

APPROVAL SHEET

Company Name _____

Full Sun Part Number **L5-OY8530-6500** _____

Quantity _____

Shipment Date _____

Approved by Supplier _____

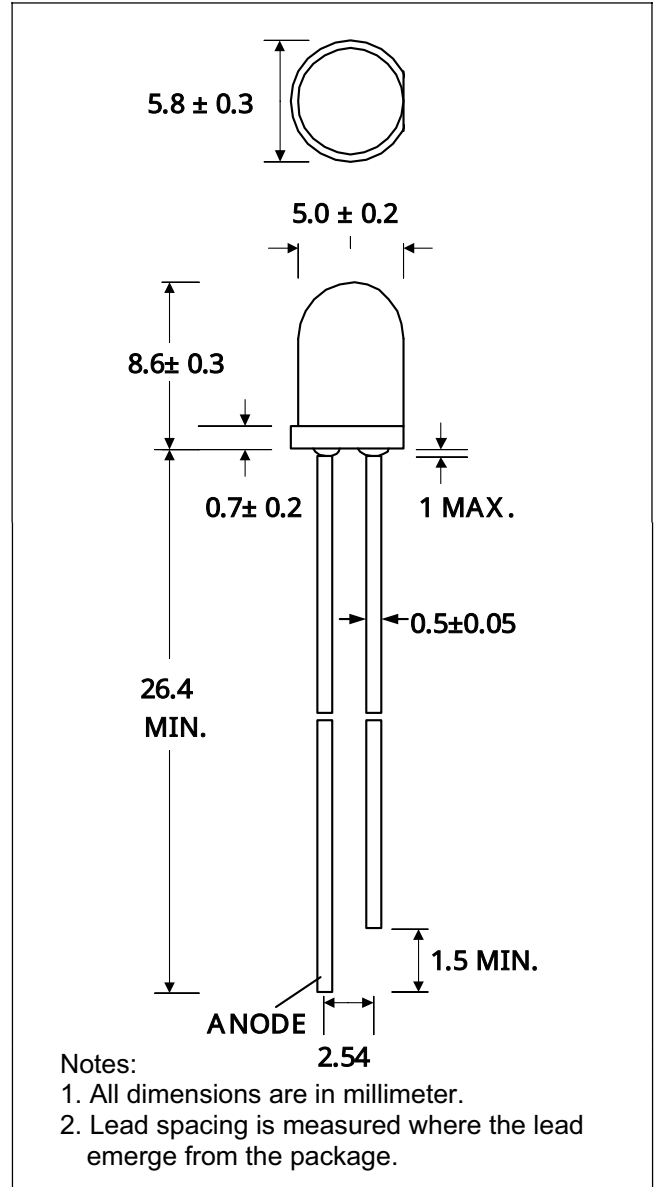
Approved by Customer _____

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°
- UV resistant epoxy



SELECTION GUIDE

Chip Material	Chip Emitted	Lens Color	Viewing Angle
AlGaInP	Super Yellow	Water Clear	30°

ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

PARAMETER	SYMBOL	MAX. RATING	Unit
Power Dissipation	P _D	85	mW
Peak Forward Current (1/10 Duty Cycle @1KHz)	I _{PF}	100	mA
Continuous Forward Current	I _{AF}	30	mA
Reverse Voltage	V _R	5.0	V
Operating Temperature Range	T _{OPR}	-20~+70	°C
Storage Temperature Range	T _{STG}	-40~+85	°C

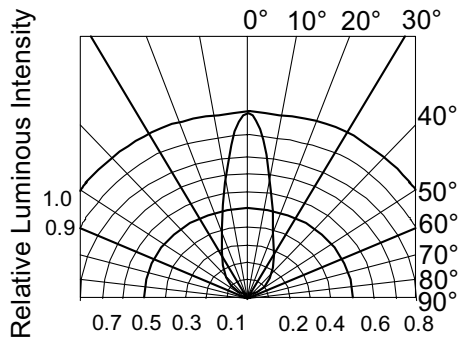
Solder temperature 1.6 mm from body for 3 seconds at 260°C

