

客户名称:

CUSTOMER NAME: _____

经办者:

职称:

DIRECTOR: _____ TITLE: _____

客户料号:

CUSTOMER PART NO.: _____

品名:

版本:

PART NUMBER: **IE-3215IR-SB-C-11** REVISION: **2.0**

发件日期:

回文日期:

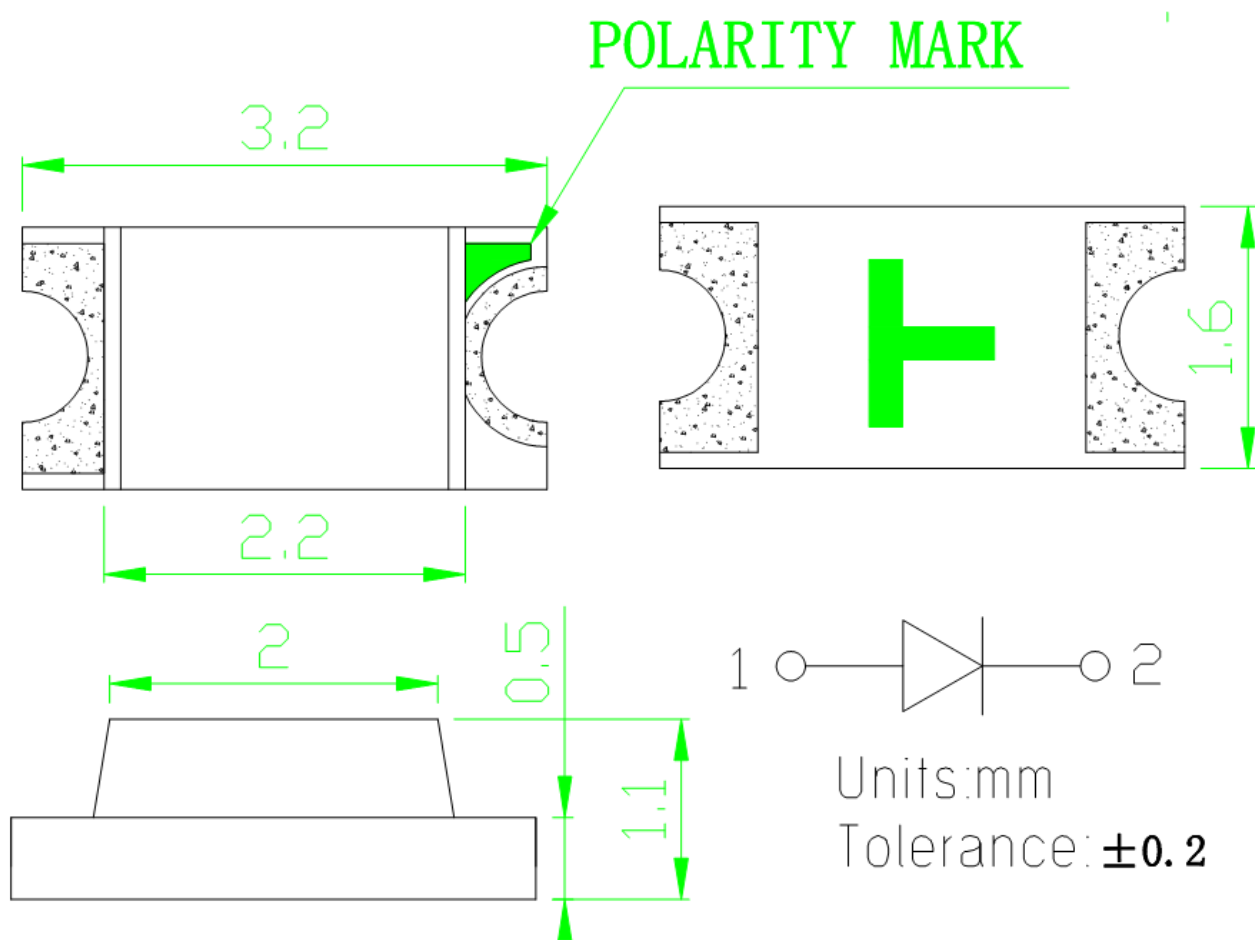
ISSUE DATE: **2014/11/13** RETURN DATE: **/ /**

