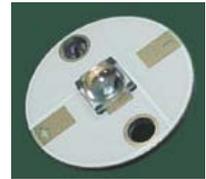




RLT-WNP1000-02



TECHNICAL DATA

High Power LED

InGaN

FEATURES:

Growth Technique: MOCVD
Substrate: Sapphire(0001)
Structure: InGaN MQW
Chip size: 1000um×1000um

ABSOLUTE MAXIMUM RATINGS (at T_A=25°C) :

Parameter	Symbol	Min.	Max.	Unit
Forward Current	I _F		500	mA
Pulse Forward Current	IFP*		1500	mA
Reverse Voltage	V _R		5	V
Operating Temperature	T _{opr.}	-30	+85	°C
Storage Temperature	T _{stg.}	-40	+85	°C
Power Dissipation	PD		1200	mW

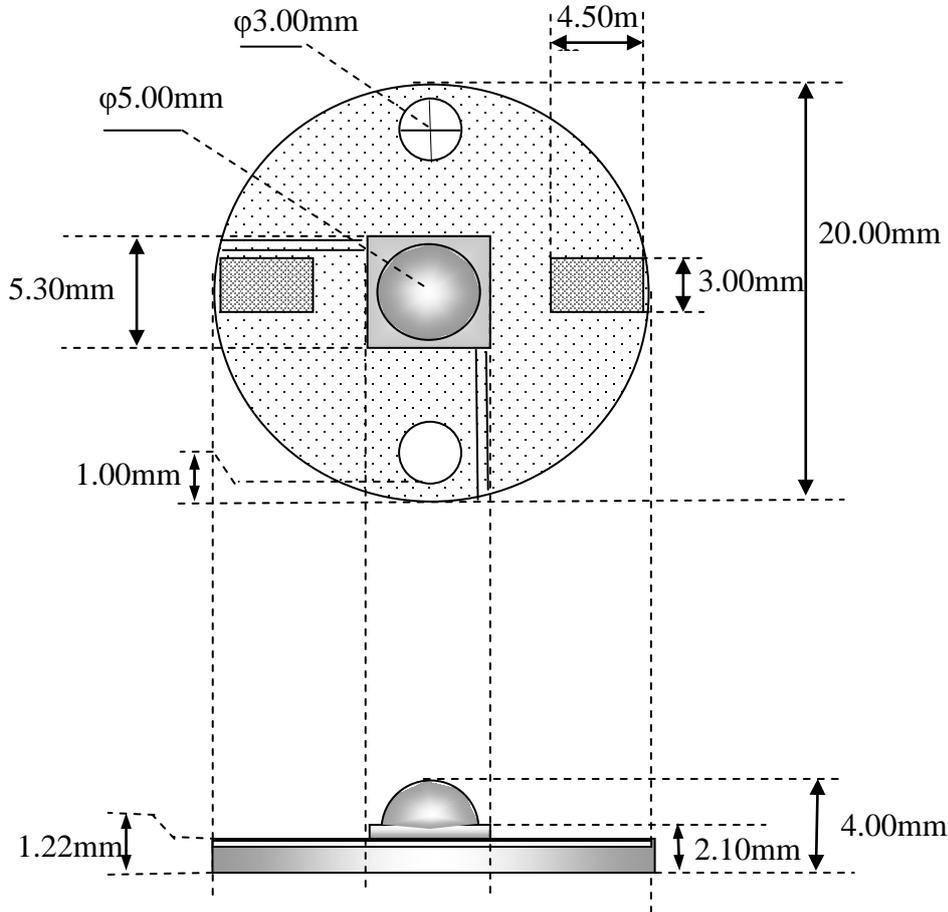
*Pulse width:Max.10ms, Duty ratio: Max 1/10

Electrical/Optical Characteristics (at T_A=25°C) :

Parameter	Condition	Min.	Typ.	Max.	Unit
Forward Voltage V _F	I _F =350mA	3.2	3.5	3.8	V
Reverse Current I _R	V _R =5V			10	μA
Wavelength	I _F =350mA		X=0.28, Y=0.28		nm
Luminous Flux	I _F =350mA	12	16	20	lm

