

QT-Brightek Side View LED Series

0602 Side View (Right Angle) LED

Part No.: QBLP617-IW5-2897

**5: 5mA
2897: High Brightness Version**



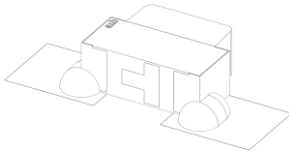
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Introduction

Feature:

- Yellow diffused lens
- Package in tape and reel
- Side view (right angle) 0602 LED package
- InGaN technology
- Beam Angle: 140° typ.
- Height profile: 0.6mm



Application:

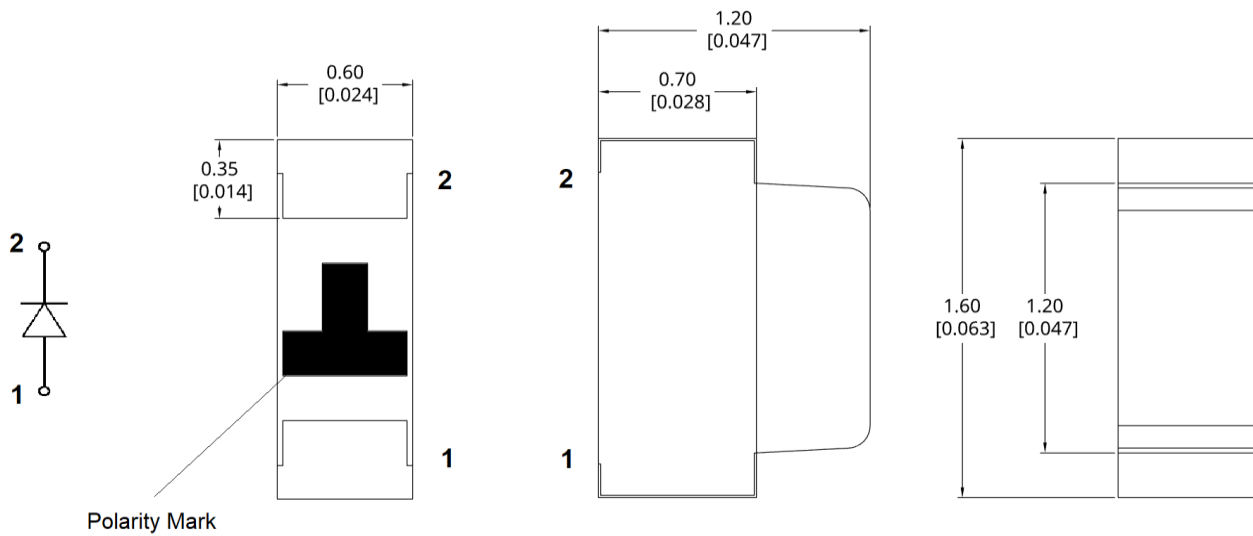
- Status indication
- Back lighting application
- General Use

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)		CIE Coordinate	I _V (mcd)		
			Typ.	Max.	Typ.	Min.	Typ.	Max.
QBLP617-IW5-2897	White	5	2.8	3.1	X = 0.298 Y = 0.305	124	240	379

