

QT-Brightek PLCC-4 Series

PLCC-4 White LED

Part No.: QBLP677A-IWD-2897

**A: Common Anode
D: 50mA
2987: High Brightness Version**



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Introduction

Feature:

- Yellow diffused lens
- 120 degree viewing angle
- Height profile: 1.85mm
- Common anode
- MSL 3

Application:

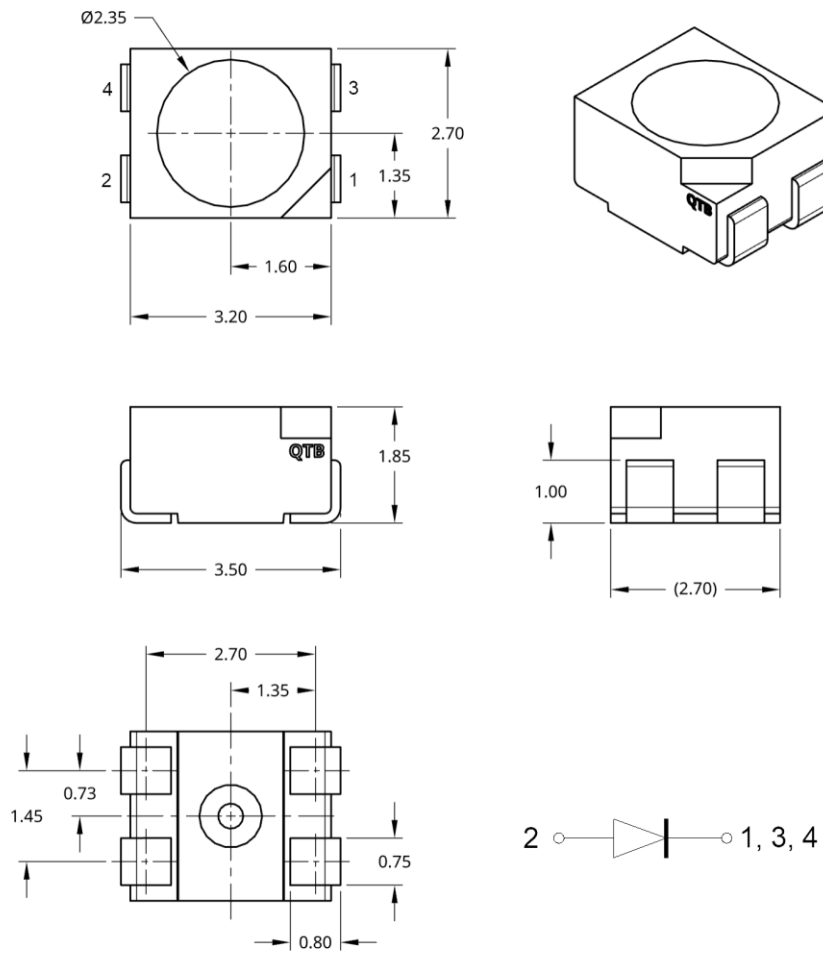
- Industrial lighting
- Industrial equipment lighting
- Transportation lighting

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)			CIE Coordinate	I _V (mcd)		
			Min.	Typ.	Max.	Typ.	Min.	Typ.	Max.
QBLP677A-IWD-2897	White	50	2.8	3.1	3.4	X=0.337 Y=0.34	3500	7400	9628

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	204	60	150	5	-40 to +85	-40 to +100	260