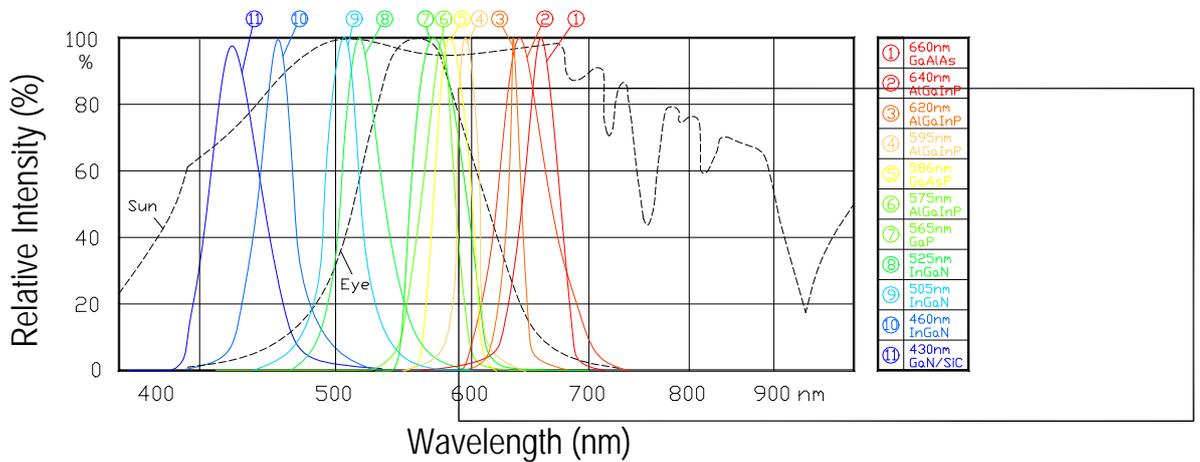


Package Dimensions :



Optical Characteristic Curves Of this Series:

Relative Intensity vs. Wavelength





*1 Criteria For Judging the Damage

Measuring items	Symbol	Measuring conditions	Judgement criteria for failure
Forward Voltage	V_F	$I_F=350mA$	Over $U \times 1.1$
Reverse current	I_R	$V_R=5V$	Over $U \times 2$
Luminous intensity	I_V	$I_F=350mA$	Below $S \times 0.7$

U means the upper limit of specified characteristics. S means initial value.

APPLICATION NOTES :

1. Static Electricity :

Products are sensitive to static electricity and a high standard of care must be taken when handling products. Particularly if an over-voltage which exceeds the Absolute Maximum Rating of Products is applied, the overflow in energy may cause damage to, or possibly result in destruction of the products. To touch the lead directly must be avoided. Customer shall take absolutely secure countermeasures against static electricity and surge when handling products.

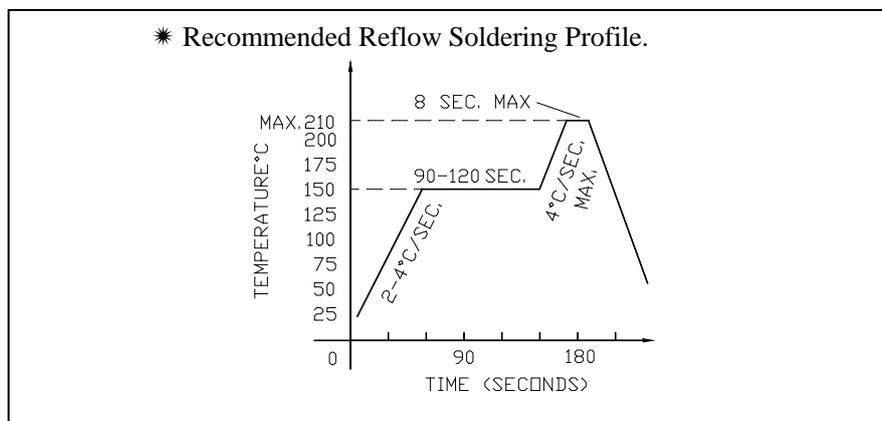
2. Soldering :

- Manual soldering by soldering iron :

The use of a soldering iron of less than 25W is recommended and the temperature of the iron must be kept at no higher than 260°C.

- Reflow soldering :

- The temperature profile as shown in Fig.3 is recommended for soldering SMD LED by the reflow furnace.
- Care must be taken that the products be handled after their temperature has dropped down to the normal room temperature after soldering.





- Post solder cleaning :
When cleaning after soldering is needed, the following conditions must be adhered to.
 - a. Cleaning solvents : Freon TF or equivalent or alcohol.
 - b. Temperature : 50°C Max.for 30 seconds or
30°CMax.for 3 minutes
 - c. Ultrasonic : 300W Max.

- OTHERS :
 - a. Care must be taken not to cause stress to the epoxy resin portion of POWER LEDs while it is exposed to the high temperature.
 - b. Care must be taken not to the rub the epoxy resin portion of POWER LEDs with a hard or sharp edged article such as the sand blast and the metal hook as the epoxy resin is rather soft and liable to be damaged.