

QT-Brightek Side View LED Series

0602 Side View LED

Part No.: QBLP617-IW5

5: 5mA

Product: QBL617-IW5	Date: October 02, 2022	Page 1 of 12
	Version# 1.2	

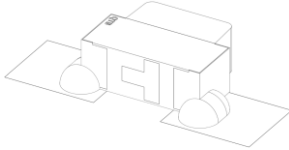
Table of Contents:

Introduction	3
Electrical / Optical Characteristic (Ta=25 °C)	4
Absolute Maximum Rating	4
CIE Chromaticity Table	5
Characteristic Curves.....	6
Solder Profile & Footprint.....	7
Mounting the LED on PCB	8
Packing	9
Labeling	10
Ordering Information	10
Revision History	11
Disclaimer	11

Introduction

Feature:

- Package in tape and reel
- Side View Ultra bright 0602 LED package
- InGaN technology
- Viewing Angle: 140° typ.
- Side view (right angle) 0602 LED package



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:

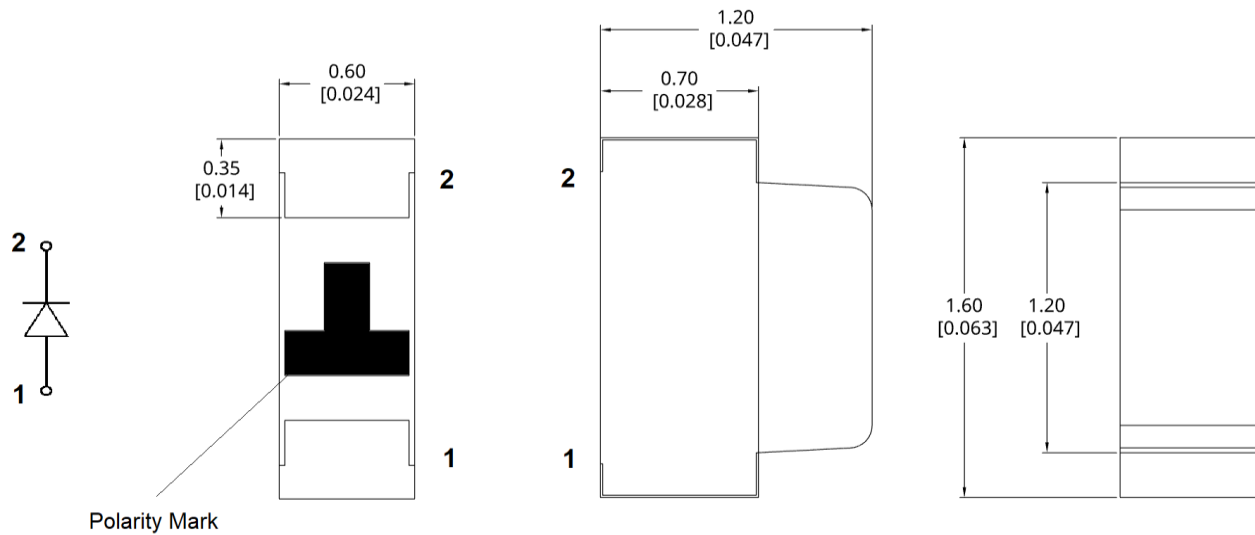
- Status indication
- Back lighting application
- General Use

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.1mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)		CCT Coordinate			I _V (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 _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°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_F @ I_F=5mA

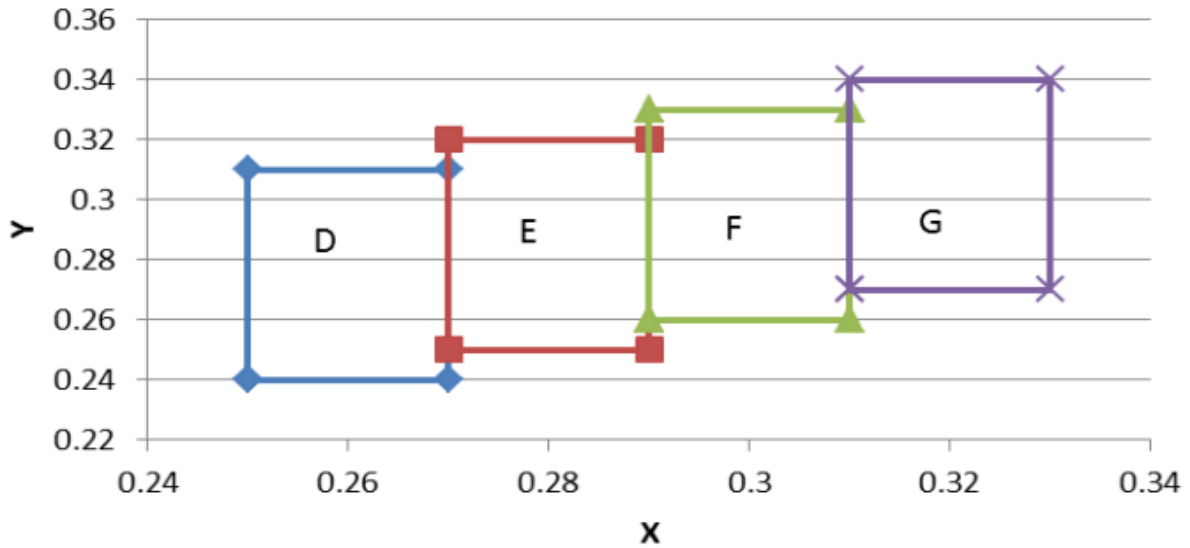
Bin	Min.	Max.	Unit
e	2.5	2.8	V
f	2.8	3.1	