Features

- Peak emission wavelength at 850nm
- High power output of min. 5mW/sr @ $I_F = 20\text{mA}$
- Narrow viewing angel of 20 degree
- High speed response
- Dimension: 3.2mm(L) x 1.6mm(W) x 1.10mm(H)



Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Rating	Unit
Power Dissipation	P _D	120	mW
Continuous Forward Current	I _F	75	mA
Reverse Voltage	V _R	5	V
Operating Temperature	T _{OP}	-30 to 80	°C
Storage Temperature	T _{ST}	-40 to 85	°C

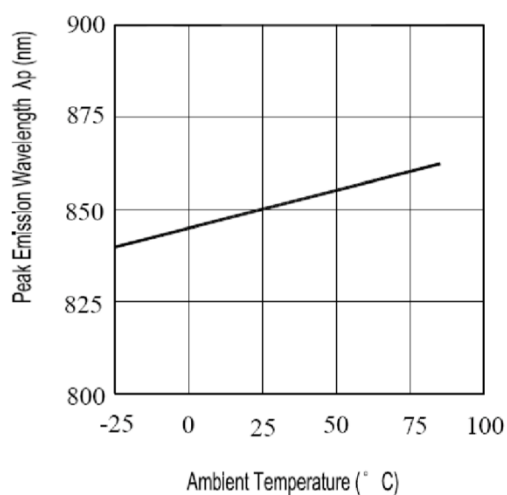
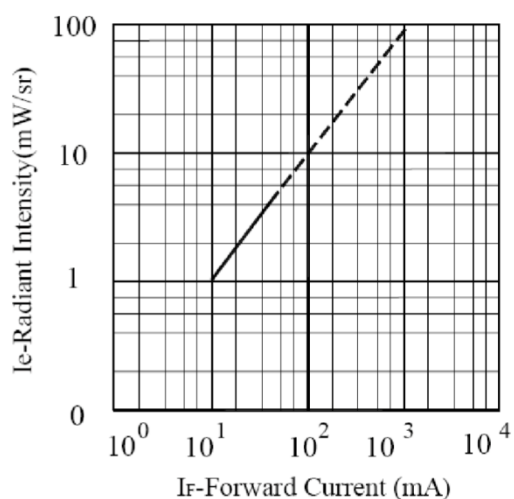
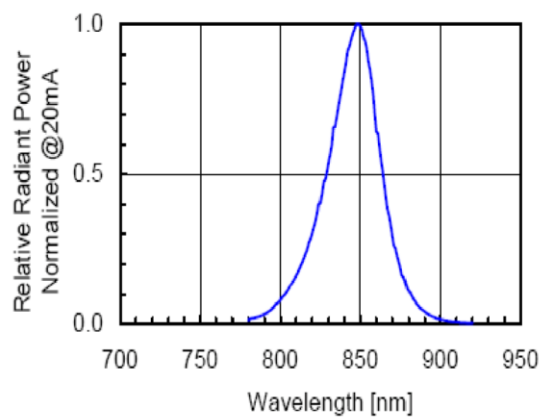
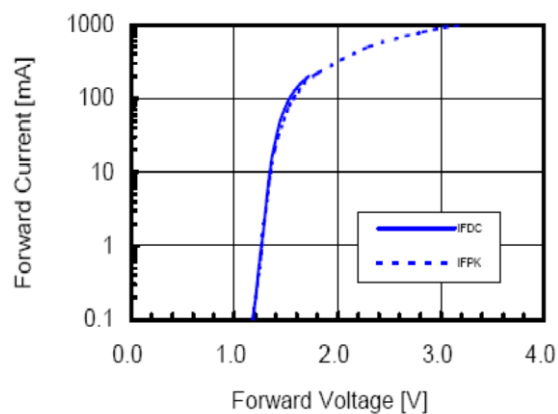
** Condition for I_{FP} is pulse of 1/10 duty and 0.1msec width

