QT-Brightek Chip LED Series

SMD 0603 LED

Part No.: QBLP601-2IW3-2897

3: 3mA
2897: High Brightness Version

Table of Contents:

Introduction

Feature:

- Yellow diffused lens
- Package in tape and reel
- Ultra bright 0603 LED package
- InGaN technology
- Viewing angle: 140º typ.
- Height profile: 0.6mm

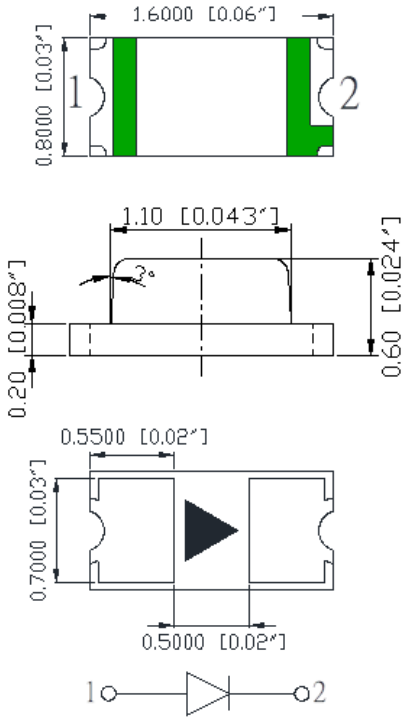
Application:

- Status indication
- Back lighting application

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)		
			Min.	Typ.	Max.	Typ.	Min.	Typ.	Max.
QBLP601-2IW3-2897	White	3	2.8	3.0	3.4	X=0.29 Y=0.296	80	130	250

Absolute Maximum Rating

Chip Material	P_d (mW)	I_F (mA)	I_{FP} (mA)*	V_R (V)	T_{OP} (°C)	T_{ST} (°C)	T_{SOL} (°C)**
InGaN	102	30	100	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/10 @ 1kHz
**IR Reflow for no more than 10 sec @ 260 °C