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

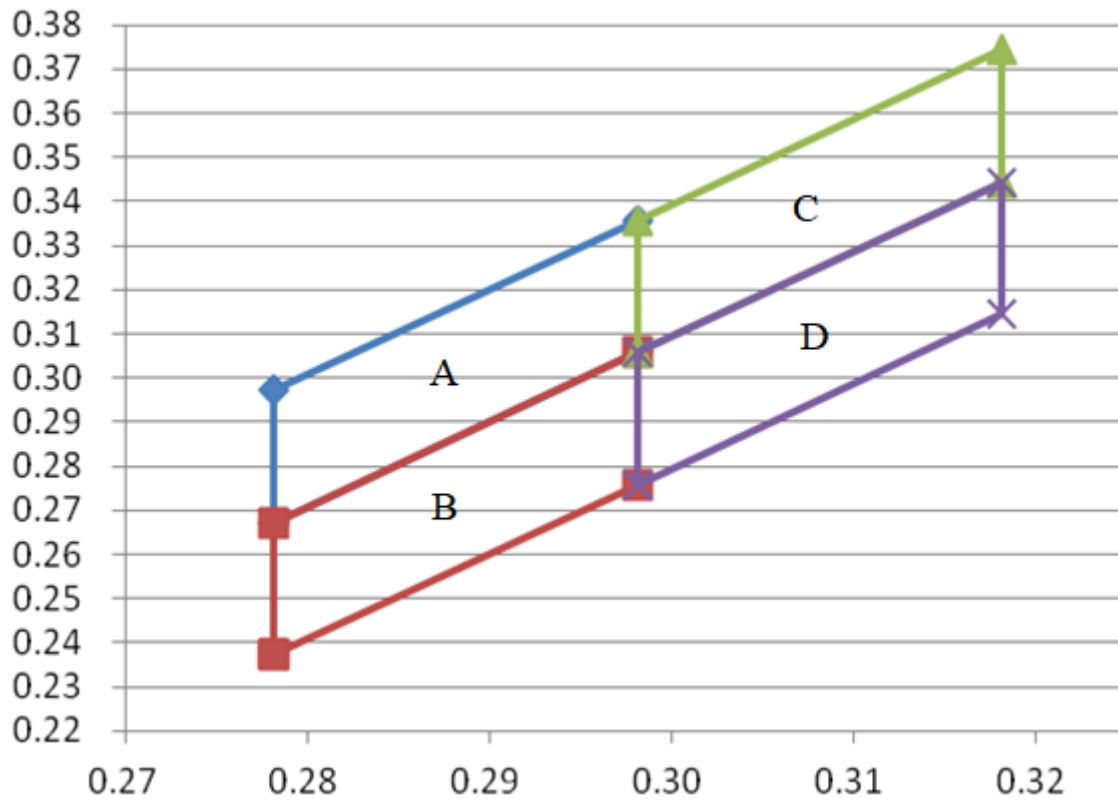
Forward Voltage V_F @ I_F=5mA

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

Luminous Intensity I_V @ I_F=5mA

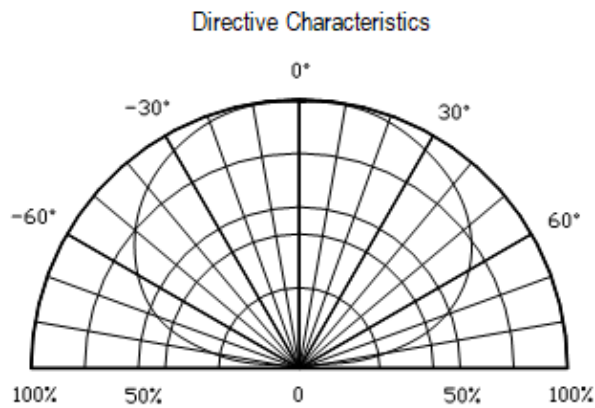
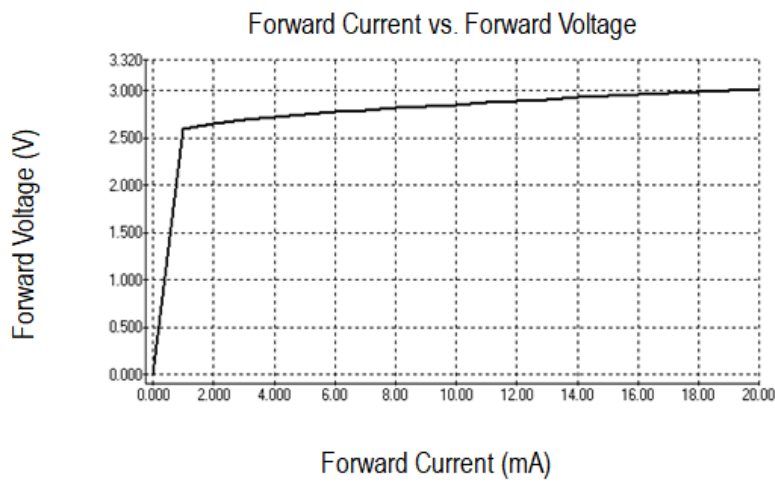
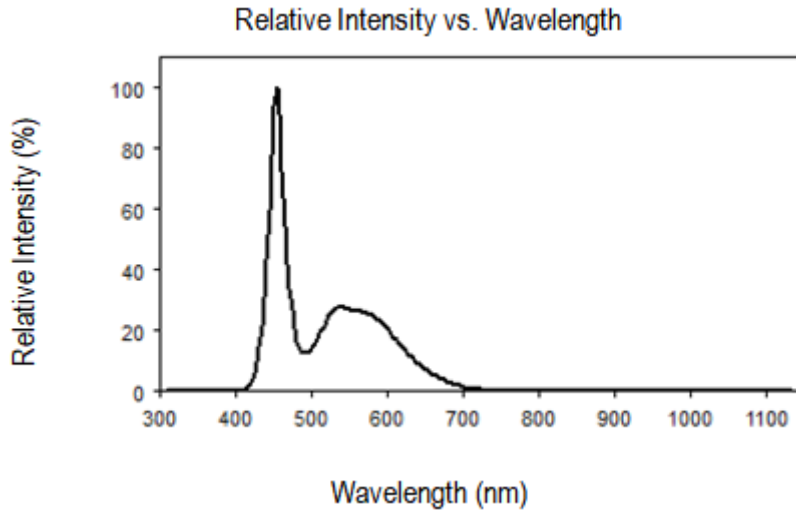
Bin	Min.	Max.	Unit
J	124	155	mcd
