



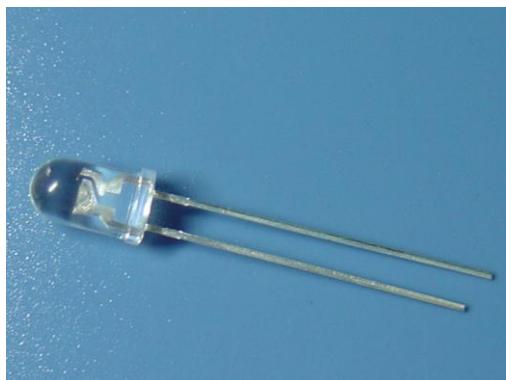
**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

请勿裸手接触器件

### Features (特征)

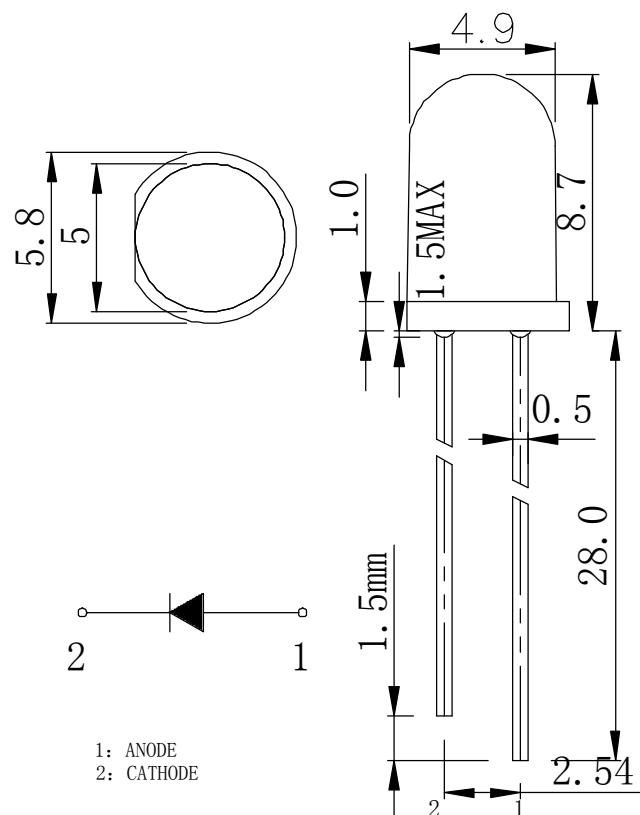
- φ 5 LAMP LED 直插φ 5 LED 灯
  - LOW POWER CONSUMPTION. 低功耗
  - CABINED VIEWING ANGLE. 小角度
  - IDEAL FOR BACKLIGHT AND INDICATOR.  
用于背光和指示
  - PACKAGE: 1000PCS / BAG. 包装:1000PCS/袋
- Package Dimensions 封装尺寸**

### HL-508H256WC-HD



### Description 描述

This devices are made with InGaN  
LED 芯片组成元素为 InGaN



Tolerance Grade 公差等级	Dimension Tolerance (UNIT:mm) 尺寸公差 (单位:mm)			
	0.5~3	3~6	6~30	30~120
	±0.1	±0.2	±0.3	±0.5
Chip 晶片				Lens Color 透镜颜色
Material 材料	Emitting Color 发光颜色		Water Clear 无色透明	
InGaN	White			

**■ Absolute Maximum Rating 最大数值**

Item 项目	Symbol 符号	Value 数值	Unit 单位
Forward Current 正向电压	IF	20	mA
Peak Forward Current* 峰值正向电流	IPF	100	mA
Reverse Voltage 反向电压	VR	5	V
Power Dissipation 功耗	PD	80	mW
Electrostatic discharge 抗静电能力	ESD	1000	V
Operation Temperature 操作温度	Topr	-30~+80	°C
Storage Temperature 储存温度	Tstg	-30~+80	°C
Lead Soldering Temperature* 引脚焊接温度	Tsol	Max. 260°C for 5sec Max.	

IPF Conditions: Pulse Width  $\leq 10\text{msec}$  (IPF 正向峰值电流使用条件: 脉冲宽度  $\leq 10$  毫秒)

\*Tsol Conditions: 3mm from the base of the epoxy bulb

Tsol 焊接条件: 焊接位置离胶体底部 3 毫米

**■ Typical Optical/ Electrical Characteristics Ta=25°C (光电参数 环境温度 25°C)**

Item (项目)	Symbol 符号	Condition 条件	Rank 档次	Min. 最小值	Typ. 典型值	Max. 最大值	Unit 单位
Luminous Intensity 光强	I <sub>v</sub>	IF=20mA	Z2	10750		14000	mcd
			Z3	14000		18200	mcd
			Z4	18200		23660	mcd
				2.8	3.2	3.6	V
Forward Voltage 正向电压	VF			--	15	--	deg
Viewing Angle 角度	2θ 1/2			--	0.37	--	X:±0.015
Chromaticity coordinates 色温坐标	X			--	0.37	--	Y:±0.025
	Y			--	0.37	--	
Recommend Forward Current 推荐使用正向电流	IF(rec)	--		--	--	20	mA
Reverse Current 反向电流	IR	Vr=5V		--	--	10	uA

