PRODUCT SPECIFICATION

Model No.：FYLS-1206EUWC70

Features:

- ■SMD Type
- ■Size (mm):3.2*1.6*0.80
- ■Emitting Color:White
- ■SMT package
- ■Suitable for all SMT assembly and soldering method
- ■Pb-free Reflow soldering application
- ■RoHS Compliant

Applications:

- ■Light Strips
- ■LCD Backlight
- ■Decorative lighting
- ■Indicators
- ■Interior automotive
- ■Illuminations
- ■Mobile Phones

CUSTOMER APPROVED SIGNATURES	APPROVED BY	SALES BY	PREPARED BY
		Foryard S011 2019. 12. 04	Foryard E001 2019. 12. 04

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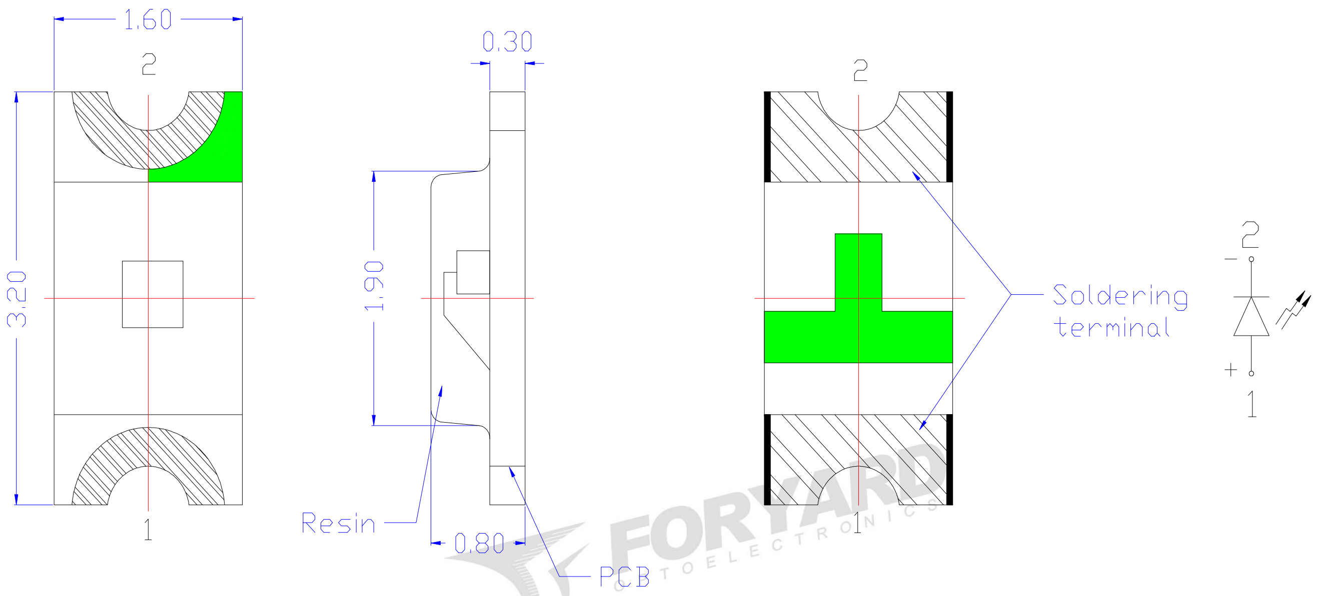
■ Mechanical Dimensions



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	90	mW
Operation Temperature	Topr	-30° C～+90° C	℃
Storage Temperature	Tstg	-40°C～+100°C	℃
Reverse Voltage	VR	8	V
Soldering Temperature	Tsol	Reflow Soldering:250℃/5sec	

***Pulse width≦1msec duty≦1/10**

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

Items	Symbol	Condition	Min.	Typ.	Max	Unit
Forward Voltage	VF	IF = 20mA	2.8	3.1	3.60	V
Reverse Current	IR	VR = 5V	---	---	10	uA
Chromatic Coordinates	X	IF = 20mA	---	0.3077	---	---
	Y		---	0.3077	---	---
Luminous Intensity	IV	IF = 20mA		1000	---	mcd
50% Power Angle	2θ½	IF = 20mA	---	120	---	Deg

■ Material

Item	Reflector	Wire	Encapsulate	Chip
Material	/	Gold	Silicone	InGaN/A1$_2$O

Note:

1.Luminous Intensity is based on the Foryard standards.

