

QT-Brightek Chip LED Series

0402 SMD Chip LED

Part No.: QBLP595-IW5

5: 5mA

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Product: QBLP595-IW5	Date: December 22, 2021	Page 2 of 10
	Version# 1.0	

Introduction

Feature:

- Yellow 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:

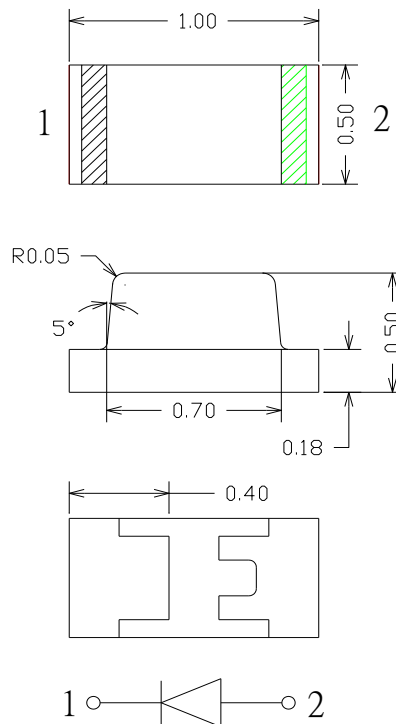
- Status indication
- Back lighting application

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-IW5	White	5	2.9	3.4	-	X=0.338 Y=0.34	-	40	55

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	102	30	125	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/8 @ 1KHz

