

PRODUCT SPECIFICATION

Model No.: FYLS-0402UBC

Features:	
<ul style="list-style-type: none"> ■ SMD Type ■ Size (mm):1.0*0.5*0.35 ■ Emitting Color:Blue ■ SMT package ■ Suitable for all SMT assembly and soldering method ■ Pb-free Reflow soldering application ■ RoHS Compliant 	 

Applications:
<ul style="list-style-type: none"> ■ Light Strips ■ LCD Backlight ■ Decorative lighting ■ Indicators ■ Interior automotive ■ Illuminations ■ Mobile Phones



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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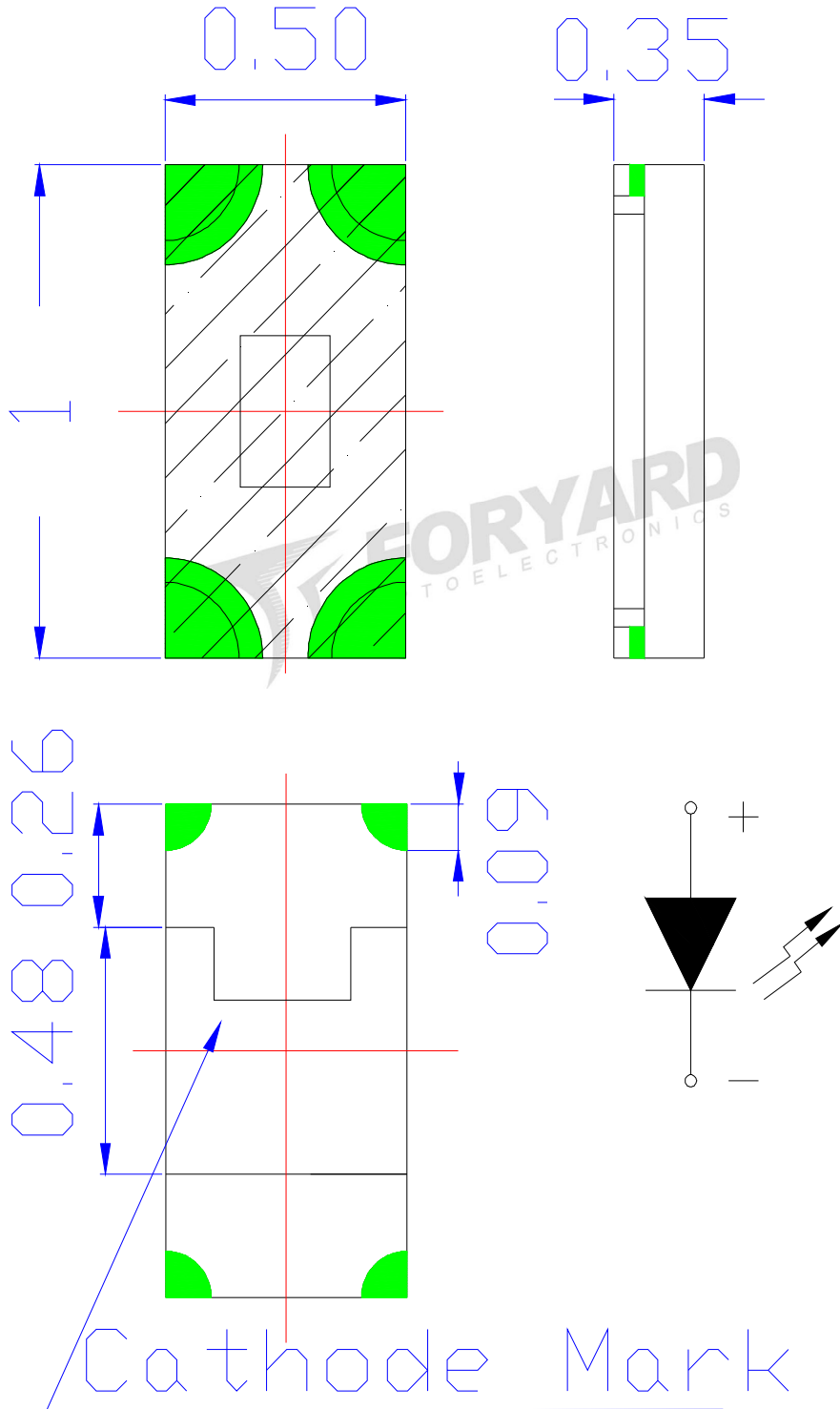
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■ Mechanical Dimensions