K	155	194	
L	194	243	
M	243	303	
N	303	379	

CIE Chromaticity Diagram



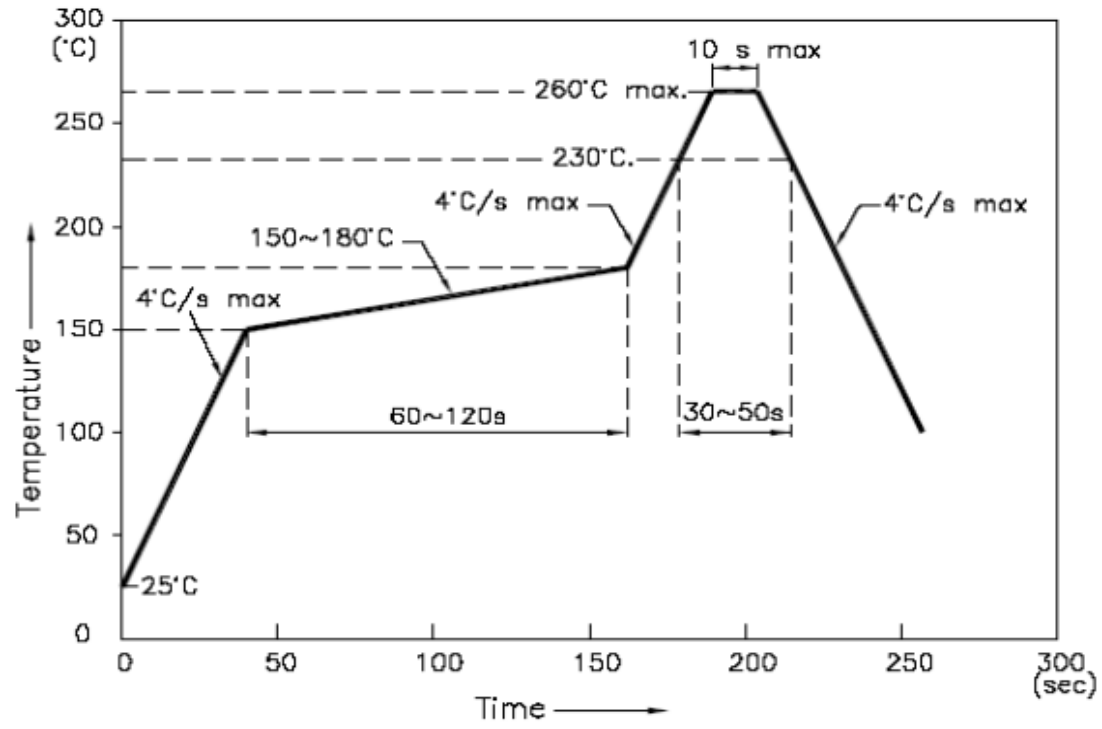
Rank	Chromaticity coordinates				
		x	y	x	y
A	x	0.278	0.278	0.298	0.298
	y	0.267	0.297	0.336	0.306
B	x	0.278	0.278	0.298	0.298
	y	0.237	0.267	0.306	0.276
C	x	0.298	0.298	0.318	0.318
	y	0.306	0.336	0.374	0.344
D	x	0.298	0.298	0.318	0.318
	y	0.276	0.306	0.344	0.314

