

QT-Brightek Chip LED Series

0402 SMD Chip LED

Part No.: QBLP595-IW-2897

Table of Contents:

Introduction	3
Electrical / Optical Characteristic (Ta=25 °C)	4
Absolute Maximum Rating	4
Correlated Color Temperature Chart	5
Characteristic Curves.....	6
Solder Profile & Footprint.....	7
Packing	8
Labeling	9
Ordering Information	9
Revision History	10
Disclaimer	10

Introduction

Feature:

- Yellow diffused lens
- Package in tape and reel
- Compact 0402 package
- InGaN technology
- Viewing angle: 150° typ.
- Height profile: 0.5mm

Application:

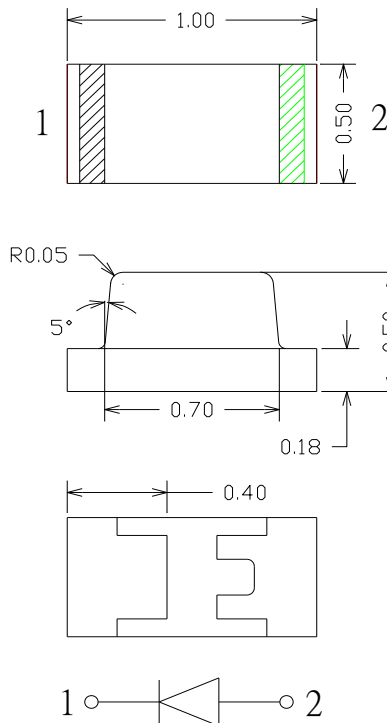
- Status indication
- Back lighting application

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.		Typ.	Min.
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 _{SOL} (°C)**
InGaN	111	30	100	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/10 @ 1KHz

