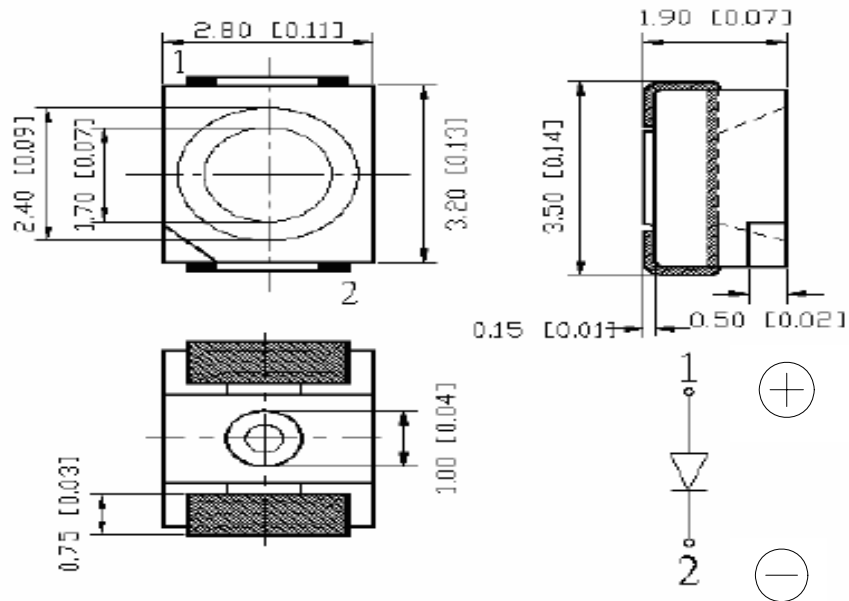


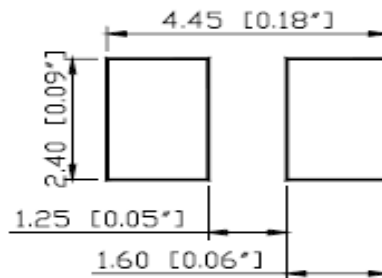
## SPECIFICATION FOR APPROVAL

Part No. : YLM-1411NB40-E01-EC

### Package Dimensions



### RECOMMEND PADLAYOUT



Part NO.	Chip Material	Lens Color	Emission Color
YLM-1411NB40-E01-EC	InGaN	Water Clear	Blue

### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}(.010\text{'})$  unless otherwise noted.
3. Protruded resin under flange is  $1.0\text{mm}(.04\text{'})$  max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.
6. HBM, Human Body Model; Seller gives no other assurances regarding the ability of products to withstand ESD.

### Caution in ESD:

Static Electricity and surge damages the LED. It is recommend to us a wrist band or anti-electrostatic glove when handing the LED. All devices, equipment and machinery must be properly grounded.

## SPECIFICATION FOR APPROVAL

Part No. : YLM-1411NB40-E01-EC

### Absolute Maximum Ratings at TA=25°C

Parameter	Maximum Rating	Unit
Power Dissipation	120	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	30	mA
Reverse Voltage	5	V
Electrostatic Discharge(ESD)	2000	V
Operating Temperature Range	-30°C to +80°C	
Storage Temperature Range	-40°C to +100°C	
Soldering Temperature	260°C for 5 Seconds	

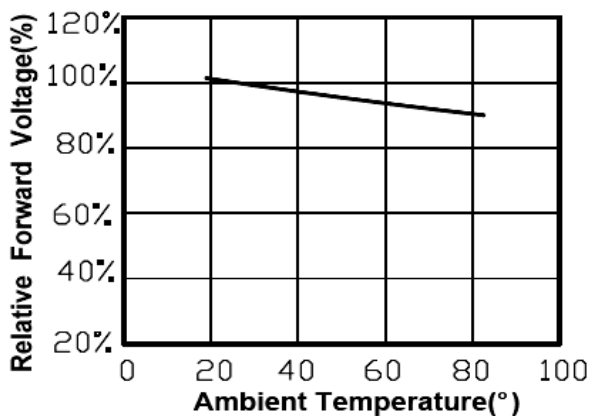
### Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	IV	210	270		mcd	IF = 20mA
Viewing Angle	2θ 1/2		120		deg	IF = 20mA
Dominant Wavelength	λ d	462.5		472.5	nm	IF = 20mA
Forward Voltage	VF	2.8	3.2	3.8	V	IF = 20mA
Reverse Current	IR			10	μA	VR = 5V