2.Pay attention about static for InGaN

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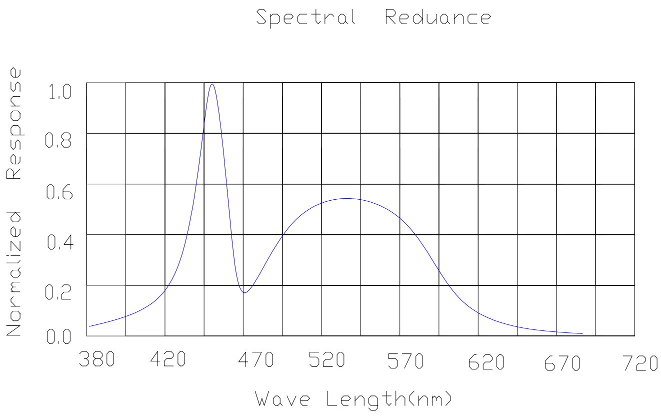
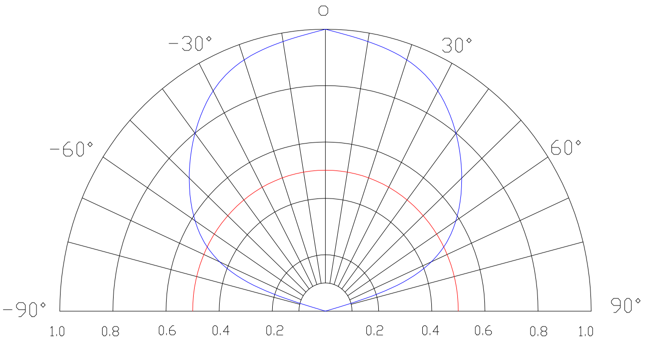
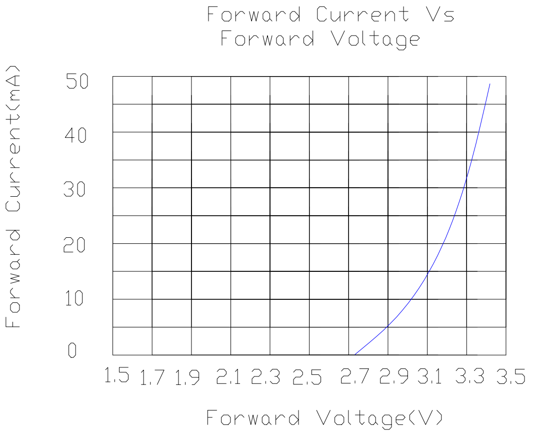
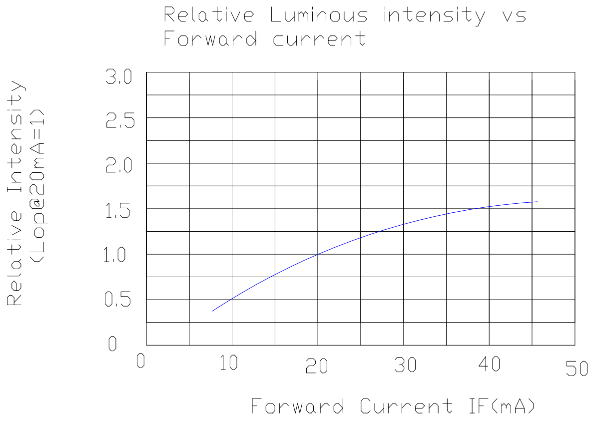
■ Typical Eletrical/Optical Characteristics Curves(Ta=25ºC Unless Otherwise Noted)

