

QT-Brightek Lamp Series

5mm Round Lamp

Part No.: QBL8IW15C-CW110

CW110: CCT = 11000K Typ.

Table of Contents:

Introduction	3
Electrical / Optical Characteristic (Ta=25 °C)	4
Absolute Maximum Rating	4
CIE Chromaticity Diagram.....	5
Characteristic Curves.....	6
Ordering Information	7
Revision History	8
Disclaimer	8

Introduction

Feature:

- Clear lens
- Packed in bulk
- 5mm round lamp
- InGaN technology
- Viewing angle: 15° typ.
- CRI: 75 typ.

Description:

These bright 5mm round type lamps are suitable for all indicator applications such as electronic signs and electronic board indicator.

Application:

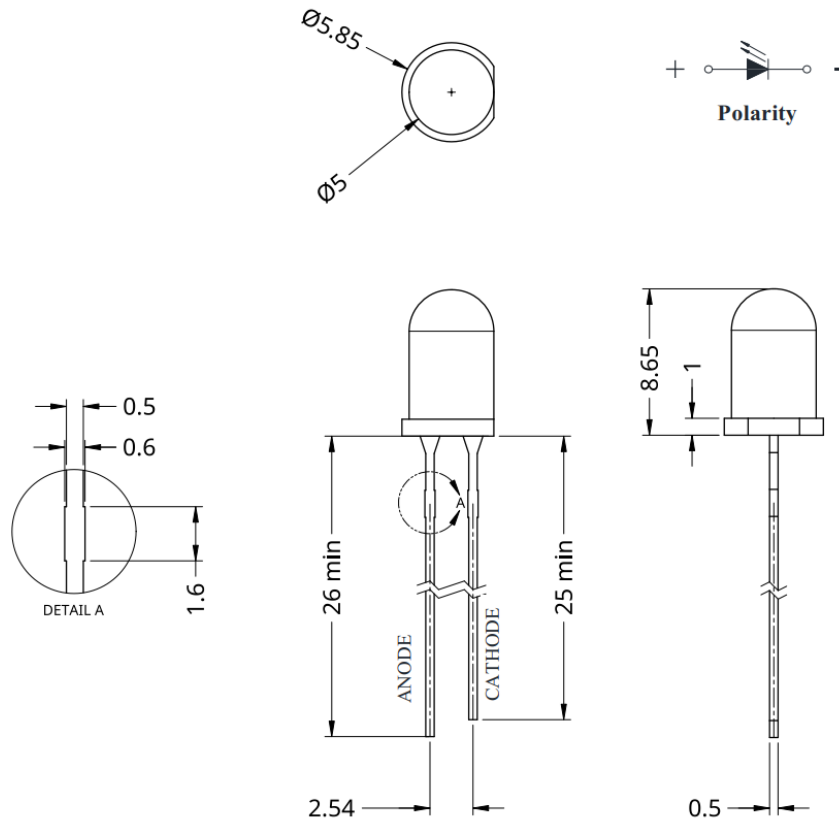
- General purpose indicator application
- Electronic signs and electronics board
- Indicator
- Lighting

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / general tolerance = +/-0.25mm unless otherwise specified

Electrical / Optical Characteristic (Ta=25°C)

Product	Color	I _F (mA)	V _F (V)		Chromaticity Coordinate	I _V (mcd)	
			Typ.	Max.	Typ.	Min.	Typ.
QBL8IW30C-CW110	Cool White	20	3.1	3.6	X=0.28, Y=0.28	28000	32000
					*CCT: 11000K		

*CCT value is for reference only

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	90	25	100	5	-40 to +85	-40 to +100	260

