

承认书

Specification for Approval

客户名称 (Customer Name): IE-3528Y-HB-BF-O

产品编号 (Product ID): _____

产品型号 (Product Model): _____

产品规格 (Product Specifications): _____

送样日期 (Date): _____

客户确认 (Customer acknowledges that)

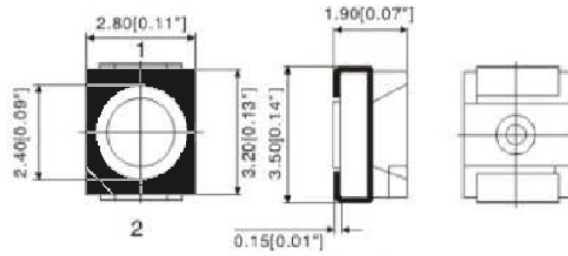
核准 Approved	审核 Audit	确认 Confirm	业务 Business	工程 Engineering	制作 Make

客户确认 (Customer acknowledges that): 合格 Qualified 不合格 Failure

客户意见 (Customer feedback):

产品型号 Product Model:

尺寸 Dimensions: 单位 Unit: 毫米 mm [英寸] [inch]



备注 (Notes:)

- 1.所有尺寸单位是 mm
All dimension units are millimeters.
- 2.所有未标注尺寸公差为 $\pm 0.2\text{mm}$
All dimension tolerance is $\pm 0.2\text{mm}$ unless otherwise noted.
- 3.所有胶体底部与引脚处多胶部分大约为 1.5mm
An epoxy meniscus may extend about 1.5mm down the leads.
- 4.胶体底部毛边小于等于 0.5mm
Burr around bottom of epoxy may be 0.5mm max.

LED Chip (LED 芯片)		胶体颜色
材料 Material	发光颜色 Emitting Color	Lens Color
AlGaInp	Yellow	

产品型号 Product Model:

最大绝对额定值(室温 = 25°C) Absolute Maximum Ratings at (Ta = 25°C)

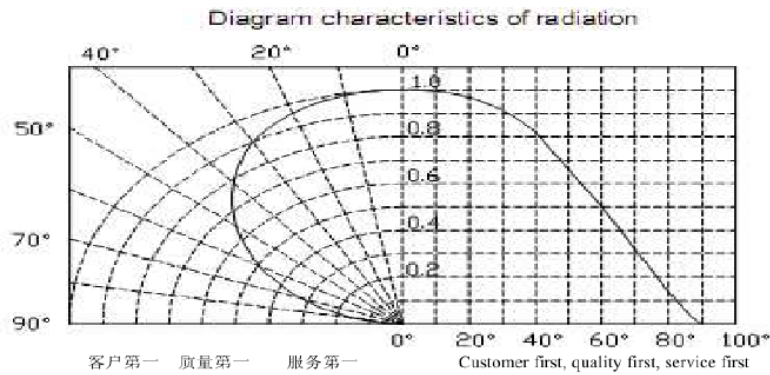
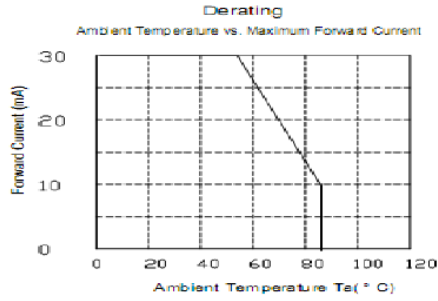
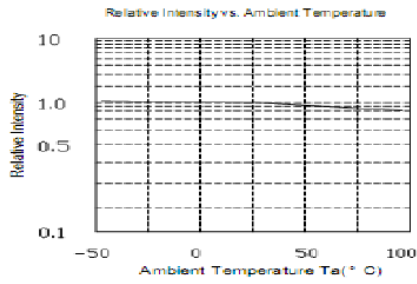
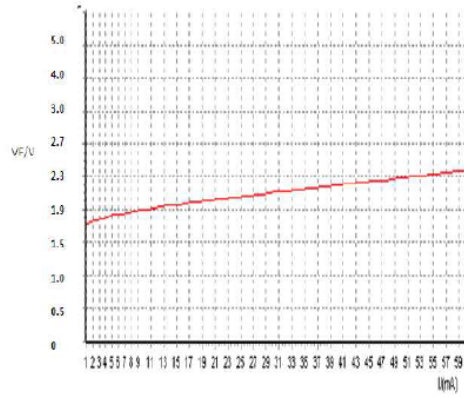
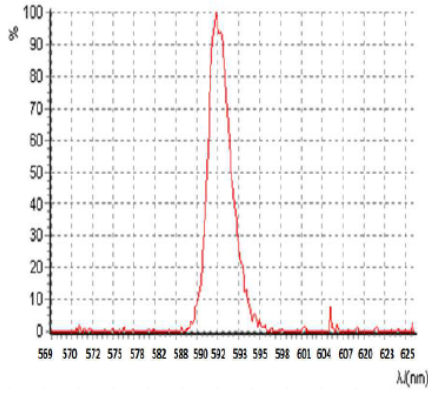
项目 ITEMS	符号 SYMBOL	最大绝对额定值 ABSOLUTE MAXIMUM RATING	单位 UNIT
正向电流 Forward Current	IF	30	mA
峰值正向电流 Peak Forward Current	IFP	100	mA
连续工作电流 Continuous Forward Current	IL	20	mA
反向电压 Reverse Voltage	VR	5	V
功耗 Power Dissipation	PD	60	mW
工作温度 Operation Temperature	Topr	-40 ~ +80	°C
贮存温度 Storage Temperature	Tstg	-40 ~ +80	°C
引脚镀锡温度 Lead Soldering Temperature	Tsol	最大温度 260°C, 最长时 间 5 秒 Max.260°C for 5 sec Max.	

