

# IR LED LAMP SPECIFICATION

**CONFIDENTIAL**

Drawn by	Checked by	Approved by

Rev. 0.0



**U-JIN LED**  
Lighting Your Imagination

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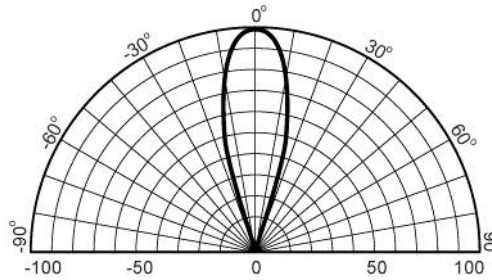


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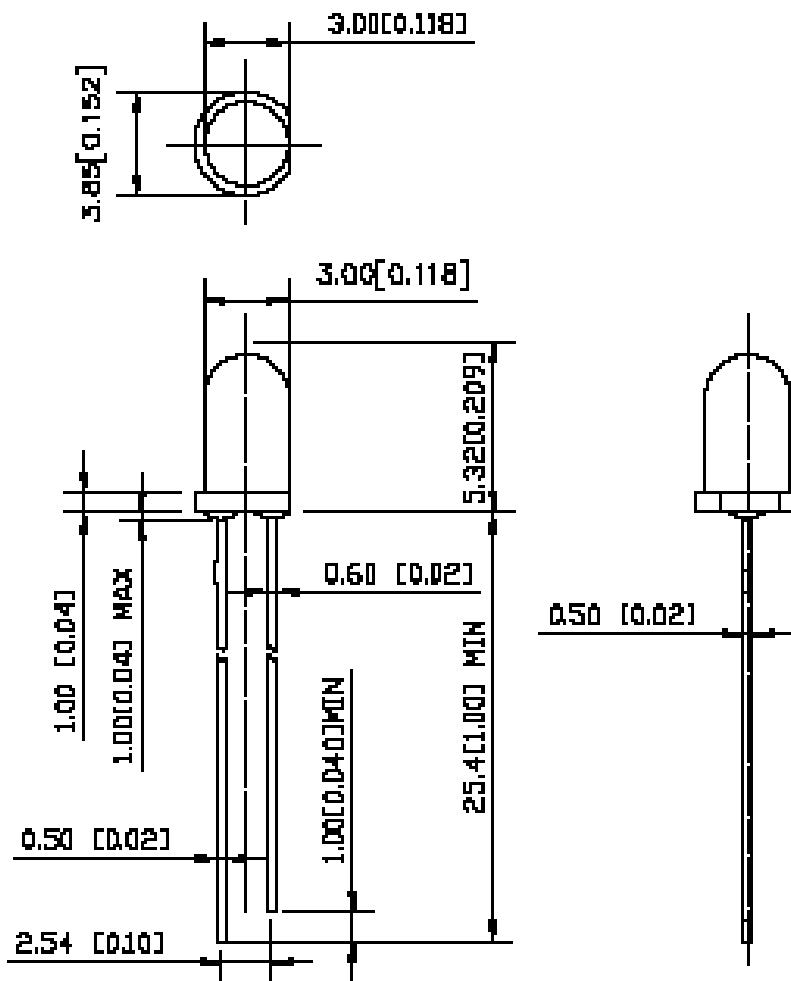
## ULI-85031AJ-30UX

### 1. Features

- 3mm dia round top lamp.
- AlGaAs Infrared LED.
- Viewing angle 30°.
- Water clear epoxy-molding type.
- High reliability and long life.
- High luminous intensity.
- Pb free.



