

## APPROVAL SHEET

Company Name \_\_\_\_\_

Full Sun Part Number **L5-OY8530-6500** \_\_\_\_\_

Quantity \_\_\_\_\_

Shipment Date \_\_\_\_\_

Approved by Supplier \_\_\_\_\_

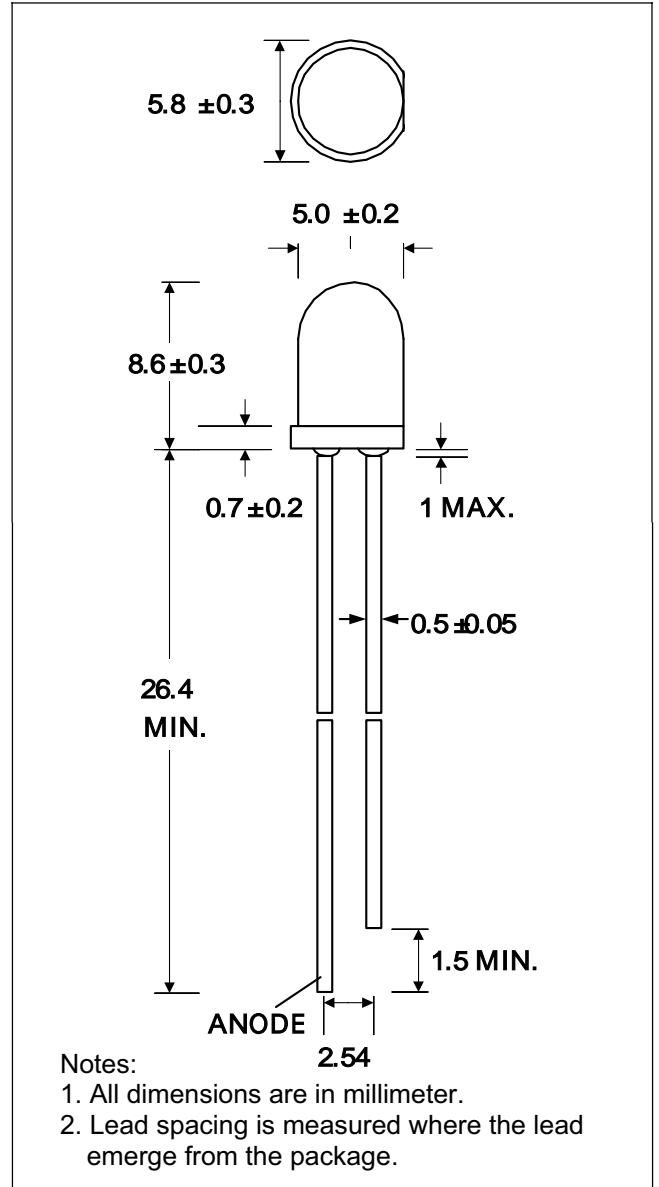
Approved by Customer \_\_\_\_\_

**DISCRIPTION**

- Super bright LED Lamp
- Round type
- T1-3/4 (5mm) diameter
- Lens color: Water Clear
- With Flange
- Solder leads without stand-off
- Package: bulk

**FEATURES**

- Emitted color: Super Yellow
- High Luminous intensity
- Technology: AlGaInP
- Peak wavelength  $\lambda_p = 587\text{nm}$
- Viewing angle:  $30^\circ$
- UV resistant epoxy



**SELECTION GUIDE**

Chip Material	Chip Emitted	Lens Color	Viewing Angle
AlGaInP	Super Yellow	Water Clear	$30^\circ$

**ABSOLUTE MAXIMUM RATINGS**

(Ta=25 )

PARAMETER	SYMBOL	MAX. RATING	Unit
Power Dissipation	P <sub>D</sub>	85	mW
Peak Forward Current (1/10 Duty Cycle @1KHz )	I <sub>PF</sub>	100	mA
Continuous Forward Current	I <sub>AF</sub>	30	mA
Reverse Voltage	V <sub>R</sub>	5.0	V
Operating Temperature Range	T <sub>OPR</sub>	-20~+70	
Storage Temperature Range	T <sub>STG</sub>	-40~+85	

