HONGLITRONIC 鸿利光电

High Power Emitter LED
P/N: EF13W1NAMS(White)

Under Development	
Mass production	●

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES
请勿裸手接触器件

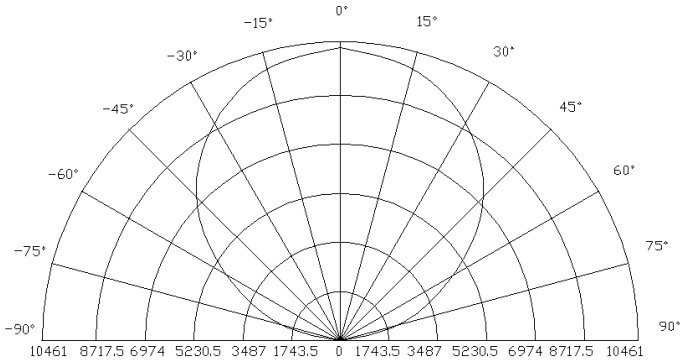
Features 特点

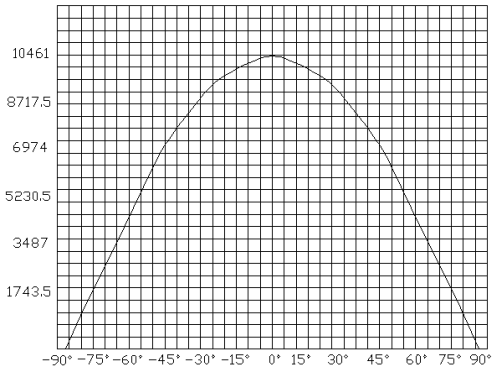
- Long operating life 寿命长
- Highest flux 光通量高
- Available in White:2500K-25000K
  色温范围：2500K~25000K
- Lambertian radiation pattern朗伯光照模式
- More energy efficient than incandescent and most halogen lamps（发光效率高）
- Low voltage DC operated（低电压直流工作）
- Cool beam, safe to the touch
  冷光源，接触安全
- Instant light (less than 100ns)
  瞬间点亮（小于100ns）
- Fully dimmable(属于可调光)
- No UV （无紫外线）
- Superior ESD protection(较好的防静电保护)
- RoHS compliant（符合RoHS标准）

Applications应用

- Reading lamps 阅读灯
- Portable lightings /(flash lightings, bicycle)便携式照明
- Indoor/Outdoor lightings户内外照明
- Edge-lit signs (Exit, point of sale)
- Traffic signaling 交通照明
- Architectural, landscaping and entertainment/advertising installations.建筑，园林绿化和娱乐/广告装置照明.

Radiation Pattern辐射模式





Typical Optical/ Electrical Characteristics @T_a=25℃ 典型的光学/电气特性在 Ta=25° C

Item名称	Symbol 符号	Condition 条件	Min. 最低	Typ. 典型	Max. 最高	Unit 单位
Forward Voltage正向电压	V_F	I_F=350mA	3.0	--	3.8	V
Reverse Current反向电流	I_R	VR=5v	--	--	30	uA
50% Power Angle发光角度	2θ1/2	I_F=350mA	120		140	deg
Luminous Flux光通量	φ_V	I_F=350mA	110	120		lm
Recommend Forward Current 正向电流	I_F	- -	--	350	700	mA
Chromaticity（色温）	Tc	I_F=350mA	6020		7040	k
Thermal Resistance,Junction to Case热阻	RJP	I_F=350mA		10		℃/w
The sample delivers goods data送货样品资料						
Item名称	Symbol 符号	Condition 条件	Min. 最低	Typ. 典型	Max. 最高	Unit 单位
Luminous Flux光通量	φ_V	I_F=350mA				lm
50% Power Angle发光角度	2θ1/2					deg
Forward Voltage正向电压	V_F					v
Chromaticity色温	Tc					k
Color rendering index(显色指数)	--					
White Color Region白光区块	X=--			Y=--		
ChromaticityCoordinates色度坐标						

Notes注:

1.Tolerance of measurement of forward voltage±0.1V、peak Wavelength±2.0nm、luminous flux±15%

测量正向电压误差为±0.1、误差为2.0nm、光通量误差为±15%。

Absolute Maximum Rating 绝对最大额定值在Ta = 25° C

Item名称	Symbol符号	Absolute Maximum Rating 绝对最大额定值	Unit单位
Forward Current正向电流	I_F	700	mA
Peak Forward Current*峰值正向电流	I_{FP}	1000	mA
Reverse Voltage反向电压	V_R	5	V
Power Dissipation耗散功率	P_D	1000	mW
Electrostatic discharge抗静电能力	E_{SD}	±2000	V
Operation Temperature工作温度范围	T_{OPR}	-40~+80	℃
Storage Temperature储存温度范围	T_{STG}	-40~+100	℃
Lead Soldering Temperature*引线焊接温度	T_{SOL}	Max. 260℃ for 3sec Max.	