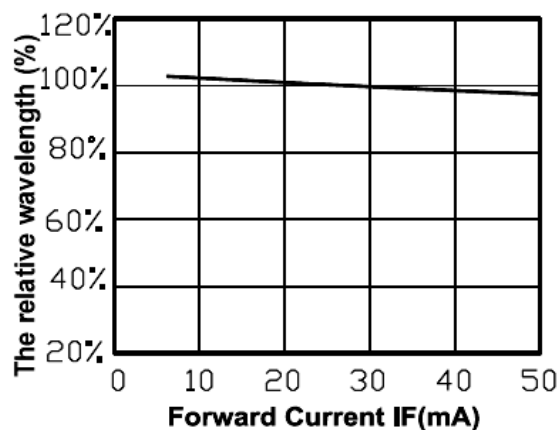
Bin	BinB	BinC	BinD	BinE	BinF	BinG	BinH
VF(v)	2.8-2.9	2.9-3.0	3.0-3.1	3.1-3.2	3.2-3.3	3.3-3.4	3.4-3.5
Bin	Bin9	Bin10	Bin11				
Iv(mcd)	210-270	270-350	350-460				
Bin	D	E					
WL(nm)	462.5-467.5	467.5-472.5					

### Optical Characteristics-1

Forward Voltage Temperature



Wavelength and current

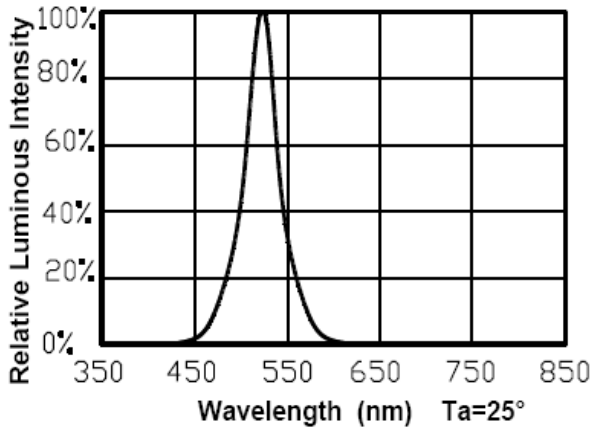


## SPECIFICATION FOR APPROVAL

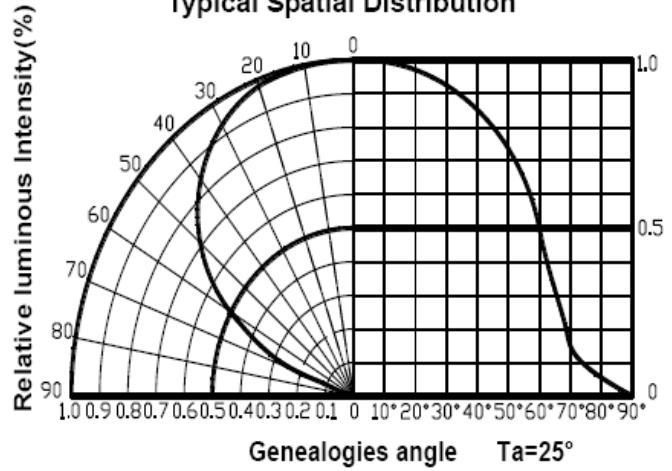