### 2. Dimension



Unit : mm  
Tolerance : ± 0.25



Unit: mm[inches]

Tolerance : ± 0.25mm [0.01]



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### 3. Absolute ratings (Ta=25°C)

Parameter	Sym	Rating	Unit
Max Forward Current	IF	100	mA
Reverse Voltage	VR	5	V
Power Dissipation	PD	190	mW
Operation Temp	Topg	-35 ~ + 85	°C
Storage Temp	Tstg	-40 ~ +100	°C

### 4. Optoelectronic characteristics (Ta=25°C)

Parameter	Sym	Condition	Min	Typ	Max	Unit
Forward Voltage	VF	IF = 50mA	1.4	1.5	1.9	V
Reverse Current	IR	VR = 5V			10	μA
Peak wave length	λP	IF = 50mA		850		nm
Radiant Intensity	IE	IF = 50mA		45		mW/Sr

### 5. Soldering conditions

Soldering Temp ≤ 260°C  
Soldering Time : 3 sec at location 2.0mm away from the base of the epoxy bulb.

### 6. Reliability Test

Test Item	Test Conditions	Note	Number of Damaged
Steady State Operating Life	Ta = 25°C IF=50mA	1000hrs	0/20
Steady State Operating Life of Low Temperature	Ta=-35°C, IF=50mA	240hrs	0/20
Steady State Operating Life of High Temperature	Ta=85°C, IF=50mA	240hrs	0/20
Resistance to soldering Heat	Tsld=260 ± 5°C, 10sec. 3mm from the base of the epoxy bulb	1 time	0/10
Temperature Cycle	Ta = -40°C ~ 100°C (1 Cycle = 1hr)	100 cycles	0/20



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### ■ Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

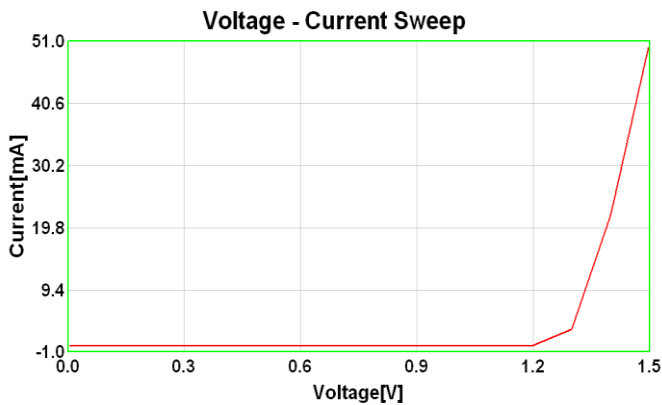


Fig 2. Relative Intensity(mW/sr) vs. Forward Current

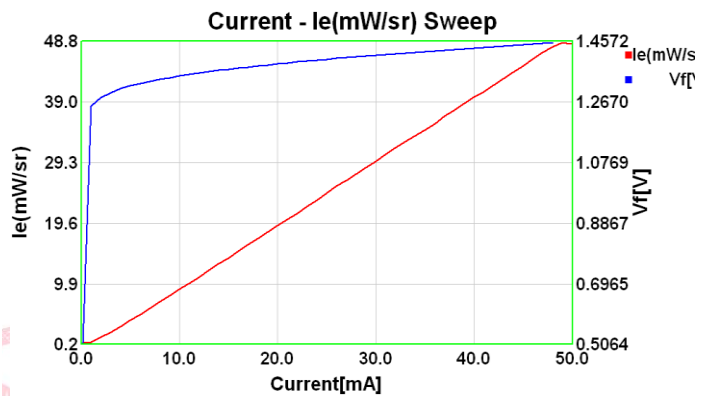


Fig 3. Relative Intensity vs. Wavelength

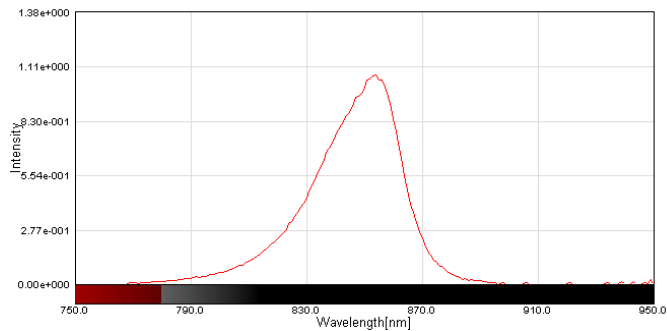


Fig 4. Forward current vs. Temperature

