

**QT-Brightek Chip LED Series**

**SMD 1206 Side View LED**

**Part No.: QBLP615-IW-XX**

**XX=CW**

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## Introduction

**Feature:**

- Yellow diffused lens
- Package in tape and reel
- Ultra bright 1206 side view LED package
- InGaN technology
- Viewing angle 150°

**Description:**

These ultrabright 1206 side view LEDs have a height profile of 1.00mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

**Application:**

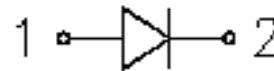
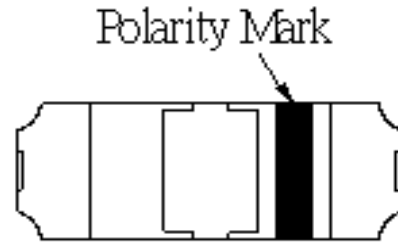
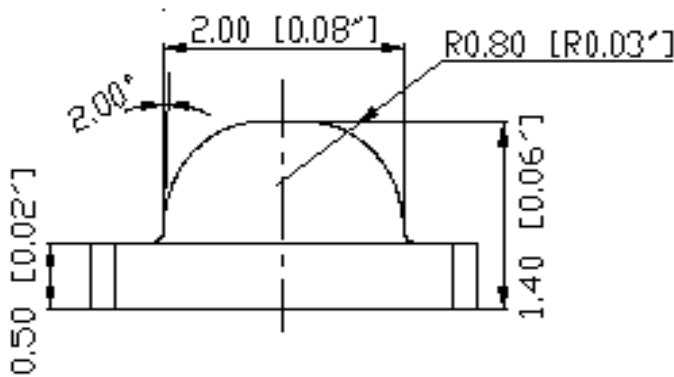
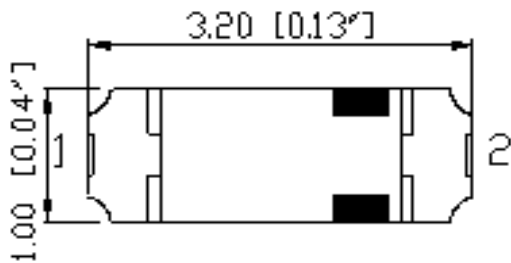
- Status indication
- Back lighting application

**Certification & Compliance:**

- TS16949
- ISO9001
- RoHS Compliant



**Dimension:**



Units: mm / tolerance = +/-0.1mm

**Electrical / Optical Characteristic (T=25 °C)**

Product	Color	I <sub>F</sub> (mA)	V <sub>F</sub> (V)		CCT Coordinate			I <sub>V</sub> (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBLP615-IW-CW	Cool White	20	3.1	3.7	-	X=0.28 Y=0.29	-	200	280

**Absolute Maximum Rating**

Material	P <sub>d</sub> (mW)	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)*	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)	T <sub>SOL</sub> (°C)**
InGaN	111	30	125	5	-40 ~ +80	-40 ~ +85	260

\*Duty 1/8 @ 1KHz

\*\*IR Reflow for no more than 10 sec @ 260 °C

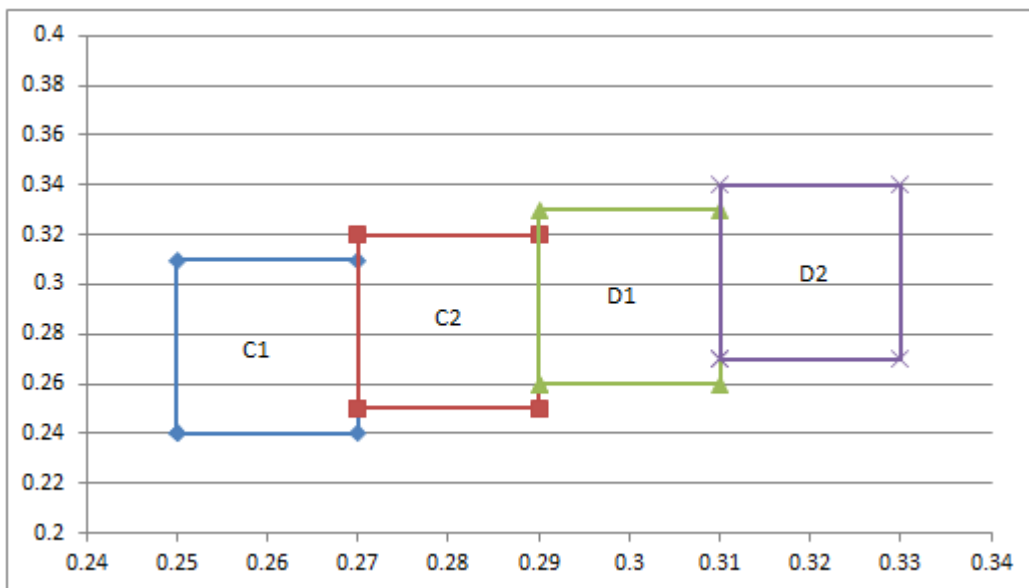
**Forward Voltage V<sub>F</sub> @ I<sub>F</sub>=20mA**

