QT-Brightek Chip LED Series

SMD 1206 Side View LED

Part No.: QBLP615-IW-XX

XX=CW

Table of Contents:

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.

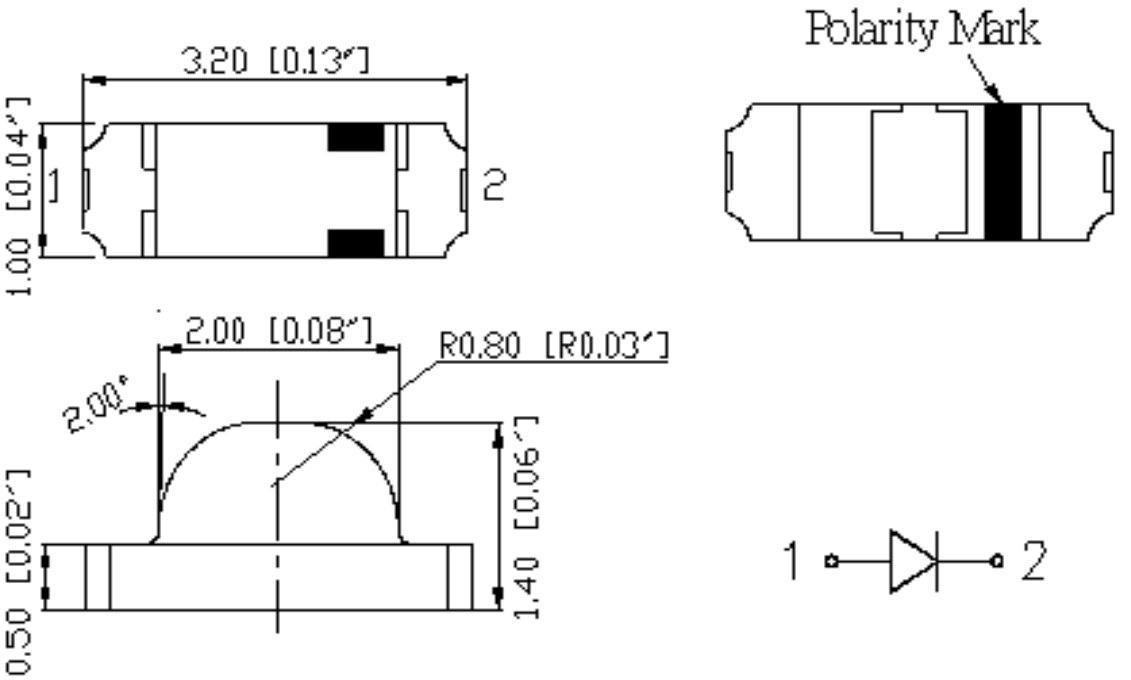
Application:

- 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_F(mA)	V_F(V)		CCT Coordinate			I_V(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_d (mW)	I_F (mA)	I_{FP} (mA)*	V_R (V)	T_{OP} (°C)	T_{ST} (°C)	T_{SOL} (°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

