

Selection Guide 选型向导

Part No	Radiant Intensity (mW/sr) 辐射强度 (mW/sr) $I_F=50mA$		Viewing Angle 发光角度
	Min 最小值	Typ 典型值	2 θ 1/2
HL-304IR3C-L3	--	26	40

Note (注意):

- 2 θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2 θ 1/2 是从光学中心线的发光强度为 1 / 2 的光学中心线的角度。
- Tolerance of measurement of luminous intensity $\pm 15\%$. 光强测量误差为 $\pm 15\%$.

Electrical / Optical Characteristics at TA=25°C 光电特性 TA=25°C

Item 项目	Symbol 符号	Min 最小值	Typ 典型值	Units 单位	Test Conditions 测试条件
Forward Voltage 正向电压	V_F	1.2	1.5	V	$I_F=50mA$
Reverse Current 反向电流	I_R	--	10	μA	
Peak Spectral Wavelength 峰值光谱波长	λ_D	--	940	nm	
Spectral Bandwidth 光谱带宽	$\Delta \lambda 1/2$	--	50	nm	

注意:

- Tolerance of measurement of forward voltage $\pm 0.1V$. 正向电压的测量误差为 $\pm 0.1V$.
- Tolerance of measurement of peak Wavelength $\pm 2.0nm$. 峰值波长的测量误差为 $\pm 2.0nm$.

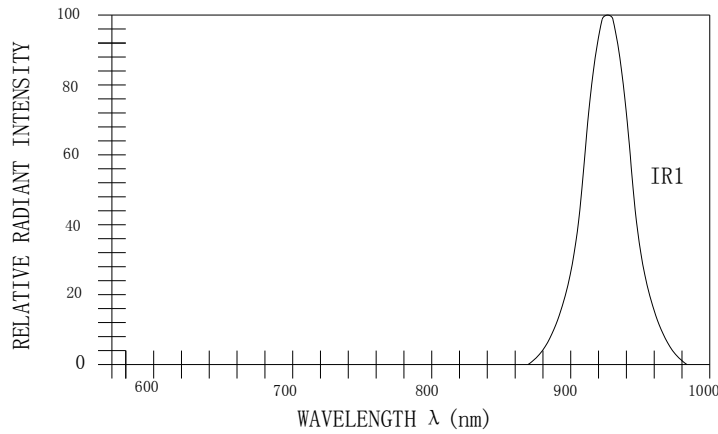
Absolute Maximum ratings at Ta=25°C 光电特性在 Ta=25°C

Parameter 参数	Symbol 符号	IR1	Units 单位
Power Dissipation 消耗功率	P_t	100	mW
DC Forward Current 直流正向电流	I_F	50	mA
Peak Forward Current[1] 峰值正向电流[1]	I_{FS}	300	mA
Operating Temperature 操作温度	-30°C ~ 80°C		
Storage Temperature 储存温度	-30°C ~ 80°C		

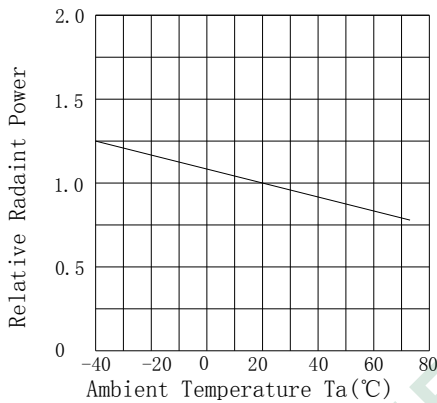
Note 注意:

- IFP Conditions: Pulse Width $\leq 10msec$ IFP 条件: 脉冲宽度 $\leq 10msec$
- Tsol Conditions: 3mm from the base of the epoxy bulb Tsol 条件: 焊接位置离胶体底部 3 毫米

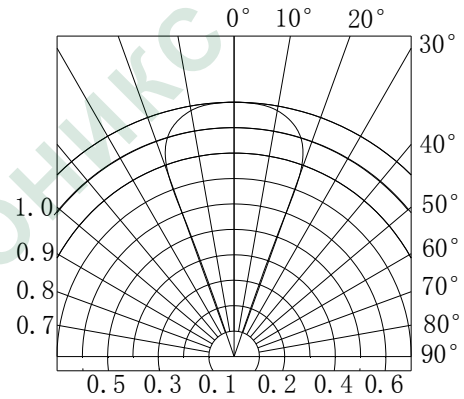
HL-304IR3C-L3



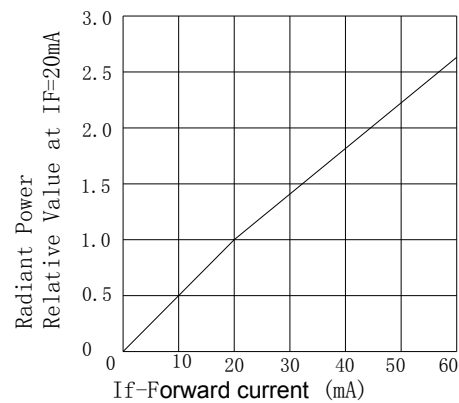
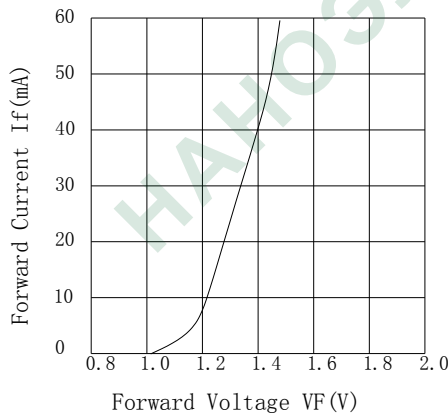
Forward Current vs. Forward Voltage



Radint Power Vs. Ambient Temperature



Spatial Distribution



Remarks 备注:

If special sorting is required (e.g. binning based on forward voltage or radiant intensity/luminous flux), the typical accuracy of the sorting process is as follows:

如果需要特殊的分类 (也就是分级基于正向电压或者辐射强度/光通量), 分类过程的典型精度如下:

1. Radiant intensity/Luminous Flux: $\pm 15\%$. 辐射强度/光通量: $\pm 15\%$.
2. Forward Voltage: $\pm 0.1V$. 正向电压: $\pm 0.1V$.

Note: Accuracy may depend on the sorting parameters. 注意: 精度取决于分类参数

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。

