

QT-Brightek Chip LED Series

SMD 1206 Side View LED

Part No.: QBLP615-IW-XX

XX=CW

Product: QBLP615-IW-XX	Date: September 29, 2022	Page 1 of 11
	Version# 1.1	

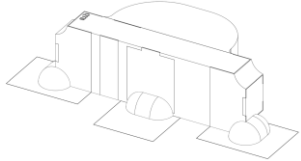
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Introduction

Feature:

- Yellow diffused lens
- Package in tape and reel
- Ultra bright 1206 side view LED package
- InGaN technology
- Viewing angle 150° typ.



Description:

These ultra bright 1206 side view LEDs have a height profile of 1.00mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

Application:

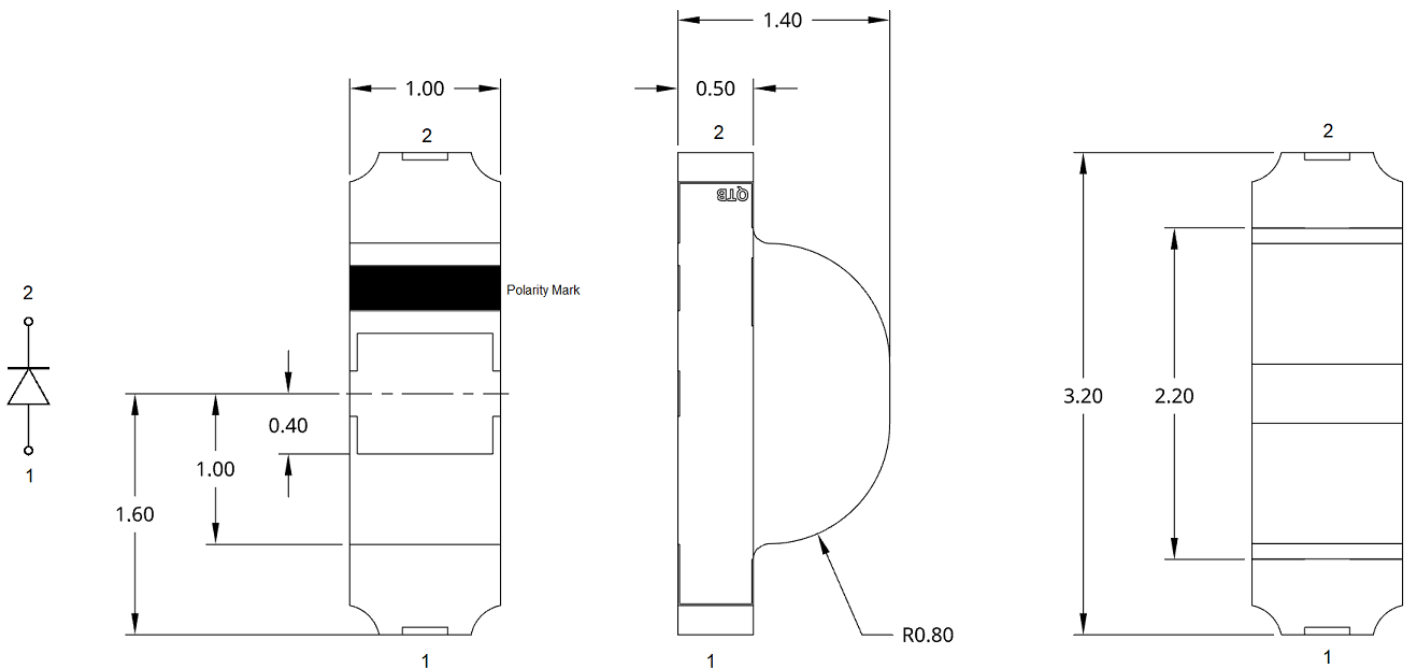
- Status indication
- Back lighting application

Certification & Compliance:

- TS16949
- 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.
QBLP615-IW-CW	Cool White	20	3.1	3.7	-	X=0.28 Y=0.29	-	200	280