Characteristic Curves

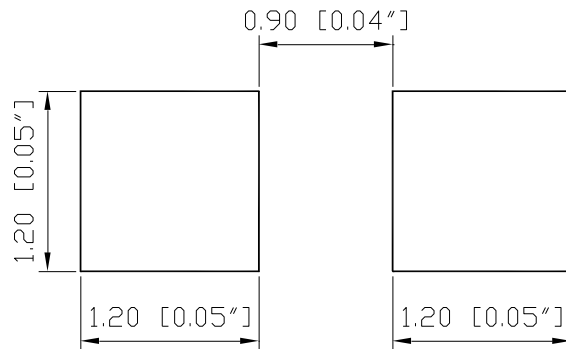


Solder Profile & Footprint

- 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):

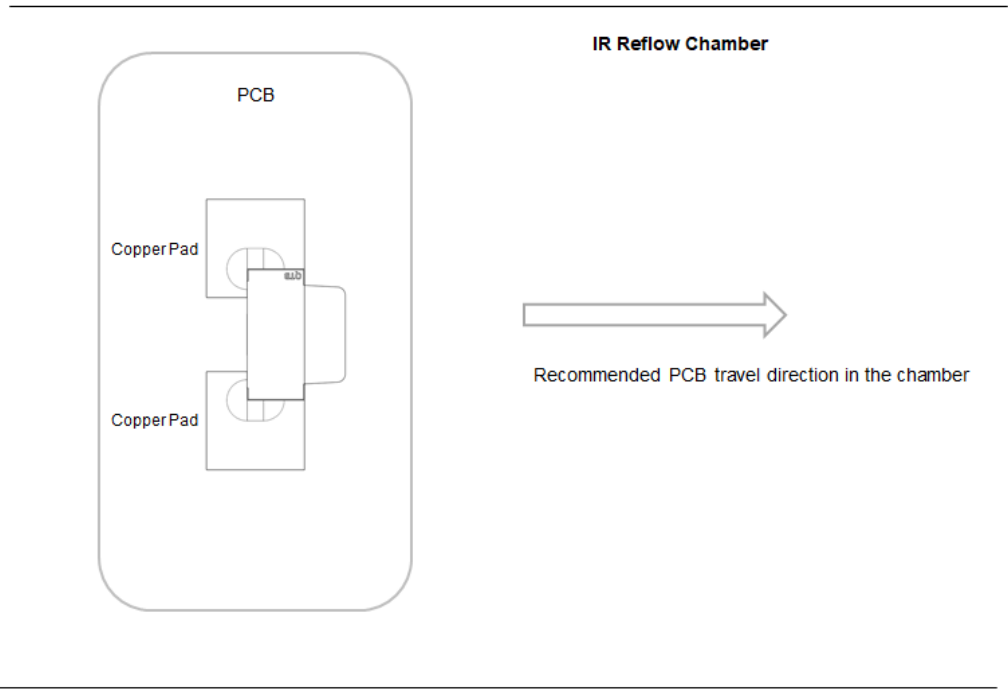


Recommended Pad Layout



Units: mm

- 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.