*IFP Conditions：Pulse Width≤10msec duty≤1/10IFP的条件：脉冲宽度≤10毫秒 占空比≤1/10

* All high power emitter LED products mounted on aluminum metal-core printed circuit board, can be lighted directly, but we do not recommend lighting the high power products for more than 5 seconds without a appropriate heat dissipation equipment. 所有高功率的发光LED产品安装在铝金属为核心印刷电路板，可直接点亮，但我们不建议在没有一个适当的散热设备时，照明高功率LED点亮超过5秒

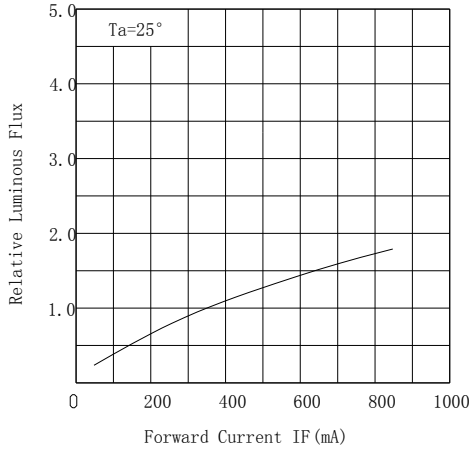
wave peak and soak-stannum soldering etc.is not suitable for this products.波峰焊、浸锡焊接不适合这个产品

Reflow soldering should not be done more than two times.The reflow temperature we recommend is 180℃

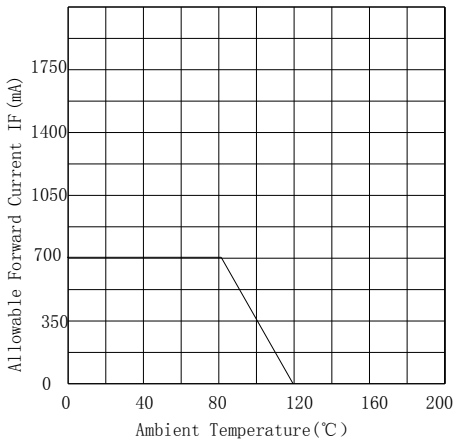
回流焊不能超过两次，回流焊最高温度建议180℃。

Typical Optical/Electrical Characteristics Curves典型光学/电性特征曲线 (T_a=25℃ Unless Otherwise Noted)（T_a=25℃ 除非另有注释）

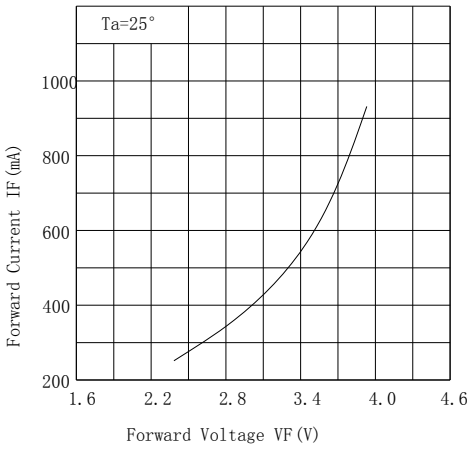
Relative Luminous Flux - IF
正向电流与相对光强曲线图



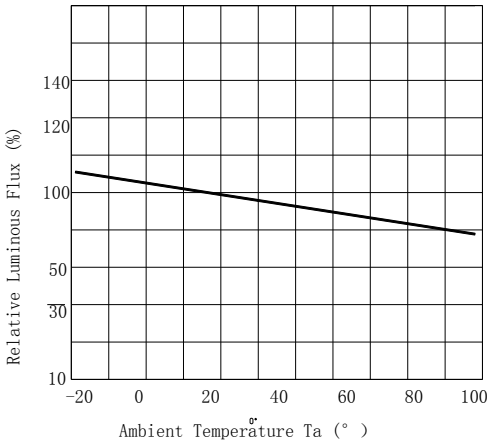
Allowable Forward Current - Ta
环境温度与正向电流曲线图



