

QT-Brightek PLCC2 Series

PLCC2 Cool White LED

Part No.: QBLP670-IW-CW80

CW80 = (CCT: 8000K)

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Introduction

Feature:

- Package in tape and reel
- Ultra bright reflector type PLCC2 LED
- Yellow diffused lens
- InGaN technology for White
- Viewing angle: 120 deg typ.
- CRI 70 typ.
- CCT: 8000K typ.

Description:

These ultra bright reflector type PLCC2 LEDs have a height profile of 1.90mm. With a combination of high brightness output and robust package, these LEDs are ideal for architecture lighting, status indication, and industrial equipment lighting applications.

Application:

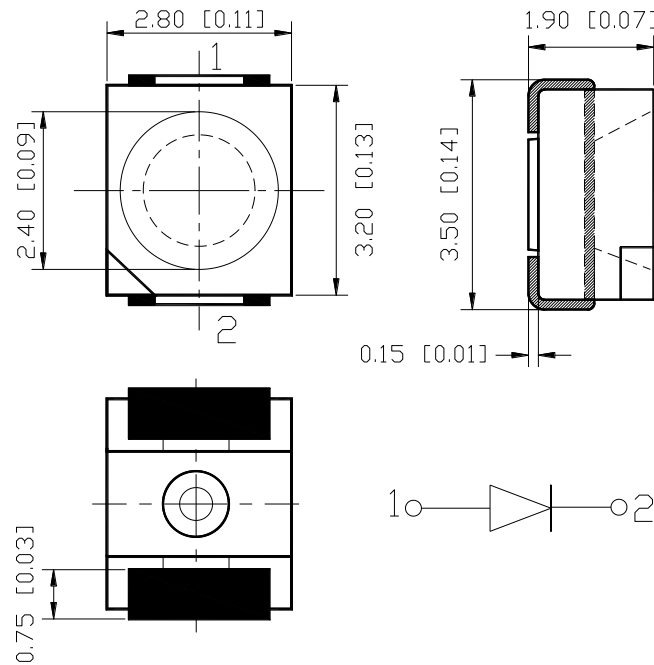
- Status indication
- Industrial equipment backlighting
- Architecture lighting

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)		Chromaticity Coordinate	I _v (mcd)	
			Typ.	Max.	Typ.	Min.	Typ.
QBLP670-IW-CW80	Cool White	20	3.0	3.4	X=0.2982 Y=0.3124	1800	2300
					CCT: 8000K		

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	102	30	125	5	-40 to +85	-40 to +100	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
H	2.8	3.0	V
J	3.0	3.2	
K	3.2	3.4	

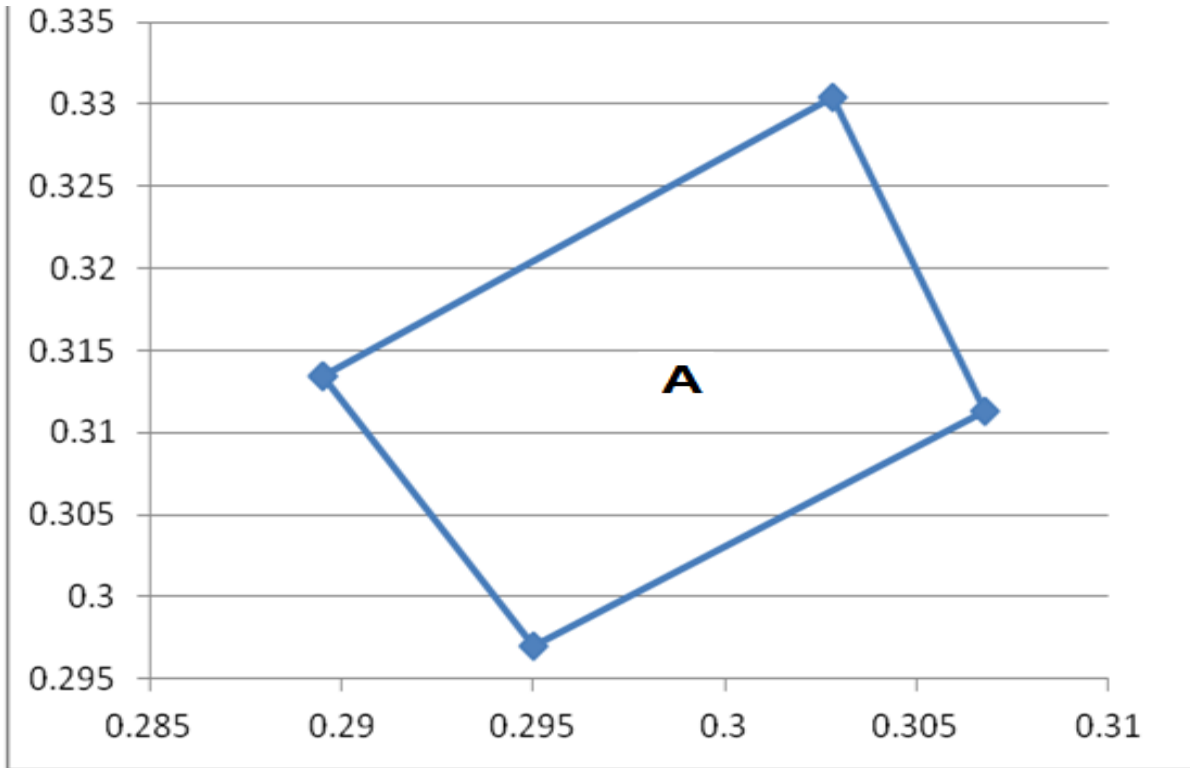
Luminous Intensity I_v for Cool White @ I_F=20mA