Part No. : YLM-1411NB40-E01-EC

### Optical Characteristics-2

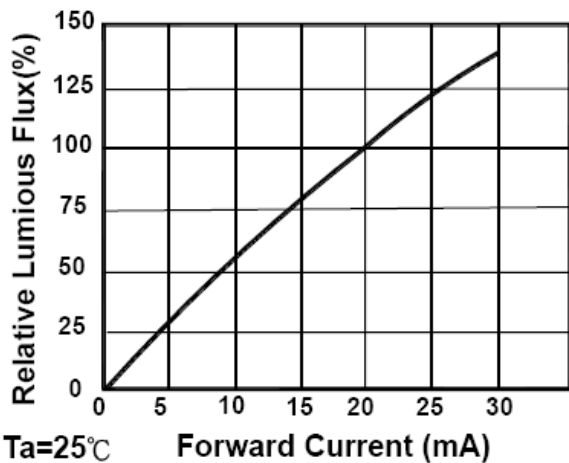
**Relative Spectral Distribution**



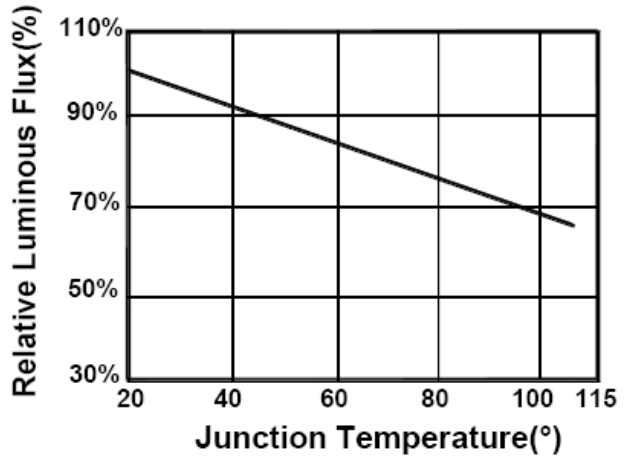
**Typical Spatial Distribution**



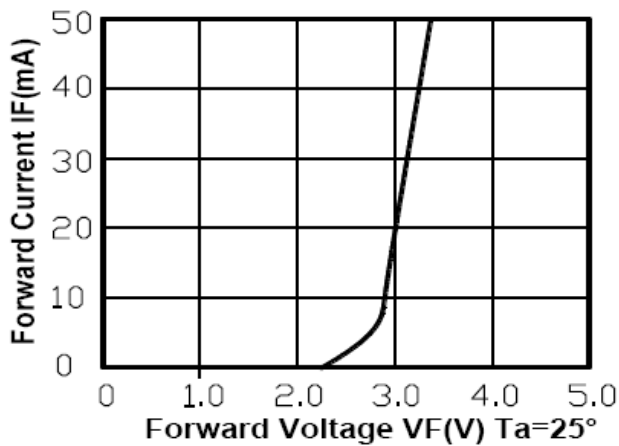
**Relative Luminous Flux .Current Ta=25**



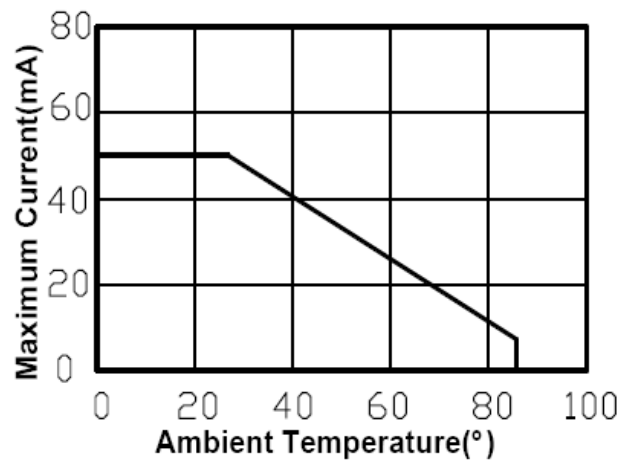
**Relative Luminous Flux .Ambient Temperature**