主要光电特性 (室温 = 25°C) Typical Electrical & Optical Characteristics (Ta = 25°C)

项目 ITEMS	符号 Symbol	测试条件 Test Condition	最小值 Min.	典型值 Typ.	最大值 Max.	单位 Unit
发光强度 Luminous Intensity	Iv	IF=20mA	1000	--	1200	MCD
正向电压 Forward Voltage	IF	IF=20mA	2.0	--	2.2	V
峰值波长 Peak Wavelength	λP	IF=20mA	590	/	595	nm
主波长 Dominant Wavelength	λD	IF=20mA	/	/	/	nm
视角 Viewing Angle	2θ1/2	IF=20mA	-	120	-	Deg
光通量 Luminous flux	Iv	IF=20mA	--	--	--	LM
显色指数坐标 Color Rendering Index Calculation	Spm	X				
	Spm	Y				
色温 Color Temperature	TC	IF=20mA	--	--	--	K

产品型号 Product Model:

■ Opto-Electrical Characteristics / 光电特性



产品型号 Product Model:

■ Reliability Test Items

No.	Item	Condition	Time/Cycle	Number of Damaged
1.	Soldering Heat Test	260±5 °C	10 sec	0/100
2	Thermal Shock	0 °C (15sec) ~ 100 °C(15sec)	1000 cycle	0/100
3	High Temp. Storage	100 °C	1000Hrs	0/100
4	Low Temp. Storage	-40 °C	1000Hrs	0/100
5	Temperature Cycle Test	-40 °C ~ 80 °C	100 Cycles, 200 Hrs	0/100
6	High Temp. High Humidity Test	60 °C, 90 % RH	1000 Hrs	0/100
7	Operation Life Test 1	Room Temp., 20mA	1000 Hrs	0/22
8	Operation Life Test 2	Room Temp., 30mA	500 Hrs	0/22
9	High Temp. Operation Life Test	85 °C , 10mA	1000 Hrs	0/22
10	Low Temp. Operation Life Test	-30 °C ,20mA	1000 Hrs	0/22

Judgment Criteria

Item	Symbol	Test Conditions	Judgment Criteria
Forward Voltage	Vf	I = 20 mA	Δ% < 10 %
Leakage Current	Ir	Vr = 5V	< 10 uA
Luminous Intensity	Iv	I = 20 mA	Δ% < 20 %

客户第一 质量第一 服务第一

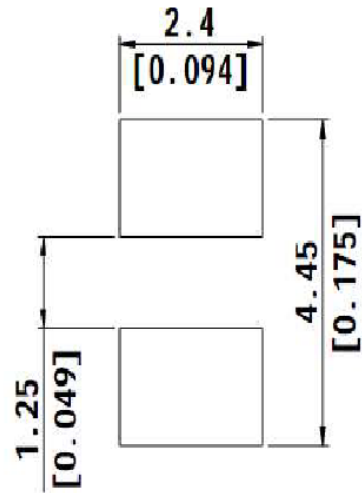
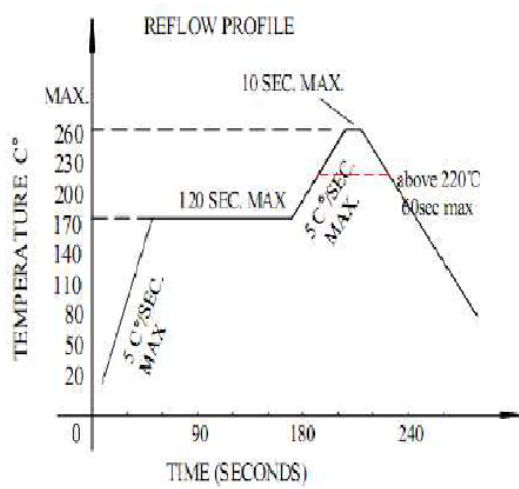
Customer first, quality first, service first

■ Reflow profile

Recommended soldering conditions.

