



广东洲光源红外半导体有限公司

Guangdong ChauLight Infrared Semiconductor Co., Ltd.

Specification

规格书

Customer Name:

客户名称: _____

Customer P/N:

客户品号: _____

Factory P/N:

公司品号: ZIR-3216C-19-R15

Part Number:

料号代码: _____

Client approval 客户审核			Baiheng approval 审核		
Approval 核准	Audit 确认	Confirmation 制作	Approval 核准	Audit 确认	Confirmation 制作
					周宏
<input type="checkbox"/> Qualified 接受		<input type="checkbox"/> Disqualified 不接受	DATE: 日期: 2020-11-06		

地址: 广东省中山市联胜南路3号

Tel/电话: 0760-88504720

Fax/传真: 0760-88504721

Web/网址: <http://www.zgy-led.com>

注: 1. 此规格书以中英文方式书写, 若有冲突以中文版本为准文本.

2. 此规格书的最终解释权归广东洲光源红外半导体科技技术有限公司

3. 此规格书的有效期限为两年, 自盖章或签字之日起计算, 期满时双方可以续签协议, 但应采用书面形式



Features(特征)

- Small double-end package.(小型双端封装)
- Low forward voltage.(低电压)
- Good spectral matching to Si photo detector (与硅光电探测器良好的光谱匹配)
- Package in 8mm tape on 7" diameter reel (直径为 7 "卷筒的 8mm 磁带包装)
- Pb free(无铅)
- The product itself will remain within RoHS compliant version.(产品本身符合 RoHS 标准的要求)
- Compliance with EU REACH (对欧盟 REACH 的遵守)

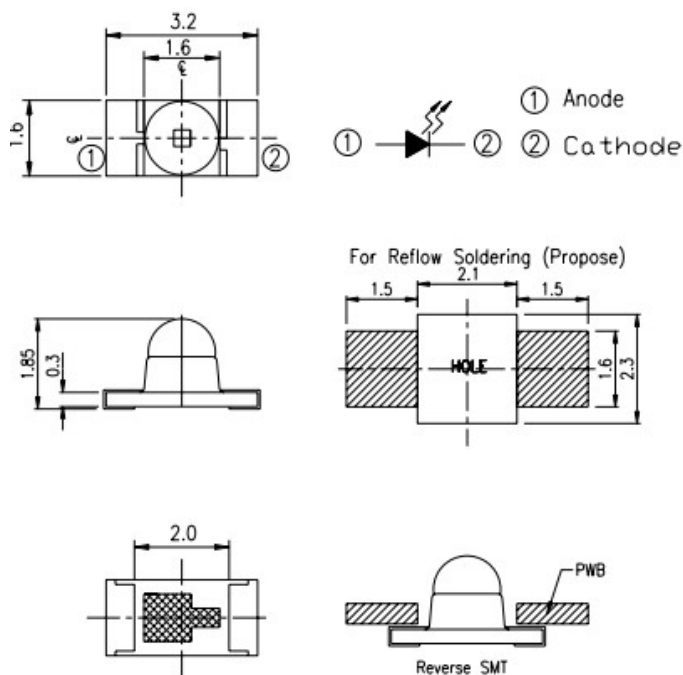


注意：操作时应注意静电敏感

Applications (应用)

- PCB mounted infrared sensor 电路板安装红外传感器
- Infrared emitting for miniature light barrier 微型光屏障的红外发射
- Floppy disk drive 软磁盘机
- Smoke detector 烟雾探测器

Package Dimensions (封装尺寸)



Notes: (备注)

1. All dimension units are millimeters. (所有标注尺寸单位为毫米)
2. All dimension tolerance is $\pm 0.15\text{mm}$ unless otherwise noted. (除特别标注外, 所有尺寸允许公差 $\pm 0.15\text{mm}$)



Selection Guide (选择指南)

Part No. 型号	Chip Material	Lens Type 胶体类型	Radiant Intensity(mW/sr) 辐射强度@ 20mA		Viewing Angle 角度
			Min	Max	2 θ 1/2
ZIR-3216C-19-R15	GaAlAs	Water Clear	1.0	7.5	30°

Note:(备注)

1. 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 是半值角, 指光强是光学中心线光强的 1/2 处到光学中心线的角度