Notes:

1. Dimension in millimeter [inch], tolerance is ± 0.25 [.010].
2. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

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■ Absolute Maximun Ratings(Ta=25° C)

Items	Symbol	Absolute maximum Rating	Unit
Forward Current(DC)	IF	30	mA
Peak Forward Current*	IFP	100	mA
Power Dissipation	PD	100	Mw
Operation Temperature	Topr	-30° C~+80° C	°C
Storage Temperature	Tstg	-40°C~+100°C	°C
Reverse Voltage	VR	5	V
Soldering Temperature	Tsol	Reflow Soldering:250°C/5sec	

*Pulse width \leq 1msec duty \leq 1/10

■ Typical Electrical &Optical Charcteristics(Ta=25°C)

Items	Symbol	Condition	Min.	Typ.	Max	Unit
Forward Voltage	VF	IF = 20mA	2.80	---	3.60	V
Reverse Current	IR	VR = 5V			10	uA
Peak Emission Waveleng	λ_p	IF = 20mA		470		nm
Dominant Wavelength	λ_D	IF = 20mA		468		nm
Luminous Intensity	IV	IF = 20mA		120		mcd
50% Power Angle	2 $\theta_{1/2}$	IF = 20mA	---	130	---	Deg

■ Material

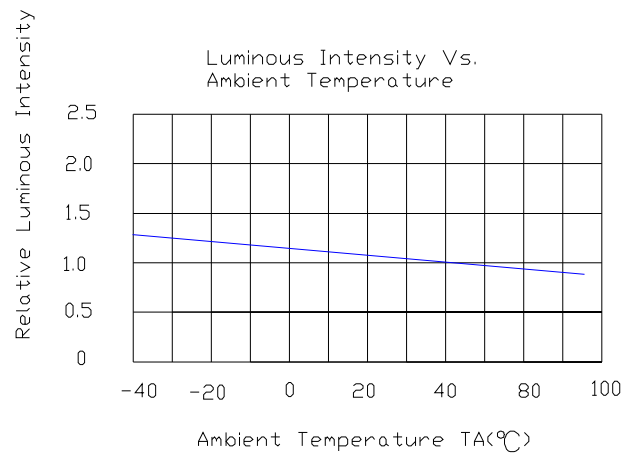
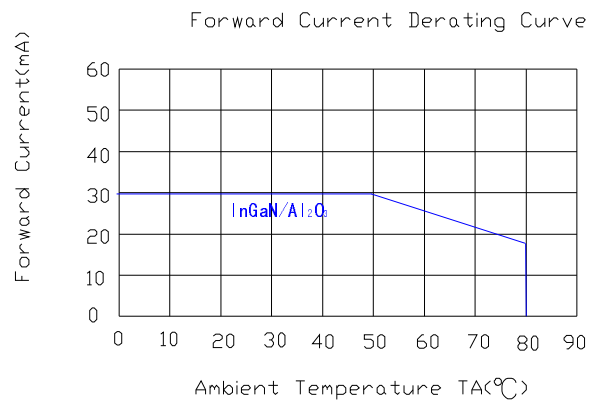
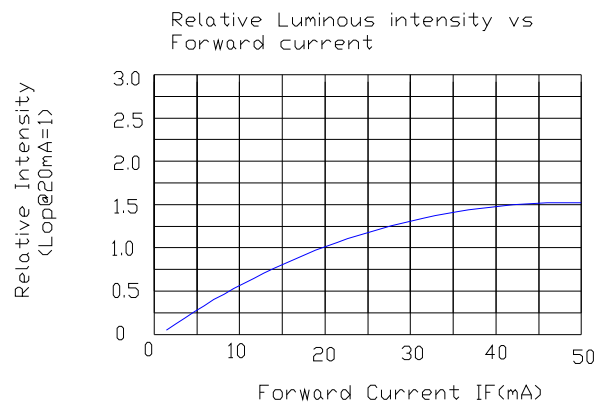
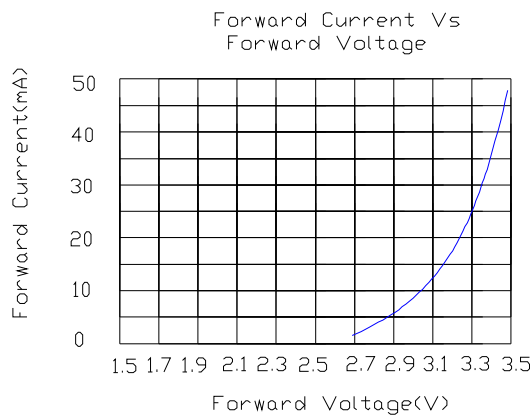
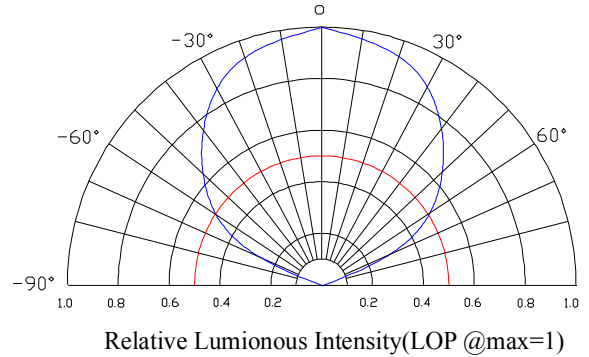
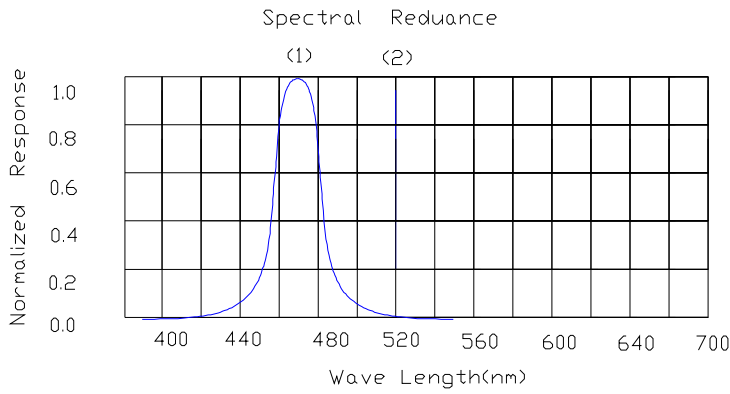
Item	Reflector	Wire	Encapsulate	Chip
Material	/	Gold	Silicone	InGaN

Note:

- 1.Luminous Intensity is based on the Foryard standards.
- 2.Pay attention about static for InGaN