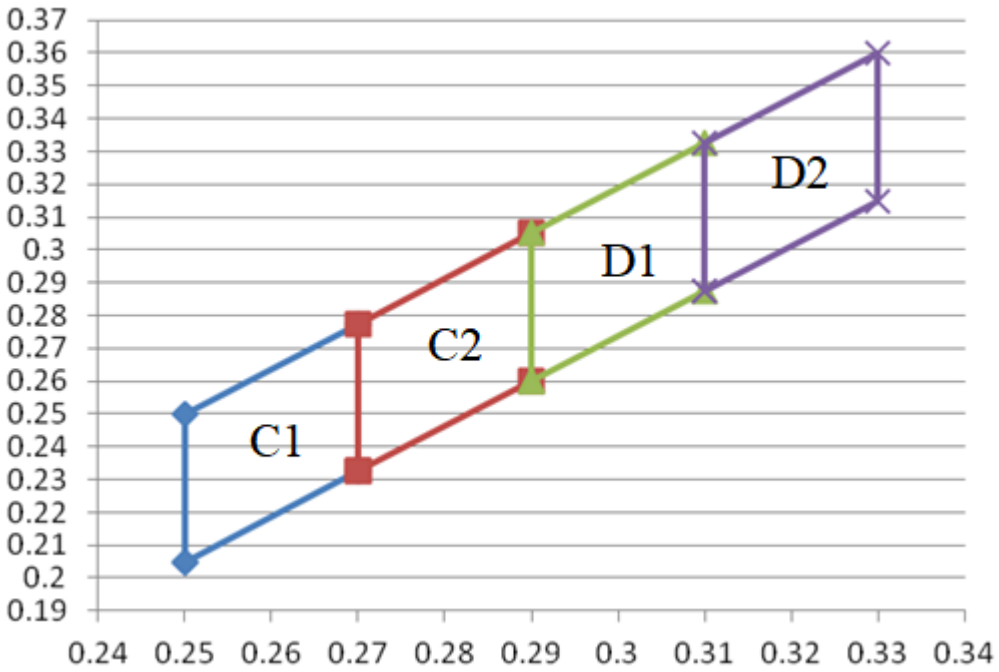
Forward Voltage V_F @ I_F=3mA

Bin	Min.	Max.	Unit
e	2.5	2.8	V
f	2.8	3.1	
g	3.1	3.4	

Luminous Intensity I_V @ I_F=3mA

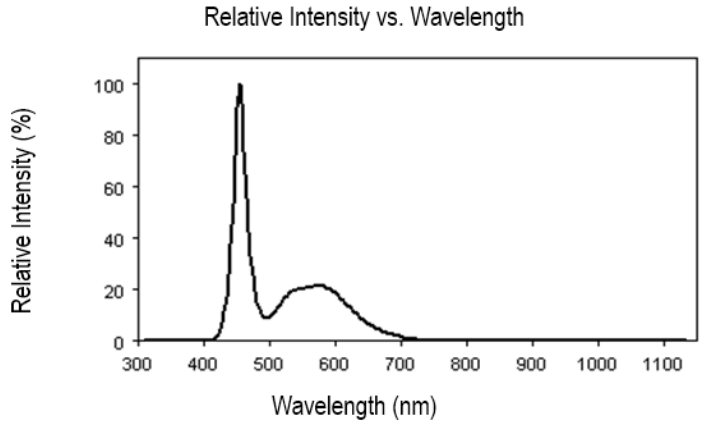
Bin	Min.	Max.	Unit
I	80	100	mcd
J	100	125	
K	125	160	
L	160	200	
M	200	250	

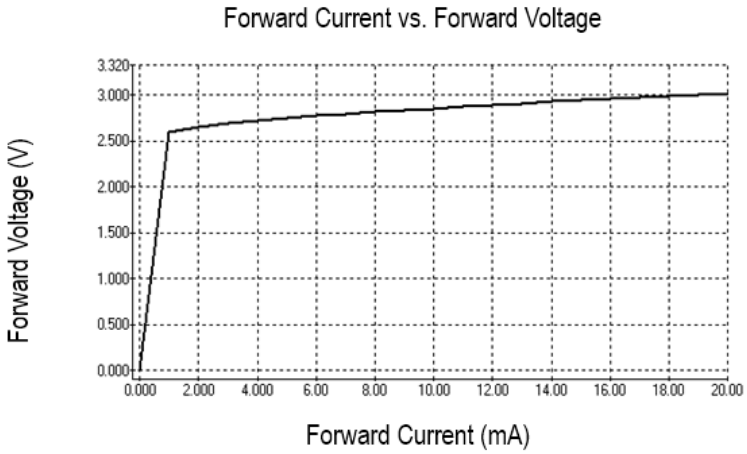
CIE Chromaticity Diagram

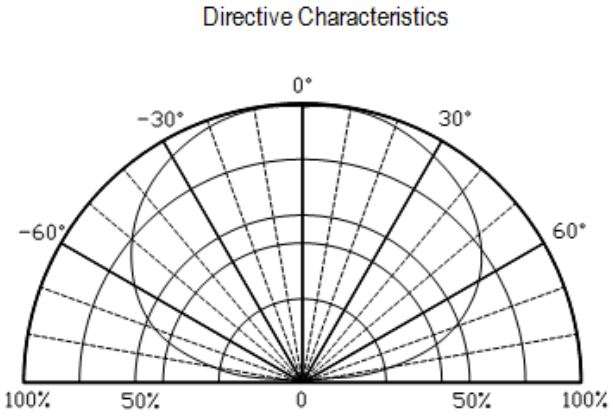


Rank		Chromaticity coordinates			
C1	X	0.25	0.25	0.27	0.27
	Y	0.205	0.25	0.2775	0.2325
C2	X	0.27	0.27	0.29	0.29
	Y	0.2325	0.2775	0.305	0.26
D1	X	0.29	0.29	0.31	0.31
	Y	0.26	0.305	0.3325	0.2875
D2	X	0.31	0.31	0.33	0.33
	Y	0.2875	0.3325	0.36	0.315

