

**QT-Brightek Side View LED Series**

**0602 Side View LED**

**Part No.: QBLP617-IW5**

Product: QBL617-IW5	Date: January 27, 2016	Page 1 of 10
	Version# 1.0	

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## Introduction

**Feature:**

- Package in tape and reel
- Side View Ultra bright 0602 LED package
- InGaN technology
- 140° Viewing Angle

**Description:**

These ultra bright side view 0602 LEDs have a height profile of 0.6mm. With higher packing density and smaller footprint, these LEDs are ideal for smaller equipment and miniature application.

**Application:**

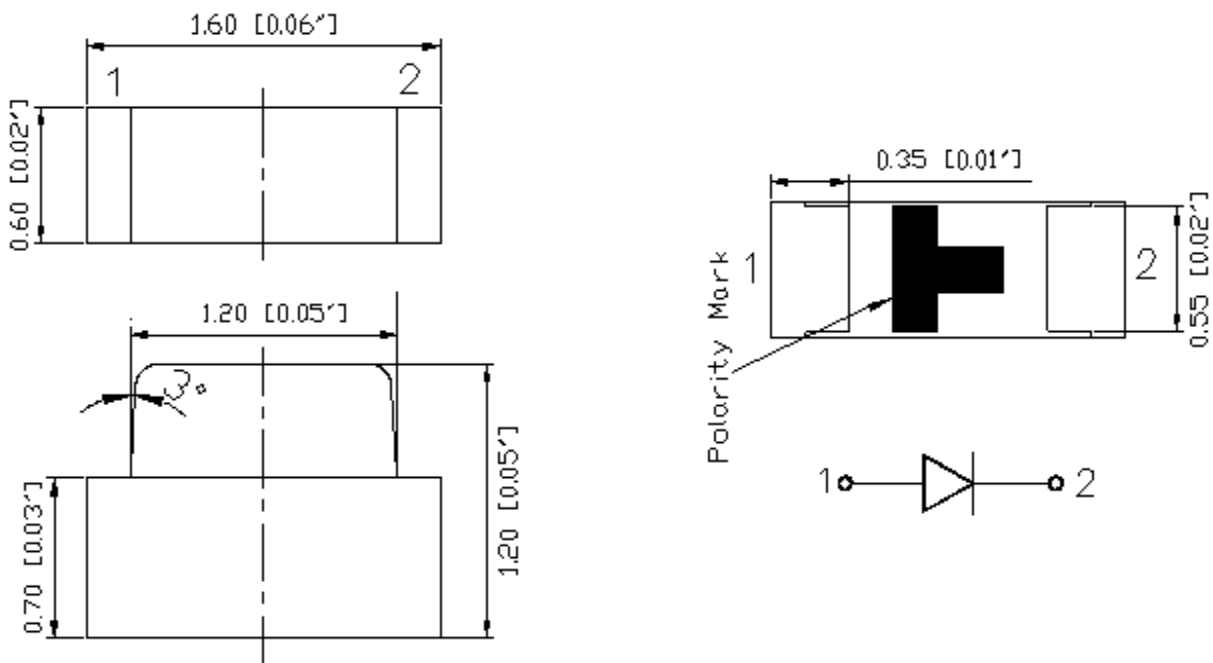
- Status indication
- Back lighting application
- General Use

**Certification & Compliance:**

- TS16949
- ISO9001
- RoHS Compliant



**Dimension:**



Units: mm / tolerance = +/-0.1mm

### Electrical / Optical Characteristic (Ta=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.
QBLP617-IW5	White	5	2.8	3.1	-	X = 0.29 Y = 0.30	-	50	98

### 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	93	30	125	5	-40 to +80	-40 to +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>=5mA

