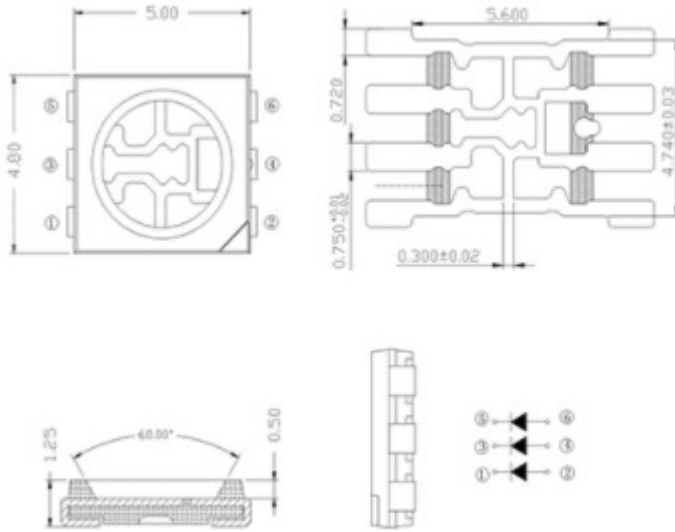


FYLS-5050RGB technical specifications



| 胶体 (Colloid) | 材质 (Material) | 发光颜色 (Color) |
|-------------------|---------------|--------------|
| 透明 Water Clear | AlGaInP/Si | 红色 (Red) |
| | InGaN | 绿色 (Green) |
| | InGaN | 蓝色 (Blue) |

备注(Remarks):

- 所有尺寸单位为毫米
All dimensions are in millimeters
- 未注明公差为±0.25 毫米 0.010 英寸 (除非另有说明)
Tolerance of + or - 0.25mm 0.010 in. (unless otherwise noted)
- 规格若有变更恕不另行通知
Specifications subject to change without prior notice

温度为 25°C 时的最大参数值 (Absolute Maximum Rating Value Temperature at 25°C)

| 参数 (Parameters) | 极限参数 (Maximum Rating) | | | 单位 (Units) |
|--------------------------------|-----------------------|------------|-----------|------------|
| | 红色 (Red) | 绿色 (Green) | 蓝色 (Blue) | |
| 功耗 (Power) | 48 | 32 | 32 | mW |
| 正向峰值电流 (Pulse Forward Current) | 30 | 15 | 15 | mA |
| 顺向直流电 (Forward Current) | 20 | 10 | 10 | mA |
| 反向电压 (Reverse Voltage) | 7 | 7 | 7 | V |

温度为 25℃时的光电特性参数(Optical Parameters Temperature at 25℃)

| 参数 Parameter | 符号 Symbols | 颜色 Color | 最小值 Min | 标准值 Typical | 最大值 Max | 单位 Units | 测试条件 Testing Conditions |
|--------------------------|---------------|-------------|------------|----------------|------------|-------------|-------------------------------|
| 光强度 LuminousIntensity | Iv | 红(Red) | 170 | --- | --- | mcd | IF=20mA |
| | | 绿(Green) | 100 | --- | --- | mcd | IF=10mA |
| | | 蓝(Blue) | 20 | --- | --- | mcd | IF=10mA |
| 波长 wavelength | WD | 红(Red) | 615 | --- | 627 | nm | IF=20mA |
| | | 绿(Green) | 500 | --- | 540 | nm | IF=10mA |
| | | 蓝(Blue) | 445 | --- | 480 | nm | IF=10mA |
| 发光角度 Viewing Angle | 201/2 | 红(Red) | --- | 120 | --- | Deg | IF=20mA |
| | | 绿(Green) | --- | 120 | --- | Deg | IF=10mA |
| | | 蓝(Blue) | --- | 120 | --- | Deg | IF=10mA |
| 正向电压 Forward voltage | VF | 红(Red) | 1.7 | --- | 2.7 | V | IF=20mA |
| | | 绿(Green) | 2.8 | --- | 3.6 | V | IF=10mA |
| | | 蓝(Blue) | 2.8 | --- | 4.0 | V | IF=10mA |
| 反向电流 Reverse Current | IR | 红(Red) | --- | --- | 1 | uA | VR=7V |
| | | 绿(Green) | --- | --- | 1 | uA | VR=7V |
| | | 蓝(Blue) | --- | --- | 1 | uA | VR=7V |

备注 (Remarks)

备注 (Remarks) :

1、此发光亮度为根据人眼对发光亮度的感应曲线之模拟发光强度符合 CIE (国际光委会组织)。

Light-emitting brightness is according to human eye simulation of the induction curve of luminous intensity in line with the CIE (International Light Committee Organization).