2. The above luminous intensity measurement allowance tolerance is $\pm 10\%$.

上述辐射强度的测试允许公差为 $\pm 10\%$

Electrical / Optical Characteristics at Ta=25°C 电性与光学特性

Parameter (参数)	Symbol (符号)	Min. (最小)	Typ. (平均)	Max. (最大)	Units (单位)	Test Conditions 测试条件
Forward Voltage 正向电压	VF	--	1.20	1.50	V	IF=20mA
Reverse Current 反向电流	IR	--	--	10	μ A	VR = 5V
Dominate Wavelength 主波长	λ_p	----	940	----	nm	IF=20mA
Spectral Bandwidth 光谱带宽	$\Delta \lambda$	----	50	----	nm	IF=20mA

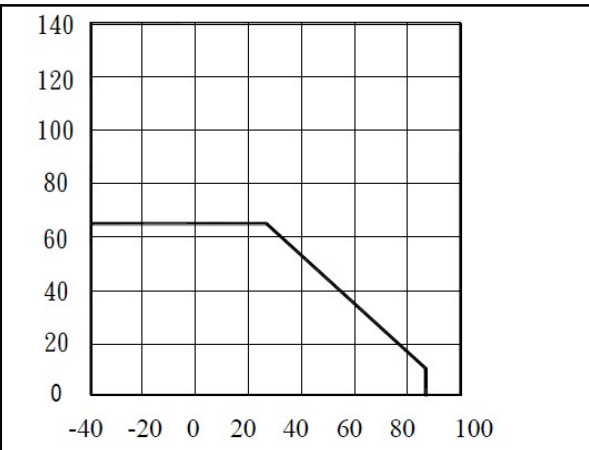
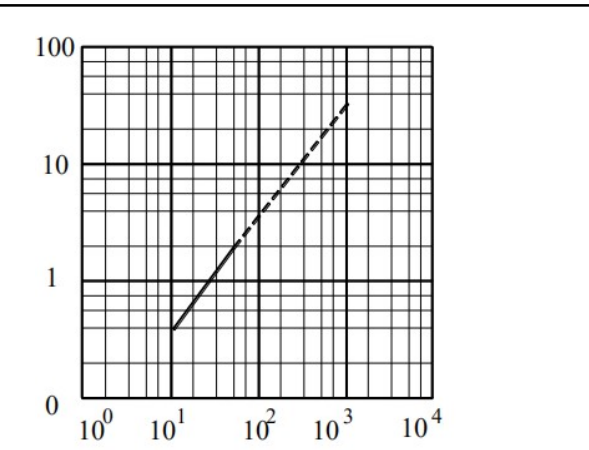
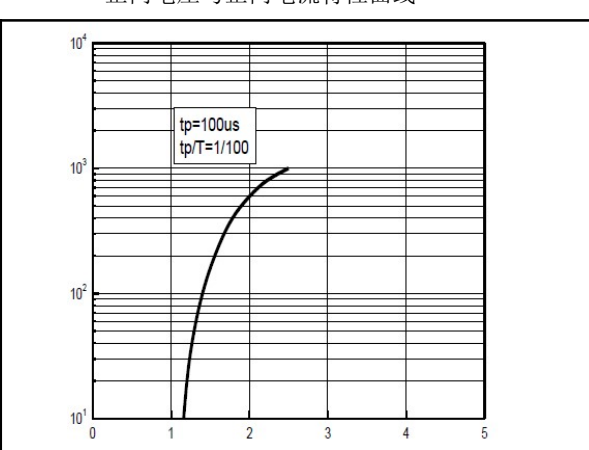
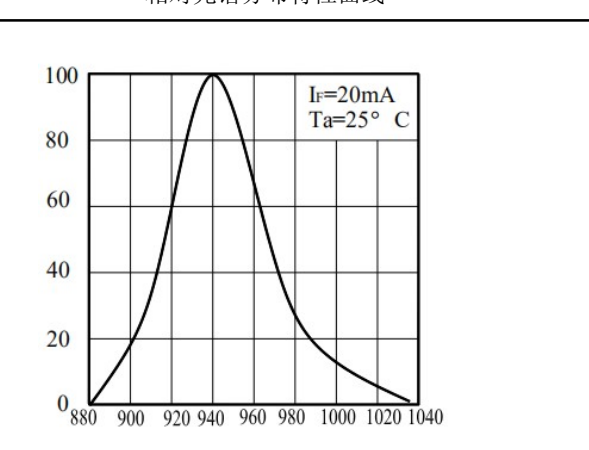
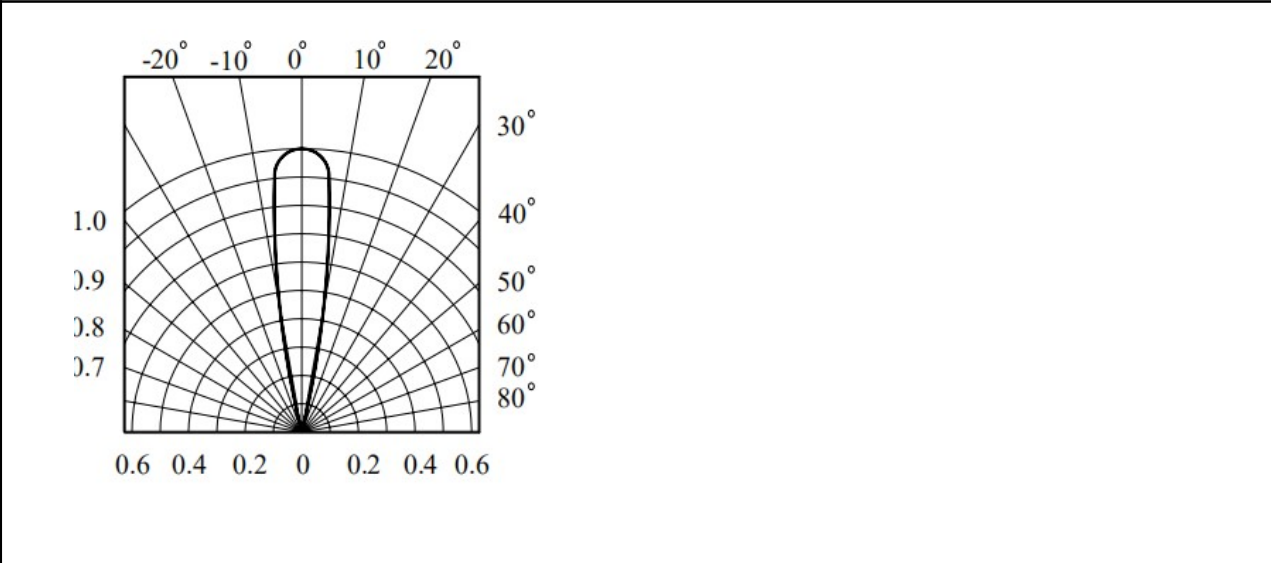
Absolute Maximum Ratings at Ta=25°C 绝对最大额定值