Luminous Intensity I_V @ I_F=5mA

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

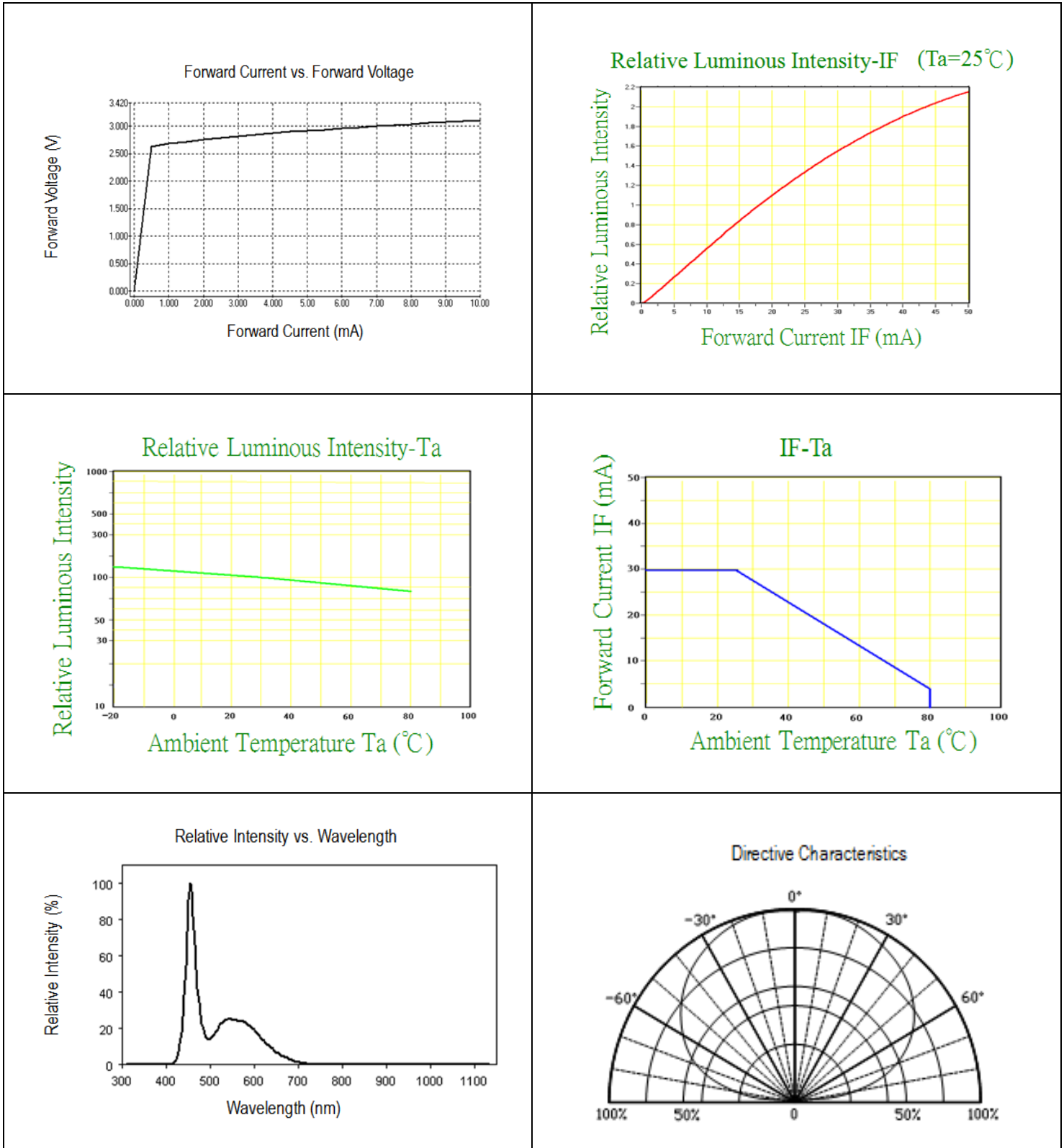
CIE Chromaticity Table

CCT



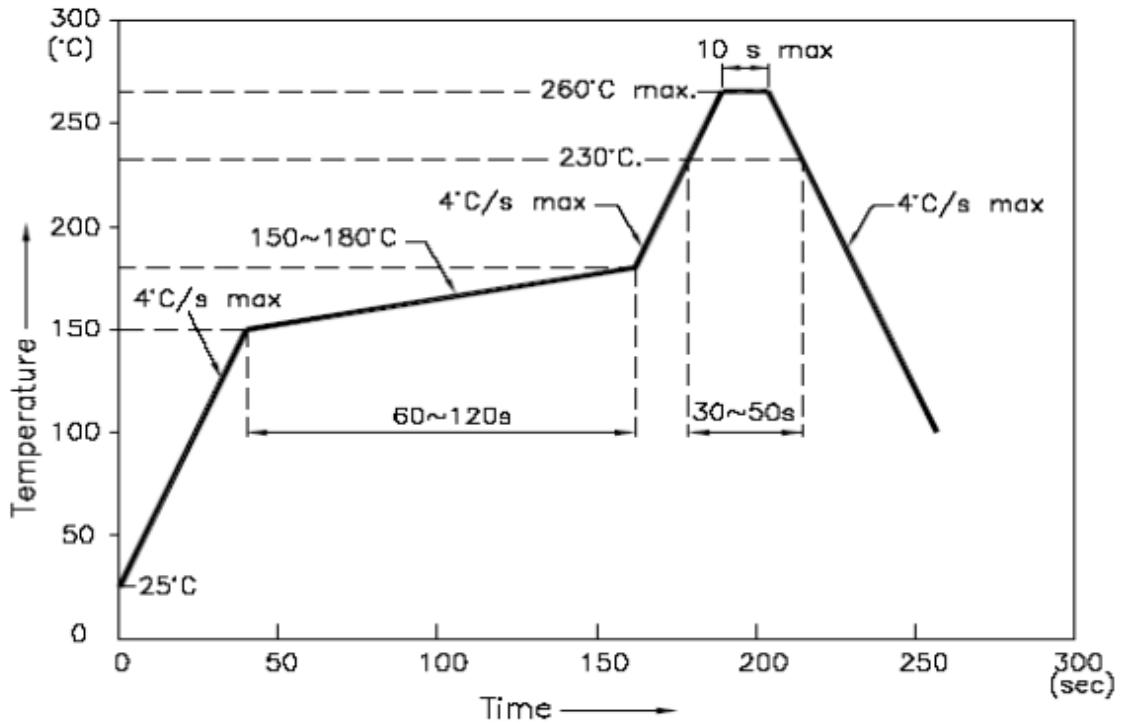
D		E		F		G	
0.25	0.24	0.27	0.25	0.29	0.26	0.31	0.27
0.25	0.31	0.27	0.32	0.29	0.33	0.31	0.34
0.27	0.31	0.29	0.32	0.31	0.33	0.33	0.34
0.27	0.24	0.29	0.25	0.31	0.26	0.33	0.27
0.25	0.24	0.27	0.25	0.29	0.26	0.31	0.27