Reflow Soldering 回流焊接		Hand Soldering 手工焊接	
Pre-heat 预热	160~180°C	Temperature 温度	300°C Max.
Pre-heat time 预热时间	120 seconds Max.	Soldering time 焊接时间	3 second Max. (one time only)
Peak temperature 最高温度	260°C Max.		
Soldering time 焊接时间	10 seconds Max.		

Temperature-profile (Surface of circuit board), Use the following conditions shown in the figure.



Note 1. Reflow soldering should not be done more than two times

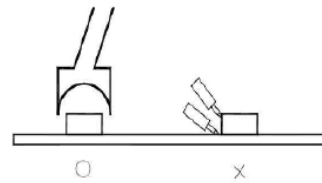
2. When soldering ,do not put stress on the LEDs during heating

Rework

1. Customer must finish rework within 3 sec under 260 °C ;

2. The head of iron can not touch the silicone ;

3. Double-type soldering iron is preferred.

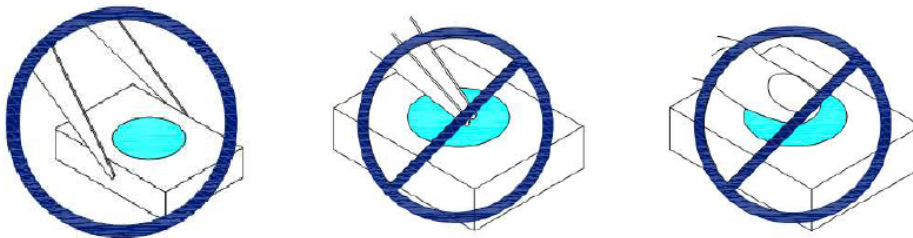


CAUTIONS

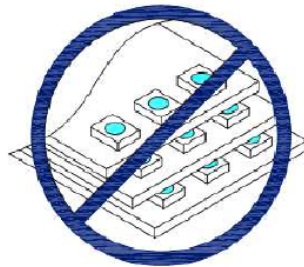
1. A rapid-rate process is not recommended for cooling the LEDs down from the peak temperature.

2.The encapsulated material of the LEDs is silicone . silicone is softer and flexible, Although its characteristic significantly reduces thermal stress, it is more susceptible to damage by external mechanical force.

Therefore the LEDs have a soft surface on the top of package. The pressure to the top surface will be influence to the reliability of the LEDs. Precautions should be taken to avoid the strong pressure on the encapsulated part. So when using the picking up nozzle, the pressure on the silicone resin should be proper.



Do not directly touch or handle the silicone lens surface. It may damage the internal circuitry.

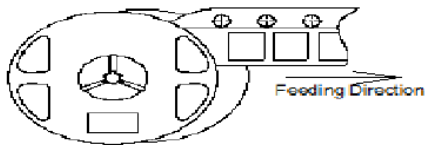


Do not stack together assembled PCBs containing exposed LEDs. Impact may scratch the silicone lens or damage the internal circuitry.

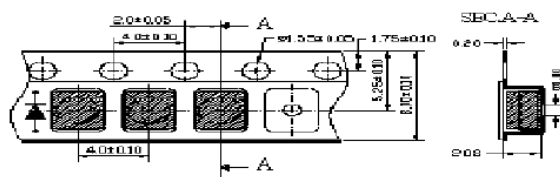
Internal Packaging

- Feeding Direction

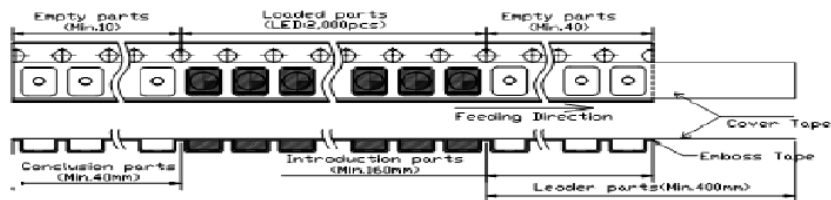
- Dimensions of Reel (Unit: mm)



- Dimensions of Tape (Unit: mm)



- Arrangement of Tape



NOTES

NOTES

1. The maximum number of missing lamps is two;

2 The cathode is oriented towards the tape sprocket hole in accordance with ANSI/EIA RS-481 specifications.

■ Caution

(1) . The LEDs should be kept at 30°C or less and 60%RH or less. The LEDs should be soldered within 24 hours (1days)

opening the package. If unused LEDs remain, they should be stored in moisture proof packages, such as sealed containers

(2) . If exposed to the air more than 24 hours later, still continue to use, bulk material required to baking at 120 °C under

5 hours for the taping materials need to use 65 °C baking 12 hours before continuing use; re-use, exposure to time in the

air is still no more than 24 hours.

(3) . The SMD LED is an ESD sensitive device. All the equipment and machine must be properly grounded.

(4) . when make use of it, please use static-free container, operator should wear antistatic clothes and rope-satic-ring also should make effective ground.