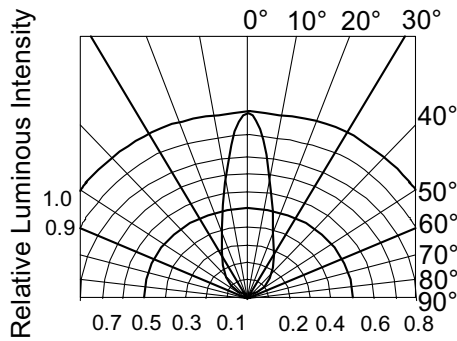
Solder temperature 1.6 mm from body for 3 seconds at 260

**OPTICAL-ELECTRICAL CHARACTERISTICS**

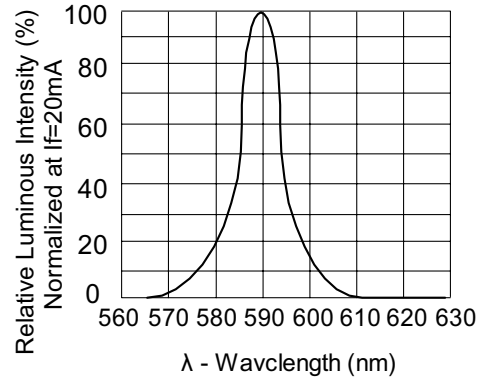
PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Luminous Intensity	I <sub>V</sub>	I <sub>F</sub> = 20mA	3900	6500		mcd
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20mA		2.0	2.4	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5V			10	uA
Viewing Angle	2θ <sub>1/2</sub>	I <sub>F</sub> = 20mA		30		deg.
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> = 20mA		587		nm
Dominant Wavelength	λ <sub>D</sub>	I <sub>F</sub> = 20mA	580	585	591	nm
Spectrum Radiation Bandwidth		I <sub>F</sub> = 20mA		20		nm

\*Tolerance of Viewing Angle: -10 / +5 deg.

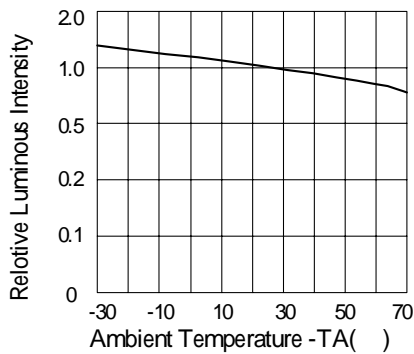
**TYPICAL OPTICAL-ELECTRICAL CHARACTERISTIC CURVES**



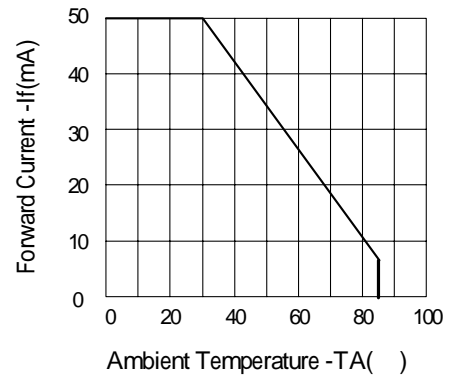
**RADIATION DIAGRAM**



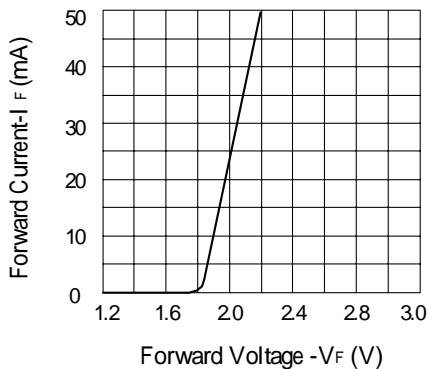
**RELATIVE LUMINOUS INTENSITY Vs. WAVELENGTH**



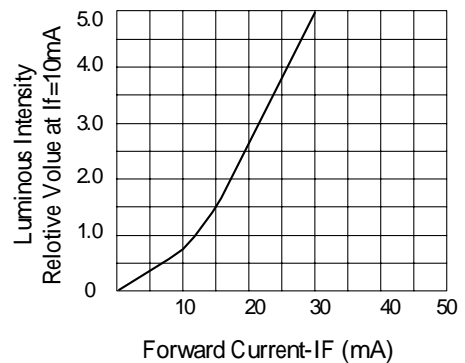
**LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE**