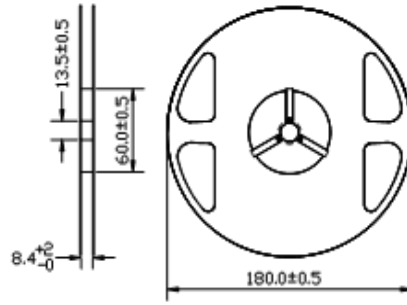
Mounting the LED on PCB



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.

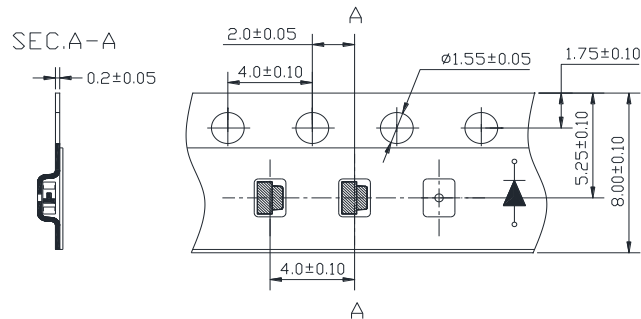
Packing

Reel Dimension:



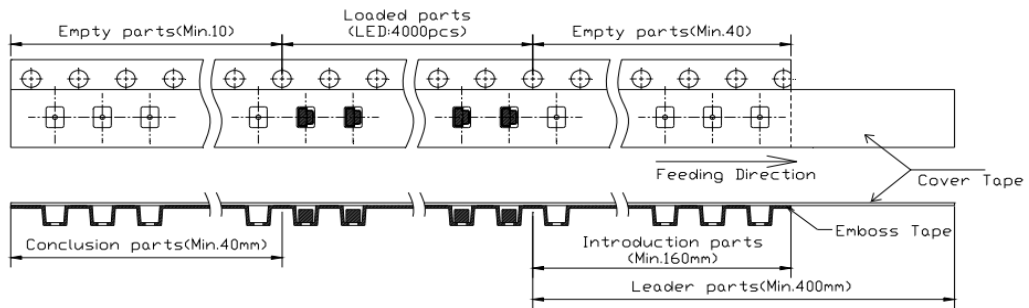
Unit: mm

Tape Dimension:

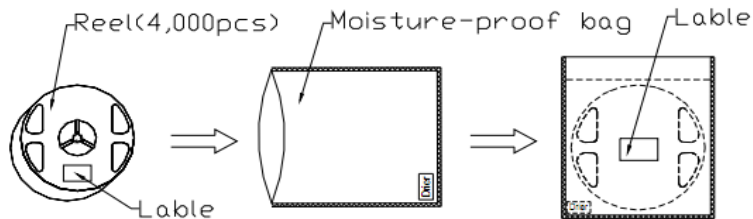


Unit: mm

Arrangement of Tape:



Packaging Specifications:



Labeling



Part No: _____
Customer P/N: _____
Item: _____
Q'ty: _____
Vf: _____
Iv: _____
WI: _____
Date: _____

Made in China

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBL617-IW5-2897	Iv=240mcd typ. @ If=5mA / CIE Coordinate: (X=0.298, Y=0.305) typ.	4,000 units



Revision History

Description:	Revision #	Revision Date
New Release of QBL617-IW5-2897	V1.0	10/29/2024

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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.