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

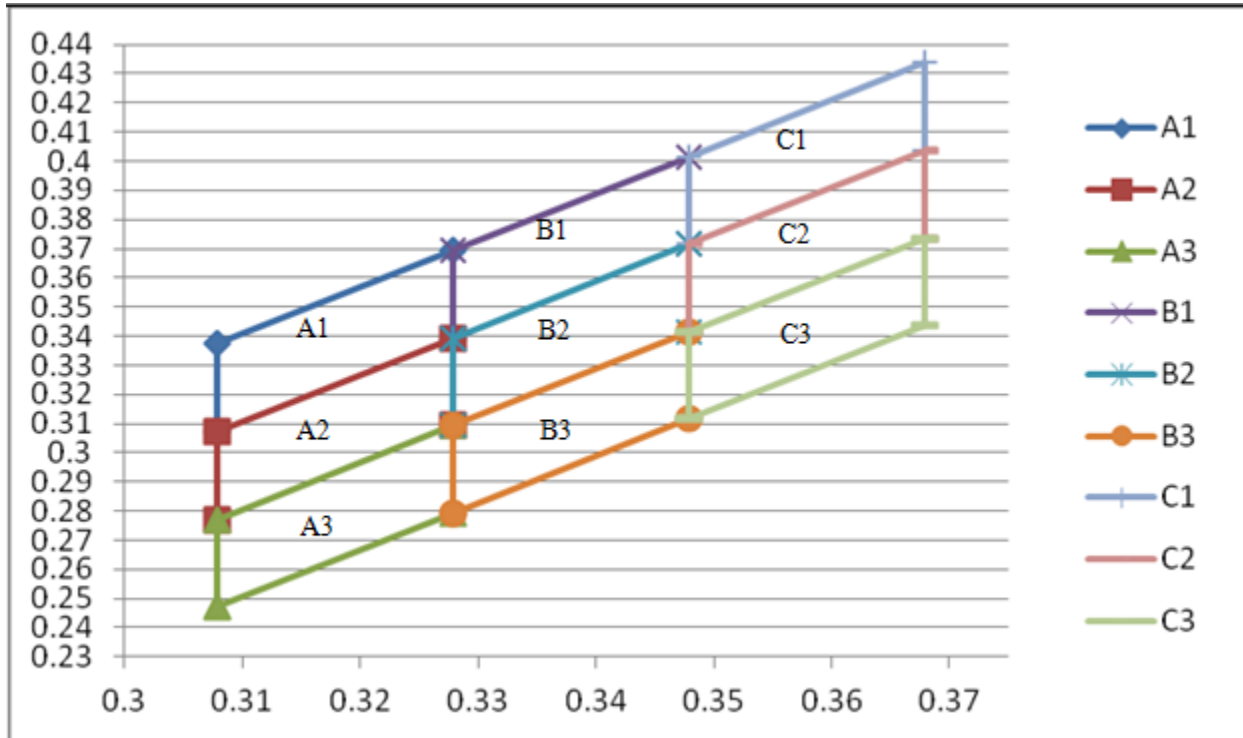
Forward Voltage V_F @ I_F=5mA

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=5mA

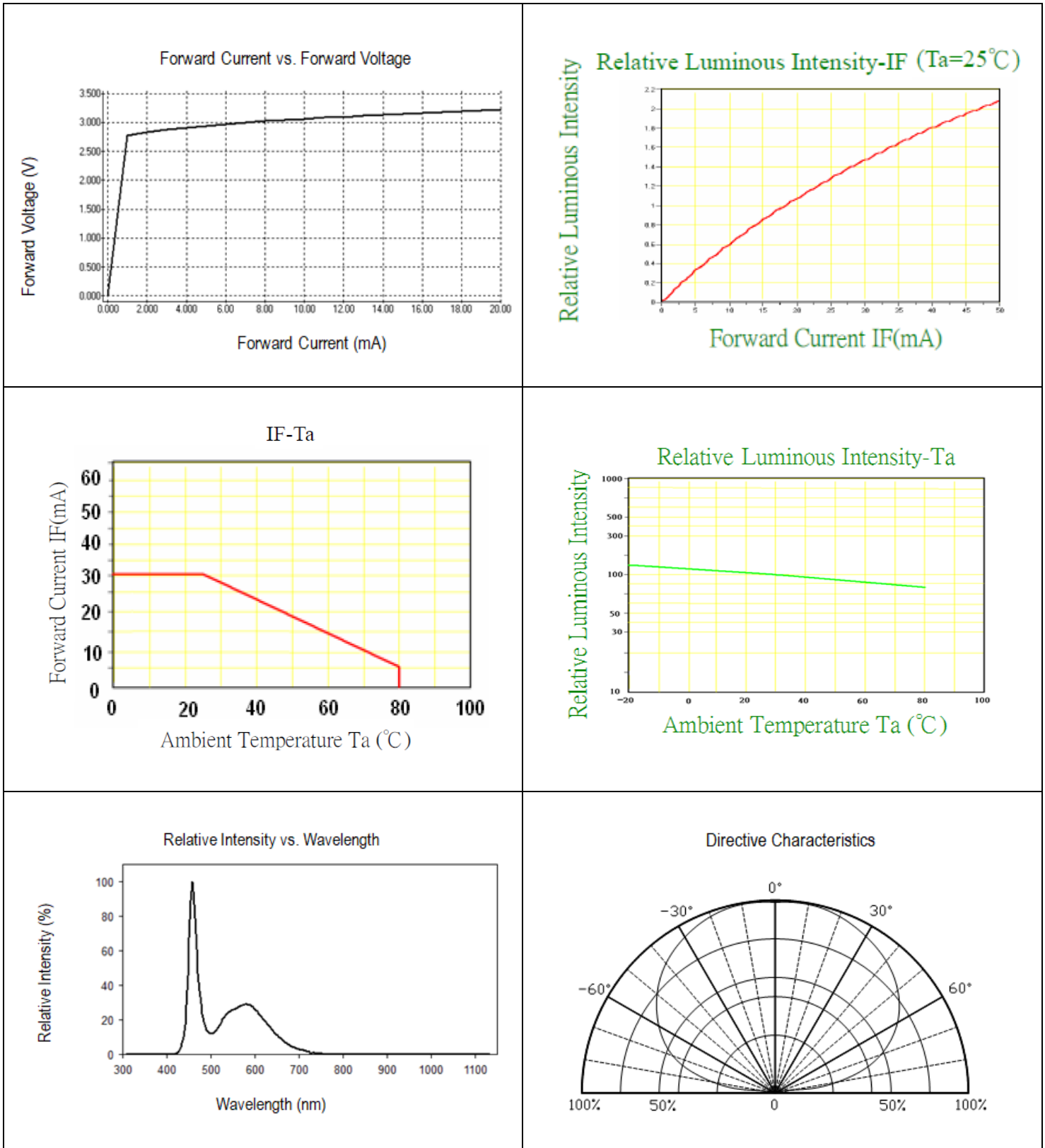
Bin	Min.	Max.	Unit
F	40	50	mcd
G	50	63	
H	63	80	
I	80	100	
J	100	125	

