

QT-Brightek Chip LED Series**SMD 1206 Tri-Color Side View LED****Part No.: QBLP615-RGB-3053**

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Introduction

Feature:

- Diffused lens
- Package in tape and reel
- 1206 Side View LED package
- InGaN technology for IB/IG
- AlInGaP technology for R
- Viewing angle 150°

Description:

These 1206 side view LEDs have a height profile of 1.0mm. Combination of higher packing density and small footprint, these LEDs are ideal for indicator and backlighting, flat backlight for LCD.

Application:

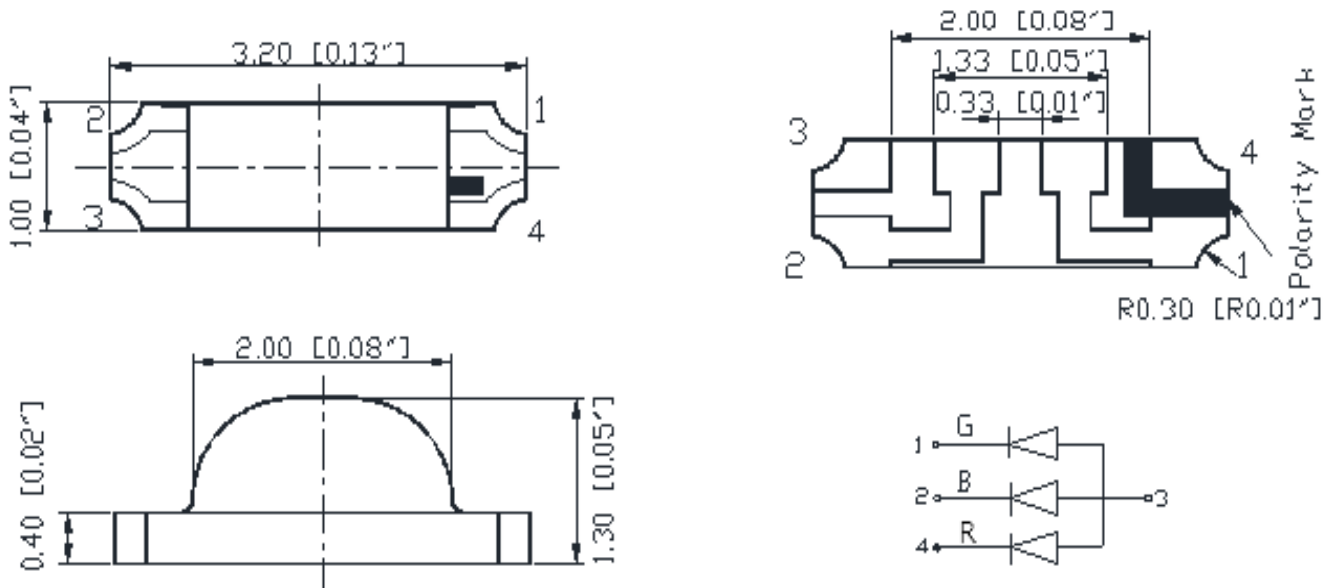
- Telecommunication
- Back lighting application
- LCD backlighting

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.1mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)		λ _D (nm)			I _V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Max.
QBLP615-RGB-3053	Red	9.8	2.0	2.5	615	620	630	72	160
	True Green	7	2.7	3.2	520	527	530	225	500
	Blue	6	2.8	3.2	465	470	475	45	80

Luminous Intensity Tolerance is ±5%

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 (IB/IG)	111	30	125	5	-40 to +80	-40 to +85	260
AllnGaP (R)	75	30	125	5	-40 to +80	-40 to +85	260