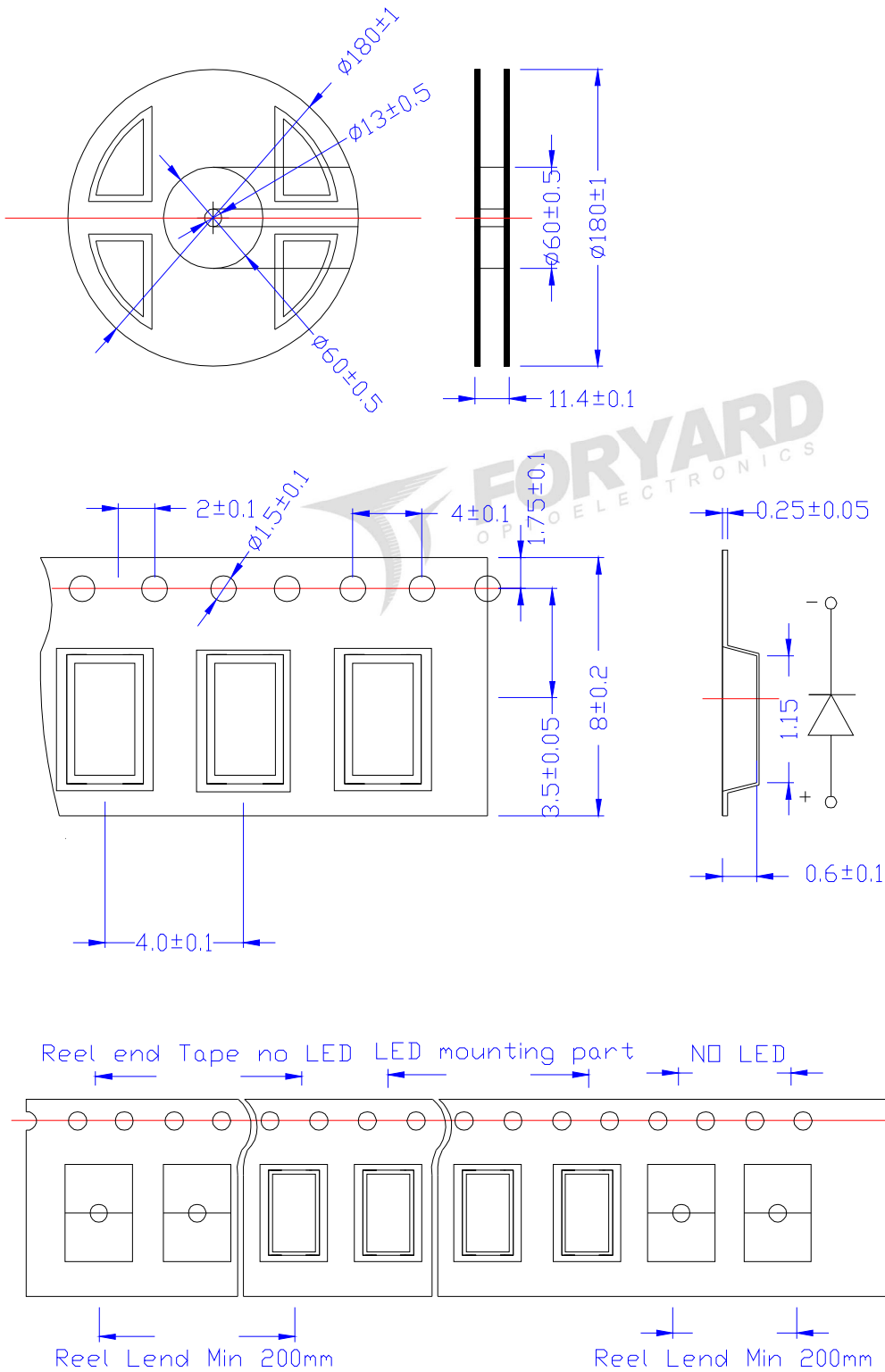
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Typical Electrical/Optical Characteristics Curves(Ta=25° C Unless Otherwise Noted)



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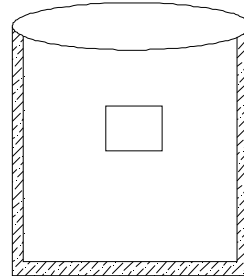
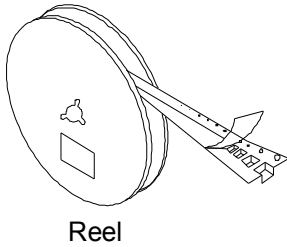
■ Packing Diagram