2、1/2 的角度是从光学中心线处的发光强度为 1/2 光学中心线值。

1/2 angle is from optical centerline at the luminous intensity is 1/2 the optical centerline value.

3、发光亮度保证误差正负 10%。

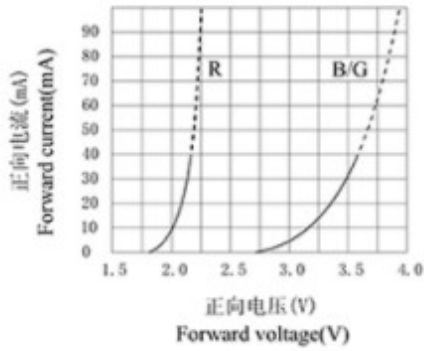
Brightness tolerance is guaranteed within plus or minus 10%.

典型的电性及视角曲线 (Typical Electrical and Perspective Curve)

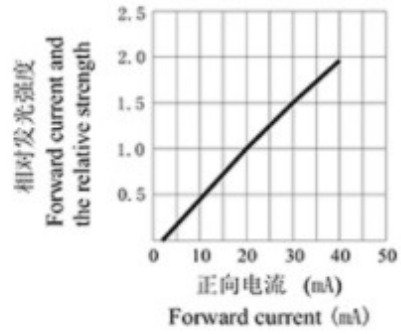
如果没有特别说明, 环境温度为 25℃

Unless Otherwise Specified, Ambient Temperature is 25 °C

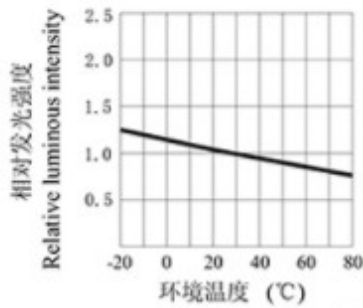
电流与电压
Current and voltage



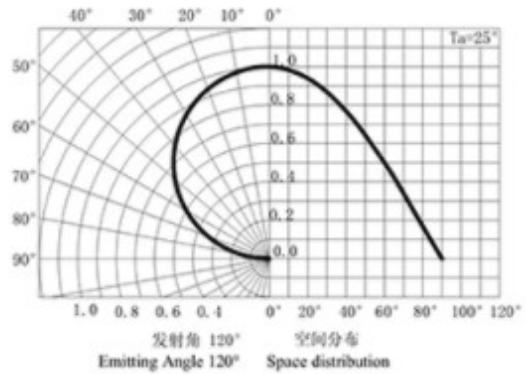
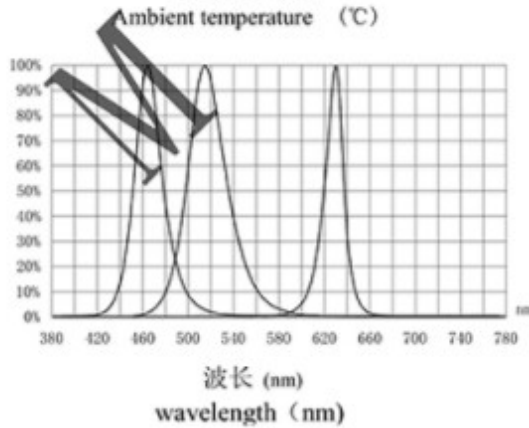
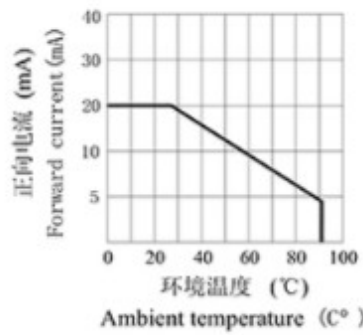
正向电流与相对强度
Forward current and the relative strength