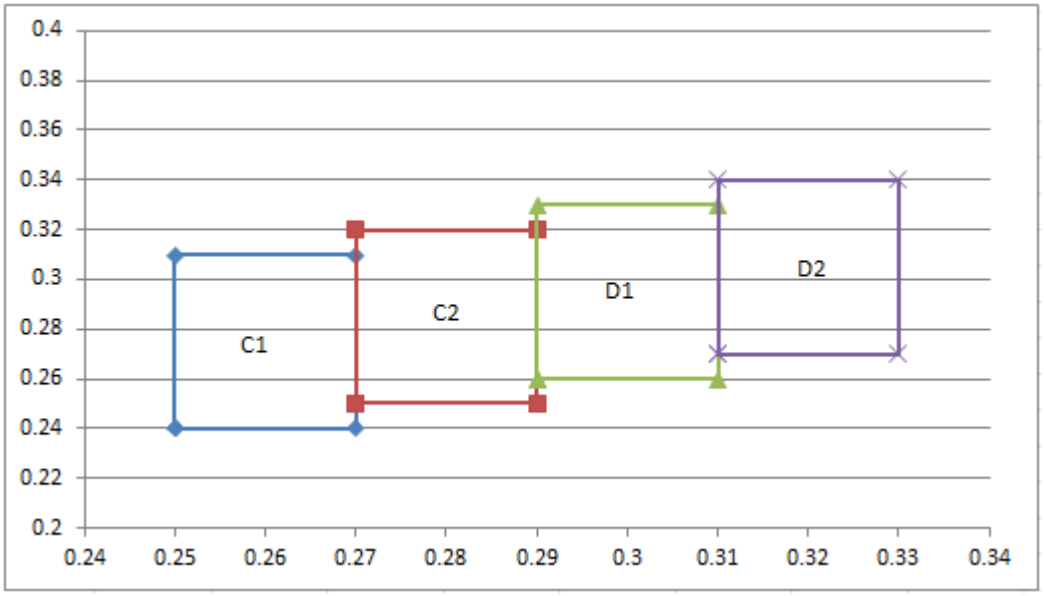
Forward Voltage V_F @ I_F=20mA

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

Luminous Intensity I_V @ I_F=20mA

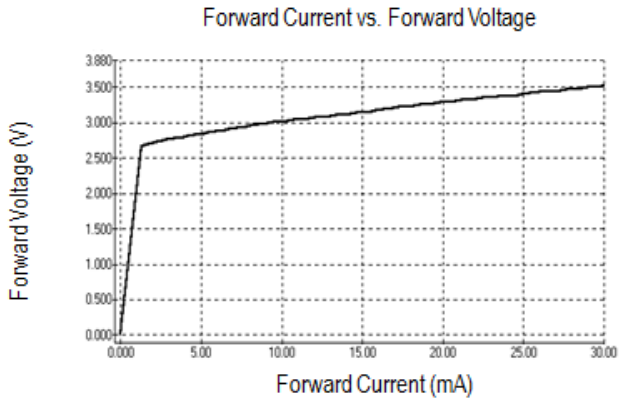
Bin	Min.	Max.	Unit
2	200	250	mcd
3	250	320	
4	320	400	
5	400	500	

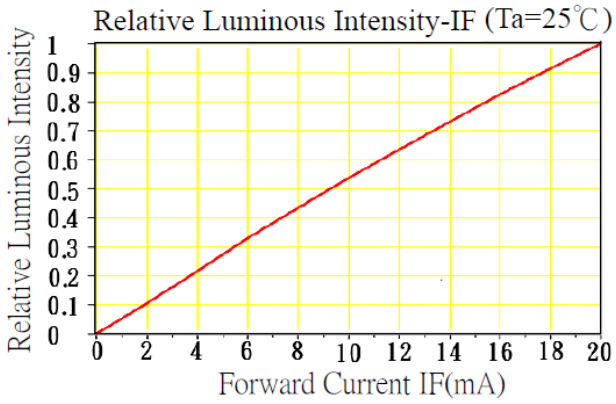
CIE Chromaticity Diagram

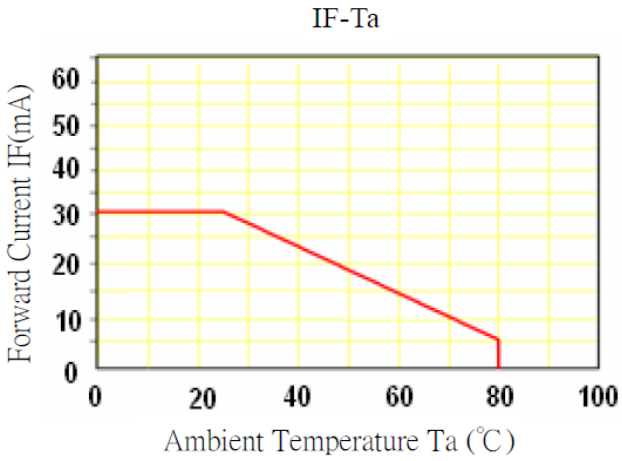


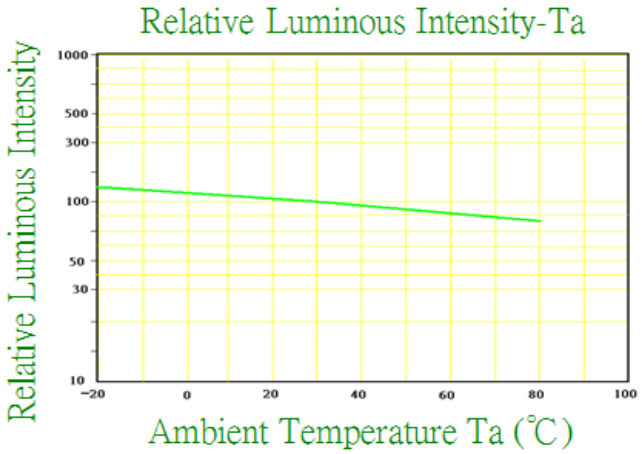
Rank	Chromaticity coordinates				
C1	0.25	0.250	0.270	0.270	0.25
	0.240	0.310	0.310	0.240	0.240
C2	0.270	0.270	0.290	0.290	0.270
	0.250	0.320	0.320	0.250	0.250
D1	0.290	0.290	0.310	0.310	0.290
	0.260	0.330	0.330	0.260	0.260
D2	0.310	0.310	0.330	0.330	0.310
	0.270	0.340	0.340	0.27	0.270

