

APPROVAL SHEET

Company Name _____

Full Sun Part Number **L3-G0030-4500** _____

Quantity _____

Shipment Date _____

Approved by Supplier _____

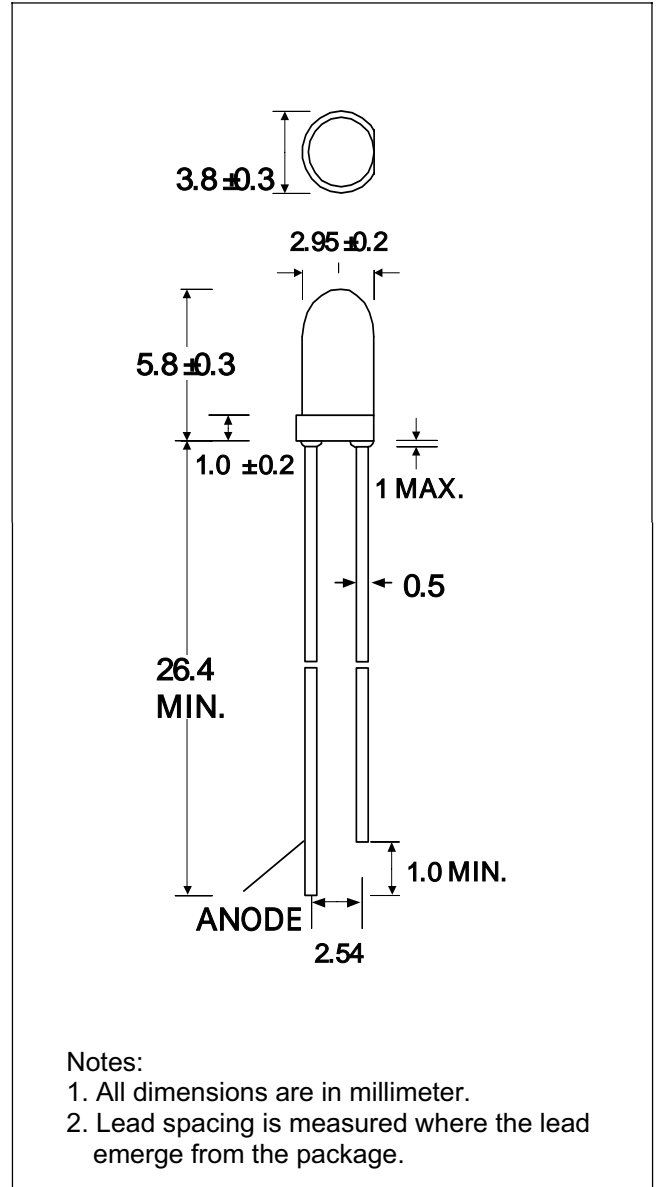
Approved by Customer _____

DISCRIPTION

- Super bright LED Lamp
- Round type
- 3mm 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)

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	
Storage Temperature Range	T _{STG}	-40~+85	

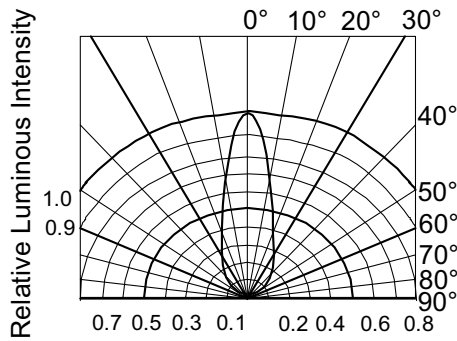
Solder temperature 1.6 mm from body for 3 seconds at 260

