



THE DATASHEET OF
QBLP595-IW-2897



QT-Brightek Chip LED Series

0402 SMD Chip LED

Part No.: QBLP595-IW-2897

Product: QBLP595-IW-2897	Date: February 09, 2018	Page 1 of 10
	Version# 1.0	

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Introduction

Feature:

- Diffused lens
- Package in tape and reel
- Compact 0402 package
- InGaN technology for IW
- Viewing Angle: 150° typ.

Description:

These compact 0402 LEDs have a height profile of 0.5mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

Application:

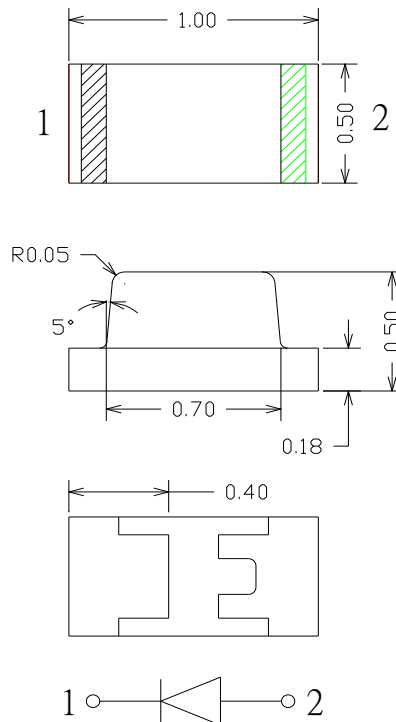
- Status indication
- Back lighting application

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)		CCT Coordinate			I _V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBLP595-IW-2897	White	20	3.1	3.7	-	X=0.33 Y=0.33	-	250	420

Absolute Maximum Rating

Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SO L} (°C)**
InGaN	111	30	125	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/8 @ 1KHz

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

Forward Voltage V_F @ I_F=20mA

Bin	Min.	Max.	Unit
f	2.8	3.1	V
g	3.1	3.4	
h	3.4	3.7	

Luminous Intensity I_V @ I_F=20mA

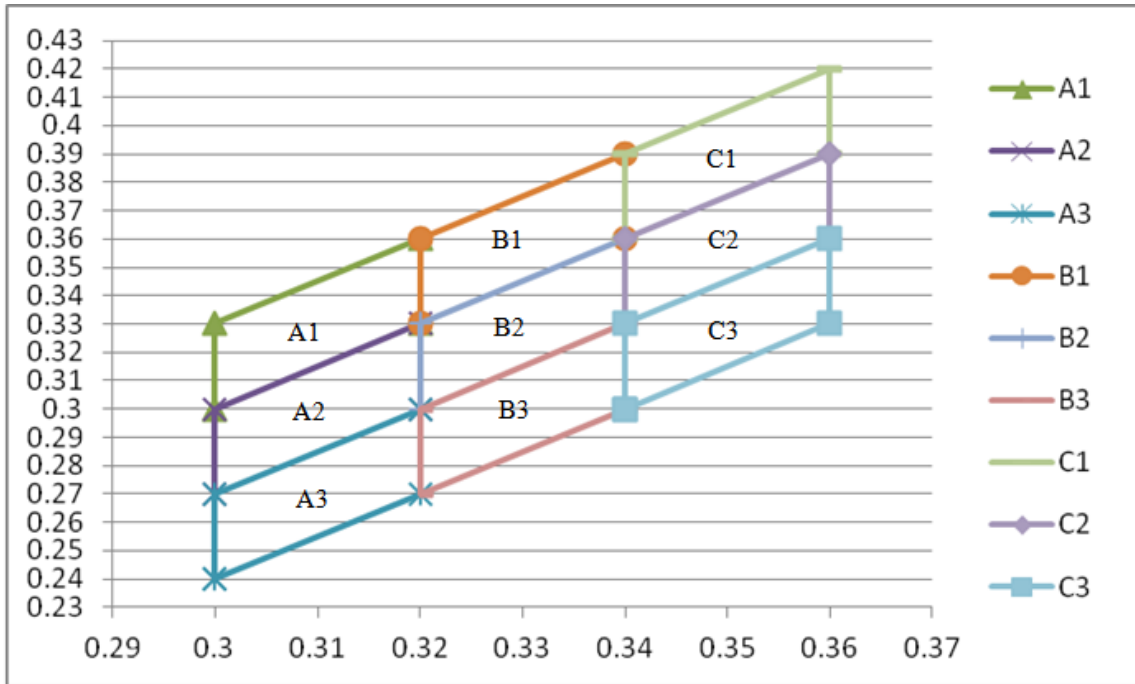
Bin	Min.	Max.	Unit
N	250	320	mcd
O	320	400	
P	400	500	
Q	500	630	
R	630	800	