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

*Duty 1/8 @ 1KHz

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

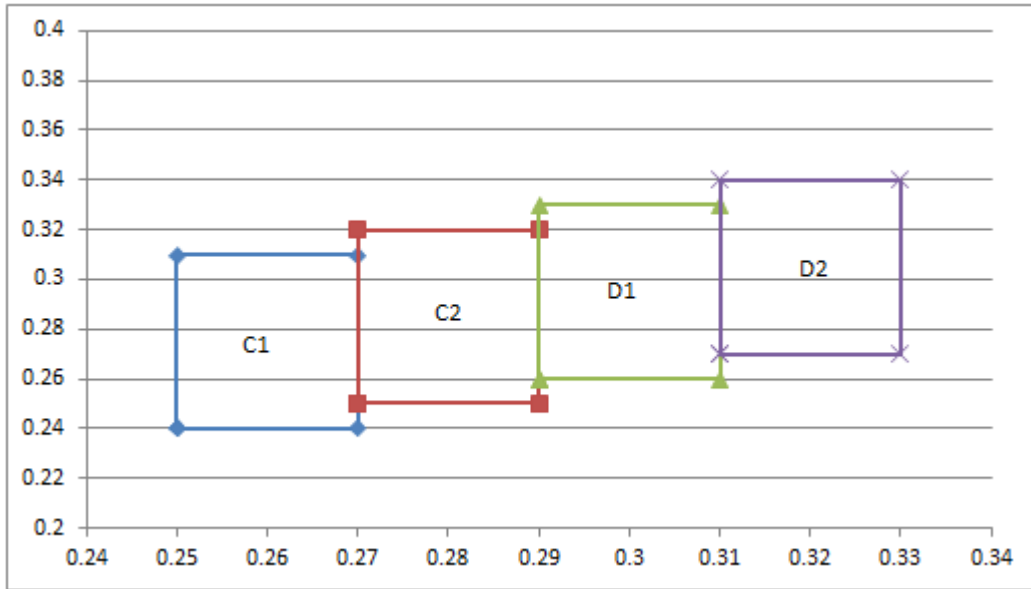
Forward Voltage V_F @ I_F=20mA

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

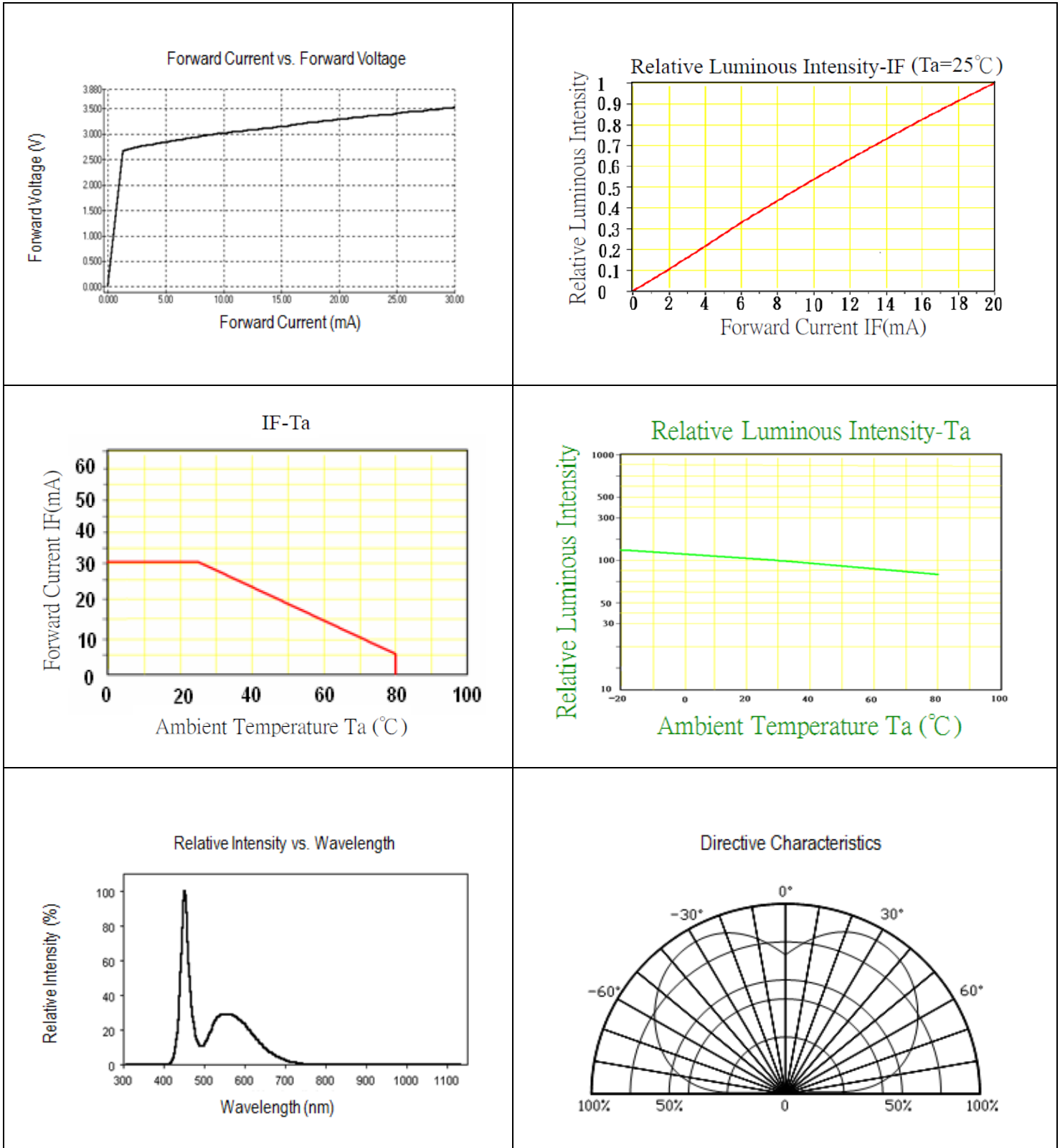
Bin	Min.	Max.	Unit
2	200	250	mcd
3	250	320	
4	320	400	
5	400	500	