Bin	Min.	Max.	Unit
L1	1800	2100	mcd
L2	2100	2640	
L3	2640	3168	

Correlated Color Temperature (CCT) @ I_F=20mA

Bin	Min.	Max.	Unit
A	7000	8300	K

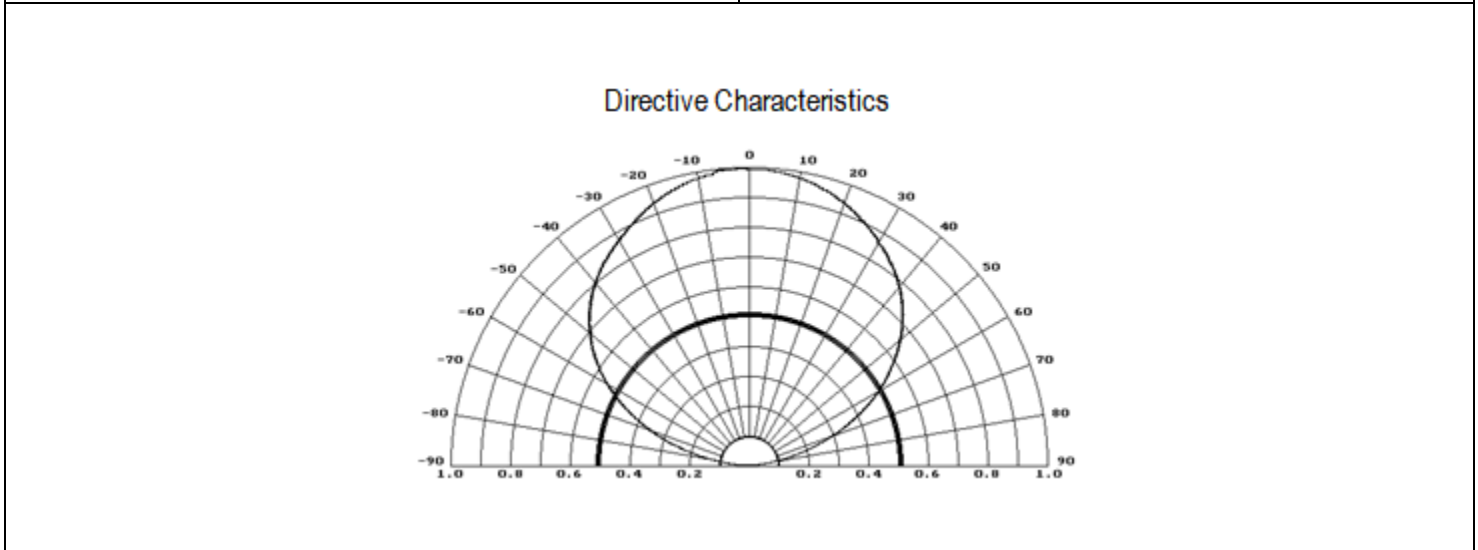
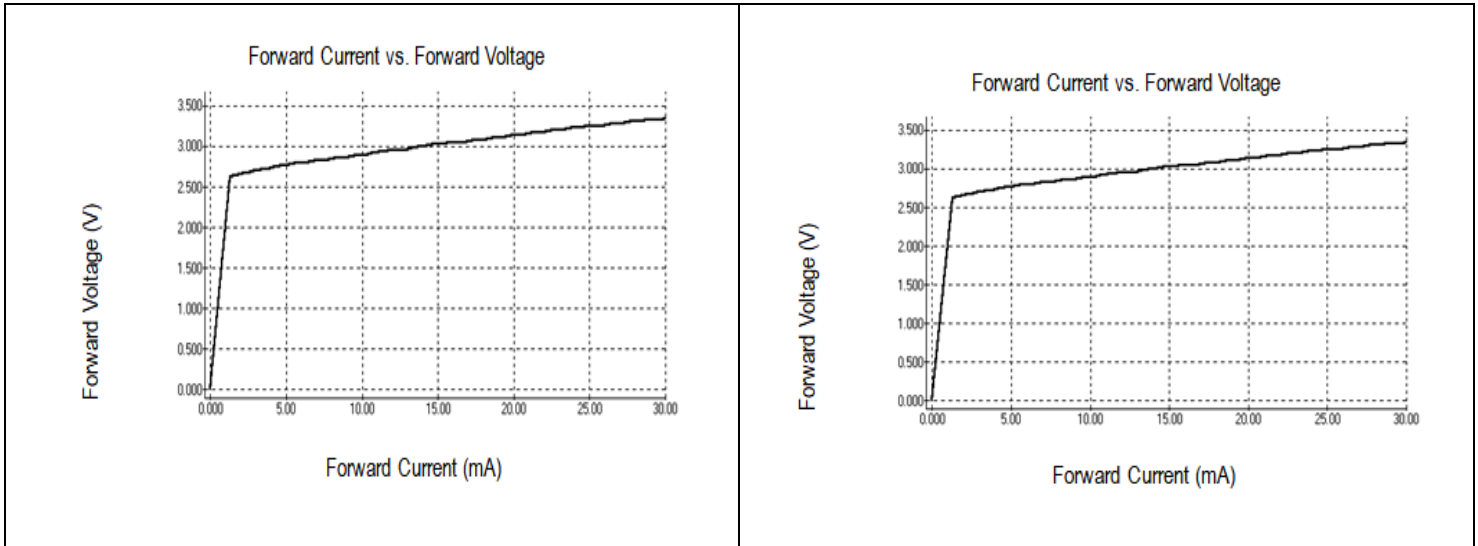
Correlated Color Temperature Chart