Electrical & Optical Specifications at Ta = 25°C

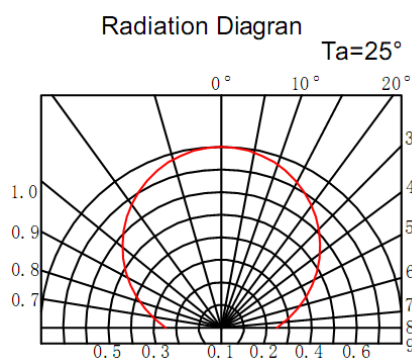
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage	V _F	--	1.3	1.7	V	I _F =20mA
Reverse Current	I _R	--	--	10	uA	V _R =5V
Peak Wavelength	λ _p	--	850	--	nm	I _F =20mA
Radiant Intensity	E _e	5.0	--	--	mW/sr	I _F =20mA
Spectral Bandwidth	Δλ	--	40	--	nm	I _F =20mA
Rise/Fall Time	Tr / Tf		25/15	35/35	ns	I _F =50mA
View angle	2θ _{1/2}	-	20	-	deg	I _F =20mA

Typical Electrical and Optical Characteristics Curves

(25 Ambient Temperature Unless Otherwise Noted)



Directive Characteristics



可靠性 RELIABILITY

测试项目及结果 Test Items and Results

序号	试验项目	参考标准	试验条件	持续时间	取样数	接收水准(不合格
						数量/抽样总数)
1	温度循环	JEITA ED-4701	-40℃~25℃~100℃~ 25℃ 30 分钟 5 分钟 30 分 钟 5 分钟	循环 100 回 合	50	0/50
2	冷热冲击	MIL-STD-202G	-40℃~100℃ 15 分钟 15 分钟	循环 500 回 合	50	0/50
3	高温储存	JEITA ED-4701 200 201	T _a =100℃	1000 小 时	50	0/50
4	低温储存	JEITA ED-4701 200 201	T _a =-40℃	1000 小 时	50	0/50
5	常温寿命 试验		T _a =25±5℃ I _F =20mA	1000 小 时	50	0/50
6	高温高湿 寿命试验		T _a =60℃ RH=85% I _F =20mA	1000 小 时	50	0/50
7	可焊性 (回流焊)	JEITA ED-4701 300 303	T _{sol} =235℃ ±5℃,5 秒 使用助焊剂	焊接一 次, 5 秒	10	0/10
8	耐焊性 (回流焊)	JEITA ED-4701 300 301	T _{sol} =260℃,10 秒 预处理: 35℃ 95%RH 96 小时	焊接二 次, 每次 10 秒	10	0/10
备注	以上试验项目如与客户试验要求存在差异的或者特殊客户特殊要求的可根据实际情况按照客					
	户的要素进行试作,客户未要求的按我司试验标准试作.不同产品使用不同电流进行测试					

注意事项 Cautions

(1) 焊接条件 Soldering Conditions

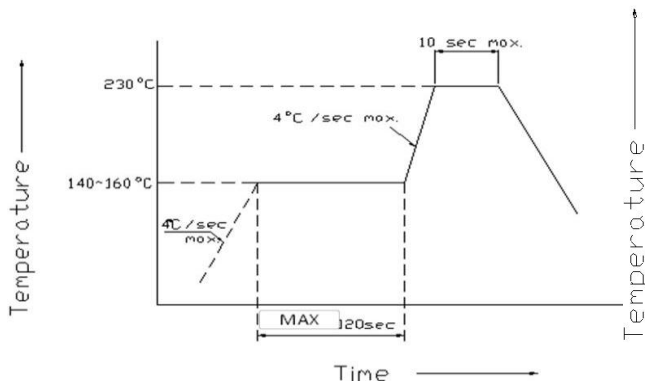
本产品最多只可回焊两次,且在首次回焊后须冷却至室温之后方可进行第二次回焊.

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and Second soldering process.

