

## APPROVAL SHEET

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

Full Sun Part Number **L5-G0030-6500** \_\_\_\_\_

Quantity \_\_\_\_\_

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

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

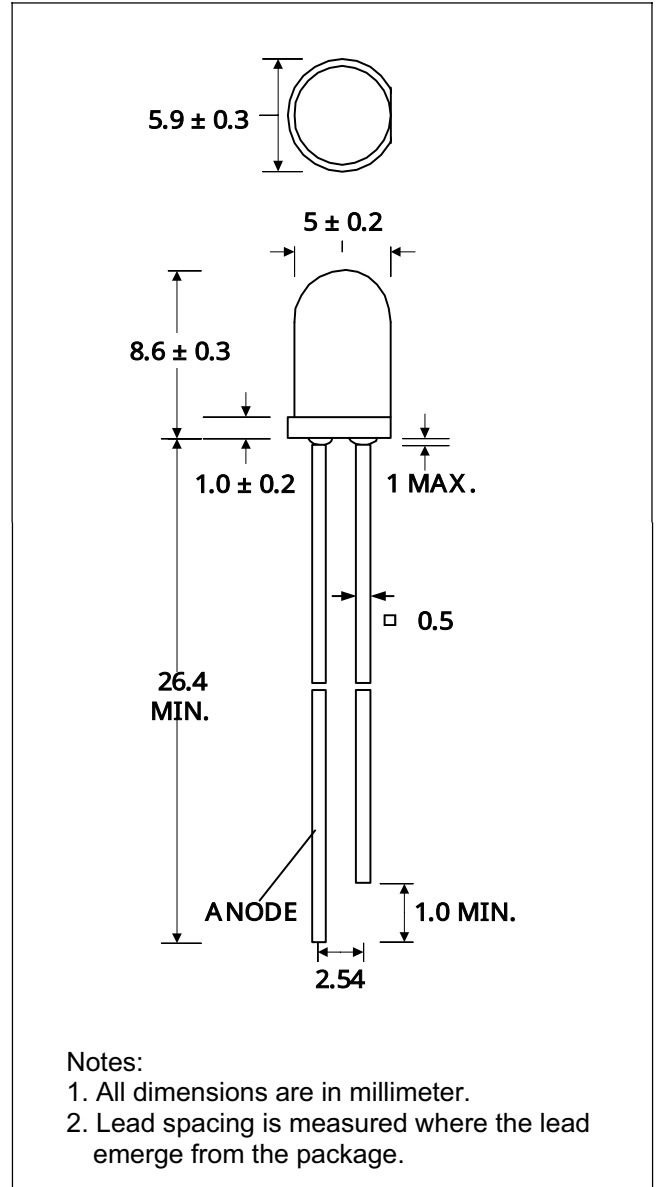
Approved by Customer \_\_\_\_\_

**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 Green
- High Luminous intensity
- Technology: InGaN
- Peak wavelength  $\lambda_p = 502\text{nm}$
- Viewing angle: 30°
- UV resistant epoxy



**SELECTION GUIDE**

Chip Material	Chip Emitted	Lens Color	Viewing Angle
InGaN	Super Green	Water Clear	30°

**ABSOLUTE MAXIMUM RATINGS**

(Ta=25°C)

PARAMETER	SYMBOL	MAX. RATING	Unit
Power Dissipation	$P_D$	120	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

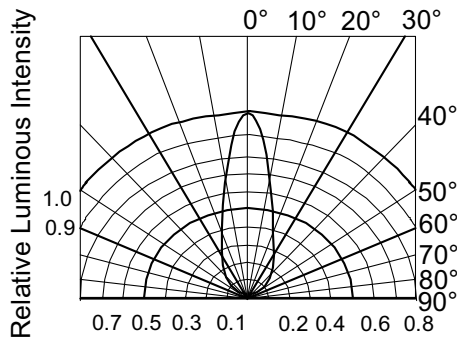
Solder temperature 1.6 mm from body for 3 seconds at 260°C