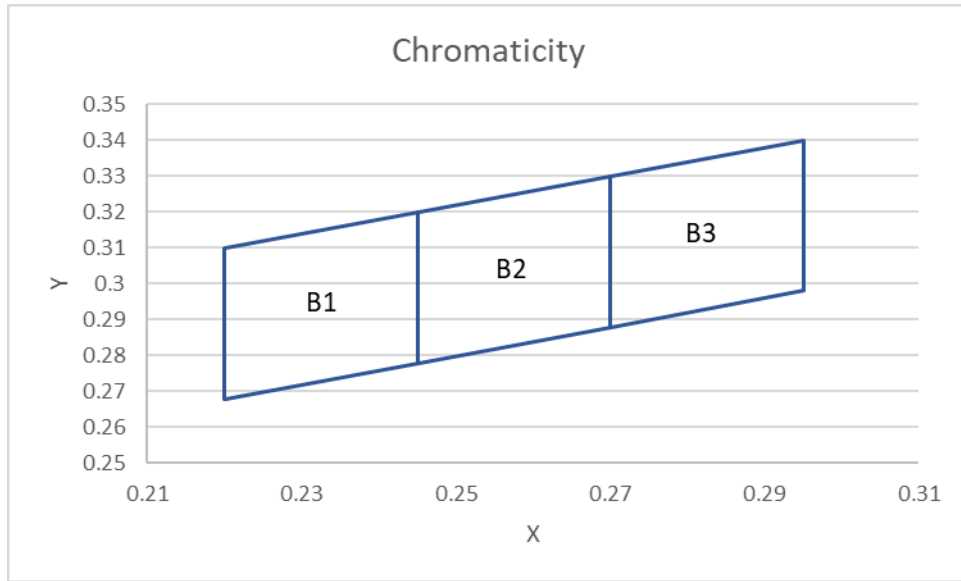
*Duty 1/8 @ 1kHz

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

Luminous Intensity I_V for White @ Red I_F=9.8mA, Green I_F=7mA, Blue I_F=6mA

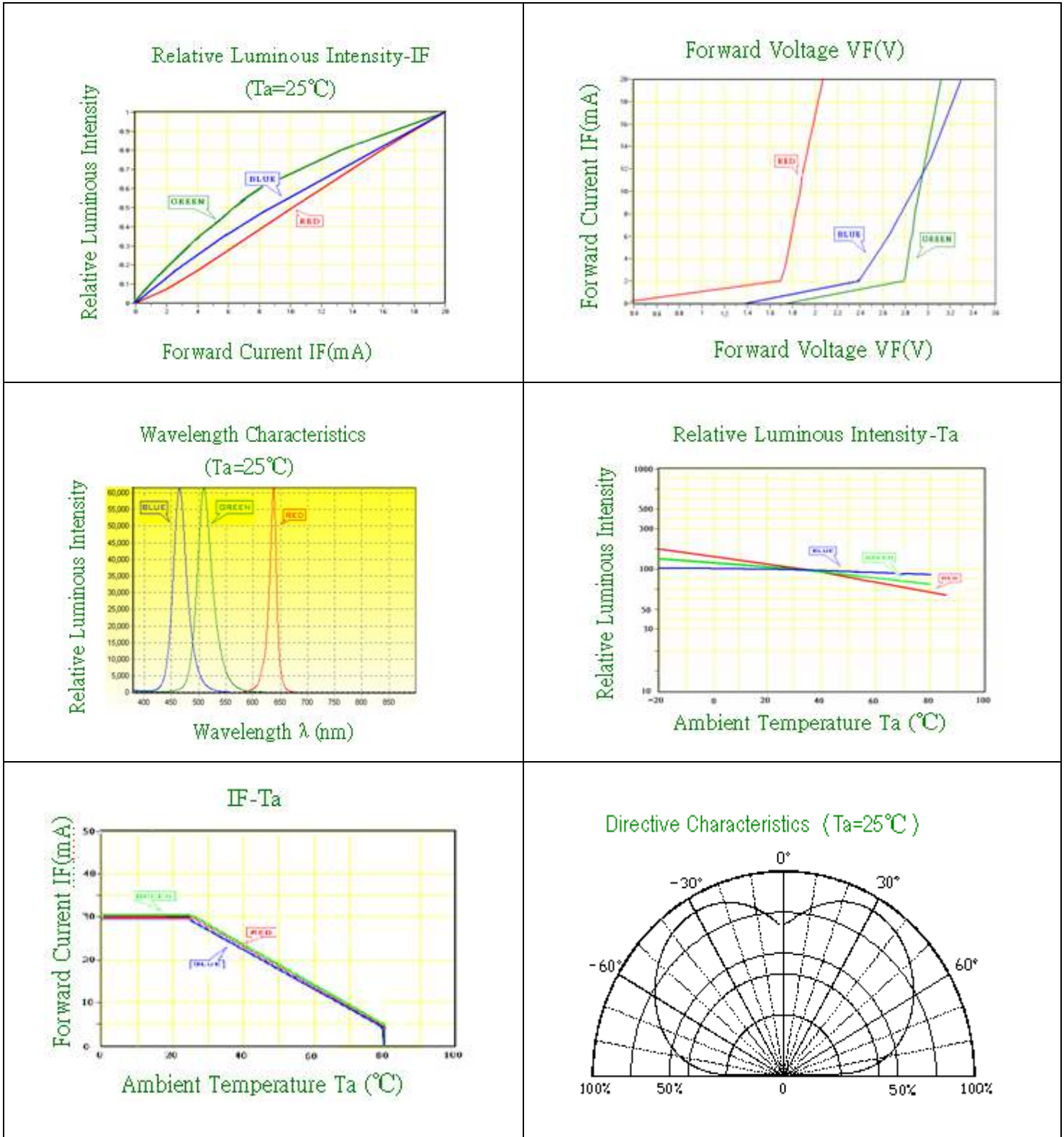
Bin	Min.	Max.	Unit
B	360	450	mcd
C	450	565	
D	565	715	
E	715	900	

