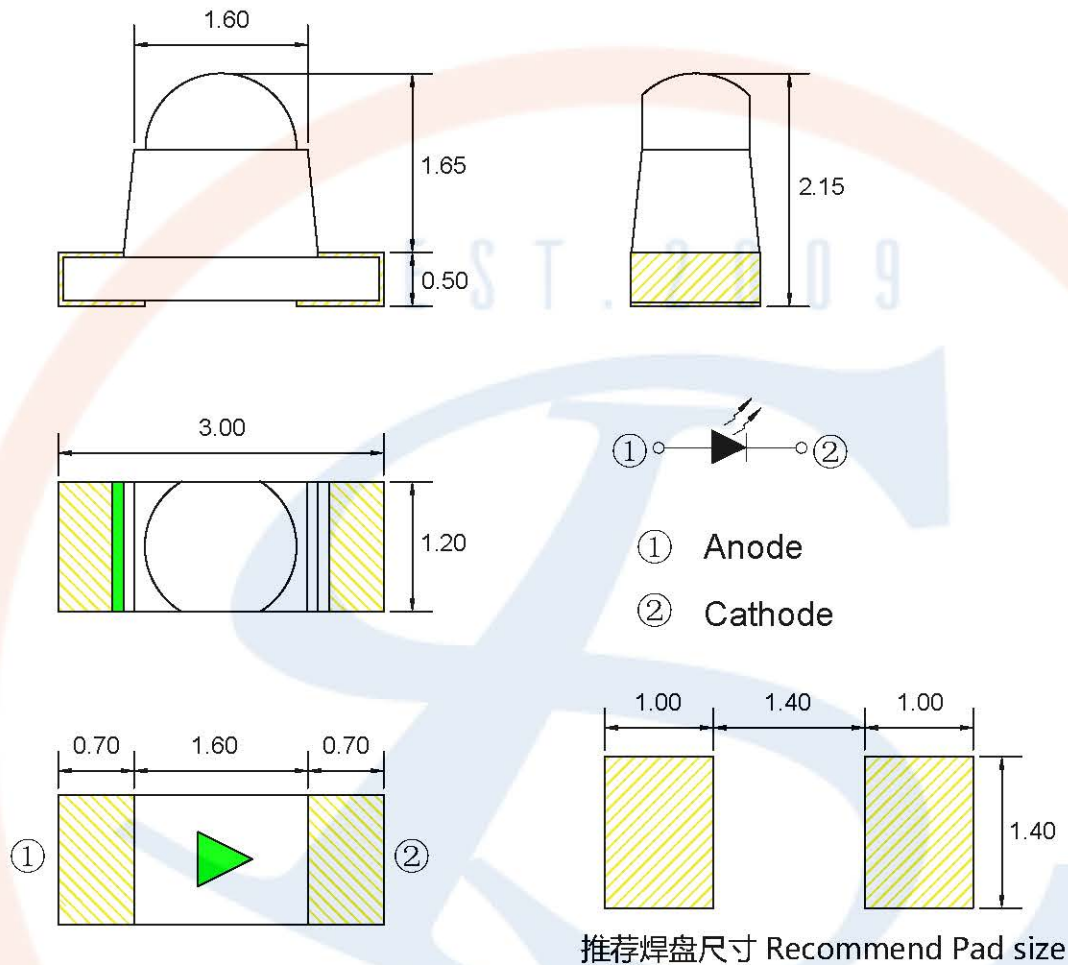
- 可用脉冲驱动
It can be driven by pulse
- 快速反应
Fast response
- 高输出功率
High output power
- 峰值波长 940nm
Peak wavelength $\lambda_p=940\text{nm}$
- 符合 RoHS
Compliant RoHS

3、应用 Applications

- 近红外遥控系统
Near infrared remote control system
- 红外触摸面板
IR touch panels
- 光开关
Optical switch



4、产品尺寸 Package Dimensions



备注：所有尺寸单位均为 mm，如无特殊说明误差范围为±0.15mm。

Note: All dimensions in mm, tolerance is ±0.15mm unless otherwise noted.



