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# SPECIFICATION

Model Name: Multi Emitters

Model NO. : 3RG9SCB-WR001

Customer No.:

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# Multi Emitters

## 3RG9SCB-WR001

### ■Features

- 3.0\*5.3mm ellipse lamp
- Low current requirement
- Low power consumption
- Versatile mounting on PCB panel

### ■Applications

- Blood Leakage Monitoring



Name	Model	RED	GREEN	Package
Multi Emitters	3RG9SCB-WR001	660 nm	520 nm	3-Pin, clear epoxy molded lead frame

### ■Absolute Maximum Ratings at Ta=25℃

Parameter 参数	symbol 符号	Max.最大值	unit 单位	Note 备注
Power dissipation	Pd	75	mW	--
Forward Current	IF	30	mA	--
Peak Forward Current	IF(Peak)	100	mA	--
Reverse Voltage	VR	5	V	--
Operating Temperature	Topr	-40℃ To +80℃		
Storage Temperature	Tstg	-40℃ To +80℃		
Soldering Temperature	TS01	≤300	℃	300℃ for 2 Seconds (300 度小于等于 2 秒)

**Note:**

- (1).3mm below package base. (在胶体3毫米以下焊接)
- (2).The production accord with the demand of ROHS. (此产品符合ROHS要求.)

# 3RG9SCB-WR001

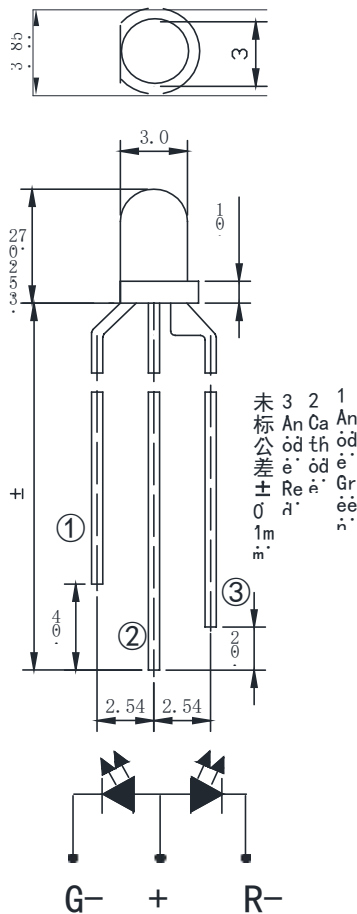
## ■Electrical / Optical Characteristics at TA=25℃

Parameter	Symbol	Min.		Typ.		Max.		Units	Test Conditions
		GREEN	RED	GREEN	RED	GREEN	RED		
Forward Voltage	V <sub>F</sub>	2.8	1.9	--	--	3.3	2.3	V	IF=20mA
Luminous Intensity	I <sub>V</sub>	4000	800	--	--	8000	1500	mcd	IF=20mA
Luminous Flux	Φ <sub>v</sub>	5.0	0.5	--	--	9.0	1.2	lm	IF=20mA
Peak Wavelength	λ <sub>p</sub>	520	660	--	--	525	665	nm	IF=20mA
Spectral Line Half-width	Δλ	--	--	34	17	--	--	nm	IF=20mA
Reverse Current	I <sub>R</sub>	--	--	--	--	10	10	uA	V <sub>R</sub> =5V
Half Intensity Angle	2θ <sub>1/2</sub>	--	--	30	30	--	--	deg	IF=20mA

**Note(1):**  $\theta_{1/2}$  is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

$\theta_{1/2}$  是指当亮度减到一半时与发光特性曲线相交所对应的角度值。

## ■ Dimension:



### Notes:

- (1).All dimensions are in millimeters. (单位: 毫米)
- (2).Tolerance is  $\pm 0.25$  unless otherwise noted. (尺寸公差:  $\pm 0.25$ ,另有标注除外.)
- (3).Specifications are subject to change until further notice. (规格若有变动,另行通知.)

