

**Senba** Senba Optical & Electric Co.,Ltd

**Approval Specification**

Description:

- ✧ **Commodity:** Round Ø5
- ✧ **Device Number:** Sb-LA503bR2C-2A/02
- ✧ **Approval Date:** \_\_\_\_\_

**Dice Material:** GaALAs/GaAs

PREPARED BY	CHECKED BY	APPROVED BY	CUSTOMER APPROVED SIGNATURES
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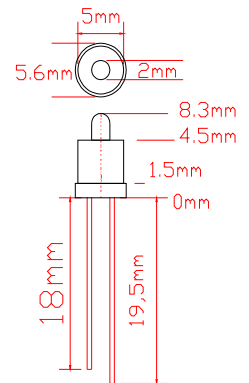
● **特点 (Features):**

1. 芯片材料 (Chip material): GaALAs/GaAs
2. 发光颜色 (Emitted color): SH Red
3. 透镜外表 (Lens Appearance): Water Clear
4. 低耗能 (Low power consumption)
5. 高效率 (High efficiency.)
6. 低电流 (Low current requirement).

● **应用 (Applications):**

1. 背光源 (Backlight)
2. 交通灯 (Traffic Lights)
3. 灯饰 (Lights)
4. 显示屏 (Display Screen)
5. 其它消费类电子产品 (Other Electric Products)

● **Package dimensions:**



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  (0.01") unless otherwise specified.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

● **最大額定 (Absolute Maximum Ratings) ... (Ta=25°C)**

Parameter	Symbol	Rating	Unit
功率消耗 (Power Dissipation)	Pd	60	mW
顺向电流 (Forward Current)	I <sub>F</sub>	20	mA
峰值电流 (Peak Forward Current* <sup>1</sup> )	I <sub>FP</sub>	30	mA
逆向电压 (Reverse Voltage)	V <sub>R</sub>	5	V
操作温度 (Operating Temperature)	Topr	-40°C ~ 80°C	
保存温度 (Storage Temperature)	Tstg	-40°C ~ 85°C	
焊接温度 (Soldering Temperature)	Tsol	260°C (for 5 seconds)	
焊接距离 (Soldering Distance)		>5	MM

\*<sup>1</sup>Condition for I<sub>FP</sub> is pulse of 1/10 duty and 0.1msec width.

● Electrical and optical characteristics(Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=20\text{mA}$	1.9	2.2	2.3	V
Luminous Intensity	$I_v$	$I_F=20\text{mA}$	5000	6500	8000	mcd
Reverse Current	$I_R$	$V_R=5\text{V}$	-		10	$\mu\text{A}$
Peak Wave Length	$\lambda_p$	$I_F=20\text{mA}$				nm
Dominant Wave Length	$\lambda_d$	$I_F=20\text{mA}$	630	633-	635	nm
Spectral Line Half-width	$\Delta\lambda$	$I_F=20\text{mA}$	-		-5	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	-	30	-	deg

● Typical Electro-Optical Characteristics Curves

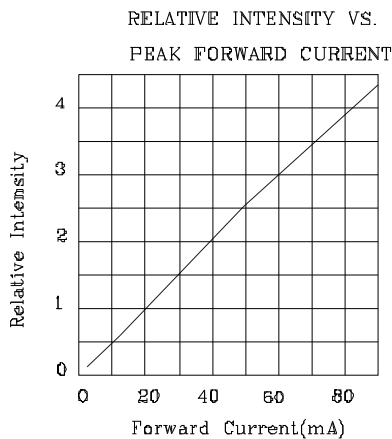
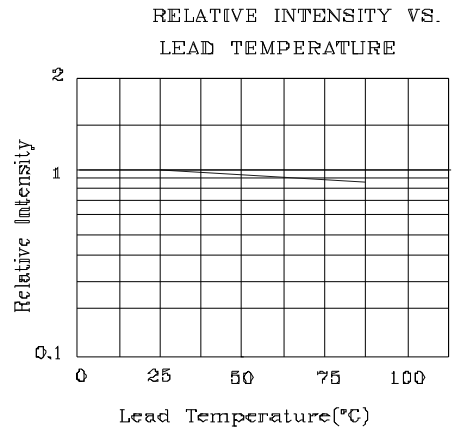
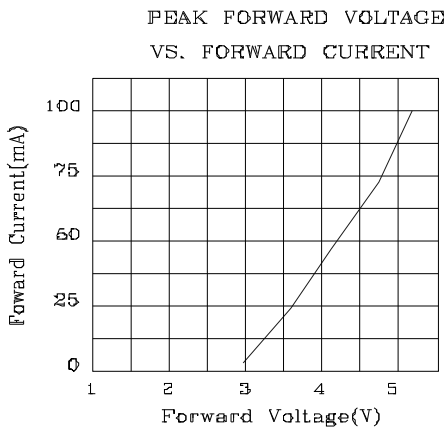
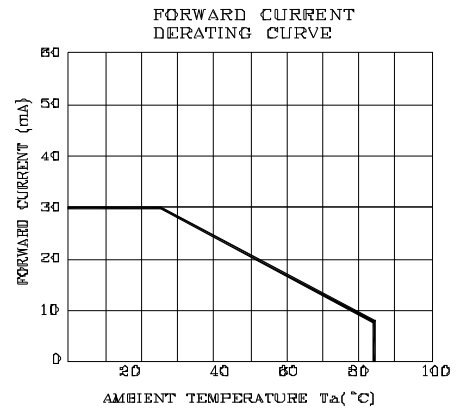
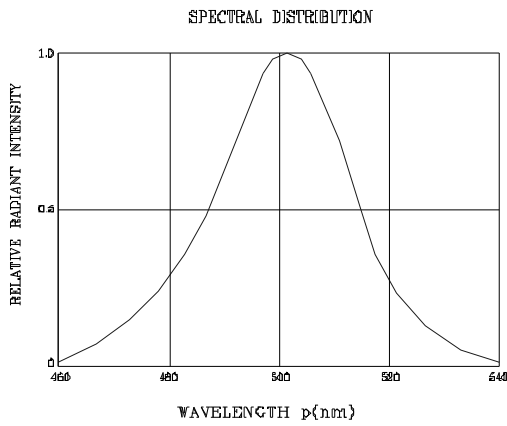


Fig.6 Radiation diagram