5、极限参数 Absolute Maximum Ratings (Ta=25°C)

参数 PARAMETER	符号 SYMBOL	最大额定值 MAXIMUM RATING	单位 UNIT
正向电流 Forward Current	I_F	65	mA
峰值正向电流(脉冲宽度 $\leq 100\mu s$, 占空比 $\leq 1\%$) Peak Forward Current(Pulse width $\leq 100\mu s$, Duty $\leq 1\%$)	I_{FP}	1	A
反向电压 Reverse Voltage	V_R	5	V
功率损耗 Power Dissipation	P_d	150	mW
工作温度 Operating Temperature	T_{opr}	-25--+85	°C
储存温度 Storage Temperature	T_{stg}	-30--+100	°C
焊接温度 Soldering Temperature	T_{sol}	260(3s以内) 260(Within 3 seconds)	°C

6、光电参数 Typical Electrical & Optical Characteristics (Ta=25°C)

参数 PARAMETER	符号 SYMBOL	测试条件 TEST CONDITION	最小 MIN	典型 TYPE	最大 MAX	单位 UNIT
辐射强度 Radiant Intensity	I_e	$I_F = 20mA$	--	5.5	--	mW/sr
		$I_F = 100mA$ Pulse Width $\leq 100\mu s$, Duty $\leq 1\%$	--	20	--	mW/sr
峰值波长 Peak Radiation Wavelength	λ_p	$I_F = 20mA$	--	940	--	nm
光谱带宽 Spectral Bandwidth	$\Delta\lambda$	$I_F = 20mA$	--	45	--	nm
正向电压 Forward Voltage	V_F	$I_F = 20mA$	--	1.20	1.40	V
		$I_F = 100mA$ Pulse Width $\leq 100\mu s$, Duty $\leq 1\%$	--	1.40	1.60	V
反向电流 Reverse Current	I_R	$V_R = 5V$	--	--	10	μA
视角 Viewing Angle	$2\theta_{1/2}$	$I_F = 20mA$	--	30	--	Deg