Parameter (参数)	Symbol (符号)	Rating (值)	Units (单位)
Power Dissipation (功耗)	Pd	130	mW
Forward Current (正向电流)	IF	65	mA
Reverse Voltage (反向电压)	VR	5	V
Electrostatic Discharge (HBM) (静电)	ESD	2000	V
Operating Temperature (操作温度)	Topr	-25 ~ +85	°C
Storage Temperature (保存温度)	Tstg	-40 ~ +85	°C

Notes: *:Soldering time ≤ 5 seconds.



Typical optical characteristics curves 典型光学特性曲线

Ambient Temperature vs. Forward Current 环境温度与正向电流特性曲线		Forward Current VS. Relative Intensity 正向电流与相对光强特性曲线	
Forward Current(mA)		Relative luminous Intensity	
	Soldering Temperature °C		Forward Current(mA)
Forward Voltage VS. Forward Current 正向电压与正向电流特性曲线		Relative spectral emission 相对光谱分布特性曲线	
Forward Current(mA)		Relative luminous intensity	
	Forward Voltage(V)		Wavelength(nm)
Relative Radiant Intensity vs. Angular Displacement			
Relative Radiant Intensity			



Forward Voltage Rank Combination (IF=20mA)

Rank	Min.	Max.	Unit
	1.0	1.5	V

Luminous Intensity Rank Combination (IF=20mA)

Rank	Min.	Max.	Unit
G	1.0	2.5	mW/sr
H	2.0	3.5	
J	3.0	4.5	
K	4.0	6.0	
L	5.0	7.0	

Dominant wavelength Rank Combination (IF=20mA)