Rank	Chromaticity coordinates				
	A	X	0.2895	0.3028	0.3068
	Y	0.3135	0.3304	0.3113	0.297

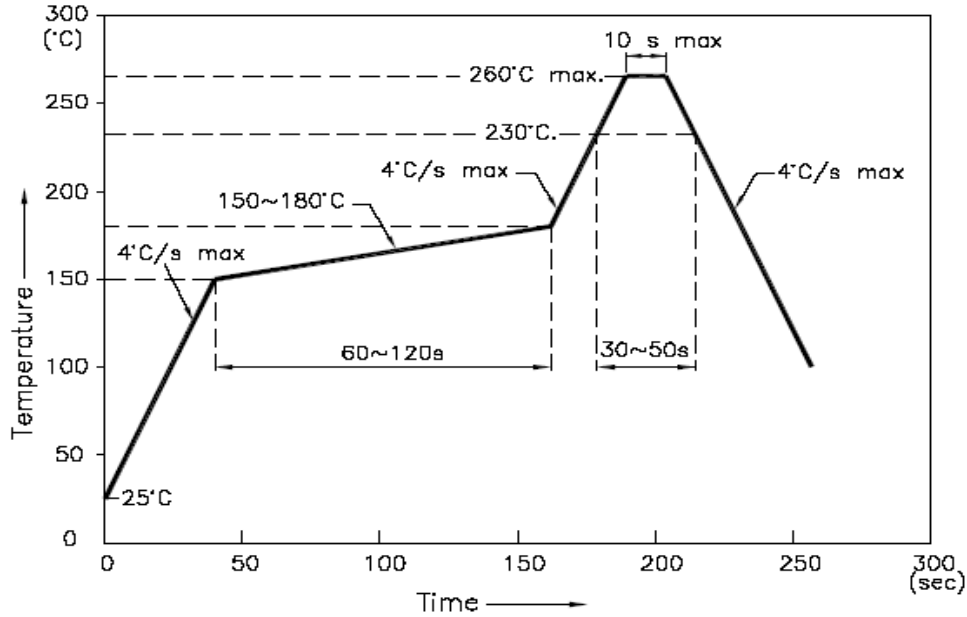
Note:
Tolerance of measurement of color coordinates: ± 0.01