Characteristic Curves

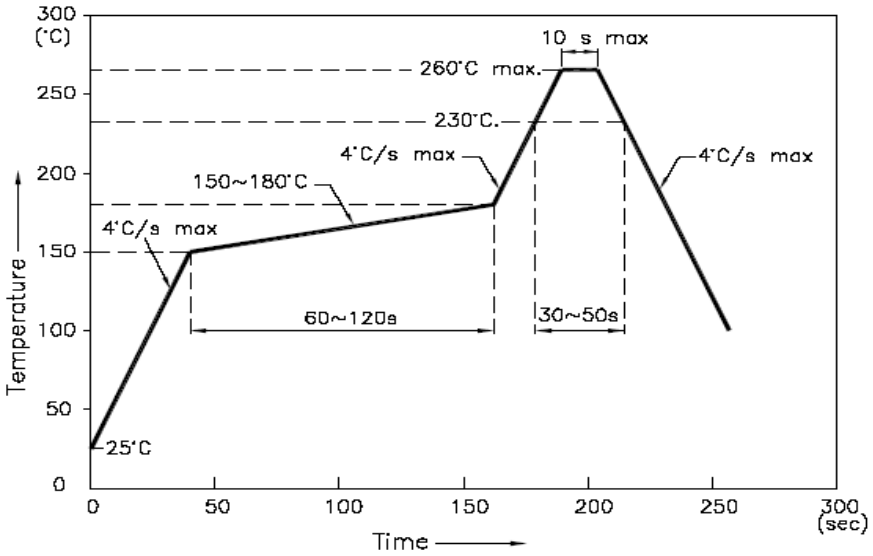




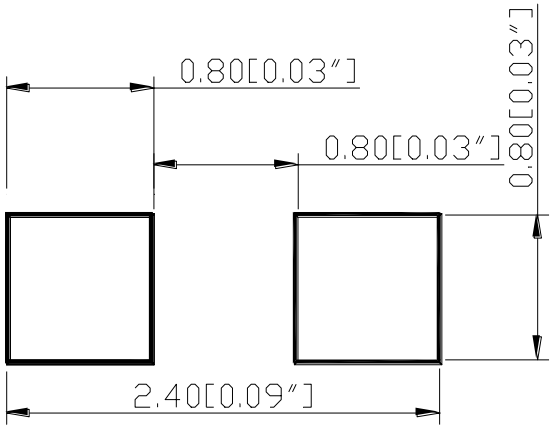


Solder Profile & Footprint

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



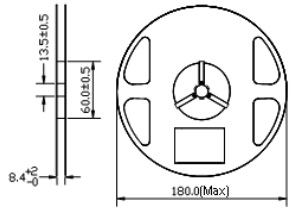
Recommended Pad Layout



Units: mm

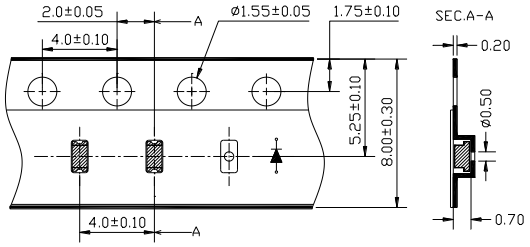
Packing

Reel Dimension:



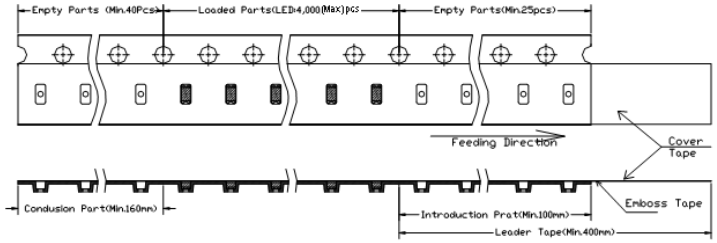
Unit: mm

Tape Dimension:

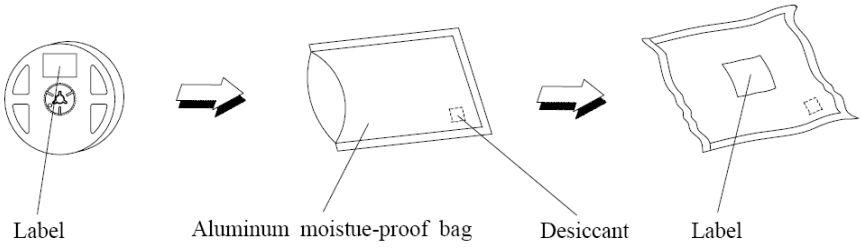


Unit: mm

Arrangement of Tape:



Packaging Specifications:



Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP601-2IW3-2897	Iv=130mcd typ. @ I_F=3mA / CIE Coordinate: (X=0.29, Y=0.296) typ.	4,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP601-2IW3-2897	V1.0	08/25/2025

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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.