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

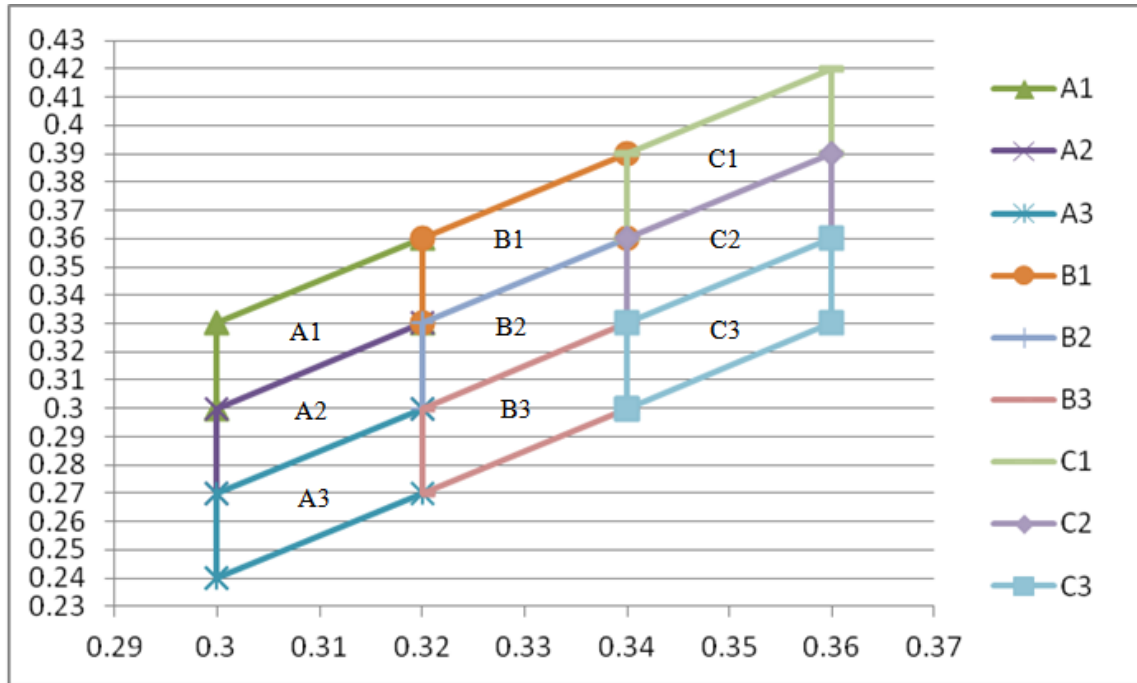
Forward Voltage V_F @ I_F=20mA

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	

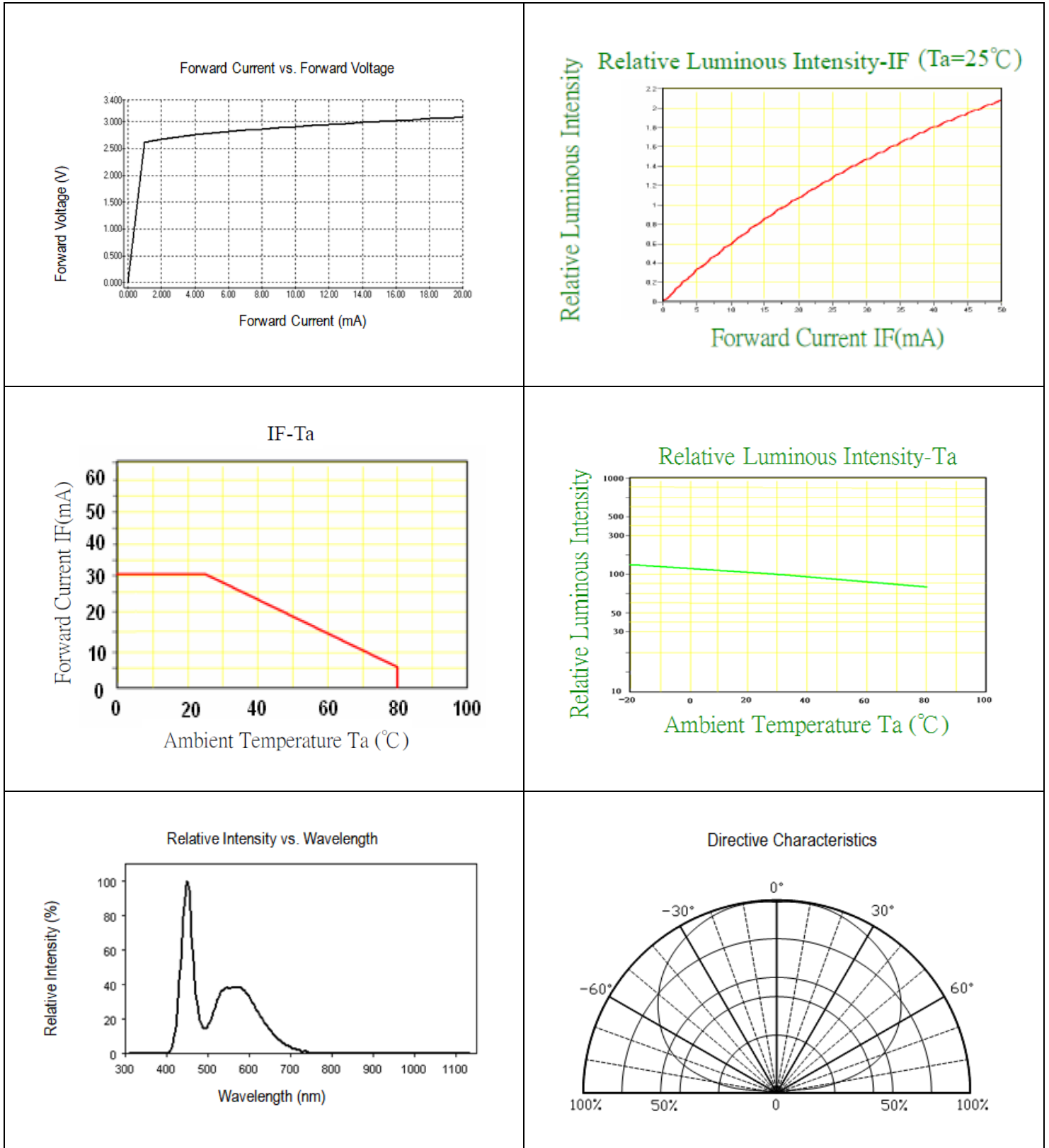
Correlated Color Temperature Chart



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

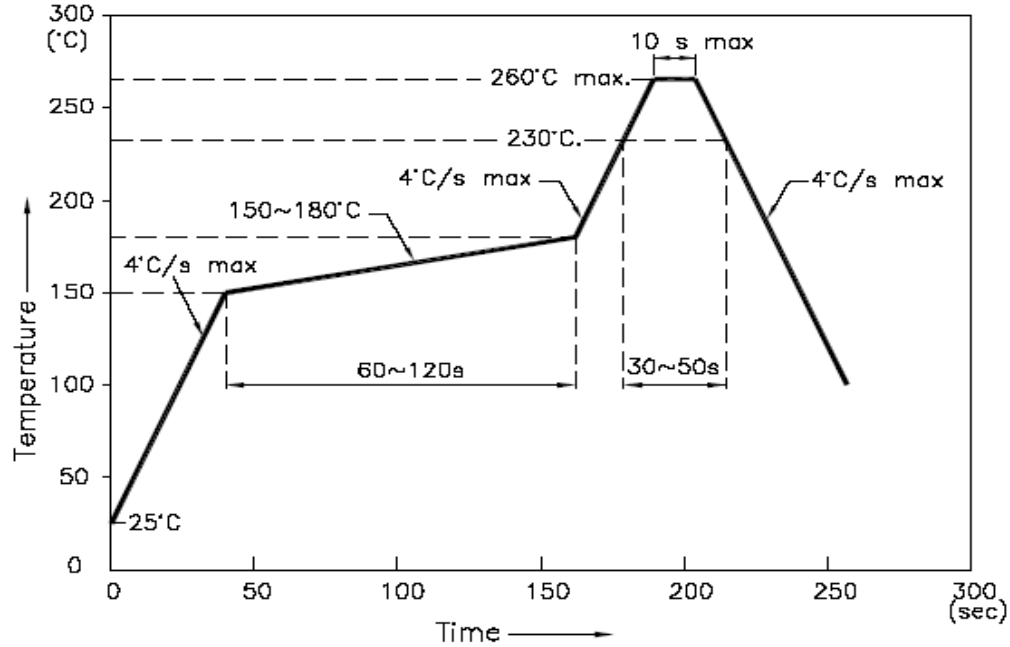
Note:
Tolerance of measurement of color coordinates: ± 0.01

Characteristic Curves

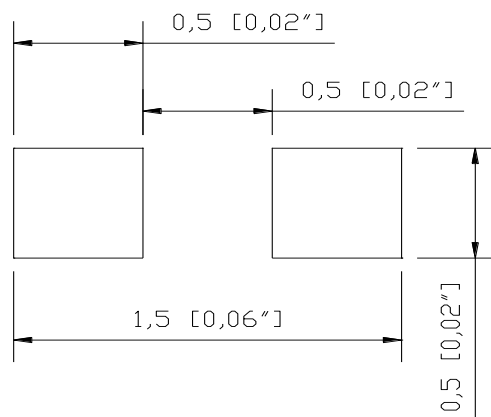


Solder Profile & Footprint

