

承 认 书

客户名称：_____
物料编码：_____
产品型号： 5050BR0Y1R-DZ-CU亮银
版本编号： 1.20
日 期： 2025-01-08

产品描述：

- 贴片5050BR0Y1R-光宏晶元单电机
- 胶体颜色：透明
- 半功率视角：120°



承 认 签 章

编制	审核	核准

客 户 确 认

确认	审核	核准

1. Features

- ⌘ Package (L/W/H) : 5.0 × 5.0 × 1.6mm
- ⌘ Color : full color
- ⌘ Lens: Transparent
- ⌘ EIA STD Package
- ⌘ Meet ROHS, Green Product
- ⌘ Compatible With SMT Automatic Equipment
- ⌘ Compatible With Infrared Reflow Solder And Wave Solder Process

2. Package Profile & Soldering PAD Suggested

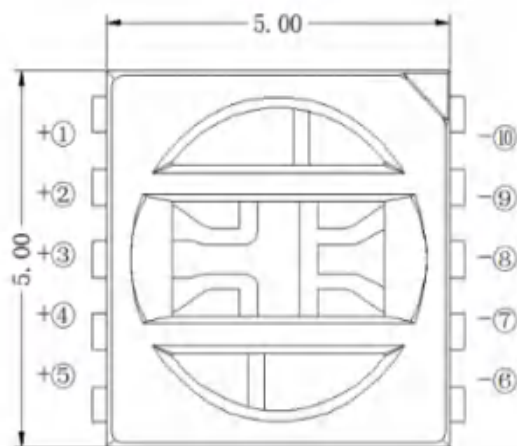


Fig.1-1 Top view 正面视图

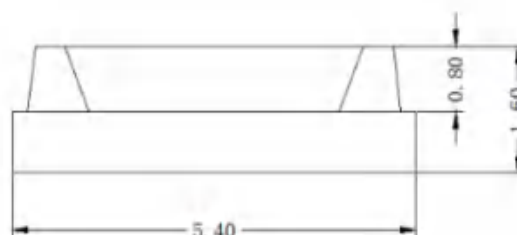


Fig.1-2 Side view 侧面视图

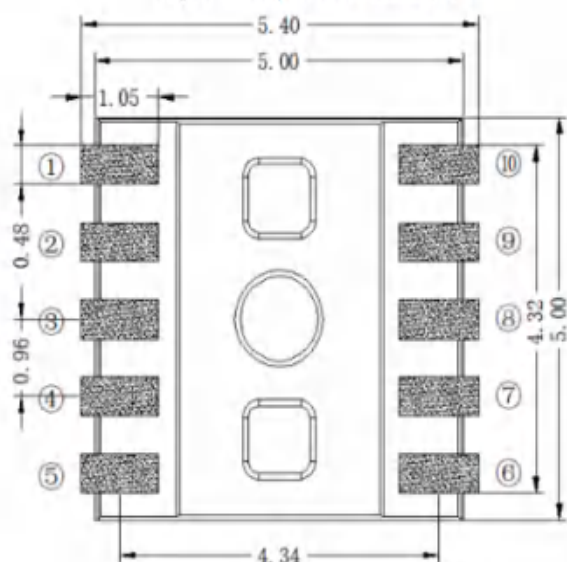


Fig.1-3 Bottom view 背面视图

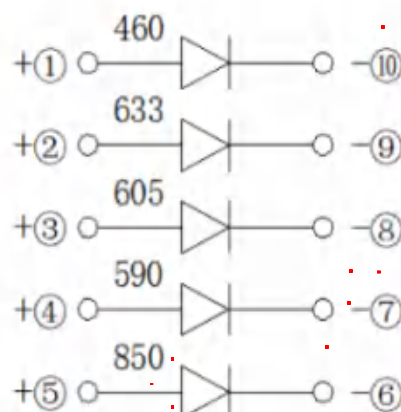


Fig.1-4 Polarity 极性

- Notes:
1. All dimensions are in millimeters ;
 2. Tolerance is ± 0.20 mm unless otherwise noted.