Note:

Tolerance of measurement of forward voltage: ±0.1V

Tolerance of measurement of luminous intensity: ±15%

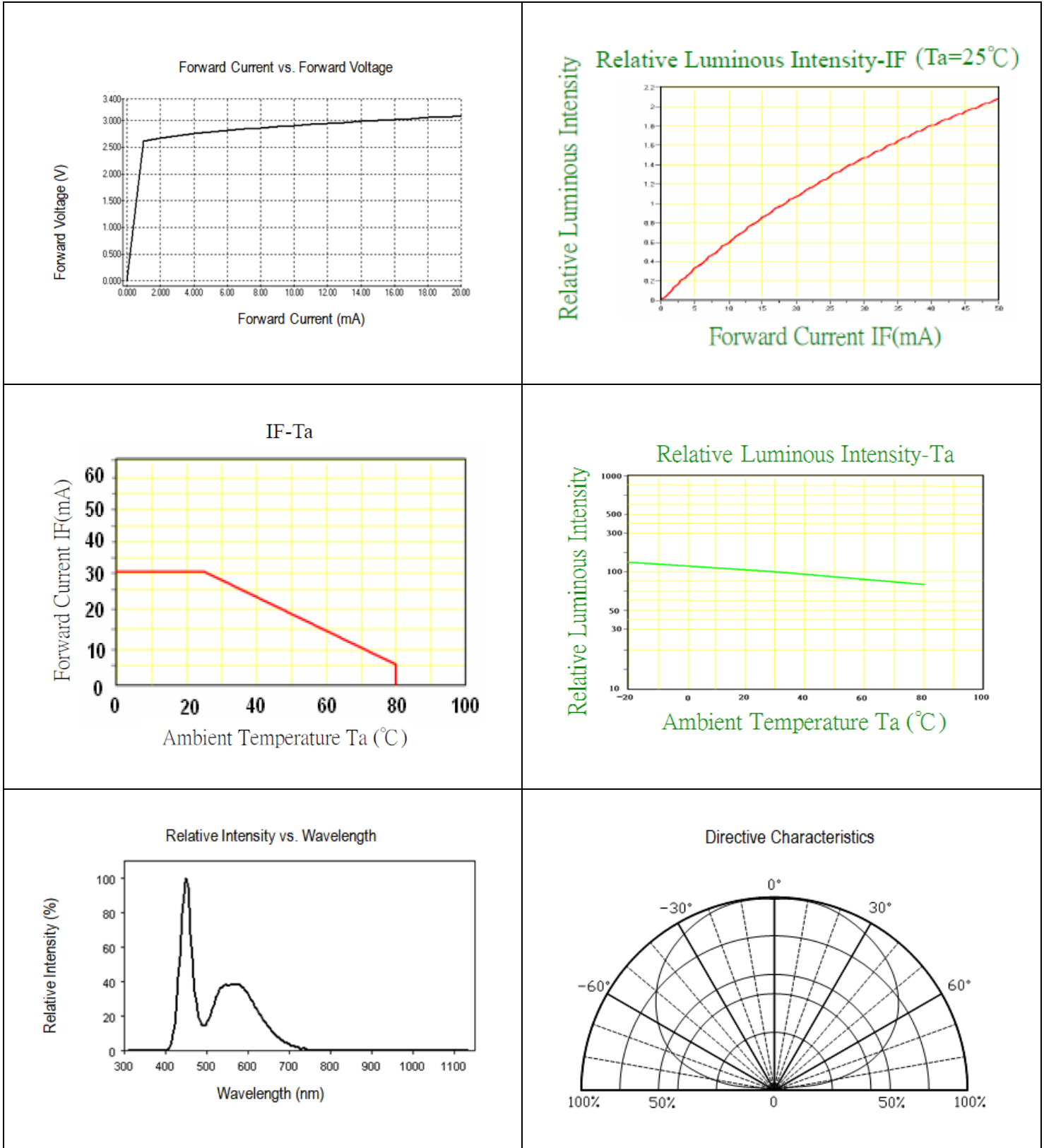
Correlated Color Temperature Chart



Rank	Chromaticity coordinates				
A1	X	0.3	0.3	0.32	0.32
	Y	0.3	0.33	0.36	0.33
A2	X	0.3	0.3	0.32	0.32
	Y	0.27	0.3	0.33	0.3
A3	X	0.3	0.3	0.32	0.32
	Y	0.24	0.27	0.3	0.27
B1	X	0.32	0.32	0.34	0.34