7、光电特性曲线 Typical Electro-Optical Characteristics Curves

图1 正向电流与正向电压

Fig.1 Forward Current vs. Forward Voltage

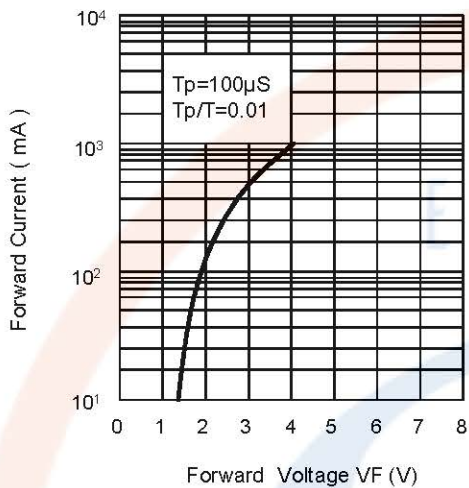


图2 辐射强度与正向电流

Fig.2 Radiant Intensity vs. Forward Current

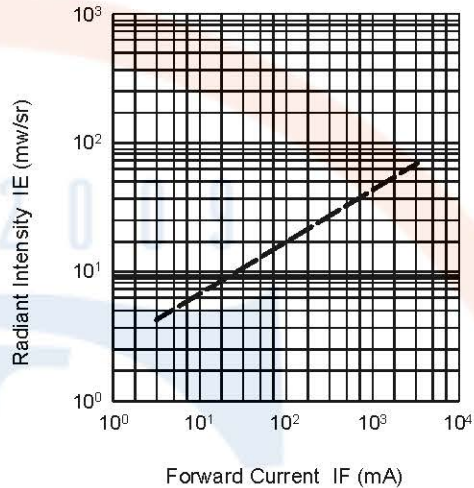


图3 正向电流与环境温度

Fig.3 Forward Current vs. Ambient Temperature

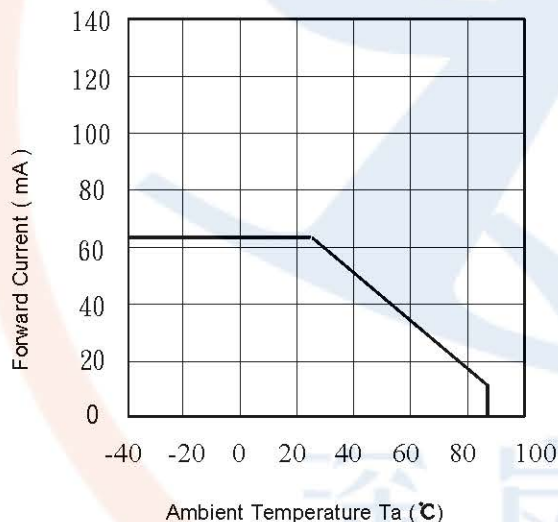


图4 相对辐射强度与波长

Fig.4 Relative Radiant Intensity vs. Wavelength

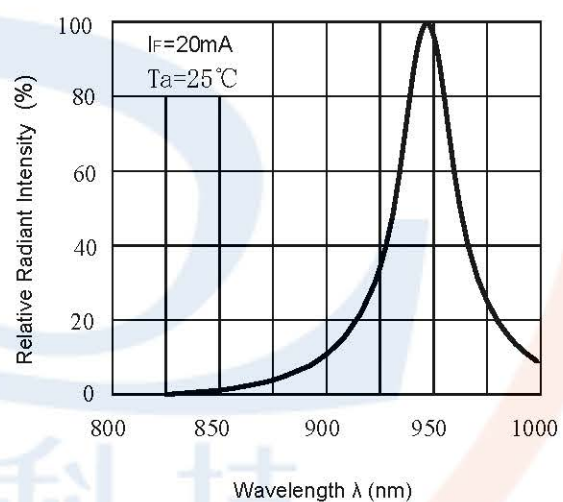
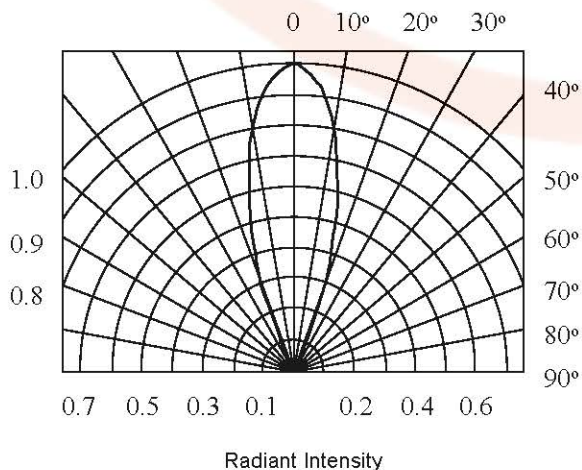


