

**LED SPECIFICATION**



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

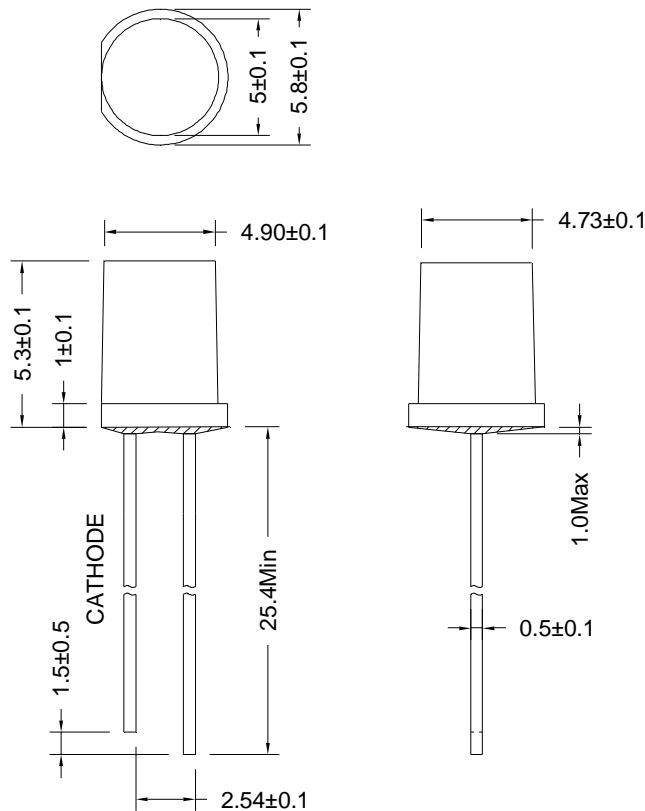
**Part No./型号: 599HR3C**

**Ø Features/特征:**

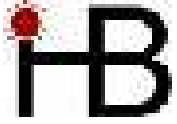
- I Single color/单色
- I High bright output/高亮度输出
- I Large view angle/大视角
- I Low power consumption/低功耗
- I High reliability and long life/  
可靠性高、寿命长

**Ø Descriptions/描述:**

- I Dice material/芯片材质: AlGaInP
- I Emitting Color/发光颜色:  
Super Bright Red / 高亮度红色
- I Device Outline/产品外形:  
Φ5mm Round Type/ 5mm 圆形
- I Lens Type 胶体颜色:  
Water Clear/ 无色透明



1. All dimensions are millimeters/单位: mm.
2. Tolerance is  $\pm 0.25$ mm unless otherwise noted/没有标注的公差均为  $\pm 0.25$ mm.



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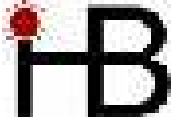
**Part No./型号: 599HR3C**

**Ø Absolute maximum ratings/极限参数 (Ta = 25°C)**

| Parameter<br>参数                 | Symbol<br>符号      | Test Condition<br>测试条件  | Values 数值 |      | Unit<br>单位 |
|---------------------------------|-------------------|-------------------------|-----------|------|------------|
|                                 |                   |                         | Min.      | Max. |            |
| Reverse Voltage<br>反向电压         | V <sub>R</sub>    | I <sub>R</sub> = 30 μ A | 5         | --   | V          |
| Forward Current<br>正向工作电流       | I <sub>F</sub>    | ----                    | ----      | 30   | mA         |
| Power Dissipation<br>损耗功率       | P <sub>d</sub>    | ----                    | ----      | 75   | mW         |
| Pulse Current<br>正向峰值电流         | I <sub>peak</sub> | Duty=0.1mS, 1kHz        | ----      | 100  | mA         |
| Operating Temperature<br>工作温度范围 | T <sub>opr</sub>  | ----                    | -40       | +85  | °C         |
| Storage Temperature<br>储存温度范围   | T <sub>str</sub>  | ----                    | -40       | +100 | °C         |

**Ø Electrical and optical characteristics/光电参数 (Ta = 25°C)**

| Parameter<br>参数                   | Symbol<br>符号   | Test Condition<br>测试条件 | Values 数值 |      |      | Unit<br>单位 |
|-----------------------------------|----------------|------------------------|-----------|------|------|------------|
|                                   |                |                        | Min.      | Typ. | Max. |            |
| Forward Voltage<br>正向电压           | V <sub>F</sub> | I <sub>F</sub> =20mA   | ----      | 2.0  | 2.5  | V          |
| Reverse Current<br>反向电流           | I <sub>R</sub> | V <sub>R</sub> =5V     | ----      | ---- | 30   | μ A        |
| Dominate Wavelength<br>主波长        | λ <sub>d</sub> | I <sub>F</sub> =20mA   | ----      | 624  | ---- | nm         |
| Peak Wavelength<br>峰值波长           | λ <sub>p</sub> | I <sub>F</sub> =20mA   | ----      | 632  | ---- | nm         |
| Spectral Line half-width<br>半波长宽度 | Δ λ            | I <sub>F</sub> =20mA   | ----      | 20   | ---- | nm         |
| Luminous Intensity<br>发光强度        | I <sub>v</sub> | I <sub>F</sub> =20mA   | 90        | ---- | ---- | mcd        |



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Ø Typical electrical/optical characteristic curves/光电特性曲线:

Fig.1 正向电流 Vs. 正向电压

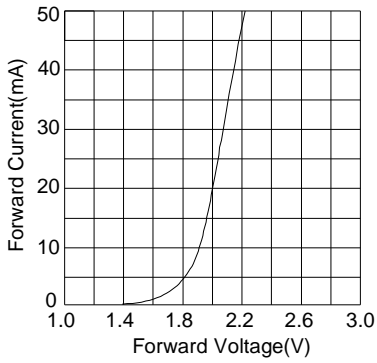


Fig.2 相对亮度 Vs. 正向电流

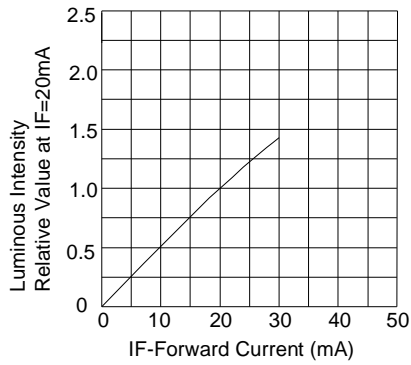


Fig.3 正向电流 Vs. 环境温度

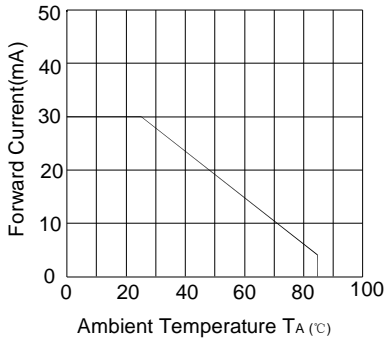


Fig.4 相对亮度 Vs. 环境温度

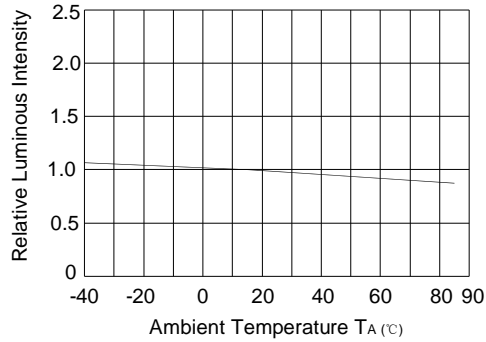


Fig.5 辐射强度 Vs. 波长

