# 产品规格书 Product Specification Report

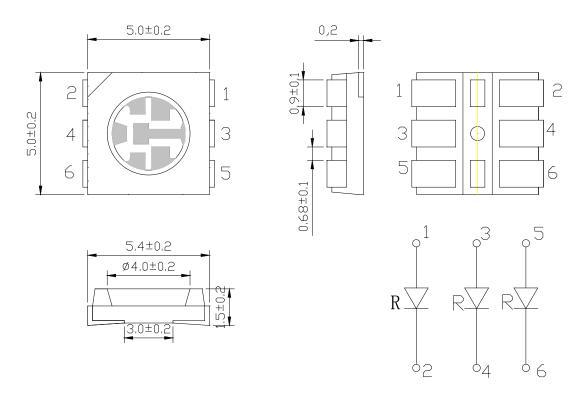
客户名称(Cus	tomer Name):					
客户料号(Cus	tomer NO.):					
产品名称 (Product Name):			5050 LED 0.2W Warm White			
产品型号 (Product Type):			BE5050 0.2W Warm White			
制定日期 (Date Prepared):			2017-4-1			
百创力确认		客户确认				
BETRONIC Approval		Customer's Approval				
制定	核准	业务部	确认人	核准	采购部	
Development	Approved	Marketing Dept	Confirmed by	Approved	Purchasing Dept	
结果判定 Judge outcome			结果判定 Judge outcome			

## SURFACE MOUNT LED LAMPS

#### 5050 系列 LED 贴片灯(5050Series SMD Chip LED Lamps)

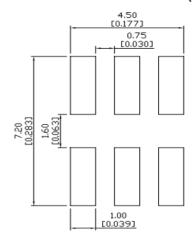
产品型号 (Product Type): BE5050 0.2W Warm White

Package Dimensions (封装尺寸)



Recommended Soldering Patter (n 推荐焊盘式样)

#### RECOMMEND PAD DESIGN (Units: mm)



#### 备注 (NOTES):

1、 所有尺寸单位为毫米

All dimensions are in millimeters;

2、 如无其他备注,尺寸公差为±0.1mm

Tolerances are  $\pm 0.1$ mm unless otherwise note.

# SURFACE MOUNT LED LAMPS

# 产品型号 (Product Type): BE5050 0.2W Warm White

### 极限参数 Absolute maximum ratings

(Ta=25° C)

参数 Parameter	符号 Symbol	数值 Value	单位 Unit
正向电流 Forward current	If	60	mA
反向耐压 Reverse voltage	Vr	5	V
耗散功率 Power dissipation	Pd	0.16	W
工作环境温度 Operating temperature range	Тор	-25~+80	° C
贮藏温度 Storage temperature range	Tstg	-30~+85	° C
峰值脉冲电流 Peak pulsing current (1/8 duty f=1KHz)	Ifp	90	mA

## 光电特性 Electro-Optical characteristics

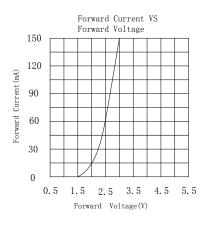
 $(TA=25^{\circ} C)$ 

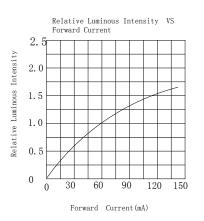
参数	测试条件 Test Condition	符号 Symbo l	发光 颜色	数值 Value			单位 Unit
Parameter				Min	Тур	Max	) + <u>  ±</u> 0 mt
色温 Color Temperature		CCT	1	2500	1	4000	K
正向电压 Forward voltage	If=20mA	Vf	R	3.0	1	3.2	V
光通量 luminous flux	If=20mA	ф	R	22		24	LM
视角 Viewing angle at 50% IV	If=20mA	2 θ 1/2	1	-1	120	1	Deg
主波长 Dominant wavelength	If=20mA	λd	R		1	1	nm
反向电流 Reverse current	Vr=5V	Ir			5		μΑ