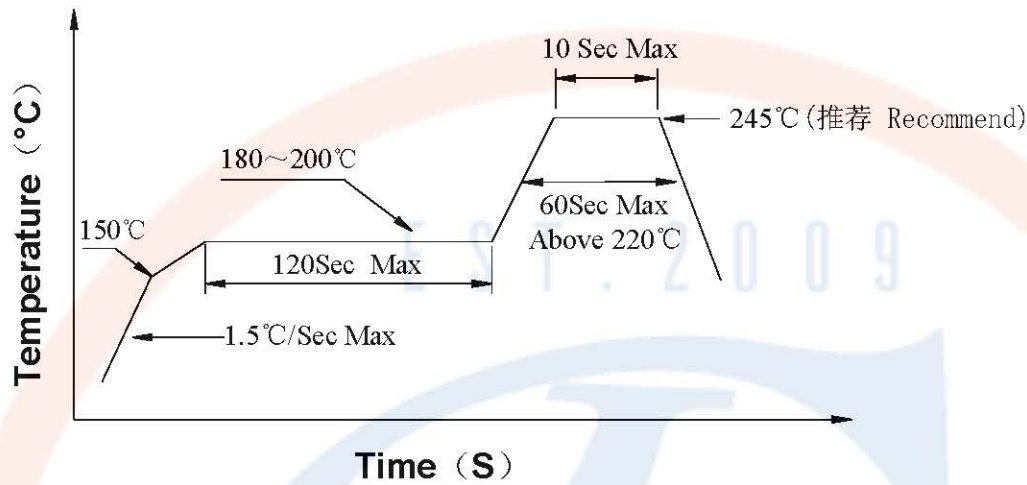
图5 相对辐射强度与角位移

Fig.5 Relative Radiant Intensity vs. Angular Displacement





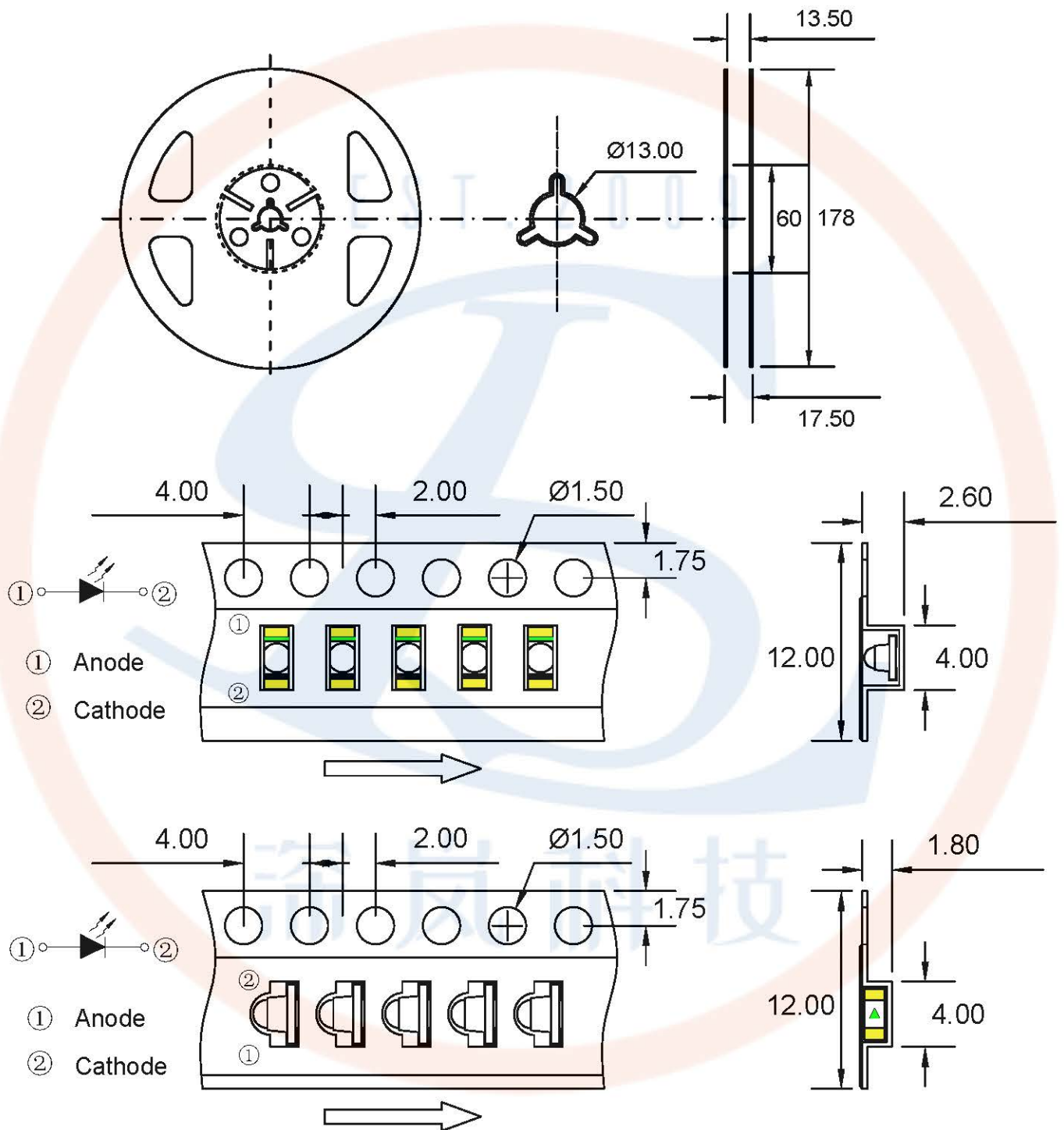
8、焊接温度曲线 Welding Temperature Curve



9、可靠性测试 Reliability Test

测试项目 Test Parameter	参考标准 Reference Criterion	测试条件 Test Condition	时间 Time	样品数 Quantity	Ac/Re
焊接耐热温度 Resistance To Soldering Heat	JESD22-B106	260°C±5 °C	5 sec	22PCS	0/1
热循环 Heat Cycle	JESD22-A104	H : +85°C ↕ L : -25°C 15mins 5mins 15mins	300 cycles	22PCS	0/1
冷热冲击 Thermal Shock	JESD22-A106	H : +85°C ↕ L : -25°C 5mins 10secs 5mins	300 cycles	22PCS	0/1
高温贮存 High Temperature storage	JESD22-A103	+100°C	1000H	22PCS	0/1
低温贮存 Low Temperature storage	JESD22-A119	-40°C	1000H	22PCS	0/1
寿命测试 Life Test	JESD22-A108	IF=20mA	1000H	22PCS	0/1
高温高湿 High Temperature High Humidity	JESD22-A101	TC=85°C RH=85%	1000H	22PCS	0/1

10、包装尺寸 Package Dimensions



备注：所有尺寸单位均为 mm，如无特殊说明误差范围为±0.3mm。

Note: All dimensions in mm, tolerance is ±0.3mm unless otherwise noted.



11、使用注意事项 Precautions

① 焊接条件 Soldering Conditions

- 回流焊：请不要超过两次焊接，两次回流焊时间间隔不可超过 24 小时。

Reflow soldering: please do not weld more than twice, and the time interval between two reflow soldering shall not exceed 24 hours.

- 烙铁：请在 25W 以下 3 秒内进行 1 次焊接。

Soldering iron: Please weld once within 3 seconds under 25W.

- 请避免树脂部分浸入锡槽。

Please avoid partial immersion of the resin in the tin bath.

- 浸焊后请避免矫正位置。

Avoid correcting the position after immersion welding.

- 焊接时，在材料被加热的状态下请不要施加压力。

When welding, please do not apply pressure when the material is heated.

② 防静电 Antistatic

- 本产品是对静电敏感的产品，在使用上需要十分注意。特别是在超过最大额定的电流和电压时会损害或破坏产品。在使用产品时请做好安全的静电和电涌防护措施。

This product is sensitive to static electricity and needs great attention in use. Especially when the maximum rated current and voltage are exceeded, the product will be damaged or damaged. Please take safe electrostatic and surge protection measures when using the product.