	Y	0.33	0.36	0.39	0.36
B2	X	0.32	0.32	0.34	0.34
	Y	0.3	0.33	0.36	0.33
B3	X	0.32	0.32	0.34	0.34
	Y	0.27	0.3	0.33	0.3
C1	X	0.34	0.34	0.36	0.36
	Y	0.36	0.39	0.42	0.39
C2	X	0.34	0.34	0.36	0.36
	Y	0.33	0.36	0.39	0.36
C3	X	0.34	0.34	0.36	0.36
	Y	0.3	0.33	0.36	0.33

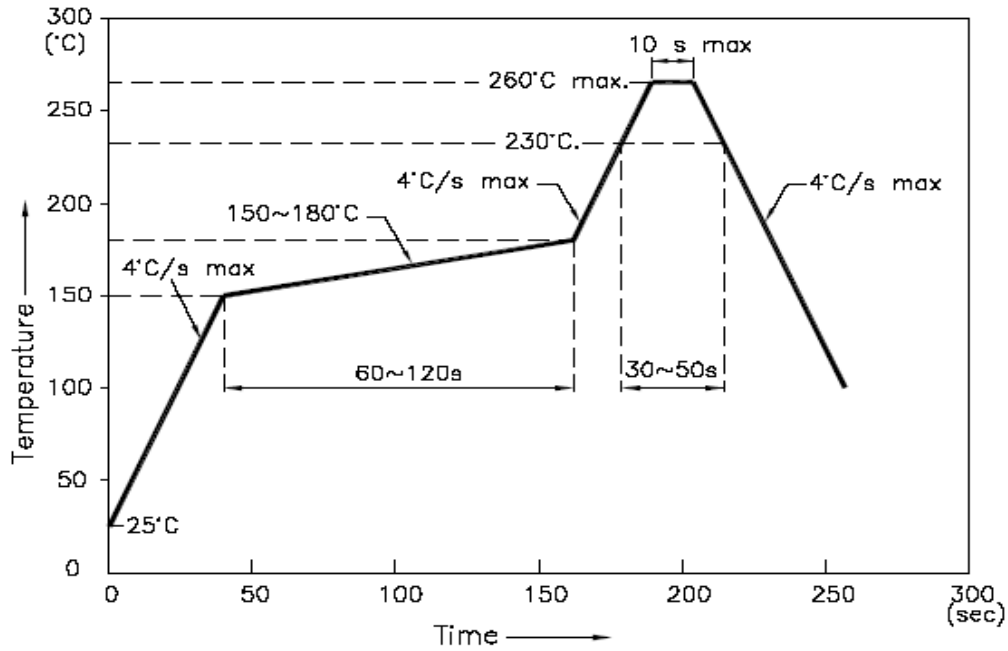
Note:
Tolerance of measurement of color coordinates: ±0.01