4. Absolute Maximum Ratings At Ta=25°C

Parameter	Symbol	Rating		Unit
Power Dissipation	Pd	B	80	mW
		R	80	
		0	80	
		Y	90	
		IR	100	
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	IFP	R	100	mA
		Y	100	
		B	100	
		IR	100	
DC Forward Current	IF	B	20	mA
		R	20	
		Y	20	
		0	20	
		Y	20	
		IR	30	
Reverse Voltage	VR	B	8	V
		R	8	
		0	8	
		Y	8	
		IR	8	
Operating Temperature Range	Topr	-20 °C ~ + 70 °C		
Storage Temperature Range	Tstg	-25 °C ~ + 75 °C		
Soldering Condition	Tsol	Reflow soldering : 250 °C For 5 Seconds Hand soldering: 300 °C For 3 Seconds		

5. Electrical Optical Characteristics At Ta=25℃

Parameter	Symbol	Color	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	IV	B	400		600	mcd	IF =20mA
		R	1150		1250		
		0	920		1000		
		Y	650		700		
		IR	49		53		
Dominant Wavelength	λ_d	B	465	---	470	nm	IF=20mA
		R	620	---	625		
		0	600	---	605		
		Y	590	---	595		
		IR		850			
Peak Wavelength	λ_p	B	465	---	470	nm	IF=20 mA
		R	620	---	625		
		0	600	---	605		
		Y	590	---	595		
		IR		850			
Spectral Line Half-Width	$\Delta\lambda$	R	---	5	---	nm	IF=20mA
		Y	---	5	---		
		B	---	5	---		
		0	---	5	---		
		Y		5			
		IR		8			
Forward Voltage	VF	B	2.8	---	3.2	V	IF=20 mA
		R	1.8	---	2.3		
		0	2.1		2.5		
		Y	1.8		2.3		
		IR	1.5	---	1.6		
Viewing Angle	201/2	---	---	120	---	deg	