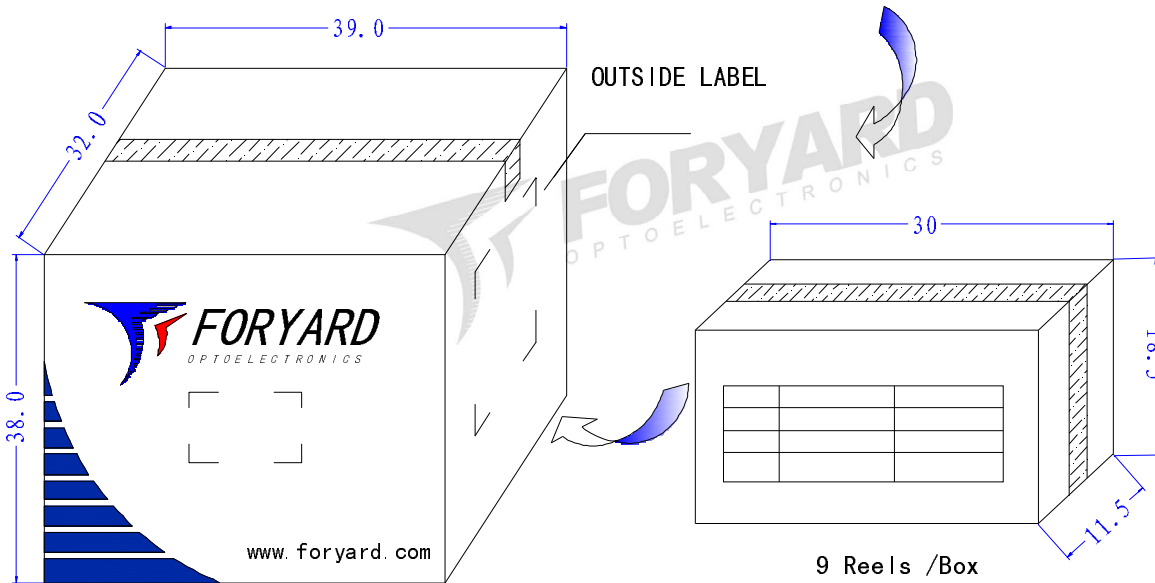
Note: The specifications are subject to change without notice. Please contact us for updated information.

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■ Packing Diagram



0402 4000/Reel



6 Boxes/Carton



OUTSIDE LABEL

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■ Precautions for use:

1. Storage

To prevent moisture absorption into SMD LEDs during the transportation and storage , the LEDs are packed in a moisture-barrier bag. Desiccants and a humidity indicator are packed together with the LEDs as secondary protection

The shelf life of LEDs stored in the original sealed bag at <math> < 40^{\circ}\text{C}</math> and <math> < 90\% \text{ RH}</math> is 12 months. Baking is required if the shelf life has expired

Before opening the packaging , check for air leaks in the bag.

After the bag is opened, the SMD LEDs must be stored at <math> < 30^{\circ}\text{C}</math> and <math> < 60\% \text{ RH}</math>. Under these conditions, SMD LEDs must be used within 24 hours. If the LEDs are not within 24 hours after removal from the bag , baking is required Take the material out of the packaging bag before baking. Do not open the oven door frequently during the baking process.

2. Soldering

(1) Manual soldering with a soldering Iron

Use a soldering iron of less than 25 watts is recommended . The iron temperature must be kept below 315°C And soldering time no more than 2 seconds.

The epoxy resin of an SMD LED should not contact the tip of the soldering iron.

No mechanical stress should be exerted on the resin portion of an SMD LED during soldering.

Handling of an SMD LED should be done only when the package has been cooled down to below 40°C

(2)Reflow soldering

Temperature profile