*Duty 1/10 @ 1kHz

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

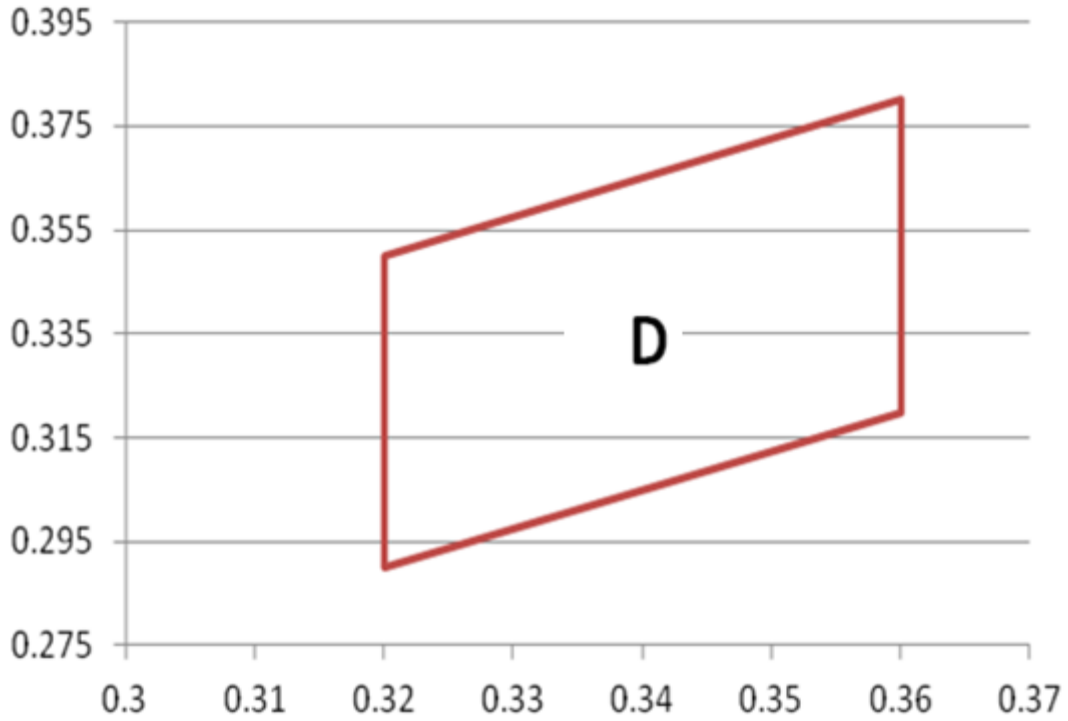
Forward Voltage V_F @ I_F=50mA

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

Luminous Intensity @ I_F=50mA

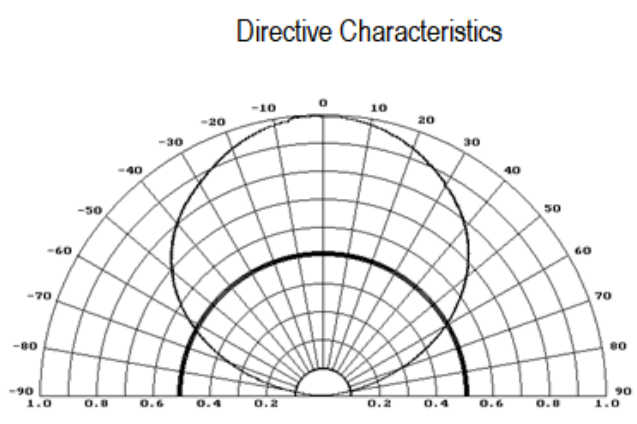