Characteristic Curves

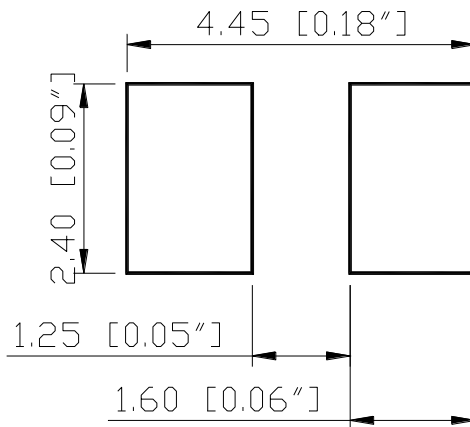


Solder Profile & Footprint

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



Recommended Pad Layout

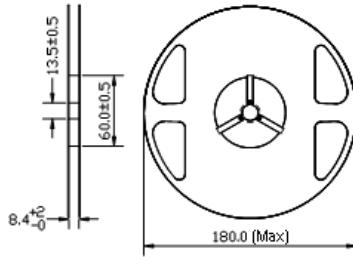


Units: mm

Tolerance: ± 0.2mm

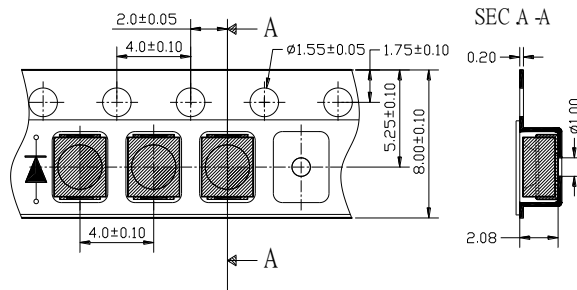
Packing

Reel Dimension:



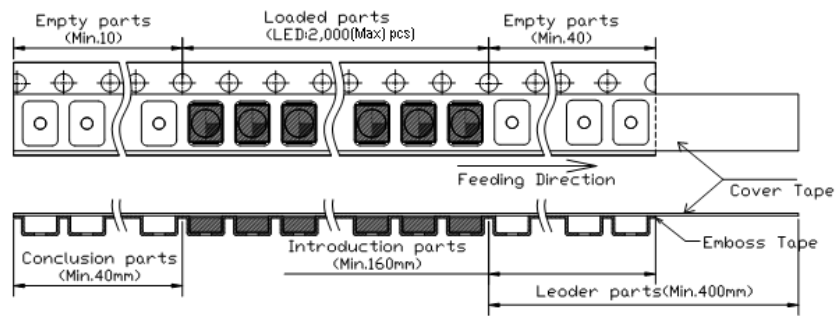
Unit: mm

Tape Dimension:

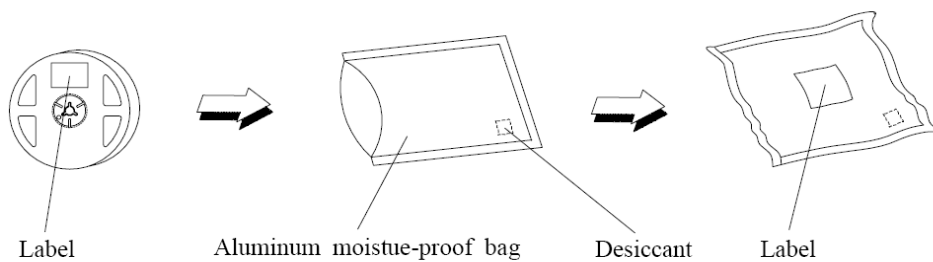


Unit: mm

Arrangement of Tape:



Packaging Specifications:





Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP670-IW-CW80	QBLP670-IW-CW80	Iv=2300 mcd typ. @ 20mA / Chromaticity Coordinate (X=0.2982, Y=0.3124) typ.	2,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP670-IW-CW80	V1.0	11/06/2018
Update mcd and typ. CCT value	V1.1	02/16/2022

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.