环境温度与相对强度
Ambient temperature and relative strength



环境温度与电流
Ambient temperature and forward current



BIN 等级 (BIN grade)

| 参数 Parameter | 符号 Symbols | 颜色 Color | 实际参数 Actual parameter | 单位 Units | 测试条件 Testing Conditions |
|--------------------------|---------------|------------------|--------------------------|-------------|----------------------------|
| 光强度 LuminousIntensity | Iv | 红 Red | 170-300 | mcd | IF=20mA |
| | | 绿 Green | 100-200 | mcd | IF=10mA |
| | | | 200-400 | mcd | IF=10mA |
| | | | 400-800 | mcd | IF=10mA |
| | | | 800-1200 | mcd | IF=10mA |
| | | 蓝 Blue | 40-60 | mcd | IF=10mA |
| | | | 60-180 | mcd | IF=10mA |
| | | 波长 wavelength | WD | 红(Red) | 615-627 |
| 绿 Green | 500-505 | | | nm | IF=10mA |
| | 505-510 | | | nm | IF=10mA |
| | 510-515 | | | nm | IF=10mA |
| | 515-520 | | | nm | IF=10mA |
| | 520-525 | | | nm | IF=10mA |
| | 525-530 | | | nm | IF=10mA |
| | 530-535 | | | nm | IF=10mA |
| | 535-540 | | | nm | IF=10mA |
| 蓝 Blue | 445-450 | | | nm | IF=10mA |
| | 450-455 | | | nm | IF=10mA |
| | 455-460 | | | nm | IF=10mA |
| | 460-465 | | | nm | IF=10mA |
| | 465-470 | | | nm | IF=10mA |
| | 470-475 | | | nm | IF=10mA |
| | 475-480 | | | nm | IF=10mA |

可靠性测试项目及测试条件(Reliability Test Items and Test Conditions)

| 编号 Number | 测试项目 Test Item | 实验条件 Test Conditions | 样本大小 Sample size | 允收/判退 Acceptance/ Rejection |
|--------------|---------------------------------------|---|---------------------|-----------------------------------|
| 01 | 回流焊 Reflow Solder | 温度: 最大 260℃ Temperature: Max 260℃ 时间(Time): 10S 周期(Cycles): 3 次 (3times) | 1000PCS | 0/1 |
| 02 | 寿命测试 Life Test | 温度(Temperature)=25℃±5℃ 电流(Current)=20mA±2mA 周期(Cycles): 1000H | 10PCS | 0/1 |
| 03 | 温度循环 Temperature Cycling | 85℃ ~ 25℃ ~ -40℃ ~ 25℃ 30 mins 5 mins 30 mins 5 mins 周期(Cycles): 20 个周期 (20 Cycles) | 1000PCS | 0/1 |
| 04 | 冷热冲击 Hot/cold Temperature Shock | 100℃±5℃ ~ -40℃±5℃ 15 mins 15 mins 周期(Cycles): 30 个周期 (30 Cycles) | 1000PCS | 0/1 |
| 05 | 低温储存 Low Temperature Storage | 温度(Temperature): -40℃±5℃ 周期(Cycles): 1000H | 1000PCS | 0/1 |
| 06 | 高温储存 High Temperature Storage | 温度(Temperature): 100℃±5℃ 周期(Cycles): 1000H | 1000PCS | 0/1 |

备注: 参数规格若有变更恕不另行通知。

Remarks: Specifications are subject to change without prior notice.

标签 Label

Model: 产品型号

Lot NO: 生产批号

IV: 发光强度等级

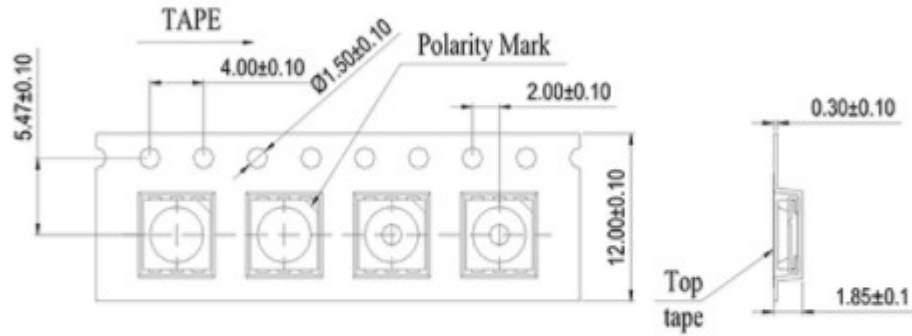
VF: 正向电压等级

X/Y (HUE): 发光颜色等级或者波长等级

Date Code: 生产日期/箱数/人员编号

Quantity: 数量

编带规格 Taping Specifications (单位 Unit: mm)



卷轴尺寸 Reel Size (单位 Unit: mm)