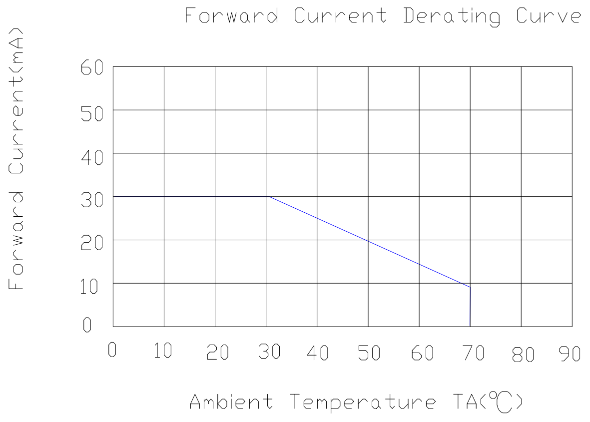


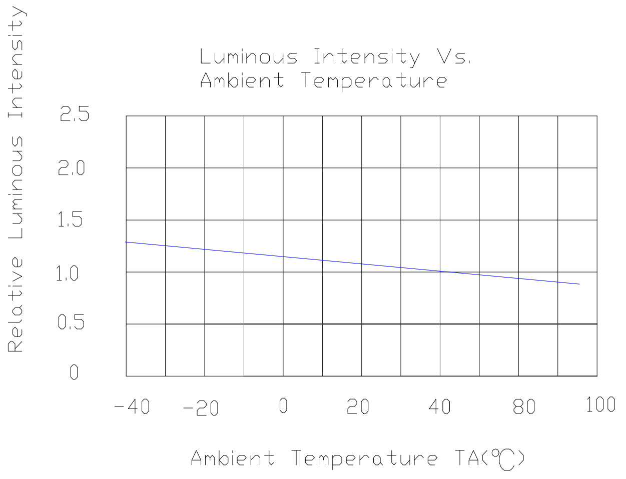


Relative Lumionous Intensity(LOP @max=1)