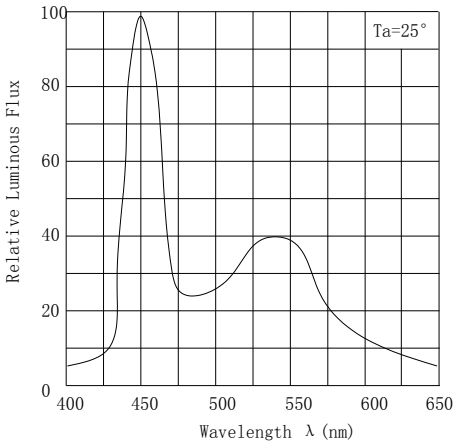
IF - VF
正向电流与正向电压曲线图



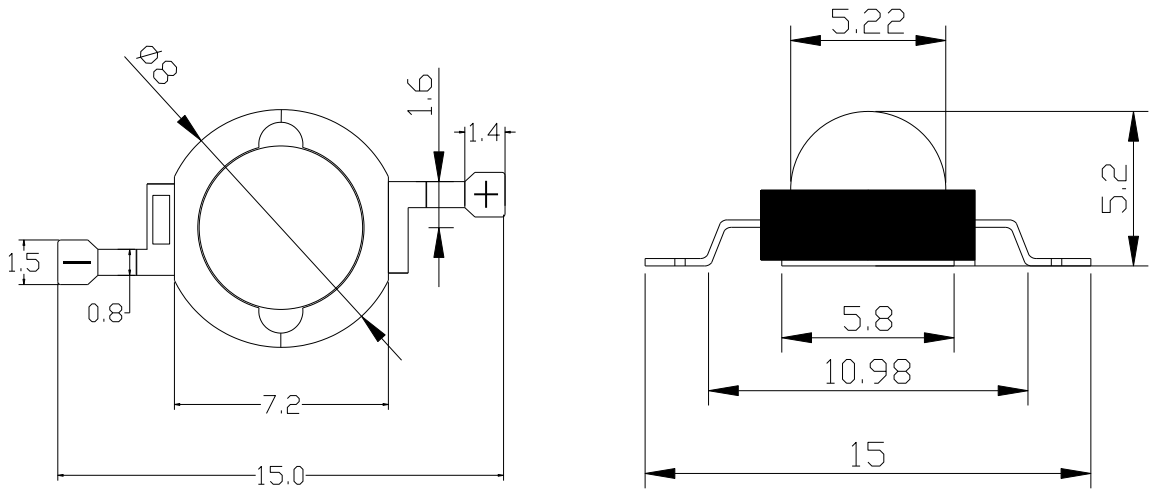
Relative Luminous Flux - Ta
环境温度与相对光强曲线图



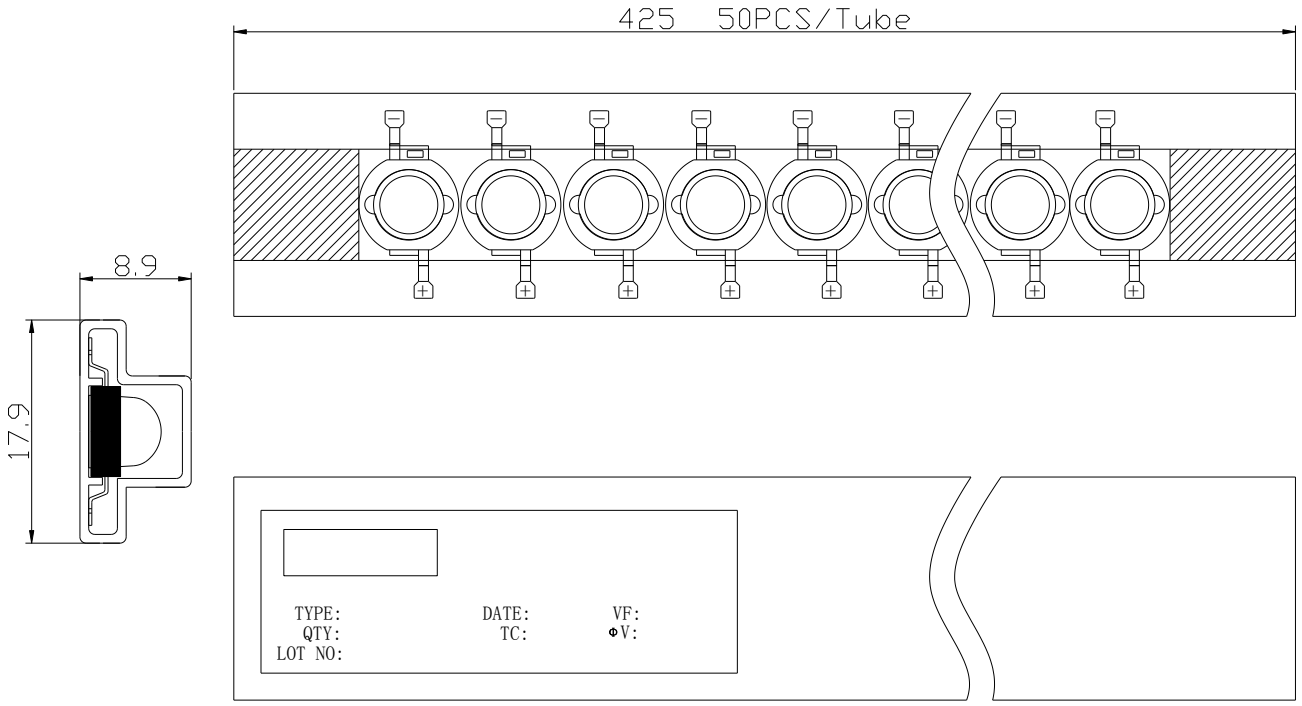
Wavelength Characteristics
相对光谱分分布曲线图



Package Dimensions封装尺寸



Notes注意:

1. All dimension units are millimeters.所有尺寸单位均为毫米.
2. All dimension tolerance is ±0.2mm unless otherwise noted.
所有尺寸误差是±0.2毫米除非另有说明

Tape Specifications(Units:mm)载带规格（单位:㎜）