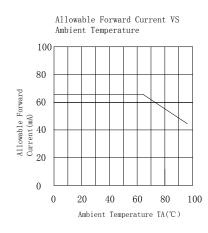
## SURFACE MOUNT LED LAMPS

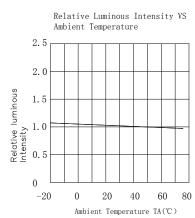
产品型号 (Product Type): BE5050 0.2W Warm White

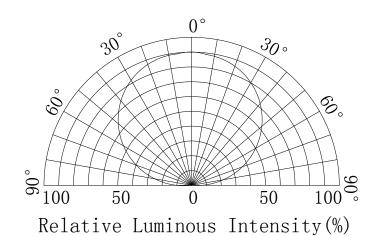
典型的光电特性曲线图表 Typical photoelectricity characteristic curve chart







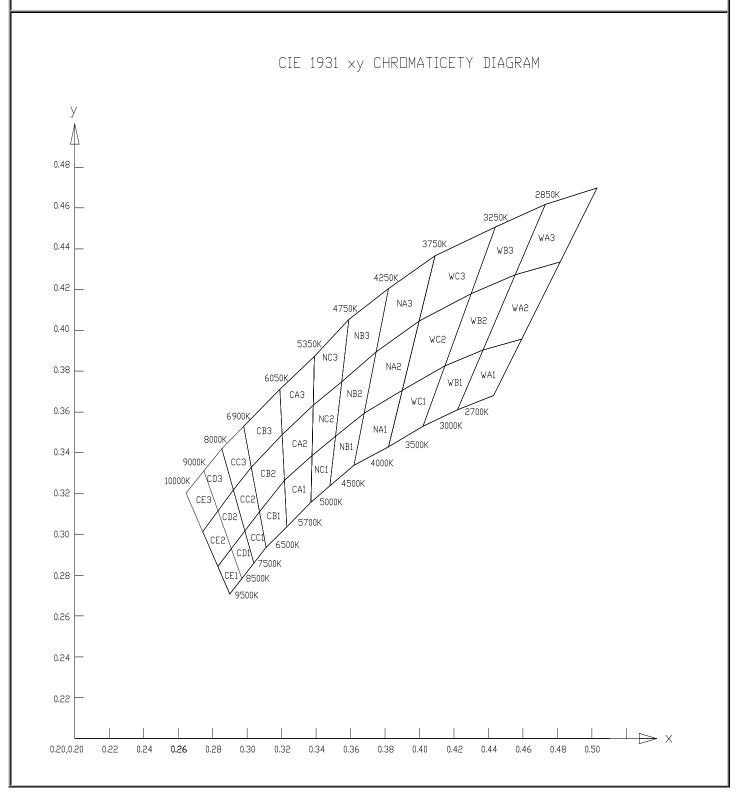




## SURFACE MOUNT LED LAMPS

产品型号 (Product Type): BE5050 0.2W Warm White

典型的光电特性曲线图表 Typical photoelectricity characteristic curve chart



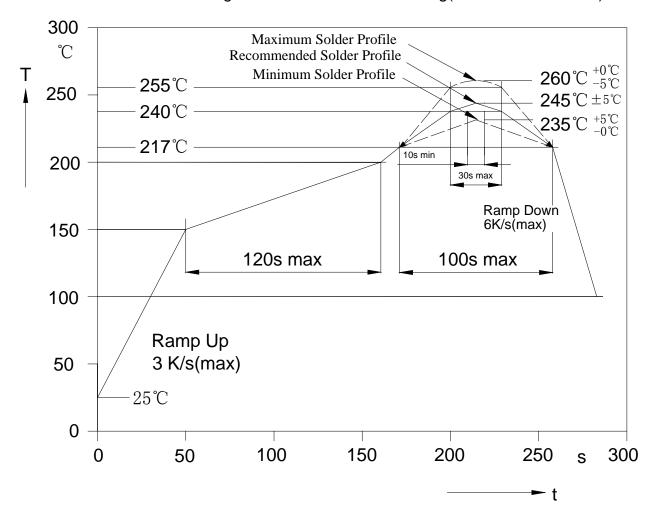
# SURFACE MOUNT LED LAMPS

产品型号 (Product Type): BE5050 0.2W Warm White

#### 焊接温度曲线图表 (回流焊)

Soldering temperature curve chart (Reflow solder profile)

#### SMD-Reflow Soldering Profile for lead free soldering (Acc.to J-STD-020B)



Remark: If not lead free soldering, the recommended solder profile is  $230\,^{\circ}$ C and max solder profile is  $245\,^{\circ}$ C.