Notes 注意:

Tolerance : VF±0.1V, IV(φ V) ±15%, 2θ 1/2±15%

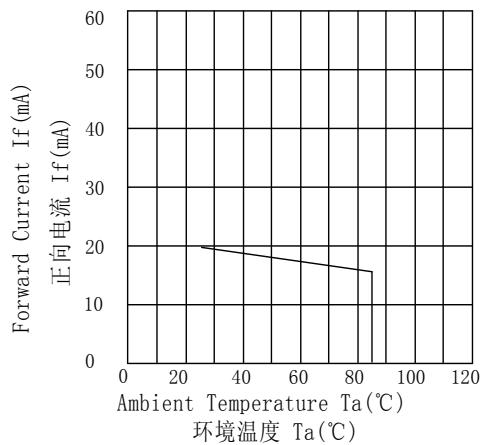
误差 : 正向电压±0.1V, 光强(光通量)±15%, 角度±15%

The above color coordinates measurement allowance tolerance ±0.003

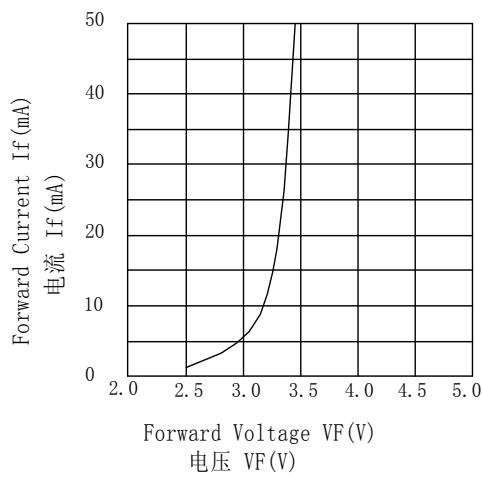
上述表格中的色坐标的测量误差为±0.003



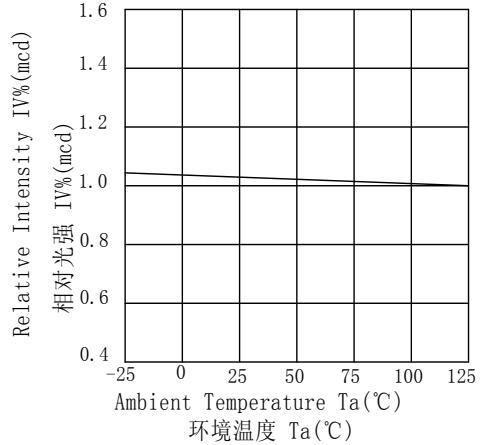
Forward Current vs. Ambient Temperature  
正向电压与环境温度关系曲线



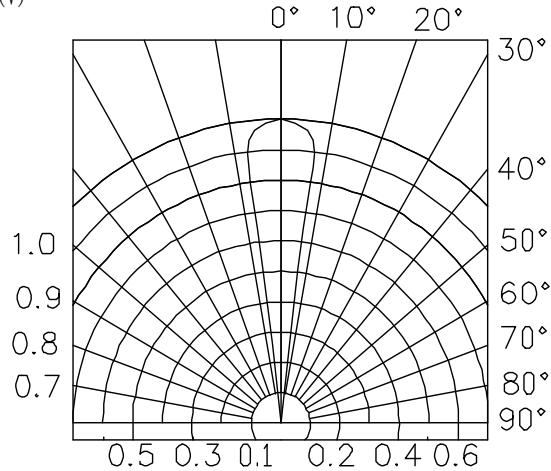
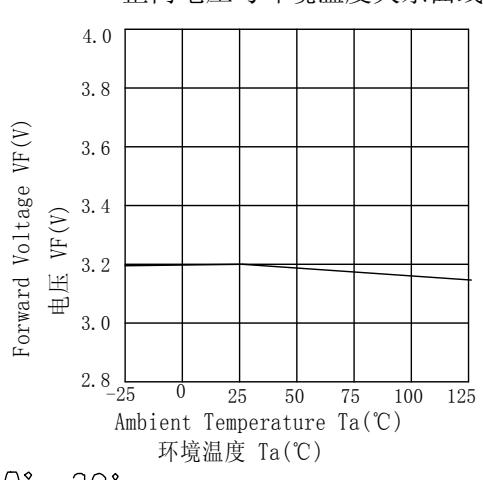
Forward Current vs. Forward Voltage  
正向电压与正向电流关系曲线