6.Direct Current Characteristics

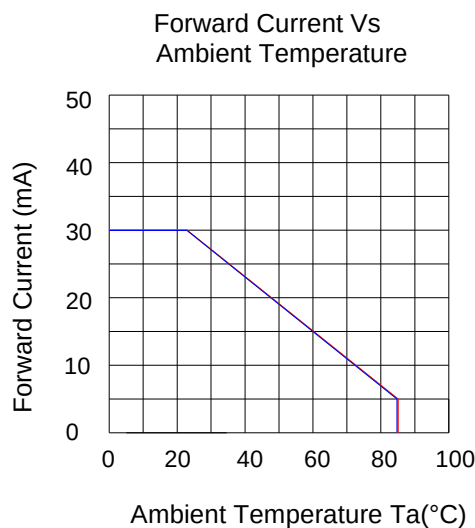
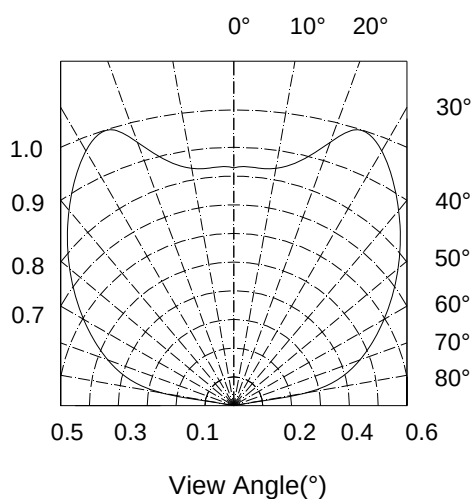
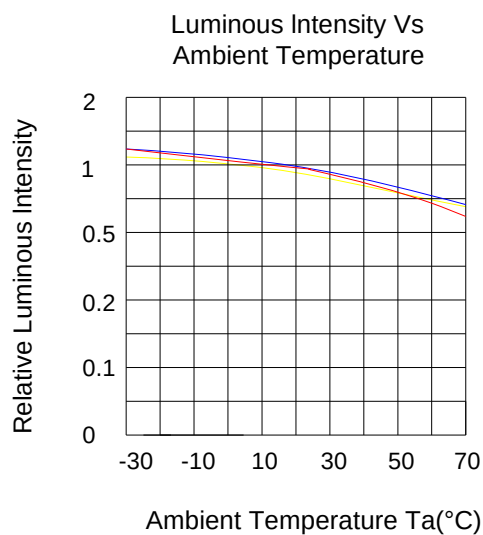
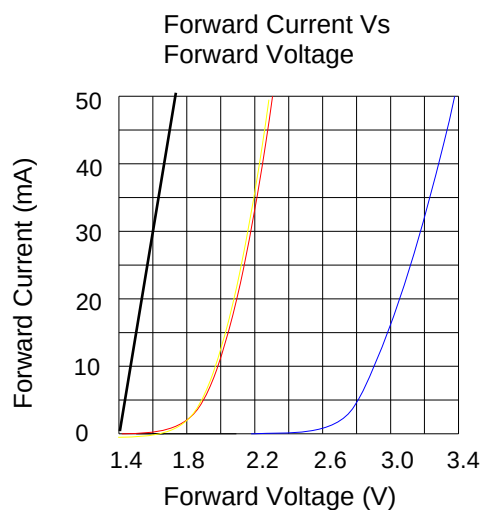
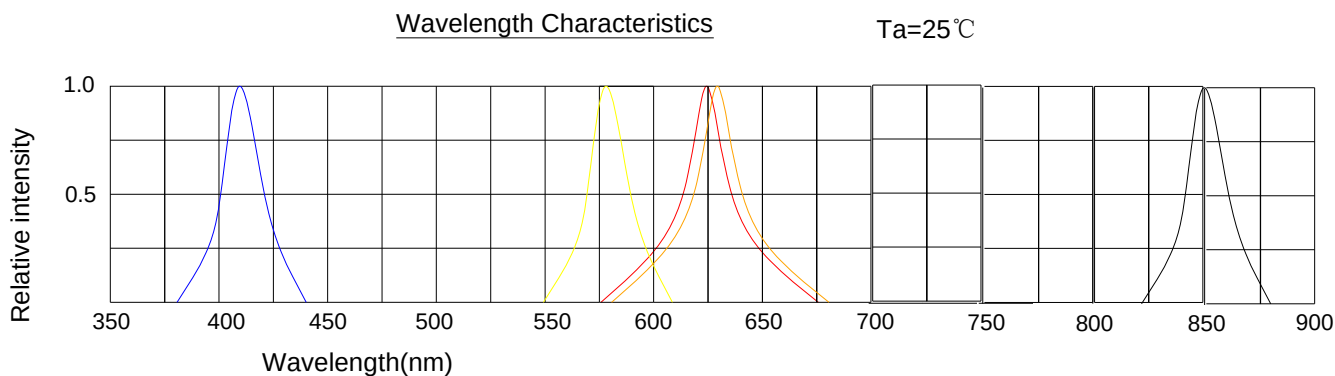
Parameter	Symbol	Min	Typ.	Max	Unit	Remarks
Operating voltage	V_{DD}	/	4.5	5	V	
Driver Current	I_{ol}		20		mA	@V _{DS} =1.2V
Power Consumption	P_o		180		mW	V _{DD} =4.5V
Flash Frequency	F_{tet}		1		Hz	External ±30%

Notes: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

2. 01/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity. 3.