Correlated Color Temperature Chart



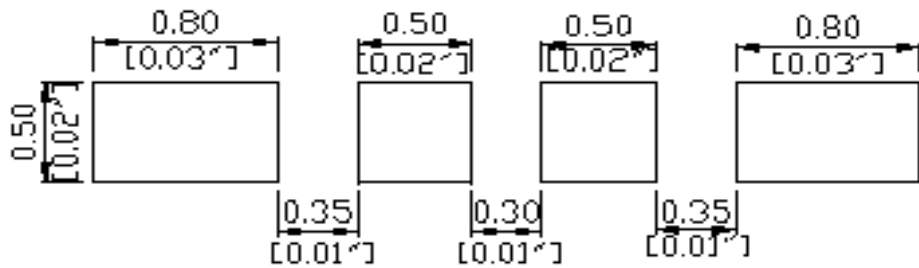
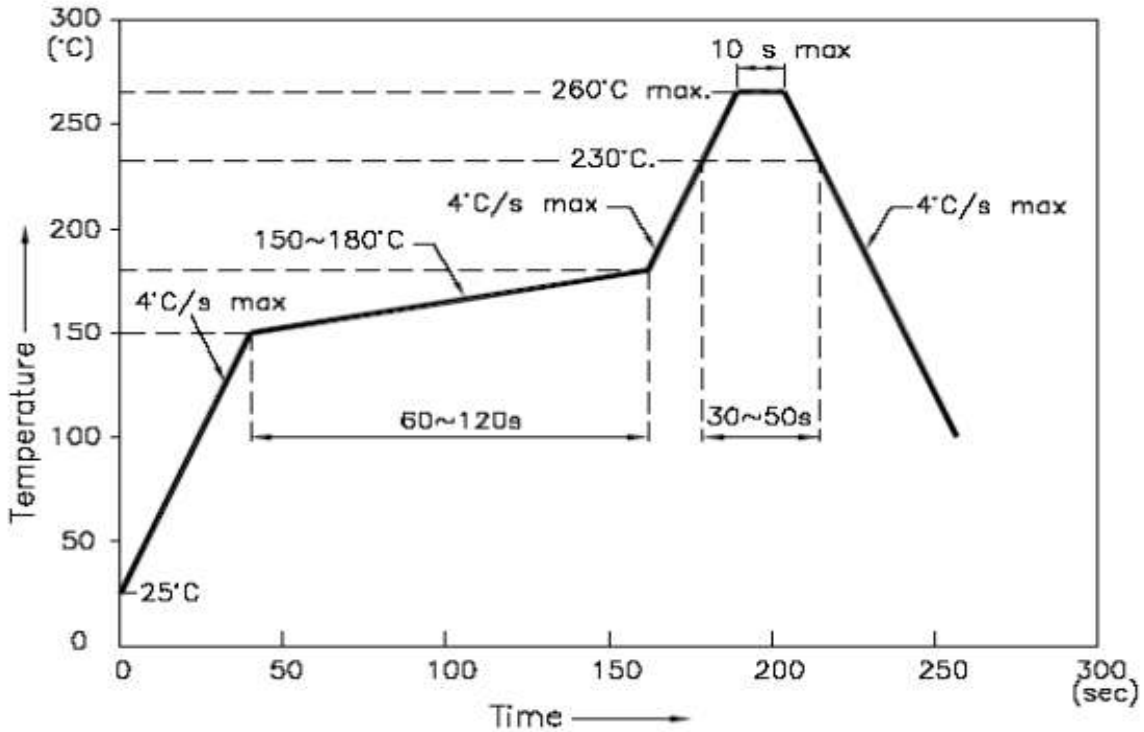
B1		B2		B3	
0.22	0.268	0.245	0.278	0.27	0.288
0.22	0.31	0.245	0.32	0.27	0.33
0.245	0.32	0.27	0.33	0.295	0.34
0.245	0.278	0.27	0.288	0.295	0.298
0.22	0.268	0.245	0.278	0.27	0.288

Characteristic Curves



Solder Profile & Footprint

-The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



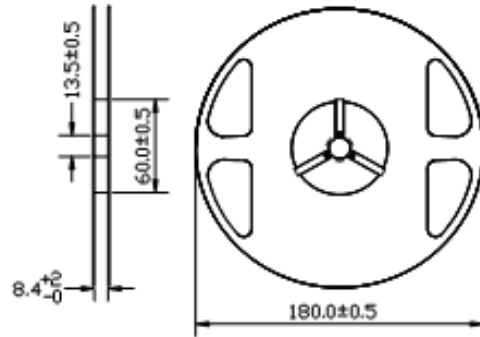
(Proposed Solder footprint)