Rank	Min.	Max.	Unit
	930	950	nm

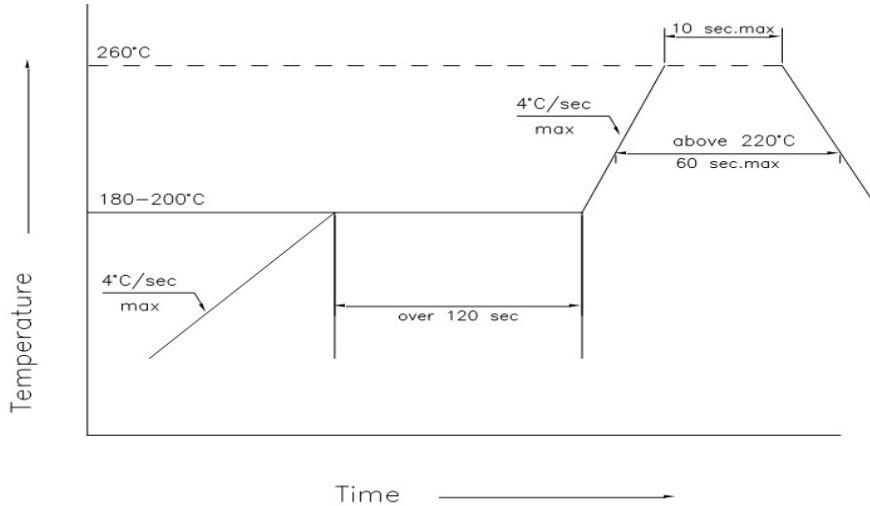
Note: (备注)

1. Tolerance of Luminous Intensity $\pm 10\%$ (辐射强度公差正负 10%)
2. The above forward voltage measurement allowance tolerance is $\pm 0.1V$. (以上所示电压测量误差 $\pm 0.1V$)
3. The above dominant wavelength measurement allowance tolerance is $\pm 1nm$. (以上所示波长测量误差 $\pm 1nm$)



*The technical information shown in the data sheets is limited to the typical characteristics and circuit examples of the referenced products. It does not constitute the warranting of industrial property nor the granting of any license.
数据工作表中所示的技术信息仅限于典型特征和电路实例引用的产品. 它既不构成工业特性的保证, 也不构成任何许可的授权.

SMT Reflow Soldering Instructions SMT 回流焊说明



1.Reflow soldering should not be done more than two times. 回流焊不可以做两次以上

2.When soldering, do not put stress on the LEDs during heating

当焊接时, 不要在材料受热时用力压胶体表面

Soldering iron 烙铁焊接

1.When hand soldering, keep the temperature of iron below less 350°C less than 3 seconds

当手工焊接时, 烙铁的温度必须小于 350°C, 时间不可超过 3 秒

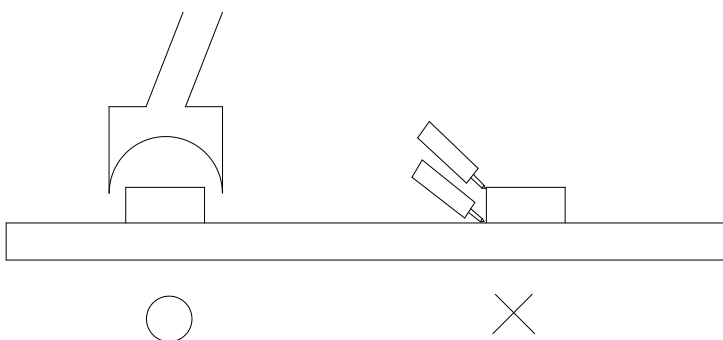
2.The hand solder should be done only one times

手工焊接只可焊接一次

Repairing 修补

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed in advance whether the characteristics of LEDs will or will not be damaged by repairing.