OPTICAL-ELECTRICAL CHARACTERISTICS

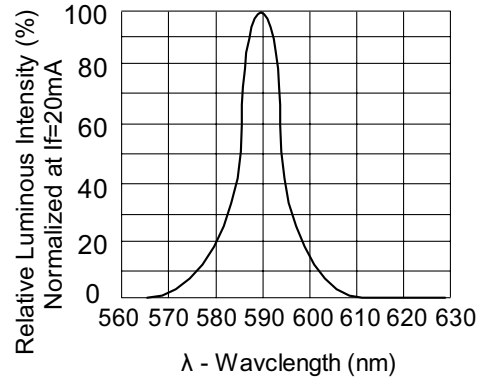
PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Luminous Intensity	I _V	I _F = 20mA	3900	6500		mcd
Forward Voltage	V _F	I _F = 20mA		2.0	2.4	V
Reverse Current	I _R	V _R = 5V			10	uA
Viewing Angle	2θ _{1/2}	I _F = 20mA		30		deg.
Peak Wavelength	λ _P	I _F = 20mA		587		nm
Dominant Wavelength	λ _D	I _F = 20mA	580	585	591	nm
Spectrum Radiation Bandwidth	Δλ	I _F = 20mA		20		nm

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

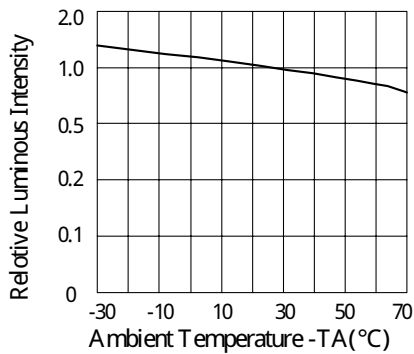
TYPICAL OPTICAL-ELECTRICAL CHARACTERISTIC CURVES



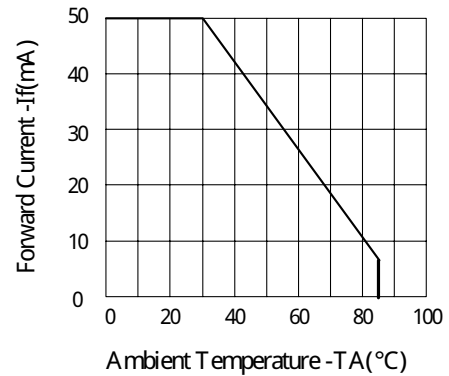
RADIATION DIAGRAM



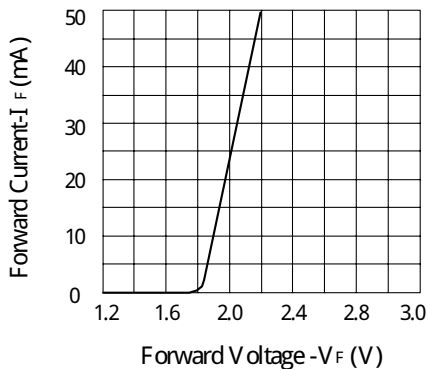
RELATIVE LUMINOUS INTENSITY Vs. WAVELENGTH



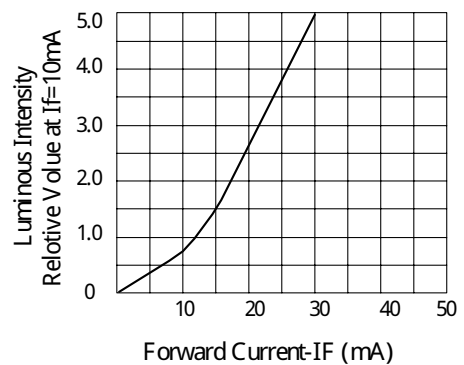
LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