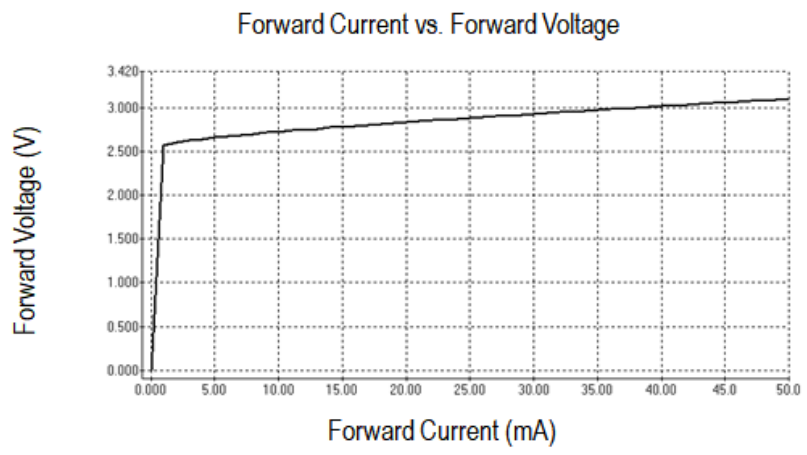
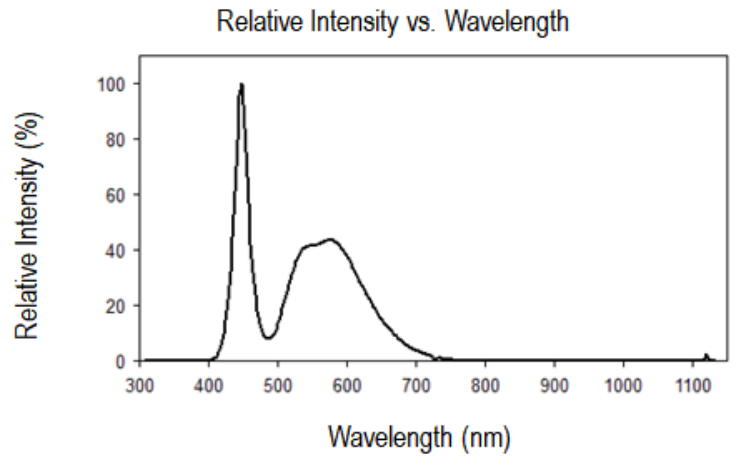
Bin	Min.	Max.	Unit
Y	3500	4375	mcd
Z	4375	5689	
a	5689	7440	
b	7440	9628	

CIE Chromaticity Diagram



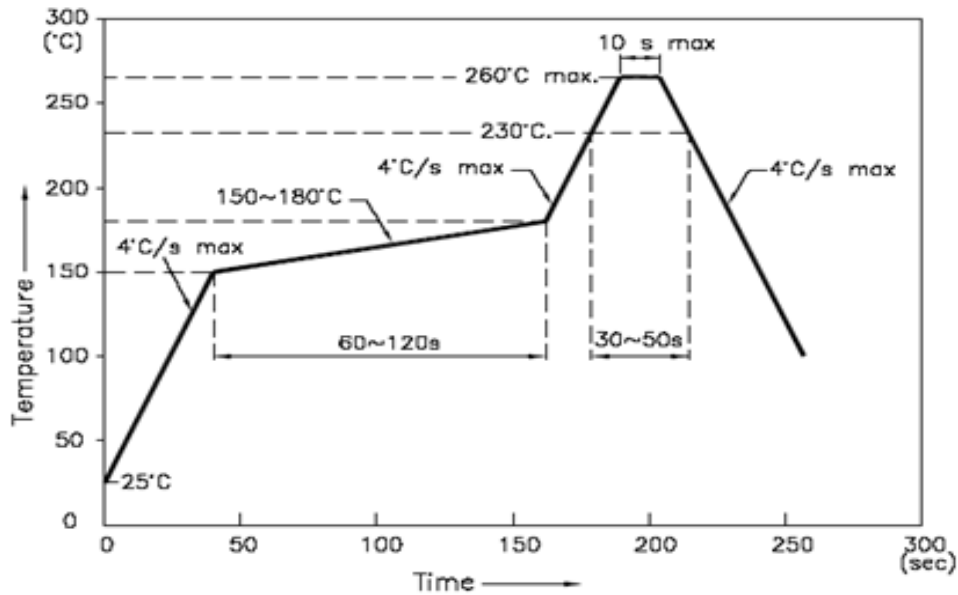
Rank	Chromaticity coordinates				
D	X	0.32	0.32	0.36	0.36
	Y	0.29	0.35	0.38	0.32