**FORWARD CURRENT Vs. AMBIENT TEMPERATURE**



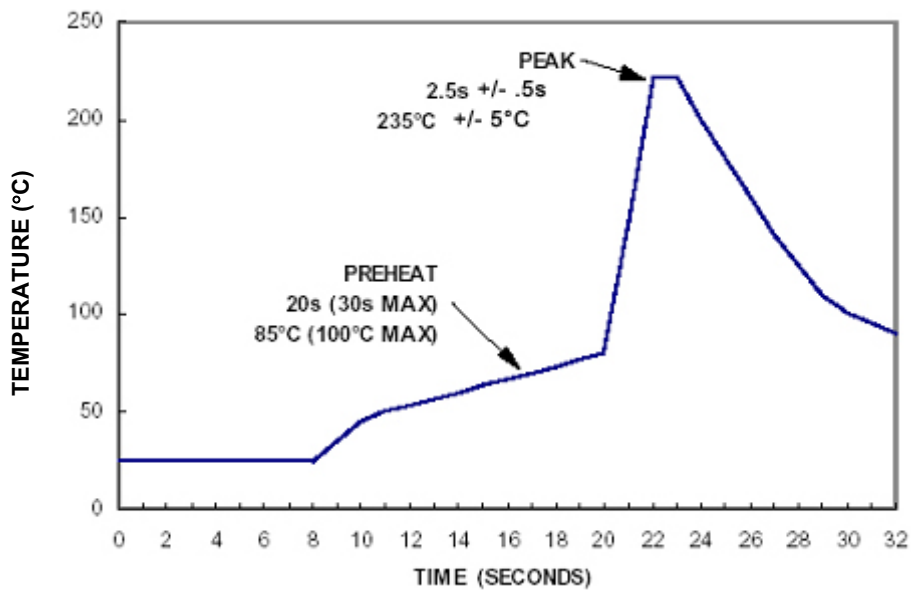
**FORWARD CURRENT Vs. FORWARD VOLTAGE**



**LUMINOUS INTENSITY Vs. FORWARD CURRENT**

### Recommended Soldering Conditions

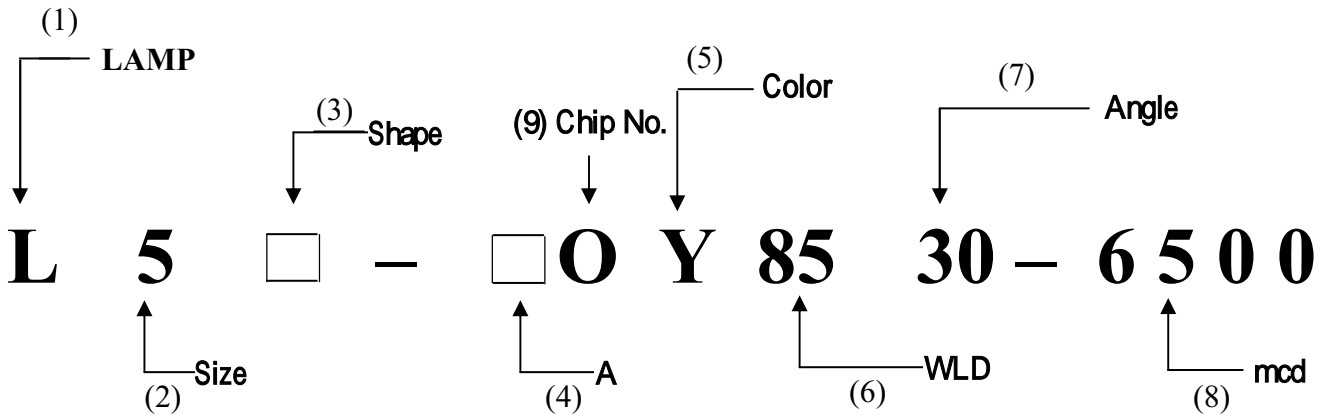
The recommended soldering conditions are listed in Table 1. A sample solder profile taken on the LED lead on the bottom-side of the PCB is shown in Figure 1. Both the recommended and maximum conditions are shown in Figure 1.



Preheat Temperature	85 +/- 15°C
Preheat Time*	20 sec (Max 30 sec)
Peak Profile Temperatures	235 +/- 5°C
Soak Time above 200°C	2.5s +/- .5s

\*Note: All top preheat stages are to be turned off so that the lamp body is not directly exposed to the heat source.

Item number code rule



Specification table

VF (v)	$\lambda$ D(nm)	IV(mcd)
1.9-1.95		3900~5500
1.95-2.0		
2.0-2.05	582-585	5500~7600
2.05-2.1	585-588	
2.1-2.15	588-591	
2.15-2.2		7600~10500
2.2-2.25		
2.25-2.3		