- 检查通电电路，电流开关时的电涌不要超过最大额定电流，对于驱动电路请插入适当的保护电路。

Check the power on circuit. The surge during current switching shall not exceed the maximum rated current. For the drive circuit, please insert an appropriate protection circuit.

- 作为使用中的静电和电涌的措施，人体接地（通过 1M 欧姆），导电性垫子，导电性工作服，导电性鞋和导电性容器都是比较有效果的。

As a measure of static electricity and surge in use, human body grounding (through 1m Ohm), conductive pads, conductive work clothes, conductive shoes and conductive containers are more effective.

- 带电的产品与低电阻的金属表面等接触时由于急剧的放电现象所引发障碍的危险性变高。与产品接触的工作台请用导电性垫子等通过电阻接地。

When a charged product contacts a metal surface with low resistance, the danger of obstacles caused by rapid discharge becomes higher. The workbench in contact with the product shall be grounded through resistance with conductive pad, etc.



●烙铁的尖端请注意接地。另外，对于容易发生静电的环节，推荐使用离子发生器。

The tip of the soldering iron should be grounded. In addition, ion generator is recommended for links prone to static electricity.

●由于静电而产生的不良品请确认措施的可靠性。

For the defective products caused by static electricity, please confirm the reliability of the measures.

③ 储存 Storage

●在产品准备好使用之前，请勿打开静电袋。

Do not open the electrostatic bag until the product is ready for use.

●打开包装前，产品应保持在 30℃及以下，相对湿度 70%及以下。

Before opening the package, the product shall be kept at 30 °C or lower and 70% relative humidity or lower.

●打开包装后，产品应保持在 30℃及以下，相对湿度 60%及以下。

After opening the package, the product shall be kept at 30 °C or lower and 60% relative humidity or lower.

●烘烤处理：60±5℃烘烤 24 小时。

Baking treatment: bake at 60 ± 5 °C for 24 hours.

④ 产品声明 Product declaration

●使用本产品前，请务必提前进行测试，确认是否适合使用。

Before using this product, be sure to test it in advance to confirm whether it is suitable for use.

●以上规格如有变更，恕不另行通知，以样品为准。

The above specifications are subject to change without notice, and the samples shall prevail.