**Electrical Characteristics**



**Thermal Design**

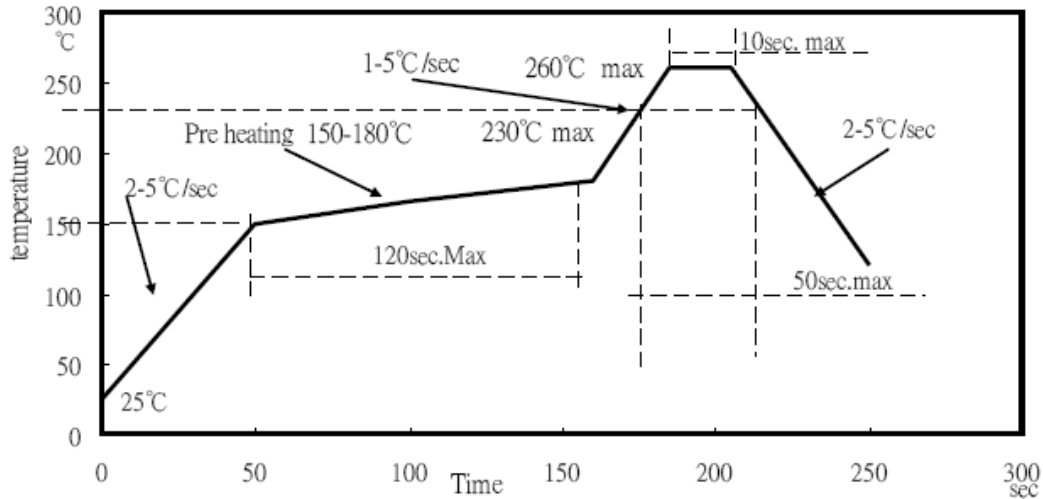


## SPECIFICATION FOR APPROVAL

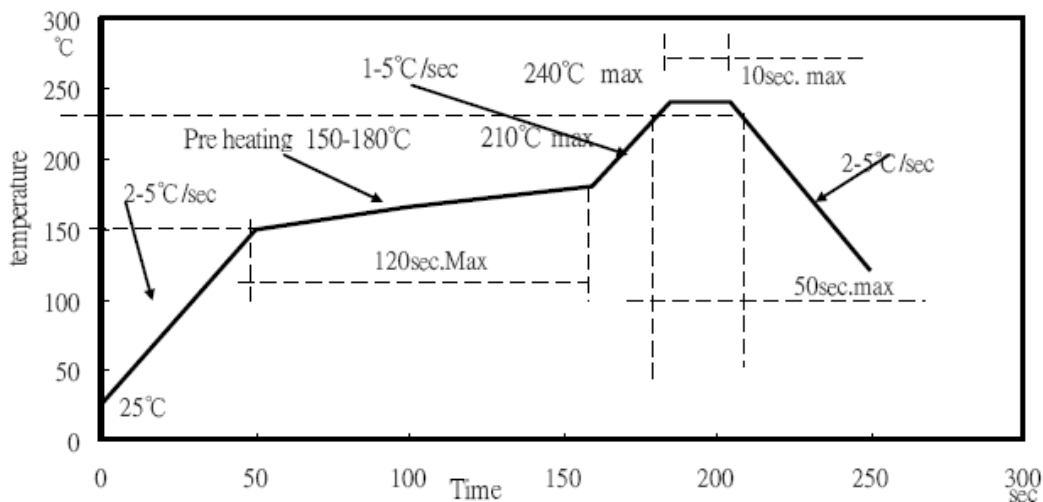
Part No. : YLM-1411NB40-E01-EC

### Reflow Profile

#### 1. IR reflow soldering Profile Lead Free solder



#### 2. IR reflow soldering Profile Lead solder



#### NOTES:

1. We recommend the reflow temperature 240°C (±5°C). the maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the silicone resin while it is exposed to high temperature.
3. Number of reflow process shall be 1 time.

## SPECIFICATION FOR APPROVAL

Part No. : YLM-1411NB40-E01-EC

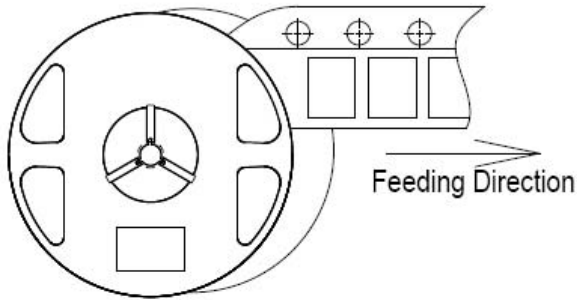
### Test items and results of reliability

Type	Test Item	Test Standard	Test Conditions	Note	Number of Damaged
Environmental Sequence	Temperature Cycle	JEITA ED-4701 300 303	-40°C 30min ↑↓5 min 100°C 30min	100 cycle	0/50
	Thermal Shock	JEITA ED-4701 200 303	-10°C 15min ↑↓5sec 100°C 15min	20 cycle	0/22
	High Temperature Storage	JEITA ED-4701 200 201	T <sub>a</sub> =100°C	1000 hrs	0/22
	Humidity Heat Storage	JEITA ED-4701 100 103	T <sub>a</sub> =60°C RH=90%	1000 hrs	0/22
	Low Temperature Storage	JEITA ED-4701 200 202	T <sub>a</sub> =-40°C	1000 hrs	0/22
Operation Sequence	Life Test	Tested with Brightek standard	T <sub>a</sub> =25°C I <sub>F</sub> =20mA	1000 hrs	0/22
	High Humidity Heat Life Test	Tested with Brightek standard	60°C RH=90% I <sub>F</sub> =15mA	500 hrs	0/22
	Low Temperature Life Test	Tested with Brightek standard	T <sub>a</sub> =-20°C I <sub>F</sub> =20mA	1000 hrs	0/22