## ■Storage and welding instructions DIP LED 存储及焊接使用說明

Please read the following notes before using the product: 使用本产品前请阅读以下说明:

### 一、Over-current-proof 过电流保护

Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen).

客户必须用电阻保护;否则微小的电压变化会引起较大的电流变化产品可能会烧坏。

### 二、Electrostatic discharge (ESD) protection 静电放电 (ESD) 保护

All kinds of LED materials, such as GaP, AlGaAs, AlInGaP, GaN, or InGaN chips are static sensitive device. ESD protection or surge voltages shall be considered and taken care in the initial design stage, and whole production process.

The following protection is recommended:

- (1) Bracelets or anti-static gloves should be used when handling leds
- (2) All installations, equipment and machines must be grounded.

If the LED is damaged by electrostatic discharge or surge voltage, the damaged LED may display some unusual characteristics. It may have leakage and LED

It doesn't glow at low current.

When the drive current is low, when the damaged LED chip is examined with a microscope, there may be some black spots in the luminous area.

各种 LED 材料, 如 GaP, AlGaAs, AlInGaP, GaN, InGaN 芯片, 是静电敏感器件。静电放电保护或浪涌电压应在初始设计阶段和整个生产过程中加以考虑和采取措施。

建议采取以下防护措施:

- (1) 在处理 LED 时应使用手环或防静电手套
- (2) 所有装置、设备和机器必须接地。

如果 LED 被静电放电或浪涌电压损坏, 损坏的 LED 可能会显示一些不寻常的特性。它可能出现漏电, 并且 LED 在低电流时不会发光的。

低驱动电流时, 当用显微镜检查受损 LED 芯片, 可能会在发光区域内有一些黑点。

### 三、Storage 储存

- 1、Do not open moisture proof bag before the products are ready to use.

在产品准备使用前, 请勿打开防潮袋。

- 2、Before opening the package, the LEDs or PDs should be kept at 30°C or less and 60%RH or less. 打开包装前, LED 或 PD 应保存在 30°C 或以下, 60%RH 或以下。

- 3、The LEDs should be used within 6 months. LED 应在 6 个月内使用。

- 4、After opening the package, the LEDs or PDs should be kept at 30°C or less and 30%RH or less. It should be used within 168 hours (7 days) to prevent oxidation of lamp pins

打开包装后, LED 或 PD 应保存在 30°C 或以下, 30%RH 或以下, 在 168 小时 (7 天) 内使用, 以防灯脚氧化。

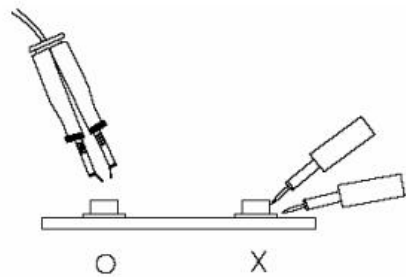
四、Soldering Iron烙铁

- 1、A soldering iron with a power of less than 25W should be used for welding, and the temperature of the soldering iron head should be lower than 300℃ and the welding should be completed within 2 seconds. Leave 2 seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.
- 应使用功率小于 25W 的烙铁焊接，要求烙铁头的温度低于 300℃，2 秒内完成焊接，然后留出两秒以上的间隔，对每个端子进行焊接。请小心焊接，因为产品的损坏通常在手焊时开始。
- 2、Don’ t cause stress too the epoxy resin while it is exposed to high temperature.
- 当环氧树脂暴露在高温下时，不要对其施加压力。
- 3、After soldering, do not warp the circuit board.焊接后，不要扭曲电路板。

五、Repairing维修

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

LED 或 PD 焊接后不应进行维修。当维修不可避免时，应使用双头烙铁（如下图所示）。应事先确认 LED or PD 是否会因维修而损坏。



六、Important Tips重要提示

In order to improve the yield of mass production, please be sure to do the first confirmation before production, only the first confirmation OK can be mass production.

为了提升批量生产的良品率，请一定要在生产前做好首件确认，只有首件确认 OK 的情况下才能批量生产。

修订记录

项次	日期	内 容	版本号
1	2024-09-24	新发行	Ver.01