Bin	Min.	Max.	Unit
f	2.8	3.1	V
g	3.1	3.4	
h	3.4	3.7	

**Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=20mA**

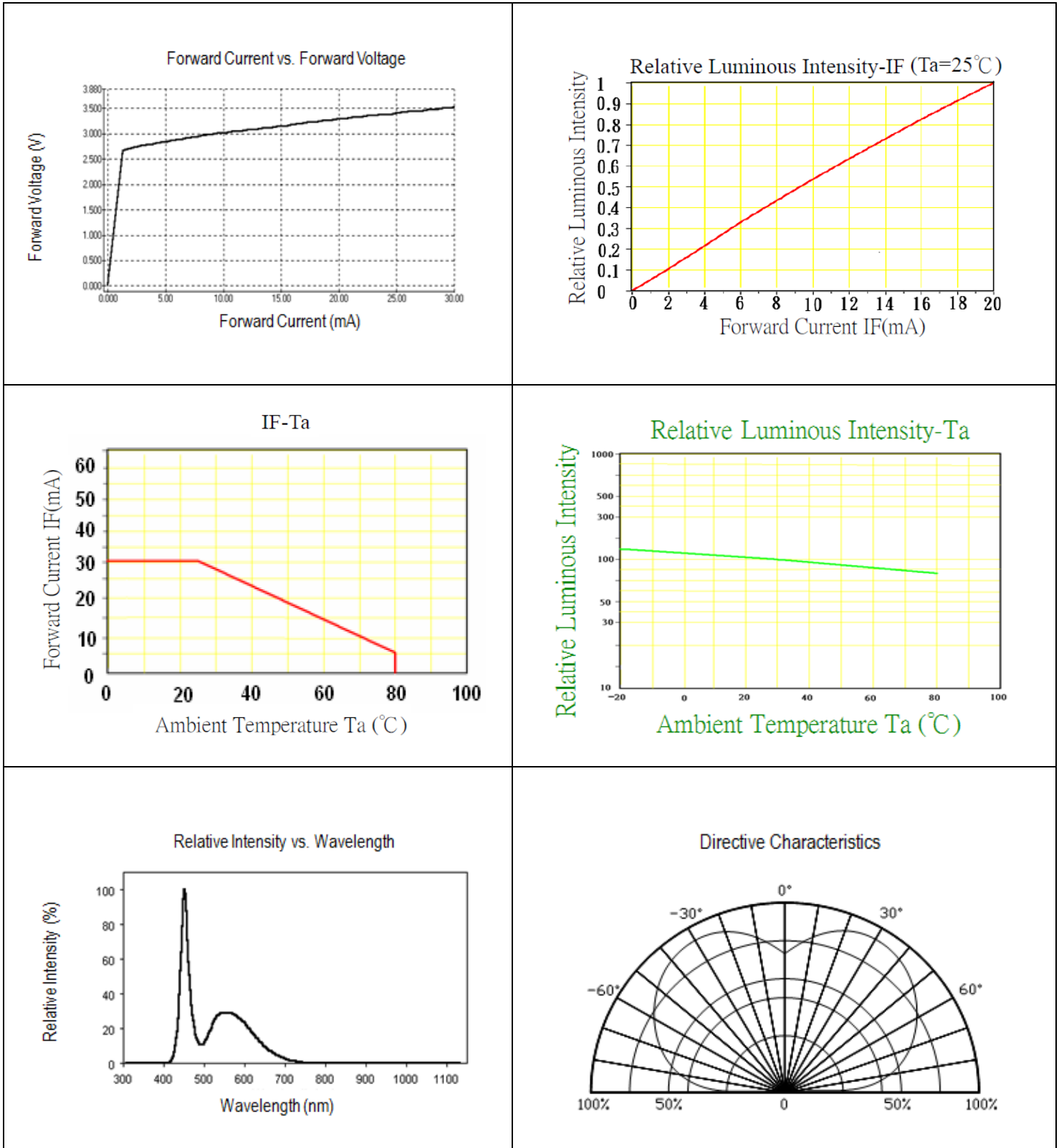
Bin	Min.	Max.	Unit
2	200	250	mcd
3	250	320	
4	320	400	
5	400	500	