The dominant wavelength, λ_d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

7. 典型特性曲线;



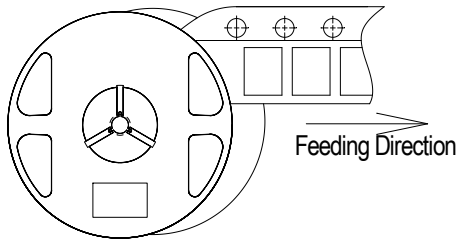
注: 如无另外注明, 测试环境温度为 $25 \pm 3^\circ\text{C}$

8. 包装方法:

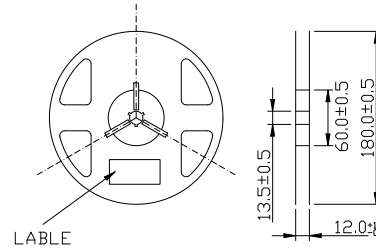
包装数量: 5000 pcs/卷

Packaging Specifications 包装规格

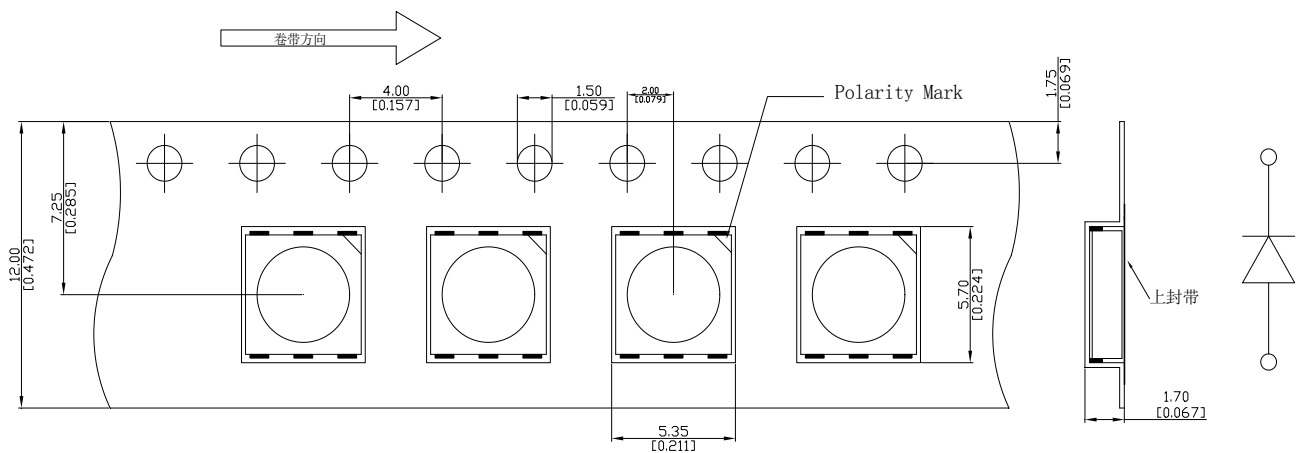
• Feeding Direction 卷带输送方向



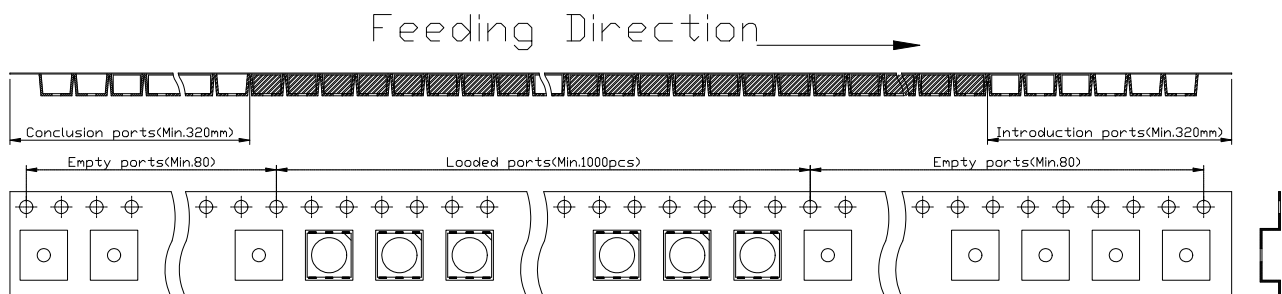
• Dimensions of Reel (Unit: mm) 卷盘尺寸



• Dimensions of Tape (Unit: mm) 卷带尺寸



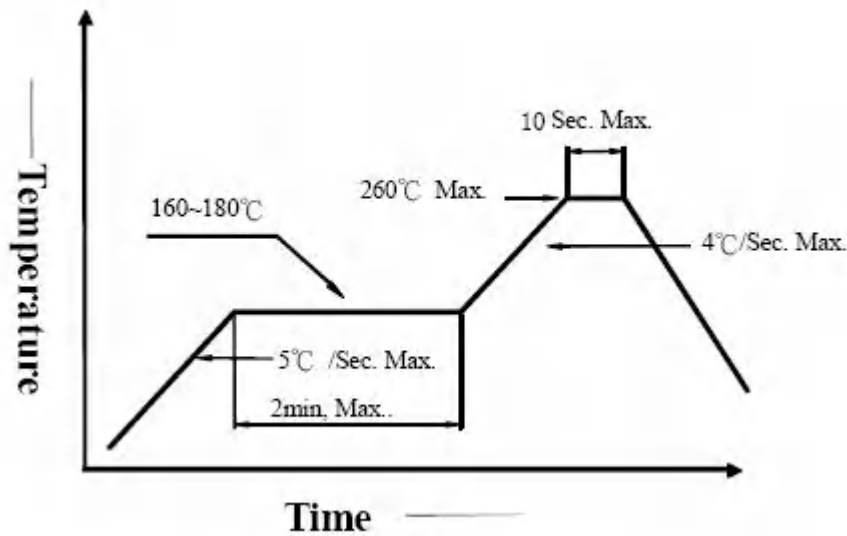
• Arrangement of Tape 卷带排列规格



NOTES

1. Empty component pockets are sealed with top cover tape;
无材料部分同样用上封带密封
2. The maximum number of missing lamps is two;
一卷材料对大差异数为 2
3. The cathode is oriented towards the tape sprocket hole
材料负极方向与卷带齿孔方向一致
4. 1 000 pcs/ Reel.
1 000pcs/卷

9.



Note: a)Reflow soldering should not be done more than two times.

材料焊接次数不超过 2 次。

b)Do not put stress on the LEDs when soldering.

焊接时请不要重压 LED 灯。