CIE Chromaticity Diagram



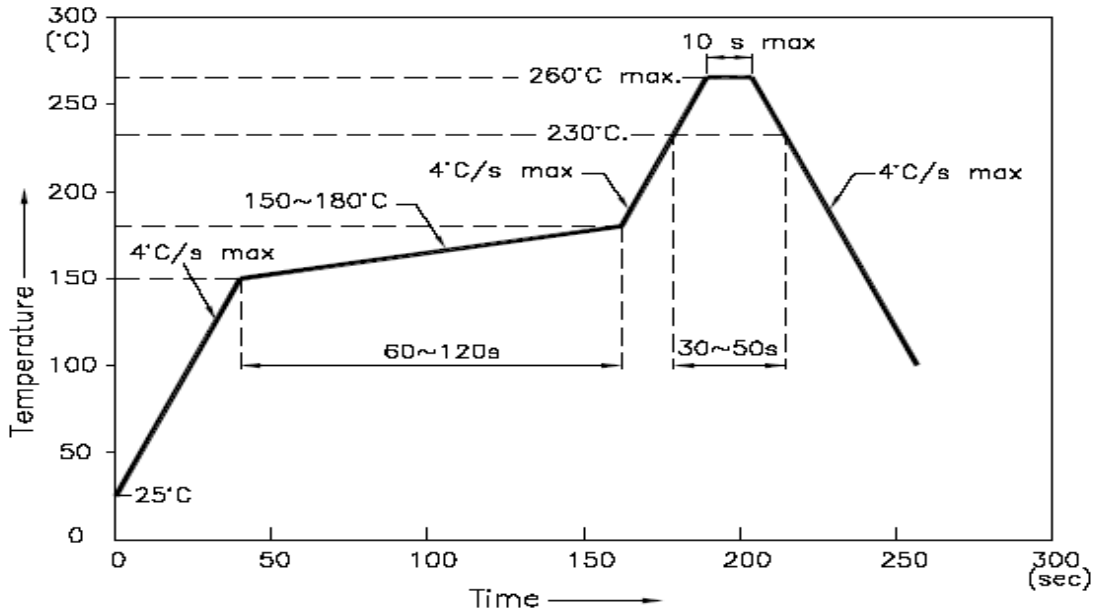
Rank	Chromaticity coordinates				
C1	0.25	0.250	0.270	0.270	0.25
	0.240	0.310	0.310	0.240	0.240
C2	0.270	0.270	0.290	0.290	0.270
	0.250	0.320	0.320	0.250	0.250
D1	0.290	0.290	0.310	0.310	0.290
	0.260	0.330	0.330	0.260	0.260
D2	0.310	0.310	0.330	0.330	0.310
	0.270	0.340	0.340	0.27	0.270