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



Recommended Pad Layout

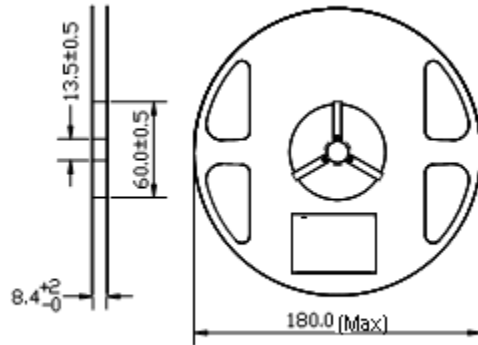


Units: mm

Tolerance: ± 0.1 mm

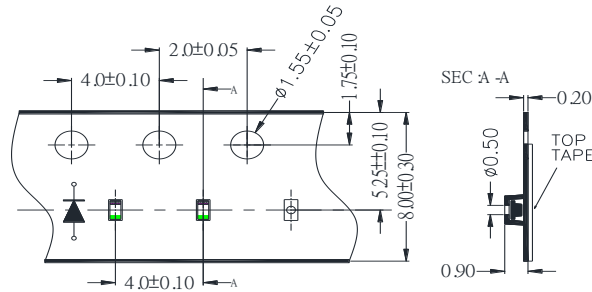
Packing

Reel Dimension:



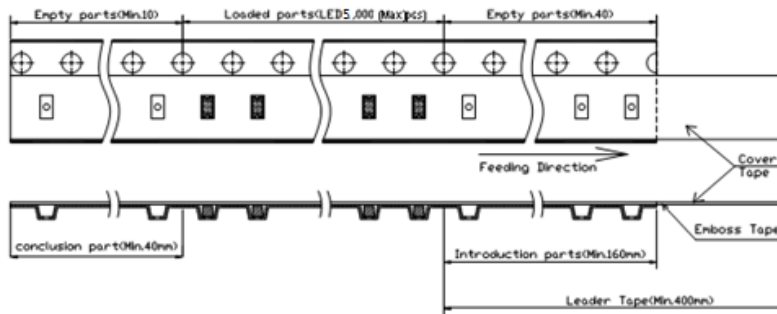
(Unit: mm)

Tape Dimension:

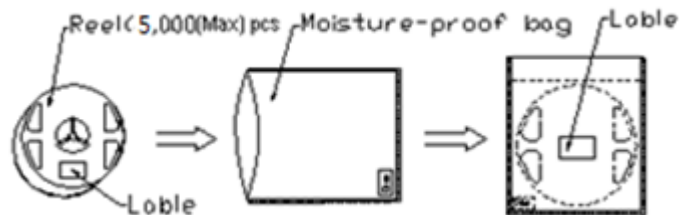


(Unit: mm)

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



Revision History

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

Disclaimer

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