**OPTICAL-ELECTRICAL CHARACTERISTICS**

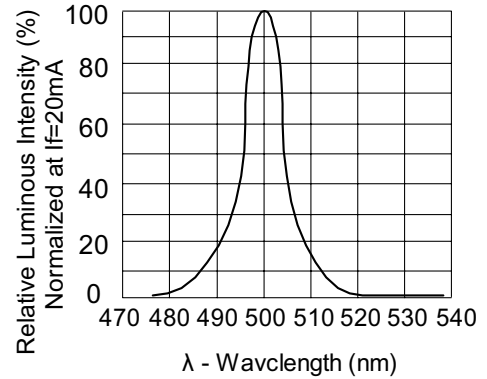
PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Luminous Intensity	$I_V$	$I_F = 20\text{mA}$	3900	6500		mcd
Forward Voltage	$V_F$	$I_F = 20\text{mA}$		3.2	3.6	V
Reverse Current	$I_R$	$V_R = 5\text{V}$			10	uA
Viewing Angle	2θ1/2	$I_F = 20\text{mA}$		30		deg.
Peak Wavelength	$\lambda_P$	$I_F = 20\text{mA}$		502		nm
Dominant Wavelength	$\lambda_D$	$I_F = 20\text{mA}$	495	500	505	nm
Spectrum Radiation Bandwidth	$\Delta \lambda$	$I_F = 20\text{mA}$		30		nm