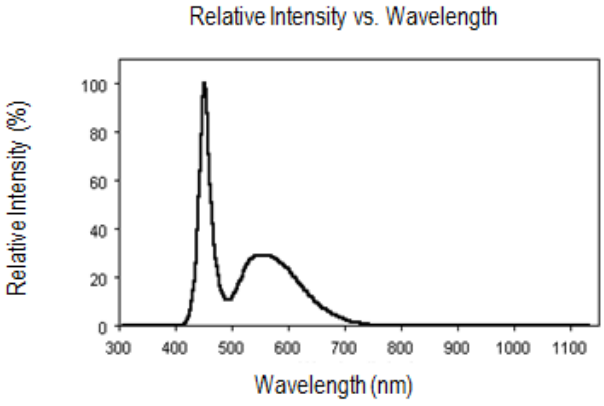
Characteristic Curves

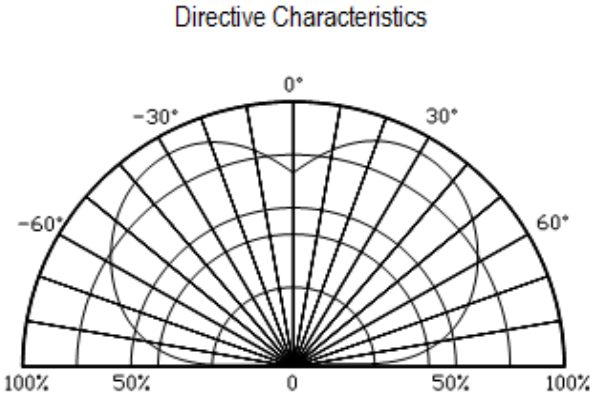






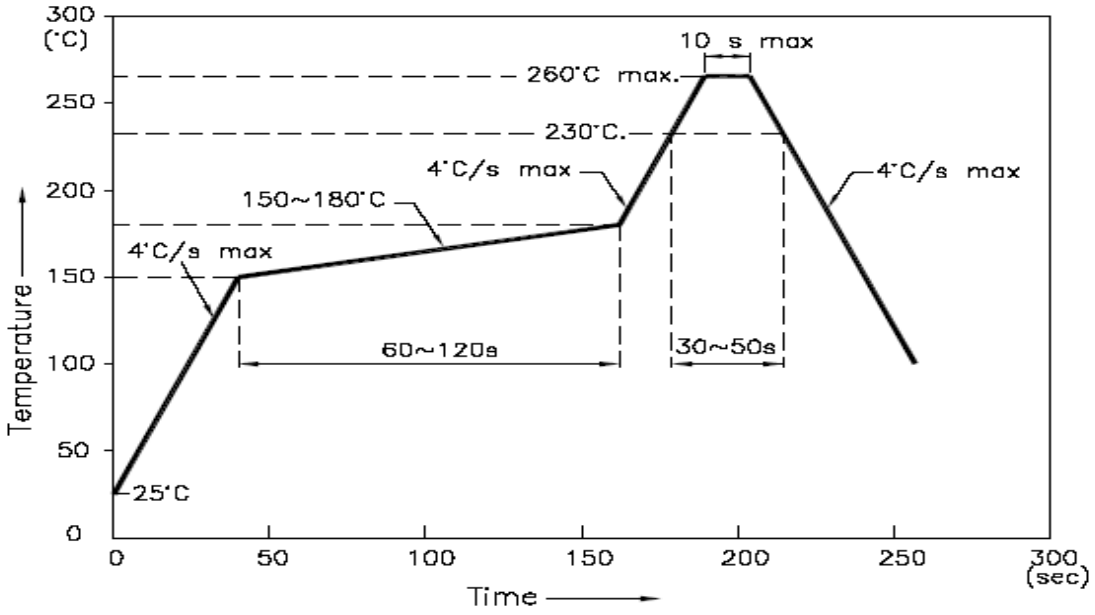




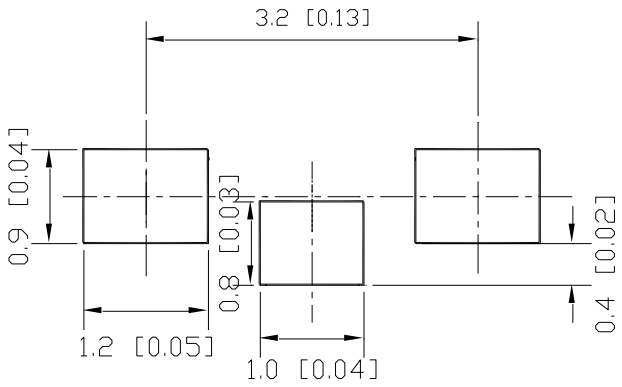


Solder Profile & Footprint

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



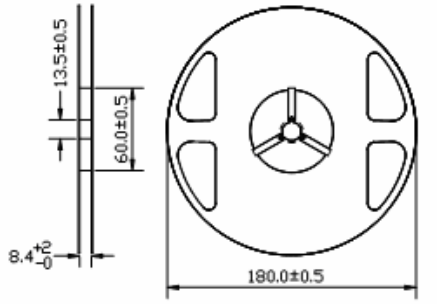
Recommended Pad Layout



Units: mm Tolerance: ± 0.1mm