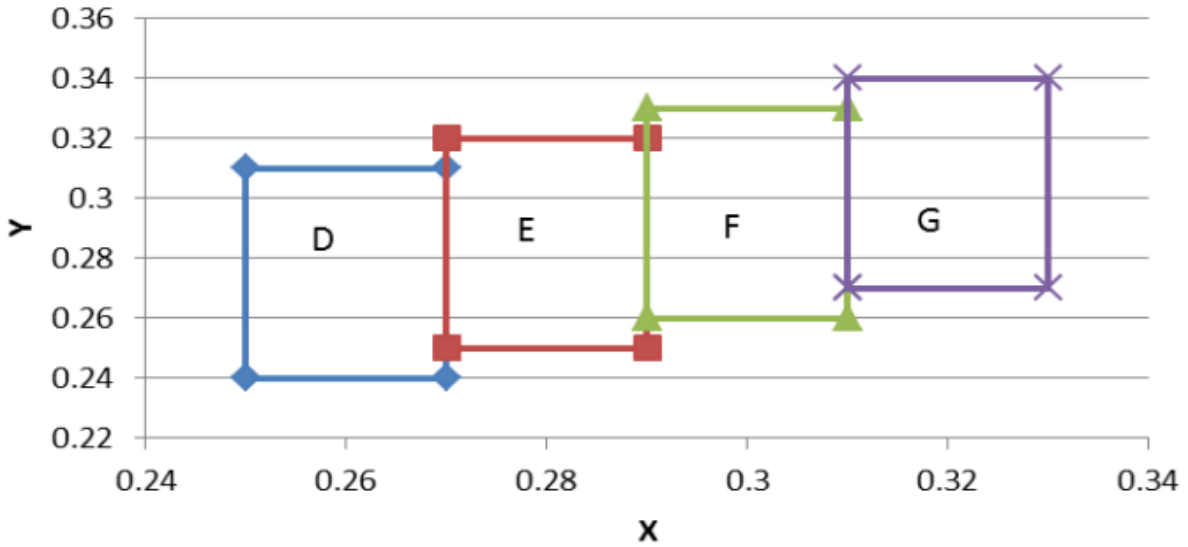
Bin	Min.	Max.	Unit
e	2.5	2.8	V
f	2.8	3.1	

### Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=5mA

Bin	Min.	Max.	Unit
G	50	63	mcd
H	63	80	
I	80	100	
J	100	125	
K	125	160	

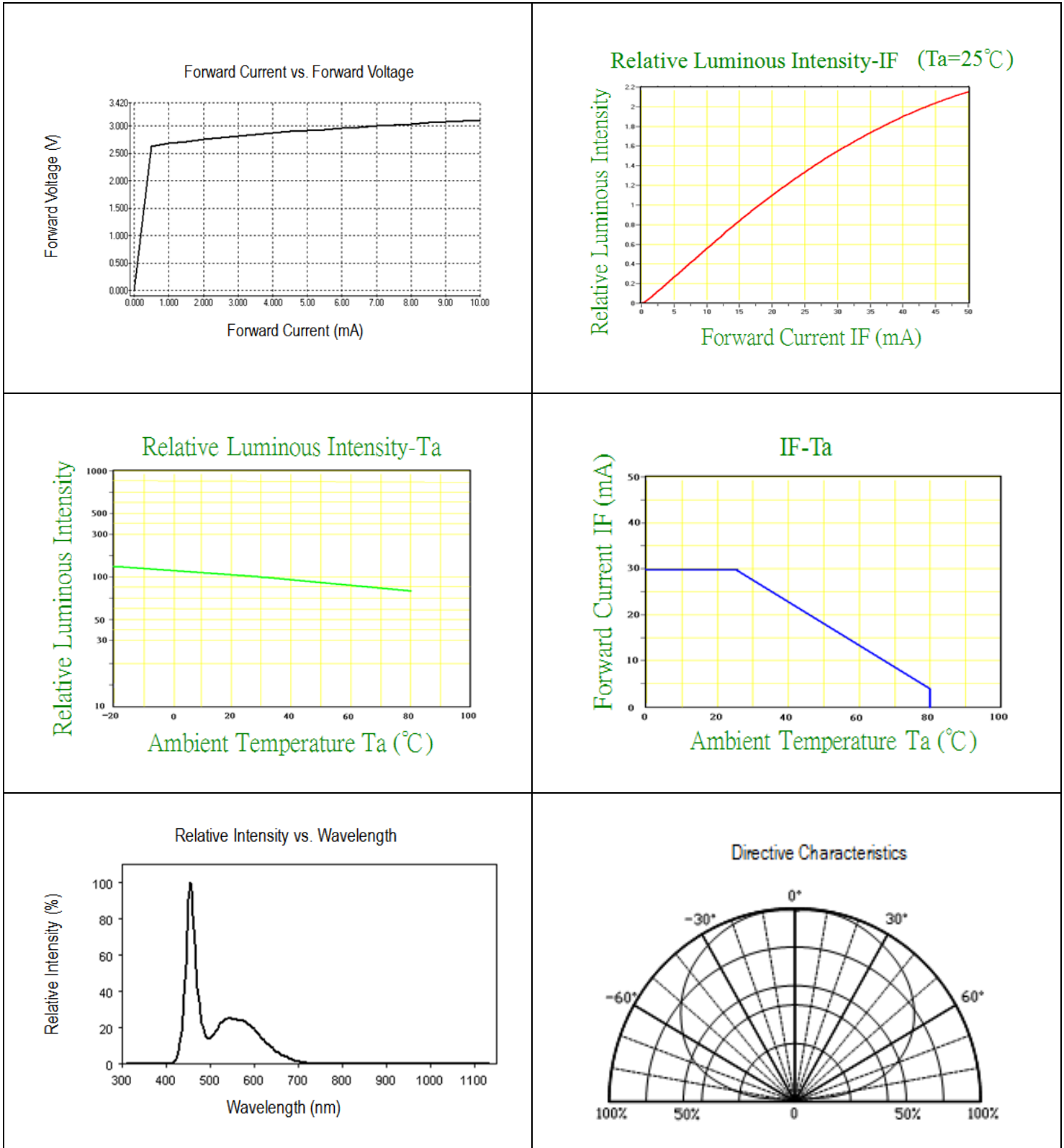
**CIE Chromaticity Table**

**CCT**



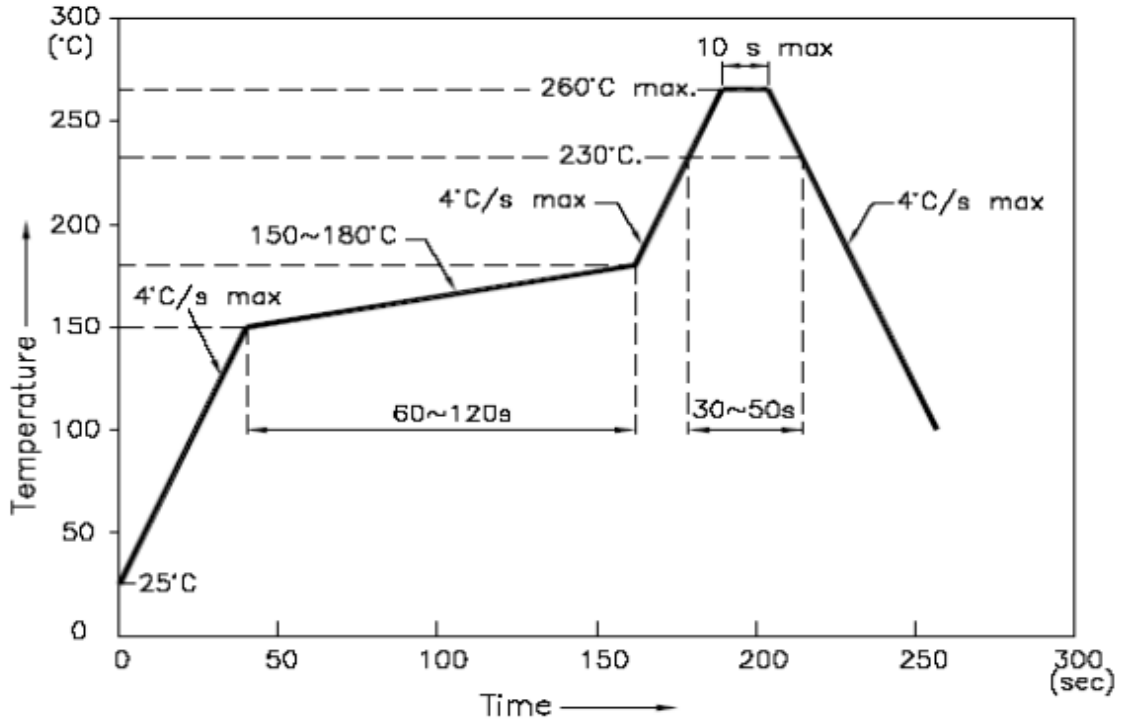
D		E		F		G	
0.25	0.24	0.27	0.25	0.29	0.26	0.31	0.27
0.25	0.31	0.27	0.32	0.29	0.33	0.31	0.34
0.27	0.31	0.29	0.32	0.31	0.33	0.33	0.34
0.27	0.24	0.29	0.25	0.31	0.26	0.33	0.27
0.25	0.24	0.27	0.25	0.29	0.26	0.31	0.27