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

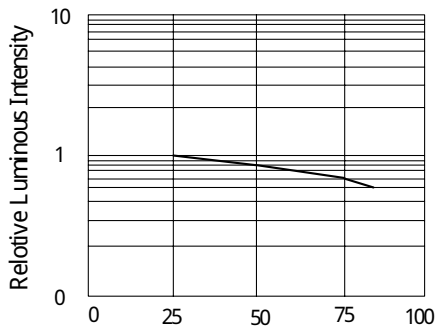
**TYPICAL OPTICAL-ELECTRICAL CHARACTERISTIC CURVES**



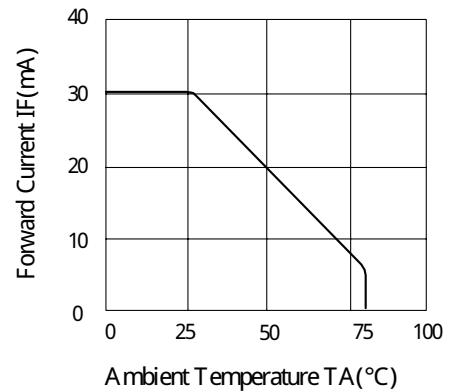
**RADIATION DIAGRAM**



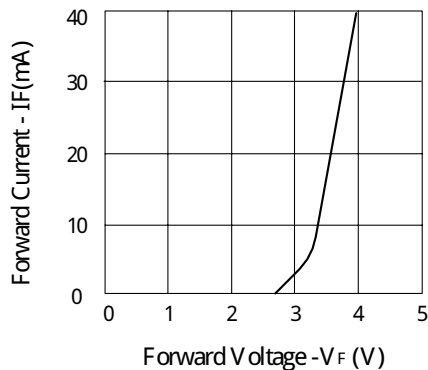
**RELATIVE LUMINOUS INTENSITY  
Vs. WAVELENGTH**



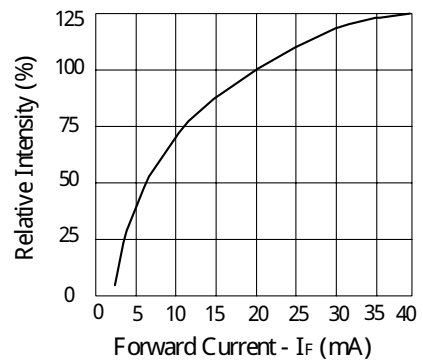
**LUMINOUS INTENSITY  
Vs. AMBIENT TEMPERATURE**



**FORWARD CURRENT  
Vs. AMBIENT TEMPERATURE**



**FORWARD CURRENT  
Vs. FORWARD VOLTAGE**

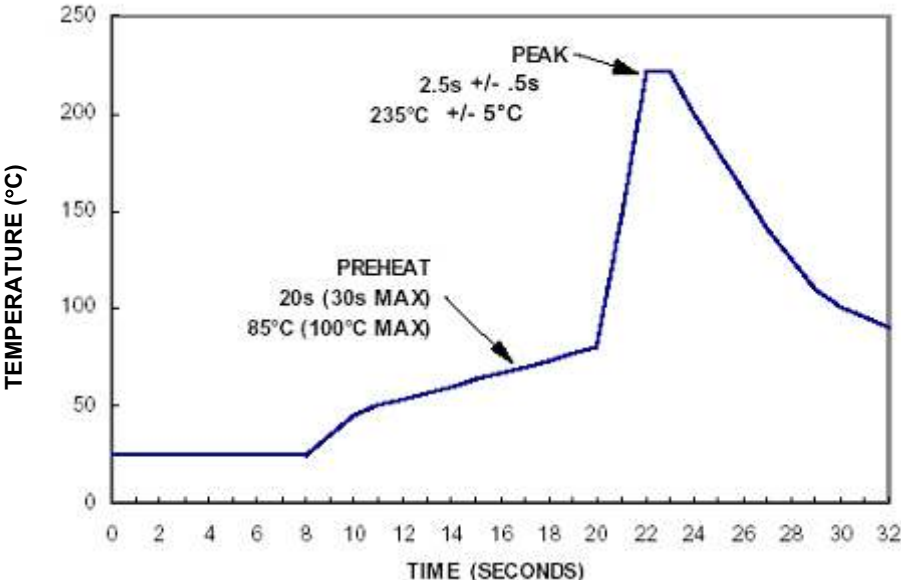


**LUMINOUS INTENSITY  
Vs. FORWARD CURRENT**

■ 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

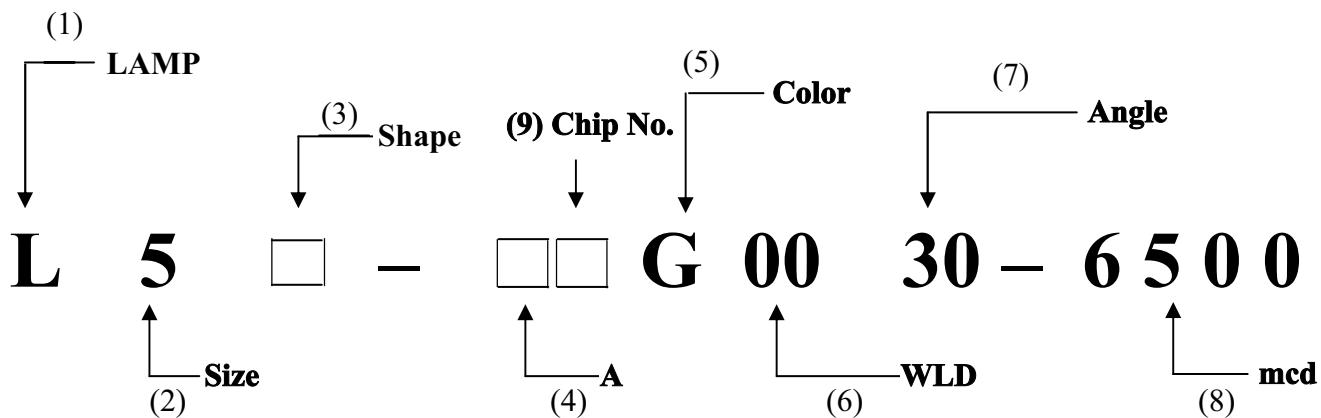
and maximum conditions are shown in Figure 1.



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)
2.9-3.0	496-499 499-502 502-505	3900~5500
3.0-3.1		5500~7600
3.1-3.2		7600~10500
3.2-3.3		10500~15000
3.3-3.4		