OPTICAL-ELECTRICAL CHARACTERISTICS

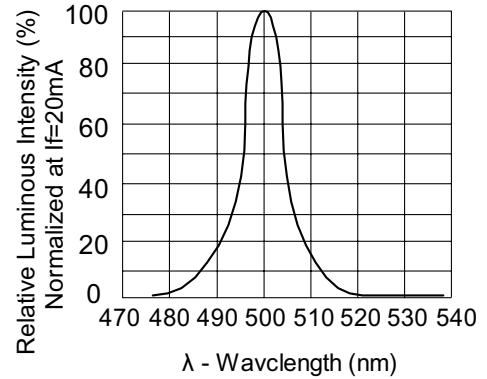
PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Luminous Intensity	I _V	I _F = 20mA	2800	4500		mcd
Forward Voltage	V _F	I _F = 20mA		3.2	3.6	V
Reverse Current	I _R	V _R = 5V			10	uA
Viewing Angle	2θ _{1/2}	I _F = 20mA		30		deg.
Peak Wavelength	P	I _F = 20mA		502		nm
Dominant Wavelength	D	I _F = 20mA	495	500	505	nm
Spectrum Radiation Bandwidth		I _F = 20mA		30		nm

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

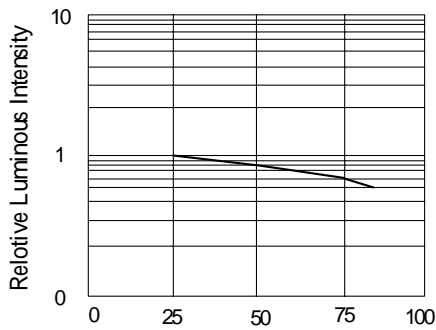
TYPICAL OPTICAL-ELECTRICAL CHARACTERISTIC CURVES



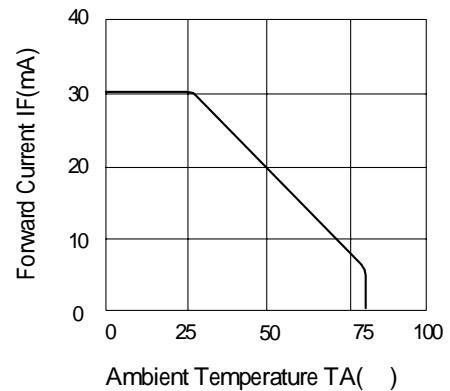
RADIATION DIAGRAM



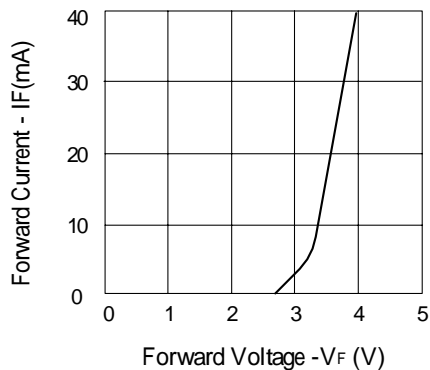
**RELATIVE LUMINOUS INTENSITY
Vs. WAVELENGTH**