*Pulse width 0.1msec, duty 1/10

**Wave Soldering for no more than 3 sec @ 260 °C

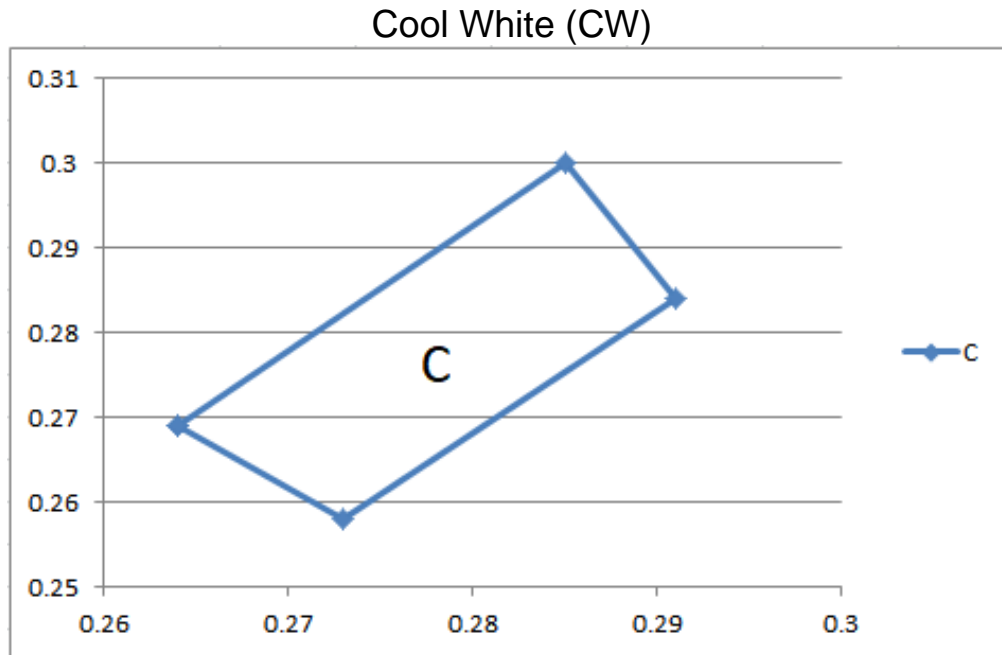
Forward Voltage V_F @ I_F=20mA

Bin	Min.	Max.	Unit
B	2.6	2.8	V
C	2.8	3.0	
D	3.0	3.2	
E	3.2	3.4	
F	3.4	3.6	

Luminous Intensity I_V @ I_F=20mA

Bin	Min.	Max.	Unit
1	28000	32000	mcd
2	32000	36000	
3	36000	40000	

CIE Chromaticity Diagram

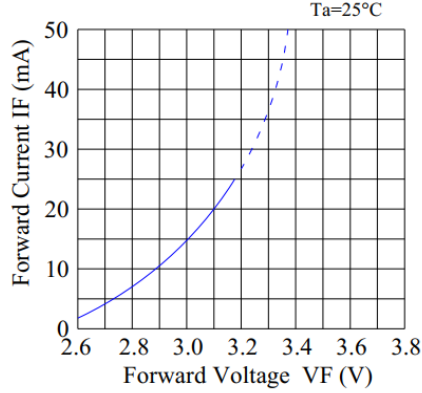


C	
X	Y
0.264	0.269
0.273	0.258
0.291	0.284
0.285	0.3
0.264	0.269

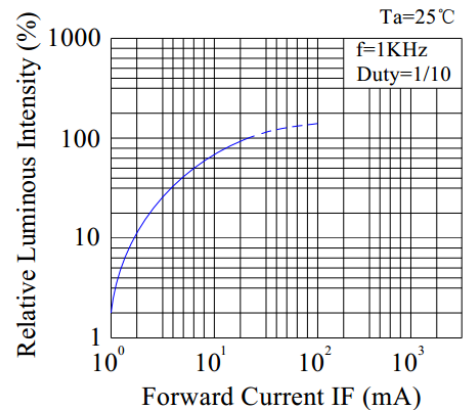
Tolerance of measurement of color coordinates: ± 0.01

Characteristic Curves

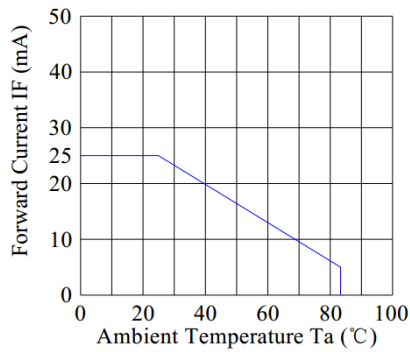
Forward Current & Forward Voltage



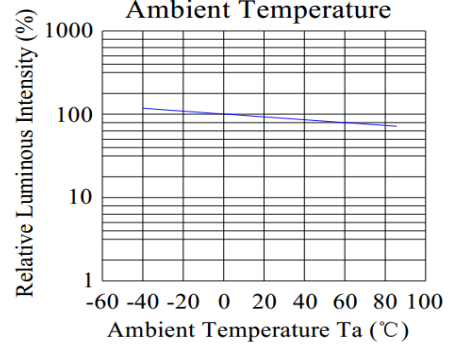
Luminous Intensity & Forward Current



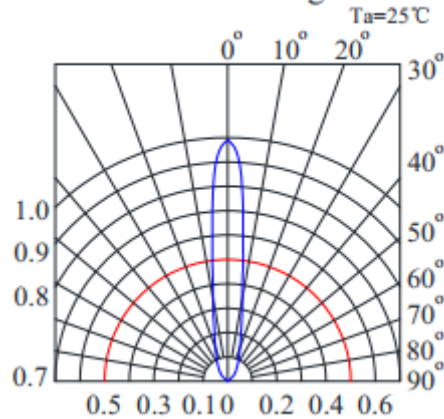
Forward Current Derating Curve



Luminous Intensity & Ambient Temperature



Radiation Diagram



Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per bag
QBL8IW15C-CW110	QBL8IW15C-CW110	Iv=32000mcd typ. @ 20mA, CIE Coordinate : (0.28, 0.28) typ.	500pcs

Revision History

Description:	Revision #	Revision Date
New Release of QBL8IW15C-CW110	V1.0	11/06/2020
Drawing update	V1.1	06/24/2022

Disclaimer

QT-BRIGHTTEK reserves the right to make changes without further notice to any products herein to improve reliability, function or design. QT-BRIGHTTEK does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent rights, nor the rights of others.

Life Support Policy

QT-BRIGHTTEK's products are not authorized for use as critical components in life support devices or systems without the express written approval of QT-BRIGHTTEK. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
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.