Characteristic Curves

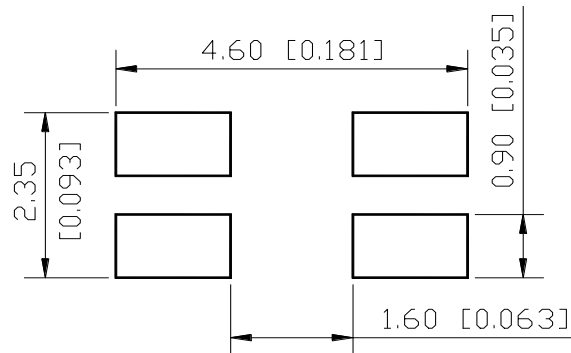


Solder Profile & Footprint

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



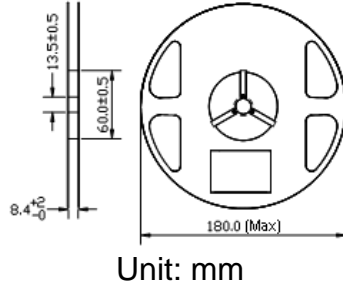
Recommended Pad Layout



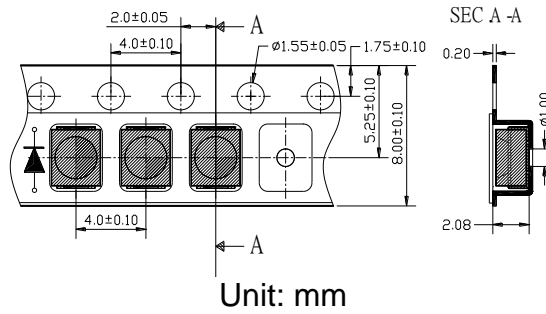
Units: mm

Packing

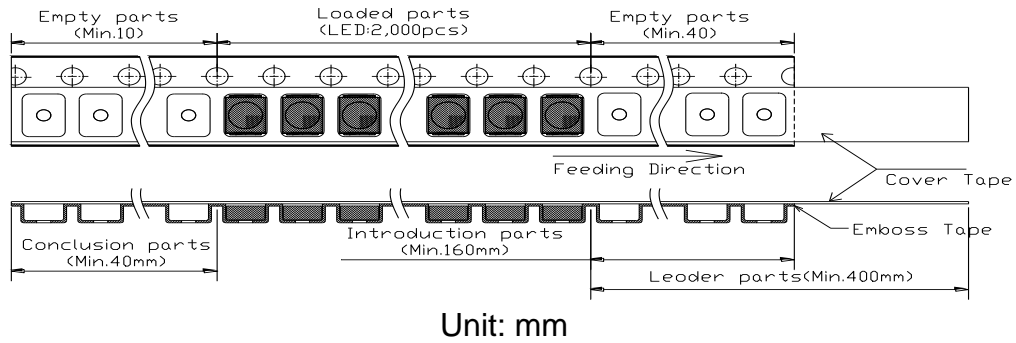
Reel Dimension:



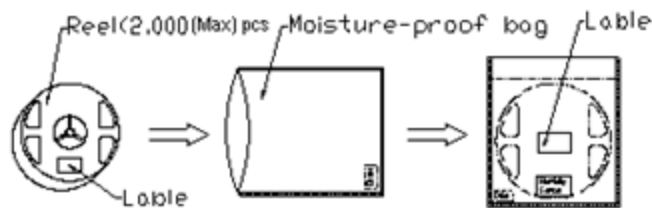
Tape Dimension:



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
QBLP677A-IWD-2897	Iv=7400mcd typ. @ I _F =50mA / CIE Coordinate: (X=0.337, Y=0.34) typ.	2,000 units



Revision History

Description:	Revision #	Revision Date
New Release of QBLP677A-IWD-2897	V1.0	09/29/2025

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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.

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