Characteristic Curves

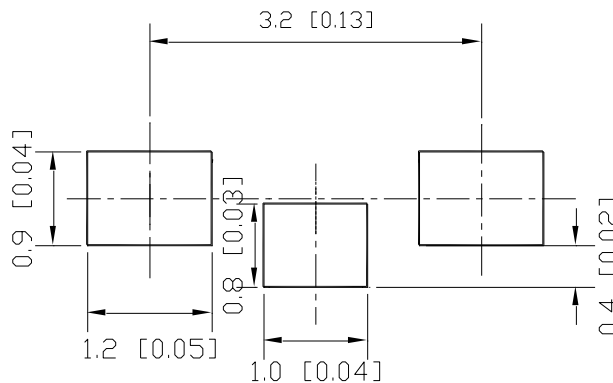


Solder Profile & Footprint

- Recommended tin solder specifications: melting temperature in the range of 178~192 °C
- The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):

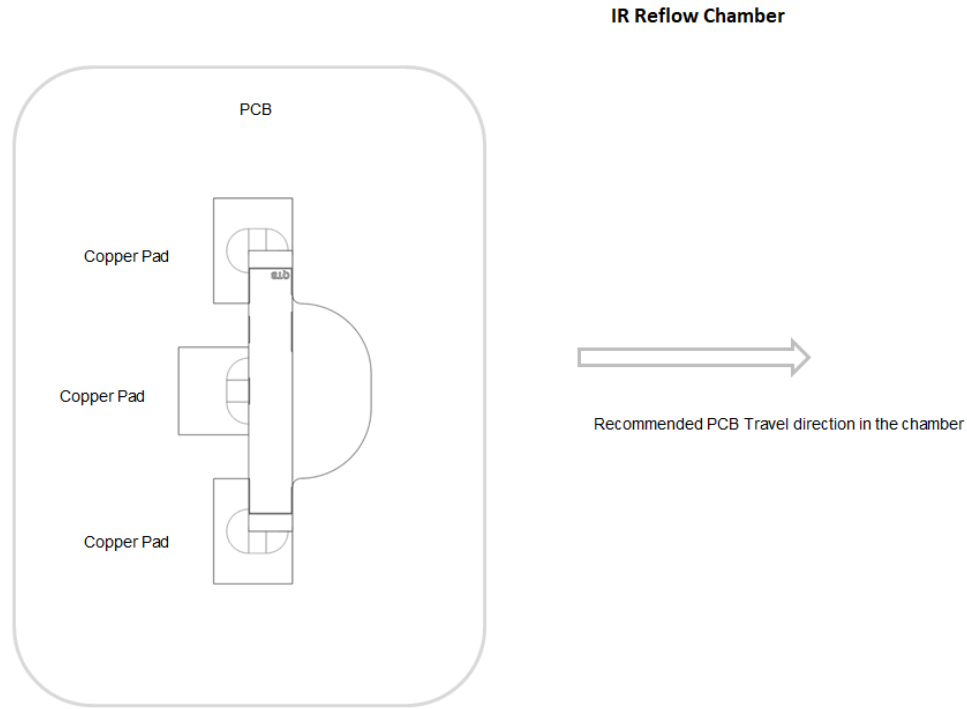


Recommended Pad Layout

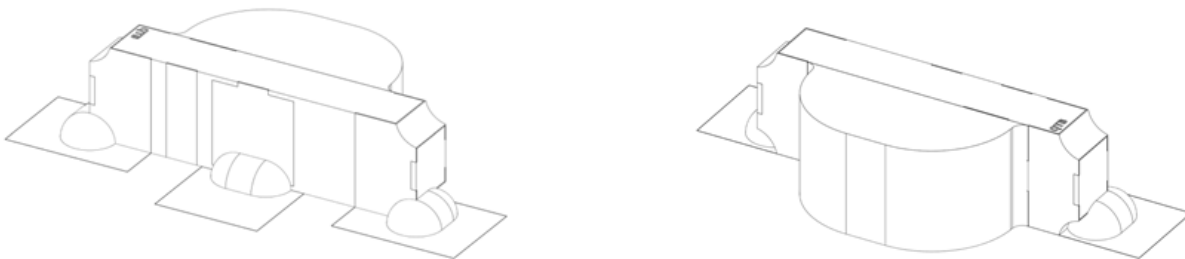


Units: mm

- The recommended IR reflow direction for a right angle (side view) SMD led is illustrated below to insure the solder on each lead melts simultaneously during the SMT reflow soldering process.