Characteristic Curves

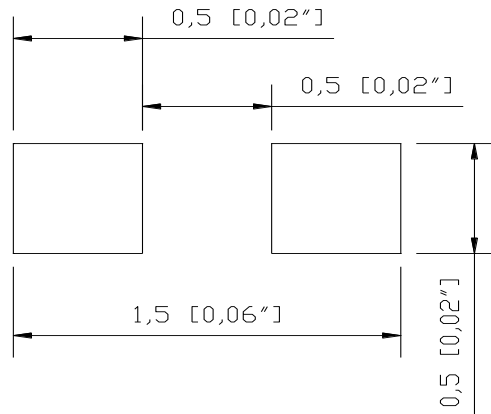


Solder Profile & Footprint

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



Recommended Pad Layout

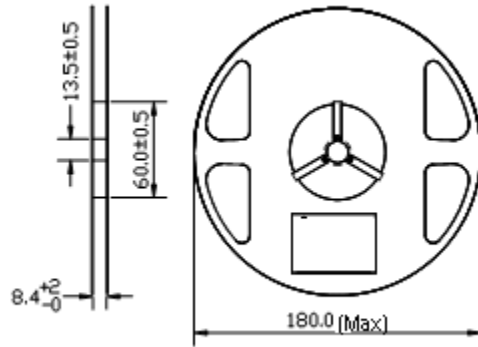


Units: mm

Tolerance: ±0.1mm

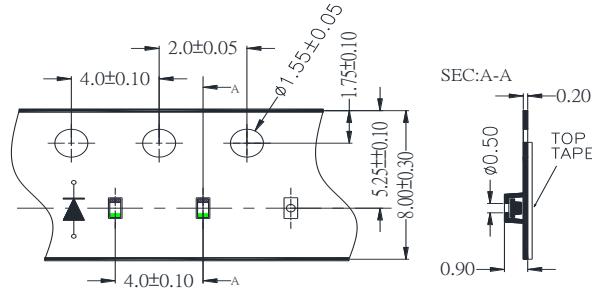
Packing

Reel Dimension:



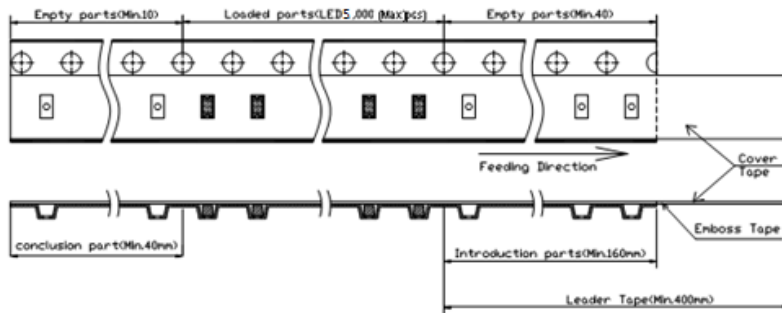
(Unit: mm)

Tape Dimension:

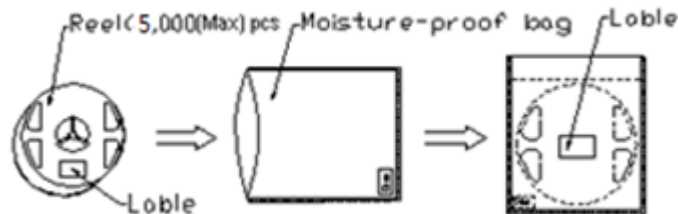


(Unit: mm)

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
QBLP595-IW-2897	QBLP595-IW-2897	Iv=420mcd typ. @ If=20mA / CCT: (X=0.33, Y=0.33) typ.	5,000 units

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Revision History

Description:	Revision #	Revision Date
New Release of QBLP595-IW-2897	V1.0	02/09/2018

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-  Alternative Solution
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