### CIE Chromaticity Diagram



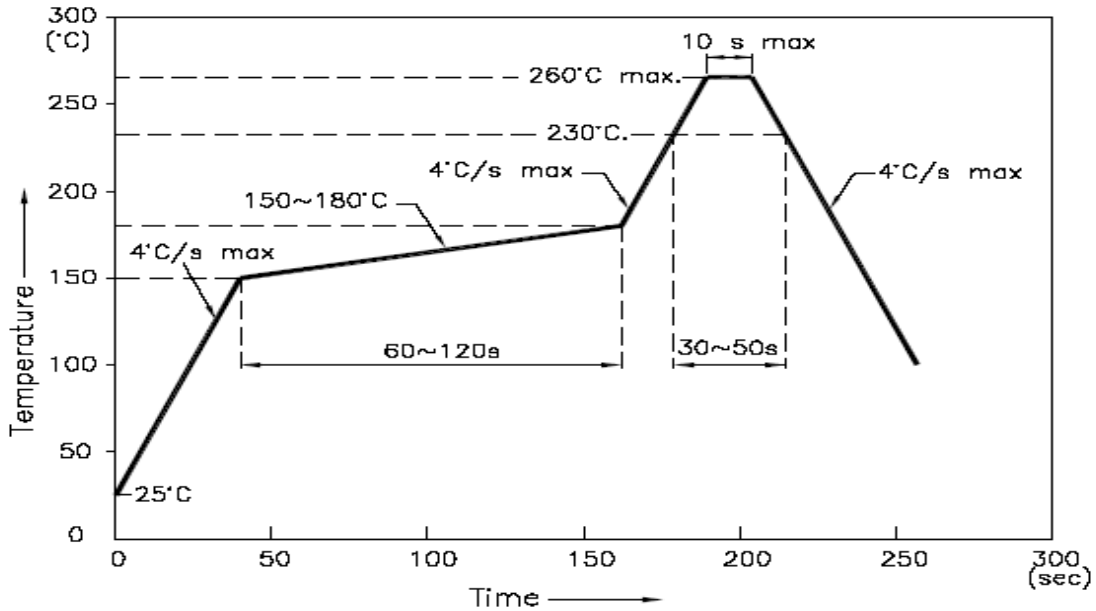
Rank	Chromaticity coordinates				
C1	0.25	0.250	0.270	0.270	0.25
	0.240	0.310	0.310	0.240	0.240
C2	0.270	0.270	0.290	0.290	0.270
	0.250	0.320	0.320	0.250	0.250
D1	0.290	0.290	0.310	0.310	0.290
	0.260	0.330	0.330	0.260	0.260
D2	0.310	0.310	0.330	0.330	0.310
	0.270	0.340	0.340	0.27	0.270

**Characteristic Curves**

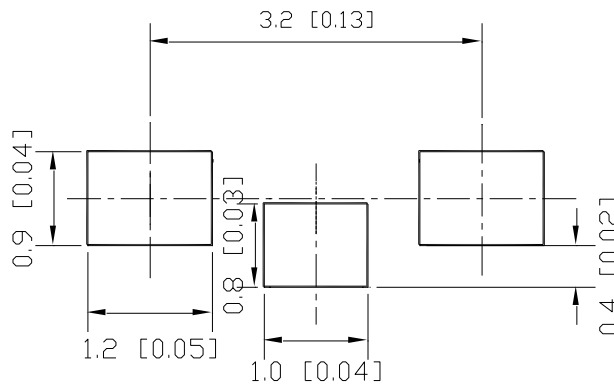


## Solder Profile & Footprint

- Recommended tin solder specifications: melting temperature in the range of 178~192 °C
- The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