**Characteristic Curves**

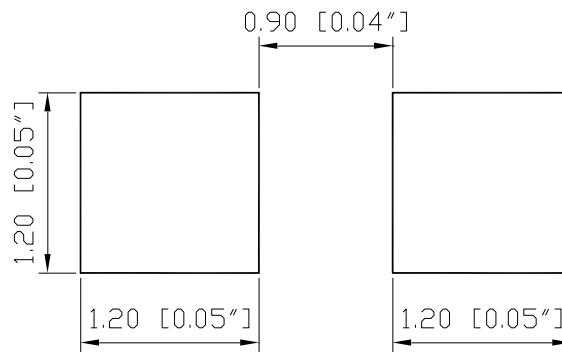


## Solder Profile & Footprint

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



### Recommended Pad Layout

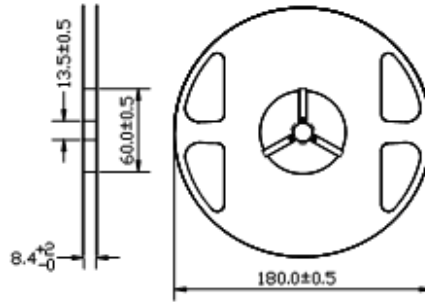


Units: mm

Tolerance:  $\pm 0.1$ mm

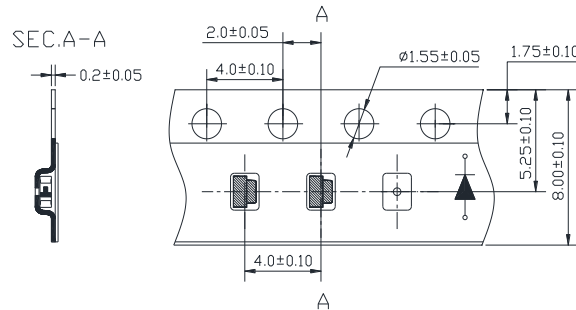
## Packing

### Reel Dimension:



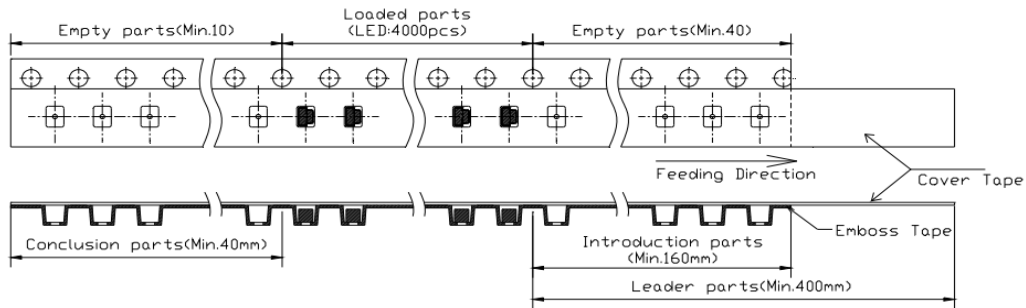
Unit: mm

### Tape Dimension:

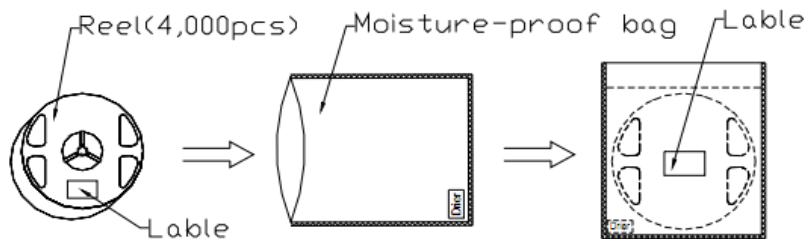


Unit: mm

### 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
QBLP617-IW5	QBLP617-IW5	Iv=98mcd typ. @ I <sub>F</sub> =5mA / CCT Coordinate: (X=0.29, Y=0.30) typ.	4,000 units

## Revision History

Description:	Revision #	Revision Date
New Release of QBLP617-IW5	V1.0	01/27/2016

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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.