# SURFACE MOUNT LED LAMPS

# 可靠性实验项目 Test items and results of reliability

<u> </u>					7 A W B
类别 Type	测试项目 Test item	源科参照标准 YK. Standard	测试条件 Test Conditions	备注 Note	不良数量 Number of Damaged
Environmental Sequence	高低温循环 Temperature Cycle	JIS C 7021 (1977)A-4	-25° C 30min  ↑ ↓ 5min  80° C 30min	100 cycle	0
	热冲击 Thermal Shock	MIL-SLD-107D	-25° C 15min ↑ ↓ 5min 80° C 15min	100 cycle	0
	高温度热循环 High Humidity Heat Cycle	JIS C 7021 (1977)A-5	$30^{\circ}$ C $\langle = \rangle$ 65° C $90\%$ RH 24hrs/1cycle	10 cycle	0
	高温存储 JIS C 7021 Ta=80° C		1000hrs	0	
	高温高湿存储 Humidity Heat Storage	JIS C 7021 (1977)B-11	T <sub>a</sub> =60° C RH=90%	1000hrs	0
	低温存储 Low Temperature Storage	JIS C 7021 (1977)B-12	$T_a=-30^{\circ}$ C	1000hrs	0
Operation Sequence	常温寿命测试 Life Test	JIS C 7035 (1985)	$T_a$ =25 $^{\circ}$ C $I_F$ =40mA	1000hrs	0
	高温高湿寿命测试 High Humidity Heat Life Test	*	60° C RH=90% I <sub>F</sub> =40mA	500hrs	0
	低温寿命测试 Low Temperature Life Test	*	$Ta=-25^{\circ}$ C $I_F=40mA$	1000hrs	0

#### ★请参考可靠性测试标准规范。

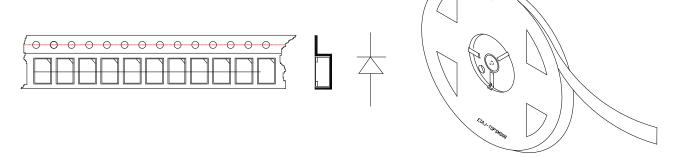
Refer to reliability test standard specification for in this line.

#### SURFACE MOUNT LED LAMPS

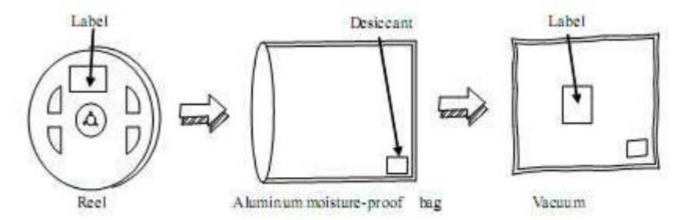
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#### 编带和包装 Tape and Packaging

1. Tape leader and reel



#### 2. Packing



#### 3. Storage:

- 1)、如暂不使用,请不要打开防潮袋。
  - Don't open the moisture proof bag before the products are ready to use.
- 2)、打开包装前, LED 灯需放置温度在 30℃以下、湿度低于 90RH 的环境内。 Before opening the packing, the LED should be kept at 30℃ or less and 90RH or less
- 3)、打开防潮袋后, 应立即使用 LED, 不能将 LED 暴露在空气中超过一个星期。 After opening the moisture proof bag, should use the LED immediately, do not expose the led in air for a week.
- 4)、如果 led 超过存储时间或受潮,应在以下条件中除湿 24 小时: 60+/-5℃ If the LEDs exceed the storage time or the moisture absorbability material has faded away, Backing treatment should be performed using the following conditions: 60+/-5℃ for 24 hours.