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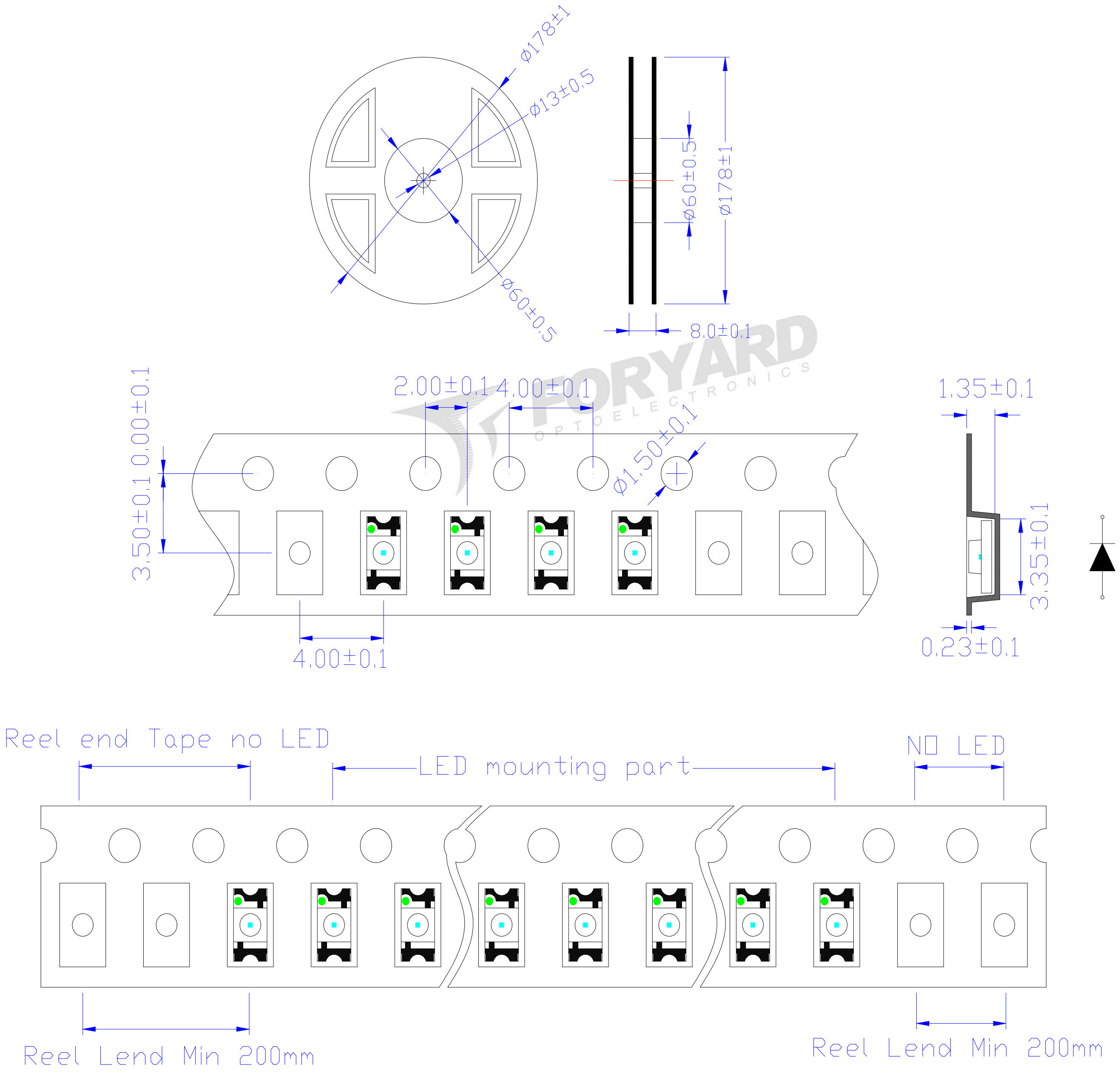
■ Packing Diagram