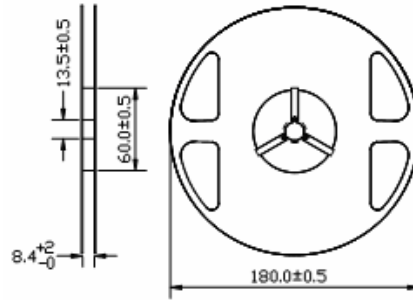
Mounting the LED on PCB



Note: The amount of solder paste applied as shown in the picture is just for illustration purpose only. When mounting and soldering the LEDs, avoid excess solder paste from overflowing onto or near the epoxy lens.

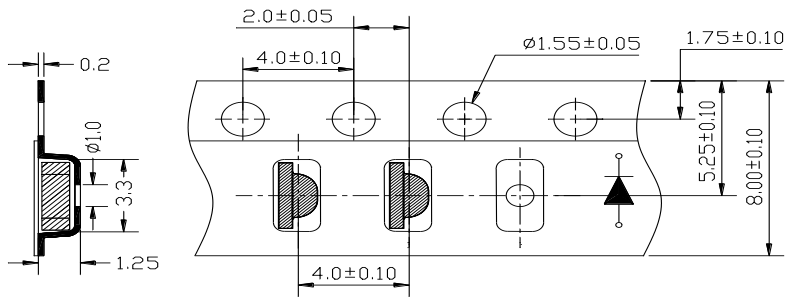
Packing

Reel Dimension:



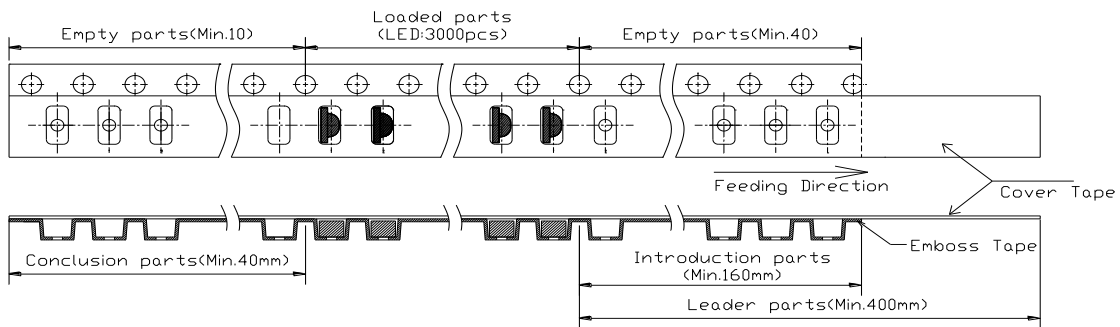
Unit: mm

Tape Dimension:

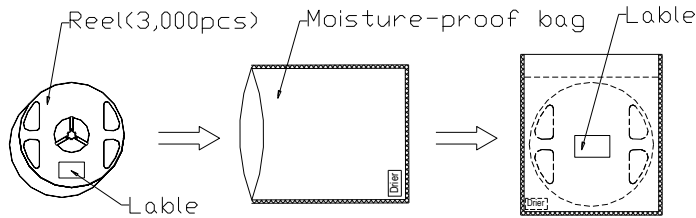


Unit in mm

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
QBLP615-IW-CW	QBLP615-IW-CW	Iv=280mcd typ. @ I _F =20mA / CCT Coordinate: (X=0.28, Y=0.29) typ.	3,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP615-IW-XX	V1.0	03/27/2014
Add recommended SMT and mounting suggestion / Optimize drawing dimensions in the datasheet	V1.1	09/29/2022



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