FORWARD CURRENT Vs. AMBIENT TEMPERATURE



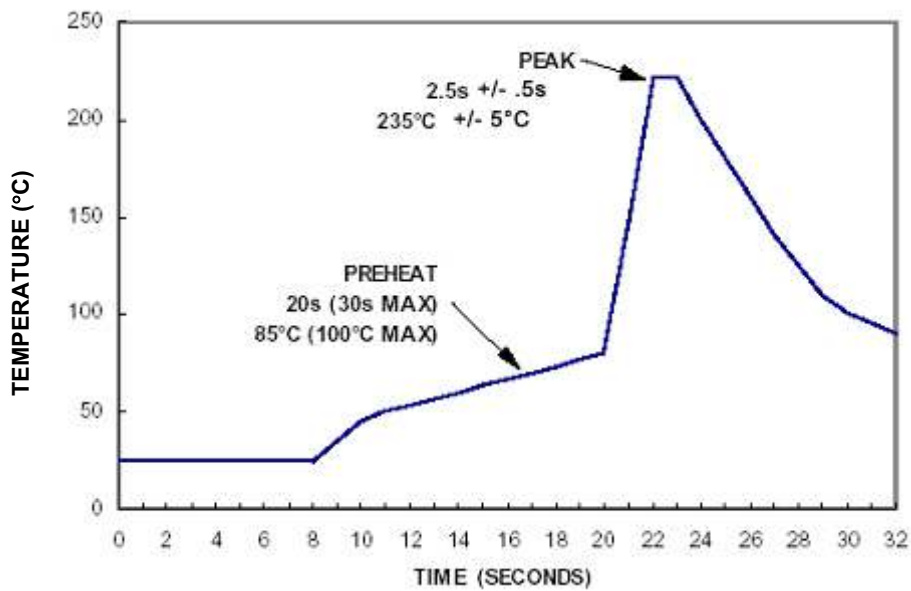
FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT

■ **Recommended Soldering Conditions**

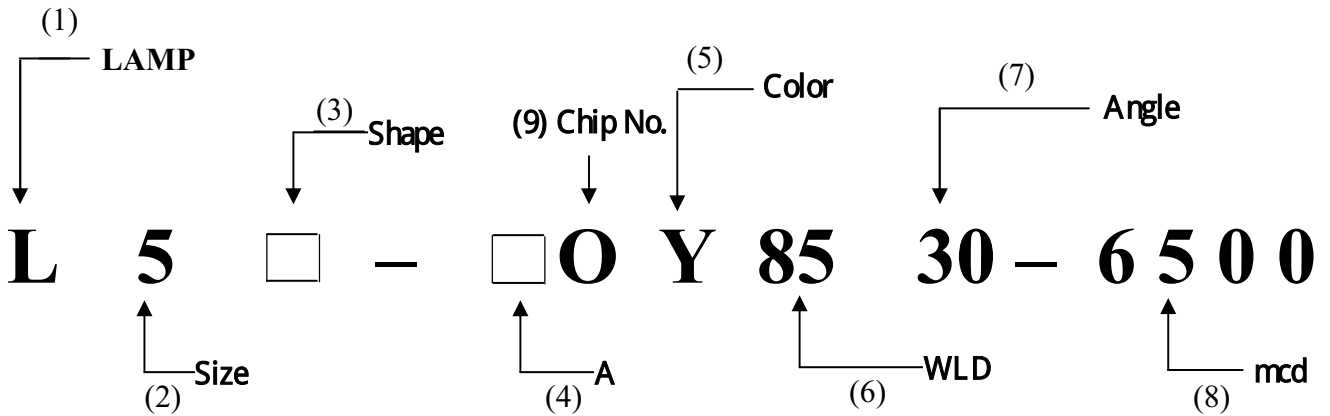
The recommended soldering conditions are listed in Table 1. A sample solder profile taken on the LED lead on the bottom-side of the PCB is shown in Figure 1. Both the recommended and maximum conditions are shown in Figure 1.



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)	λ 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	7600~10500
2.15-2.2		
2.2-2.25		
2.25-2.3		