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

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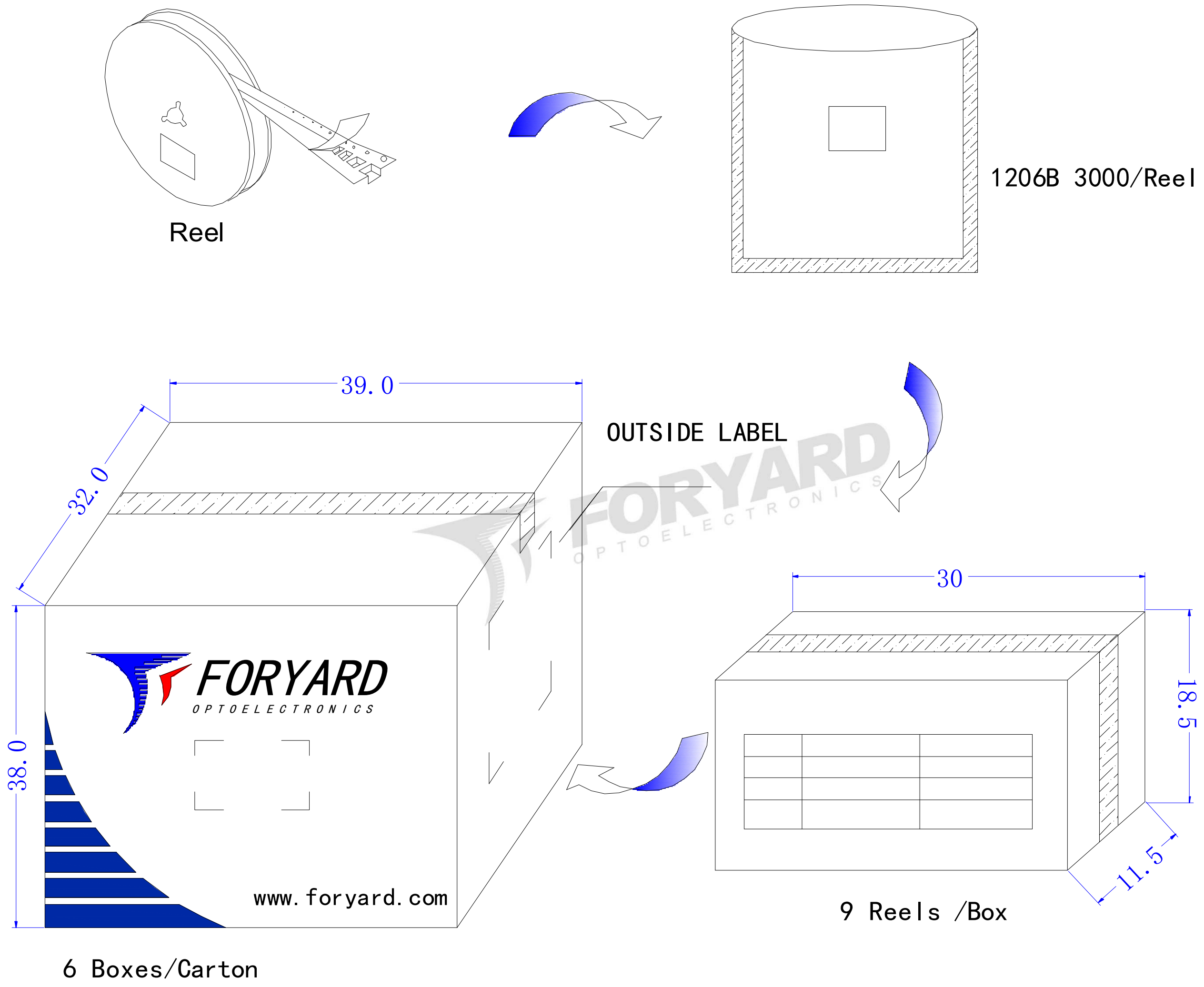
■ Packing Diagram



FORYARD
OPTOELECTRONICS

LED

PN:FYLS-XXXXX-XX

Qty:XXXXX PCS

Date:xxxx/xx/xx

GW: XX KG QC: PASS QC

NW: XX KG

XXXXXXXXXX

RoHS

ATTENTION

OUTSIDE LABEL

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

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■ Precautions for use:

1. Storage

(1).Unopened moisture barrier bag (MBB) shall be stored at temperature below 5℃~30℃, with humidity below 60%RH.

(2).Before the MBB be opened, check if have the air leakage, if have, then need to bake under 70℃±5℃ for 24hours.

(3).After the MBB has been opened, the LEDs which need for reflow soldering or other soldering methods, must be used according to below:

a: Must finish the soldering in 12hours

b: Stored with the humidity below 30%RH

c: If not finish the soldering in 12hours, need to bake the LED again under 70℃±5℃ for 24hours

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℃ And soldering time no more than 2 seconds.