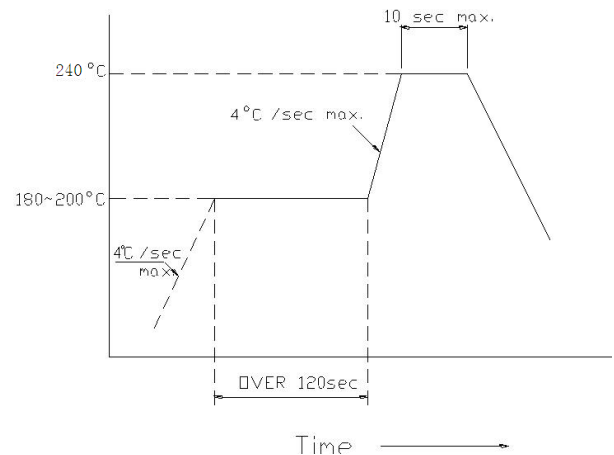
推荐焊接条件(Recommended soldering conditions)

回流焊接 Reflow Soldering			手工焊接	
预热温度 Pre-heat 预热时间 Pre-heat time 峰值温度 Peak temperature 焊接时间 Soldering time 条件Condition	有铅 Lead Solder	无铅 Lead-free Solder	温度 Temperature 焊接时间 Soldering time	350° C Max. 3 sec. Max. (one time only)
	140 ~ 160° C 120 sec. Max. 230° C Max. 10 sec. Max. 参考下图	180 ~ 200° C 120 sec. Max. 240° C Max. 10 sec. Max. 参考下图		

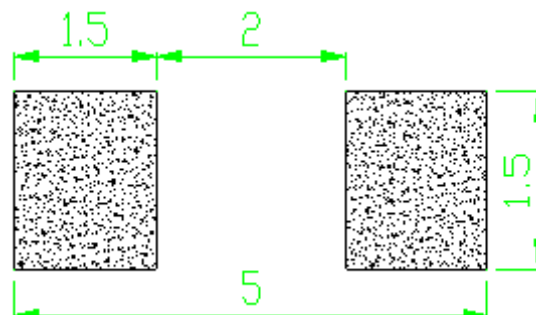
有铅回焊 (Lead Solder)



无铅回焊 (Lead-Free Solder)



Recommended Solderii
(Units : mm)



(2)静电 Static Electricity

触摸 LED 时,推荐使用防静电手腕带或防静电手套.

It is recommended that a wrist band or an anti-electrostatic glove be used when handling the LEDs.

所有装置、设备、机器均应接地.

All devices, equipment and machinery must be properly grounded.

静电损坏的 LED 会显示出异常特征:正向电压变低或在低电流时死灯.标准: $IF=0.5mA$ 时, $V_F > 2.0V$ Damaged LEDs will show some unusual characteristics such as the forward voltage becomes lower, or the LEDs do not light at the low current. Criteria : ($V_F > 2.0V$ at $IF=0.5mA$)

(3)防潮包装 Moisture Proof Package

使用防潮包装

It is recommended that moisture proof package be used .

(4)使用注意事项

Cautions:

4.1.在开包装之前, 请先检查包装袋有无漏气, 如果有漏气现象, 请退回我司重新烘烤除湿包装后再使用。

Please check if there is air leak before opening the package, if so, please return the goods back to take drying process for later using.

4.2 抽真空包装材料未超过 15 天可正常使用, 包装袋开启后,产品必须:

Products can be used within 15days after packaging, after that, they must be:

4.2.1 在 24hrs 内未焊接完毕。

Soldered within 24 hrs

4.2.2 要在规定环境条件中使用: 温度: $30^{\circ}C$ 以内 湿度: $60\%RH$ 以下

Used in the condition: $30^{\circ}C$ within and $60\%RH$ below

4.2.3 存储低于 $30\%RH$ 。

Stored in $30\%RH$ for moisture below.

4.3.抽真空包装材料超过 15 天(含)以上未使用,再使用时需重新拆铝箔袋取出烘烤 $85^{\circ}C/6H$ 除湿后才可使用。

Products cannot be used for and over 15days after being packaged unless opening the package and take drying our process in $85^{\circ}C/6H$.

4.4.抽真空包装材料超过 60 天(含)以上未使用, 请退回我司重新烘烤除湿包装后再使用。

Products not be used for or over 60days after being packaged please return back to take drying out and packaging process for forward using.

4.5.材料拆装后使用时间超过 24H 未用完, 需烘烤 $85^{\circ}C/6H$ 除湿后才可使用。

Products not be used after opening the package need to be dried out for $85^{\circ}C/6H$