Characteristic Curves

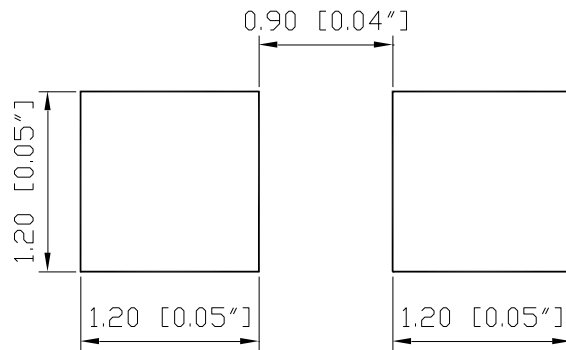


Solder Profile & Footprint

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



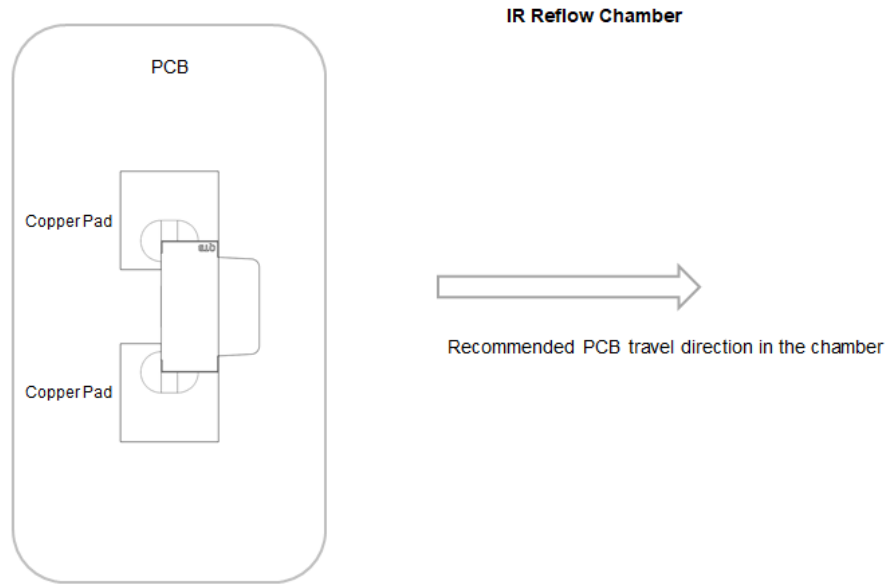
Recommended Pad Layout



Units: mm

Tolerance: ± 0.1mm

- The recommended IR reflow direction for a right angle (side view) SMD led is illustrated below to insure the solder on each lead melts simultaneously during the SMT reflow soldering process.



Mounting the LED on PCB

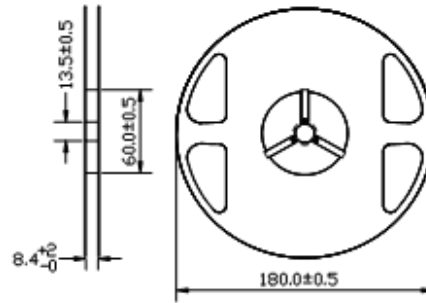


Note: The amount of solder paste applied as shown in the picture is just for illustration purpose only. When mounting and soldering the LEDs, avoid excess solder paste from overflowing onto or near the epoxy lens.

Product: QBL617-IW5	Date: October 02, 2022	Page 8 of 12
	Version# 1.2	

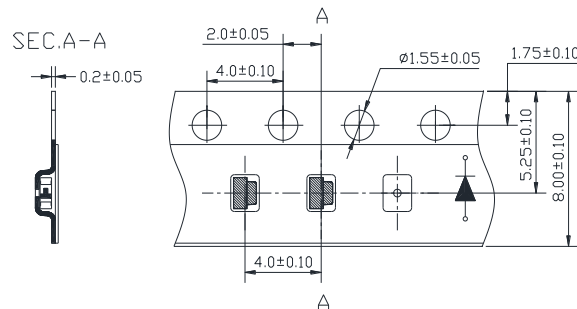
Packing

Reel Dimension:



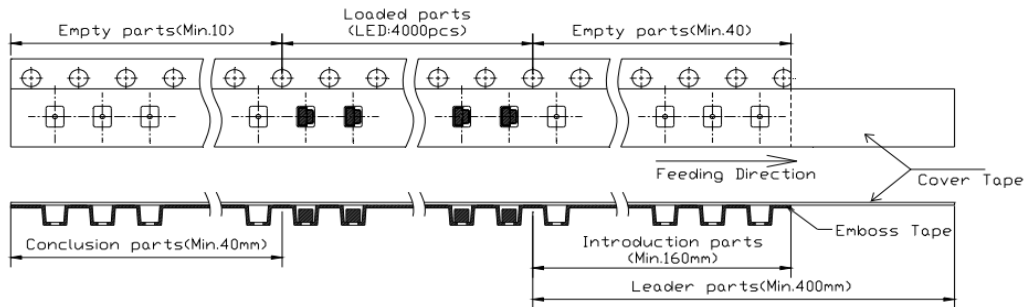
Unit: mm

Tape Dimension:

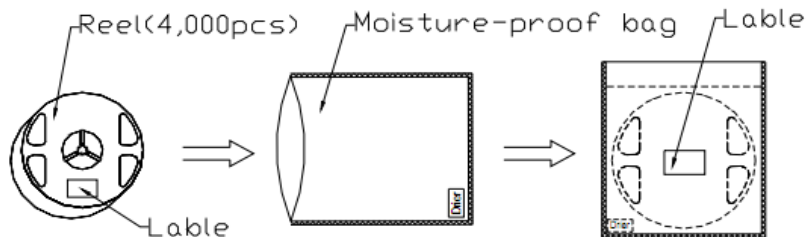


Unit: mm

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 _F =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
Add recommend SMT and mounting suggestion / Optimize drawing dimensions in the datasheet	V1.1	04/11/2022
Update the mounting orientation illustration	V1.2	10/02/2022

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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.

Product: QBL617-IW5	Date: October 02, 2022	Page 12 of 12
	Version# 1.2	