### Recommended Pad Layout

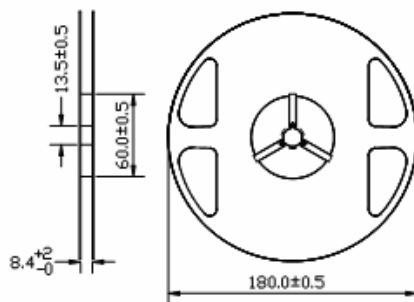


Units: mm

Tolerance: ± 0.1mm

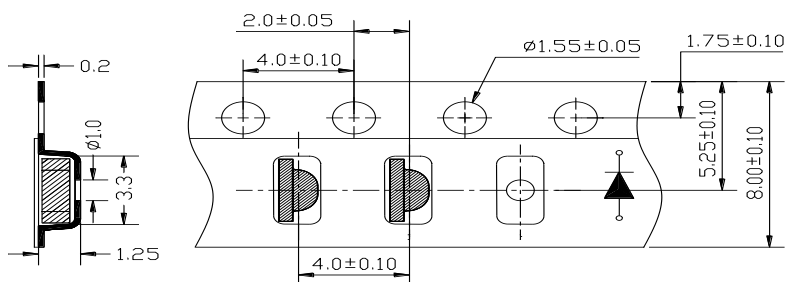
## Packing

Reel Dimension:



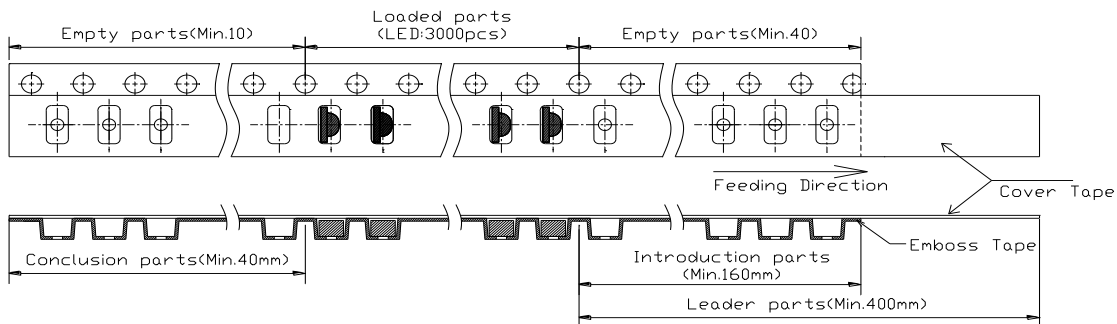
Unit: mm

Tape Dimension:

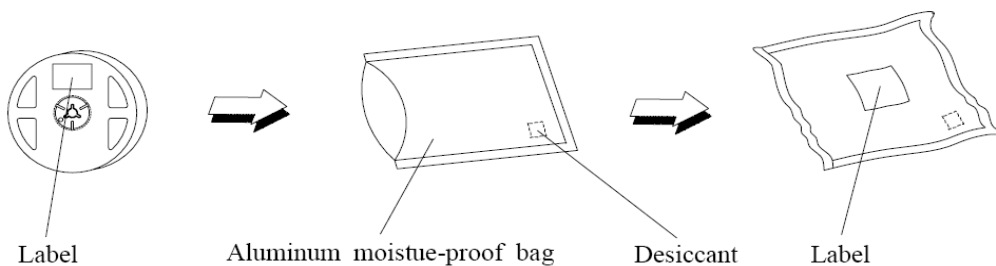


Unit in mm

Arrangement of Tape:



Packaging Specifications:





**Labeling**

Part No: \_\_\_\_\_

Customer P/N: \_\_\_\_\_

Item: \_\_\_\_\_

Q'ty: \_\_\_\_\_

Vf: \_\_\_\_\_

Iv: \_\_\_\_\_

WI: \_\_\_\_\_

Date: \_\_\_\_\_

**Made in China****Ordering Information**

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP615-IW-CW	QBLP615-IW-CW	Iv=280mcd typ. @ I <sub>F</sub> =20mA / CCT Coordinate: (X=0.28, Y=0.29) typ.	3,000 units

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## Revision History

Description:	Revision #	Revision Date
New Release of QBLP615-IW-XX	V1.0	03/27/2014

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2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.