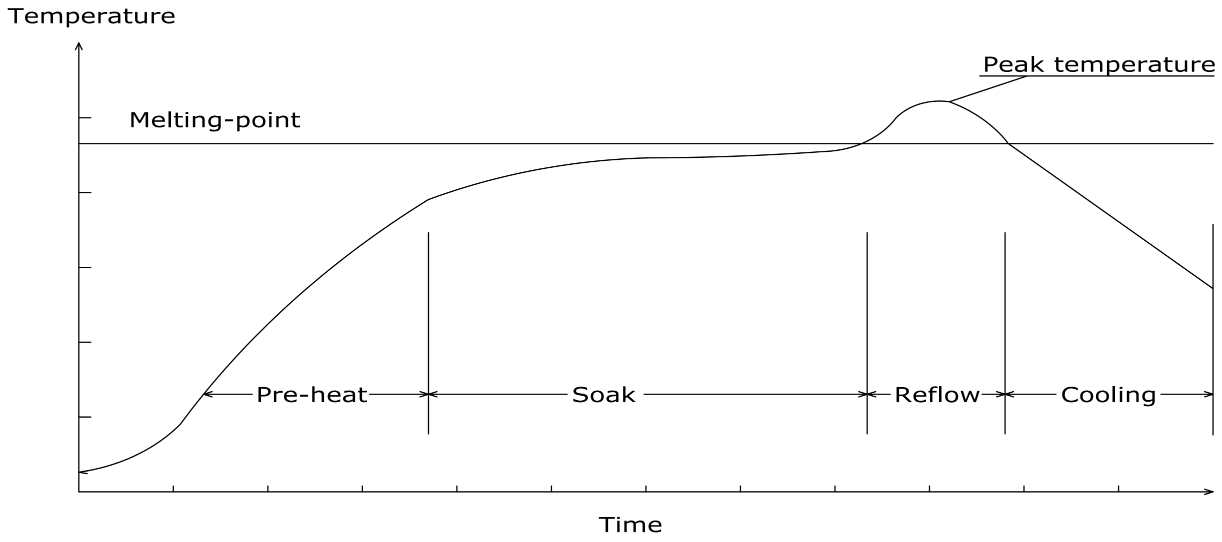
The epoxy resin of an SMD LED should not contact the tip of the soldering iron.

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℃

(2)Reflow soldering

Temperature profile



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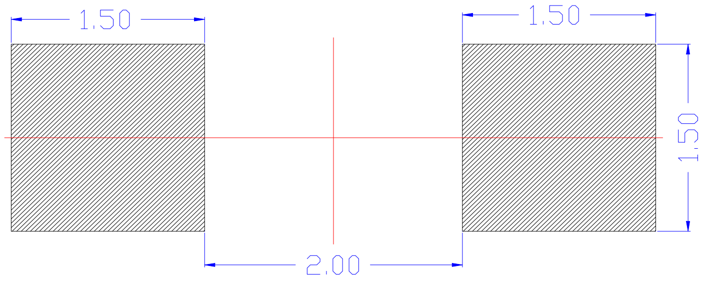
Solder=Sn63-Pb37	Solder= Pb-Free
Average ramp-up rate:4℃/sec.max	Average ramp-up rate:4℃/sec.max
Peak preheat temperature:100-150℃	Peak preheat temperature:100-150℃
preheat time:100seconds.max	preheat time:100seconds.max
ramp-down rate:6℃/sec.max	ramp-down rate:6℃/sec.max
Peak temperature:230℃	Peak temperature:250℃
Time within 5℃ of actual peak temperature=10 sec. max	Time within 5℃ of actual peak temperature=10 sec. max
Duration above 183℃ is 80 sec. max	Duration above 217℃ is 80 sec. max

SMD LED should not be modified after soldering. If modification cannot be avoided, the modification must be pre-qualified to avoid damage to the SMD LEDs.

Reflow soldering should not be done more than one time

No stress should be exerted on the package during soldering.

(3) Recommend Soldering pad design(unit=mm)



3. Static Electricity

Static Electricity and surge voltage damage the LEDs. So it is recommended that an ESD wrist band, ESD shoe strap or an anti-electrostatic glove be used when handling the LEDs.

All devices, equipment and machinery must be properly grounded

4. Others

Reverse voltage should not exceed the absolute maximum rating on the data sheet. The colour of the LEDs is changed slightly an operating current and thermal.

This device should not be used in any type of fluid such as water, oil, organic solvent and etc

When washing is required, IPA (Isopropyl Alcohol) should be used.

The influence of ultrasonic cleaning on the leds depends on factors such as ultrasonic power and the way.

High-brightness LED light may injure human eyes. Avoid looking directly into lighted LED

The appearance and specifications of the product may be modified for improvement without notice.