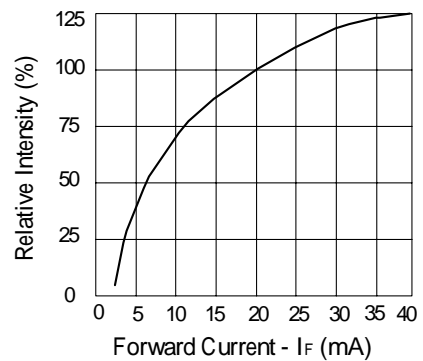
**LUMINOUS INTENSITY
Vs. AMBIENT TEMPERATURE**



**FORWARD CURRENT
Vs. AMBIENT TEMPERATURE**



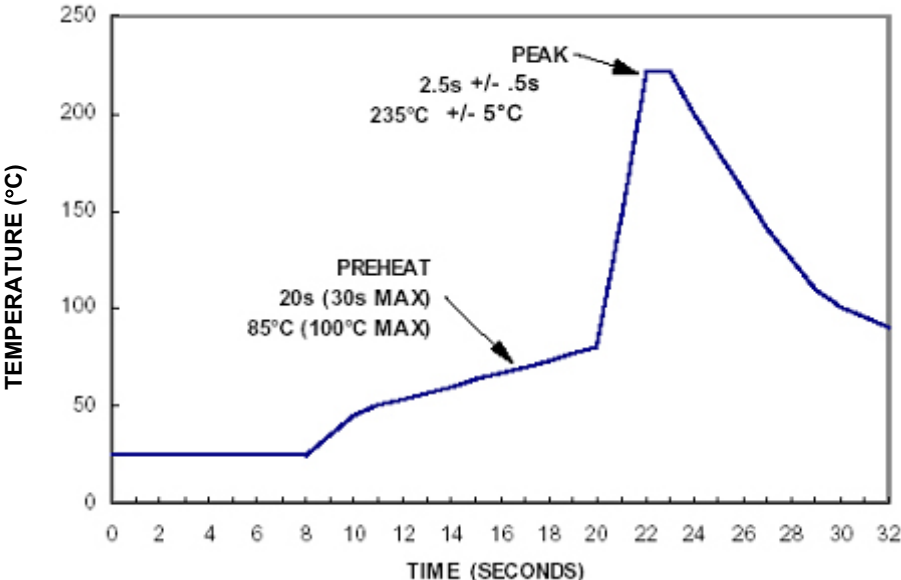
**FORWARD CURRENT
Vs. FORWARD VOLTAGE**



**LUMINOUS INTENSITY
Vs. FORWARD CURRENT**

Recommended Soldering Conditions

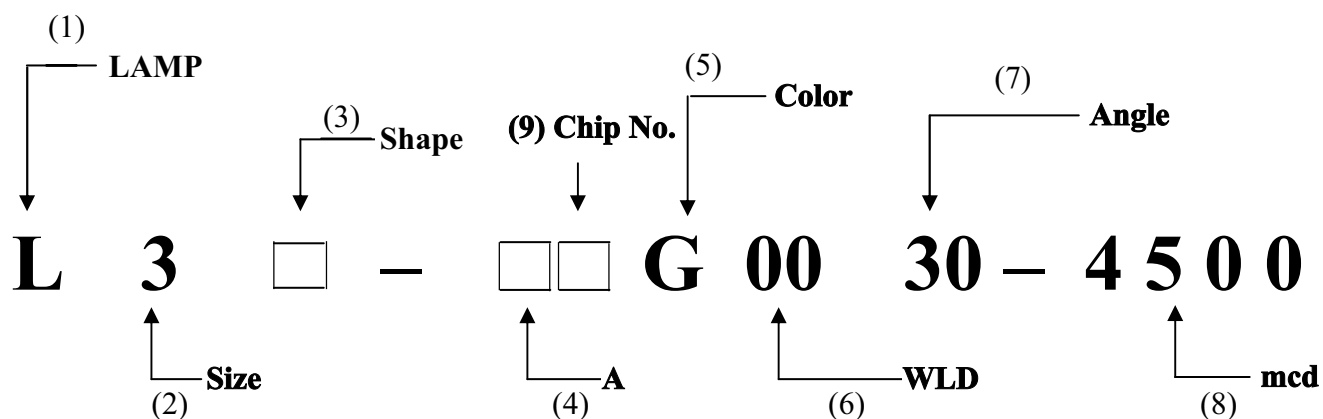
The recommended soldering conditions are listed in Table 1. A sample solder profile taken on the LED lead on the bottom-side of the PCB is shown in Figure 1. Both the recommended and maximum conditions are shown in Figure 1.



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)	λ D(nm)	IV(mcd)
2.9-3.0	496-499 499-502 502-505	2800~3900
3.0-3.1		3900~5500
3.1-3.2		5500~7600
3.2-3.3		7600~10500
3.3-3.4		