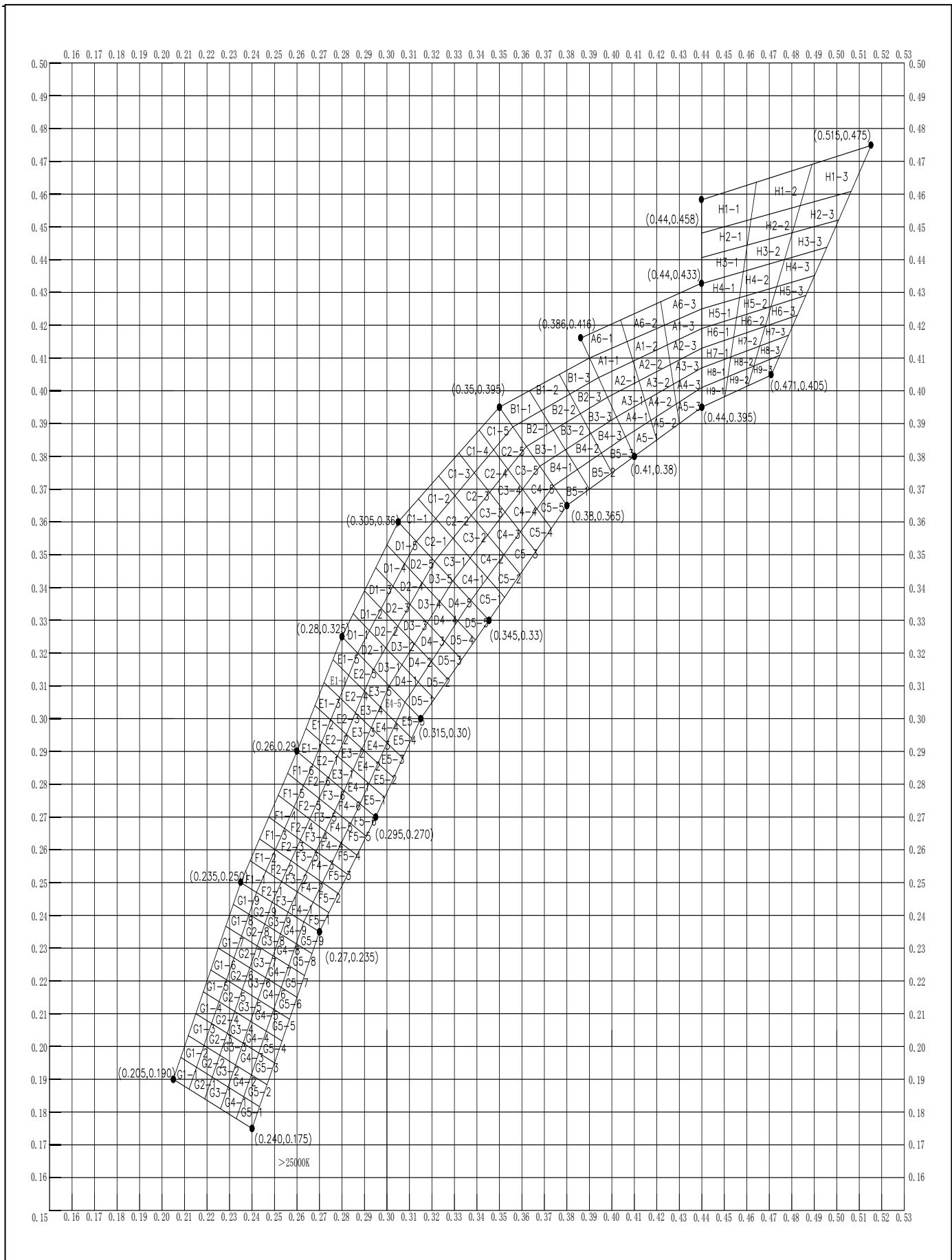


Relative Intensity vs. Ambient Temperature  
相对光强与环境温度关系曲线



Forward Voltage vs. Ambient Temperature  
正向电压与环境温度关系曲线







## Soldering (焊接) :

### 1. Manual Of Soldering (手工焊接)

The temperature of the iron tip should not be higher than 300°C and Soldering within 3 seconds per solder-land is to be observed. (烙铁最高温度不高于 300°C，焊接时间小于 3 秒)

### 2. DIP soldering (Wave Soldering) (波峰焊接)

Preheating: 120°C ~ 150°C, within 120~180 sec. ( 预热温度 120°C ~ 150°C， 小于 120~180 秒)

Operation heating: 245°C ± 5°C within 5 sec. 260°C (Max)

操作温度: 245°C ± 5°C 小于 5 秒，最高温度不高于 260°C

Gradual Cooling (Avoid quenching).

过完波峰焊后应缓慢冷却.