LED 回流焊后不应该修复, 当修复是不可避免时, 必须使用双头烙铁 (如下图), 但必须事先确认此种方式会或不会损坏 LED 本身的特性。





洲光源红外半导体
CHAU LIGHT

Label 标签格式

CAT: Luminous intensity rank 亮度等级

HUE: Dominate Wavelength 波长等级

REF: Forward voltage rank 电压等级

CPN:
P / N: S0216080002

Model: ZY4-Z1608C-06G-Z4

QTY: 4000

L / N: ZGY18112088

MSL-3

CAT: R1

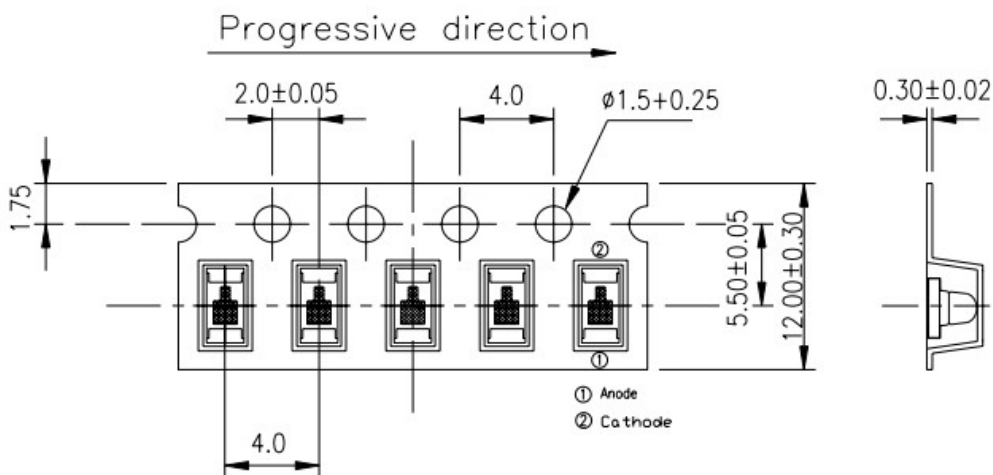
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REF: 4

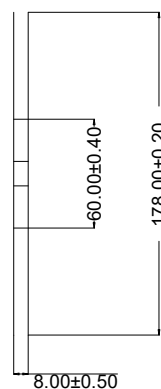
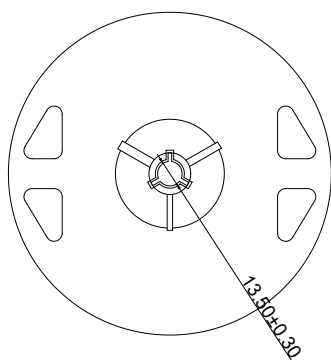
RoHS



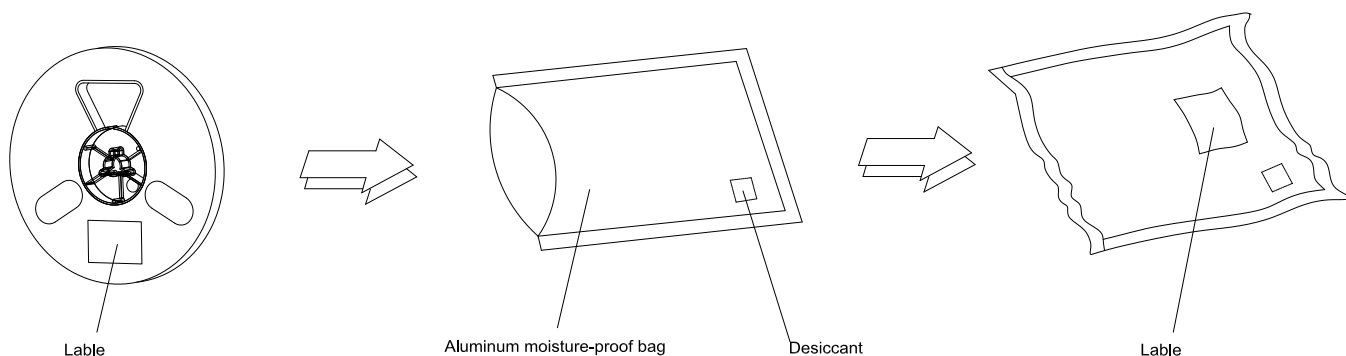
Tape Specifications (Units : mm) 载带规格 (单位: mm) 1500PCS/卷



Reel Dimensions 卷轴尺寸



Moisture Resistant Packaging 防潮带包装



Note: The tolerances unless mentioned is ±0.1mm, Unit: mm

注: 标注公差为±0.1mm, 单位: mm