Correlated Color Temperature Chart



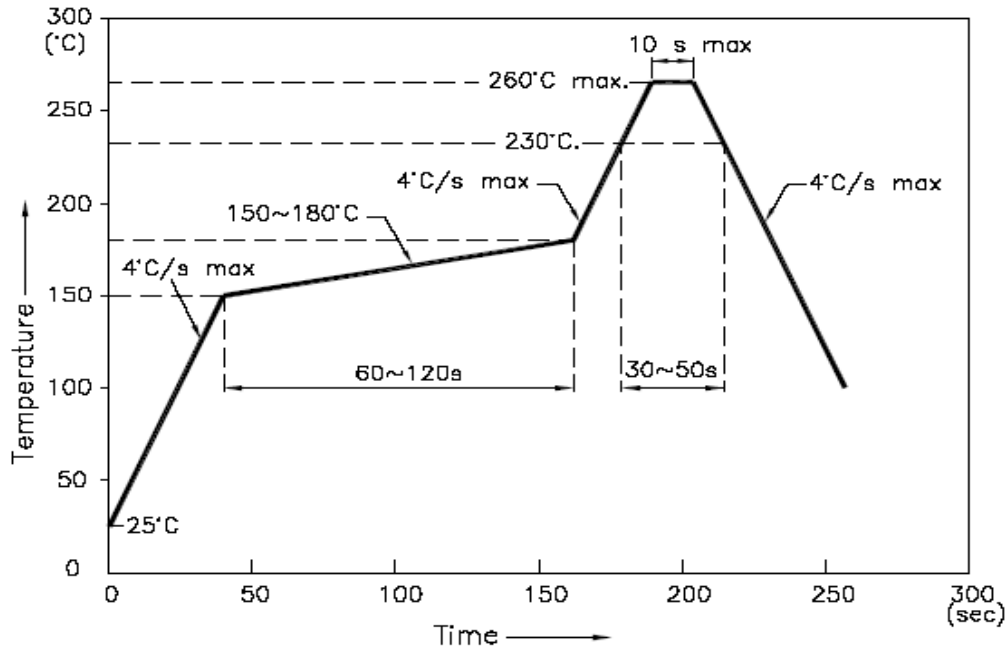
Rank	Chromaticity coordinates				
		X	Y	X	Y
A1	X	0.308	0.308	0.328	0.328
	Y	0.307	0.337	0.369	0.339
A2	X	0.308	0.308	0.328	0.328
	Y	0.277	0.307	0.339	0.309
A3	X	0.308	0.308	0.328	0.328
	Y	0.247	0.277	0.309	0.279
B1	X	0.328	0.328	0.348	0.348
	Y	0.339	0.369	0.402	0.372
B2	X	0.328	0.328	0.348	0.348
	Y	0.309	0.339	0.372	0.342
B3	X	0.328	0.328	0.348	0.348
	Y	0.279	0.309	0.342	0.312
C1	X	0.348	0.348	0.368	0.368
	Y	0.372	0.402	0.434	0.404
C2	X	0.348	0.348	0.368	0.368
	Y	0.342	0.372	0.404	0.374
C3	X	0.348	0.348	0.368	0.368
	Y	0.312	0.342	0.374	0.344