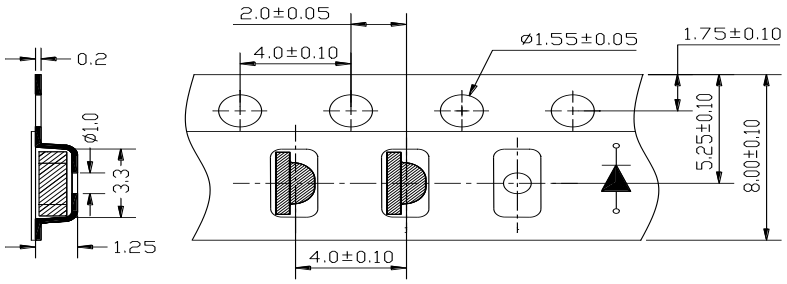
Packing

Reel Dimension:



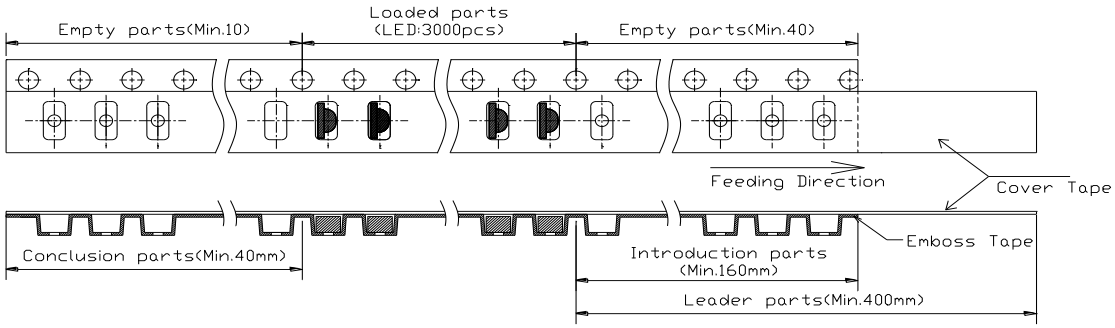
Unit: mm

Tape Dimension:

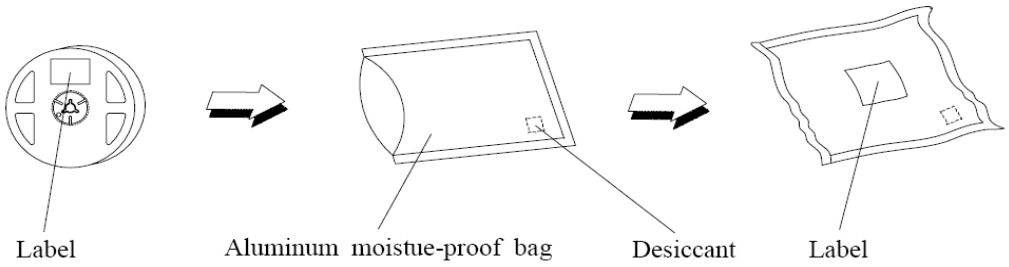


Unit in mm

Arrangement of Tape:



Packaging Specifications:



Labeling

Ordering Information

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

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.