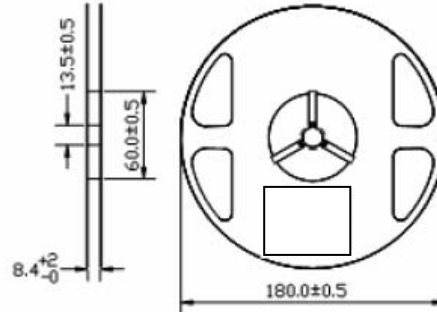
## SPECIFICATION FOR APPROVAL

Part No. : YLM-1411NB40-E01-EC

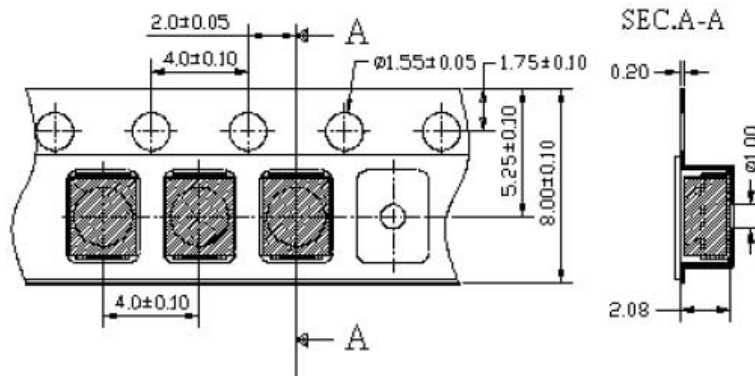
### Packaging Specifications



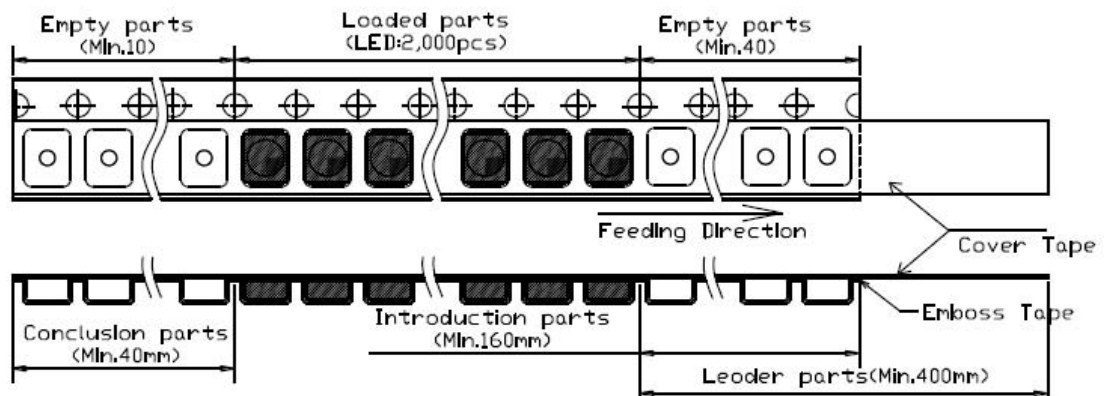
#### ● Dimensions of Reel (Unit: mm)



#### ● Dimensions of Tape (Unit: mm)



#### ● Arrangement of Tape



#### NOTES

1. Empty component pockets are sealed with top cover tape;
2. The maximum number of missing lamps is two;
3. The cathode is oriented towards the tape sprocket hole in accordance with ANSI/EIA RS-481 specifications;
4. 2,000pcs/Reel

Part No. : YLM-1411NB40-E01-EC

※**Note** :

**Recommended storage conditions :**

1. Storage Condition:

- a. don't open the sealed bag until the Reflow Soldering ◦
- b. before open the sealed bag, please keep bag at Ambient Temperature from 5 to 25°C and Relative Humidity < 60% ◦
- c. storage life: within 6 months ◦

2. Once overdue the storage life or after open the sealed bag for 12 hours , the LED has to be oven at 70°C for 24 hours before the Reflow Soldering ◦

3. After oven the LED, the Reflow Soldering has to be completed within 12 hours. ◦

Otherwise, the oven LED has to be sealed in bag again and storage at Ambient Temperature of 23 +/- 5°C & RH 5~30% ◦