Characteristic Curves

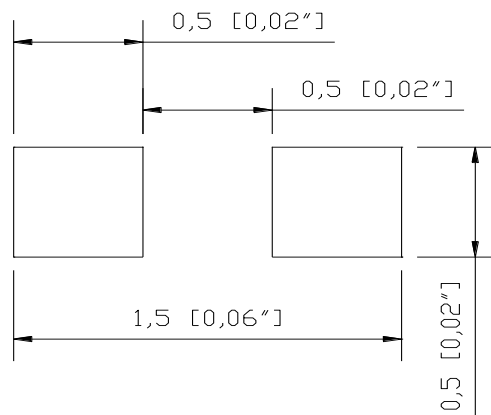


Solder Profile & Footprint

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



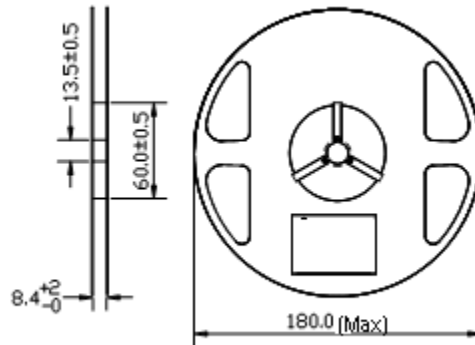
Recommended Pad Layout



Units: mm

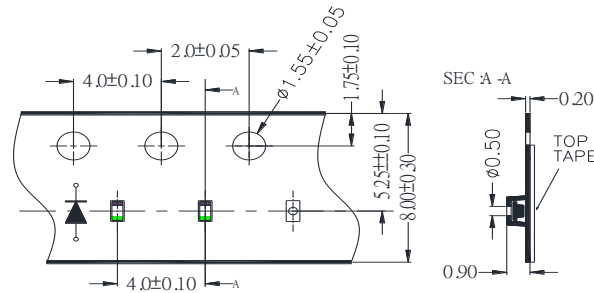
Packing

Reel Dimension:



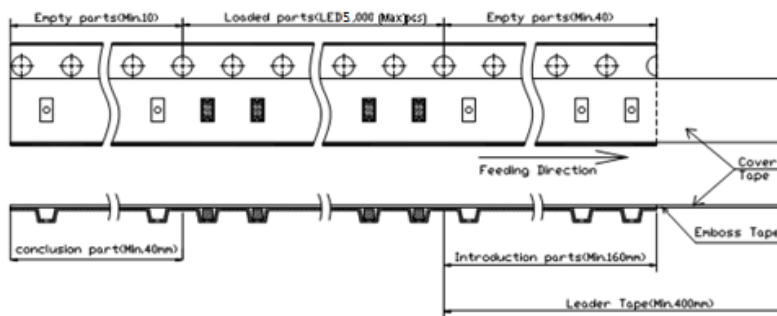
(Unit: mm)

Tape Dimension:

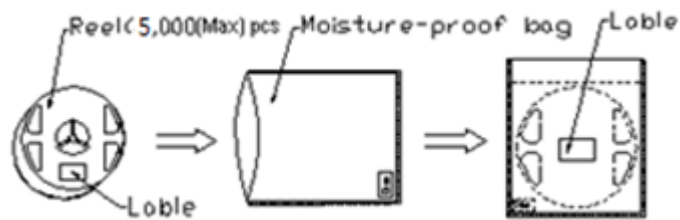


(Unit: mm)

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-IW5	QBLP595-IW5	Iv=55mcd typ. @ I _F =5mA / CIE Coordinate: (X=0.338, Y=0.34) typ.	5,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP595-IW5	V1.0	12/22/2021



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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.