c)Do not warp the circuit board before it have been returned to normal ambient conditions after soldering.

焊接后温度未回降到常温时请勿扭曲线路板。

10 . Hand Soldering Profile 手工焊接规范

The temperature of the iron should be lower than 300°C and soldering within 3sec per solder-pad is to be observed.

手工焊接时，烙铁温度不高于 300°C，每个焊脚焊接时间不超过 3 秒

11 . Storage Profile 贮存规范

1. Do not open the moisture proof bag before ready to use the LEDs

请在未准备使用 LED 之前不要打开防静电袋子。

2. The LEDs should be kept at 30°C or less and 60%RH or less before opening the package.

The max. storage period before opening the package is 1 year.

LED 在未开封之前应保存在 30°C 以下，湿度在 60% 以下的环境中，最长保存期为 1 年。

3. After opening the package, the LEDs should be kept at 30°C/40%RH or less, and it should be used within 7 days

打开包装待后，LED 需保存在 30°C/40% 湿度以下的条件，且必须在 7 天内使用完。

4. If the LEDs be kept over the condition of 3, baking is required before mounting. Baking condition as below: 60±5°C for 12 hours

如果 LED 超出了第 3 点要求，则 LED 必须经过烘烤才能使用，烘烤条件为：60±5°C，12 个小时