Units: mm

tolerance: +/- 0.1mm

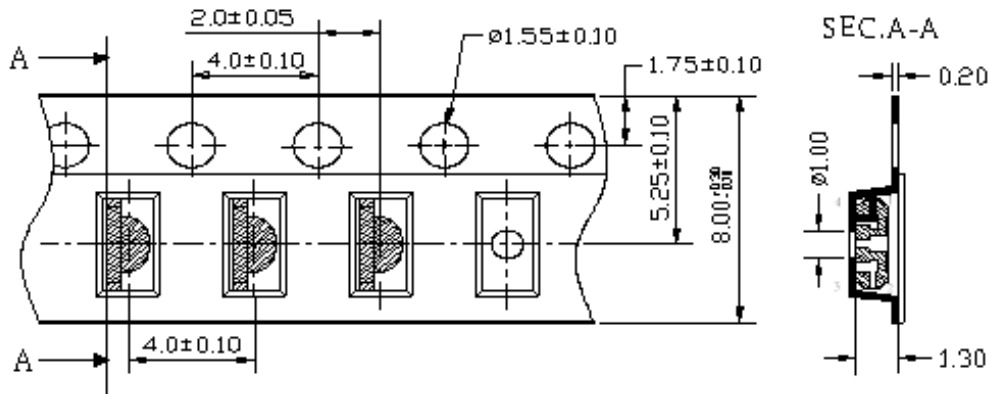
Packing

Reel Dimension:



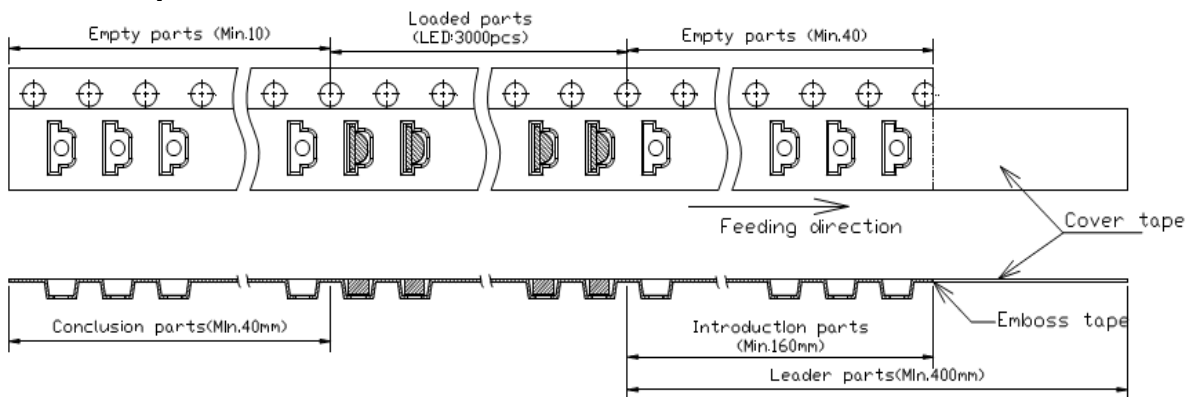
Unit: mm

Tape Dimension:

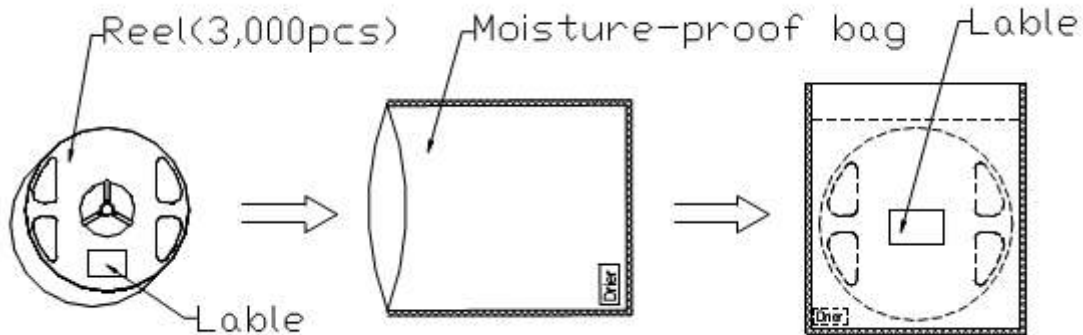


Unit: mm

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-RGB-3053	QBLP615-RGB-3053	R: $I_V=100\text{mcd}$ / Color: 615nm to 630nm @ $I_F=9.8\text{mA}$	3,000 units
		IG: $I_V=500\text{mcd}$ / Color: 520nm to 320nm @ $I_F=7\text{mA}$	
		IB: $I_V=80\text{mcd}$ / Color: 465nm to 475nm @ $I_F=6\text{mA}$	

Revision History

Description:	Revision #	Revision Date
New Release of QBLP615-RGB-3053	V1.0	11/08/2019

Disclaimer

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1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
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.