

QT-Brightek Lamp Series

5mm Round Lamp

Part No.: QBL8IW15C-XX

XX (Color Code) = WW/NW/CW

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Introduction

Feature:

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

Description:

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

Application:

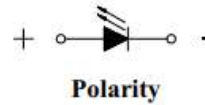
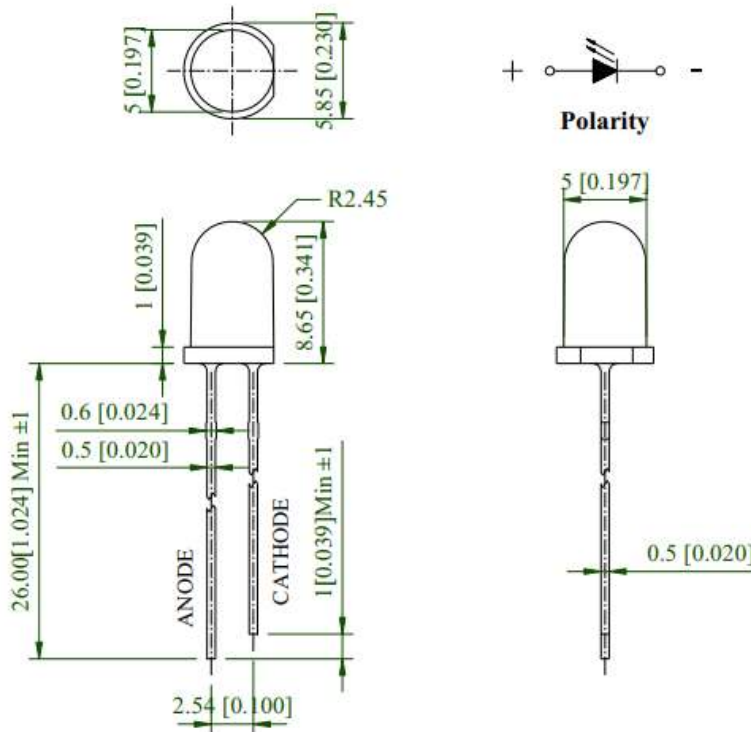
- General purpose indicator application
- Electronic signs and electronics board
- Indicator

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



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

Electrical / Optical Characteristic (Ta=25 °C)

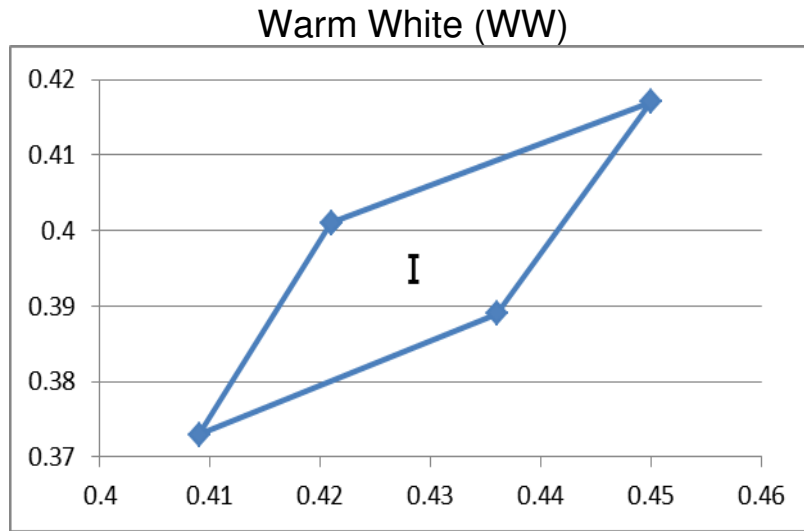
Product	Color	I _F (mA)	V _F (V)		Chromaticity Coordinate			I _V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBL8IW15C-WW	Warm White	20	3.1	3.6	-	X=0.43 Y=0.395	-	18000	23000
QBL8IW15C-NW	Natural White	20	3.1	3.6	-	X=0.335 Y=0.325	-	14000	23000
QBL8IW15C-CW	Cool White	20	3.1	3.6	-	X=0.28 Y=0.28	-	14000	23000

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	95	25	100	5	-40 to +85	-40 to +100	260

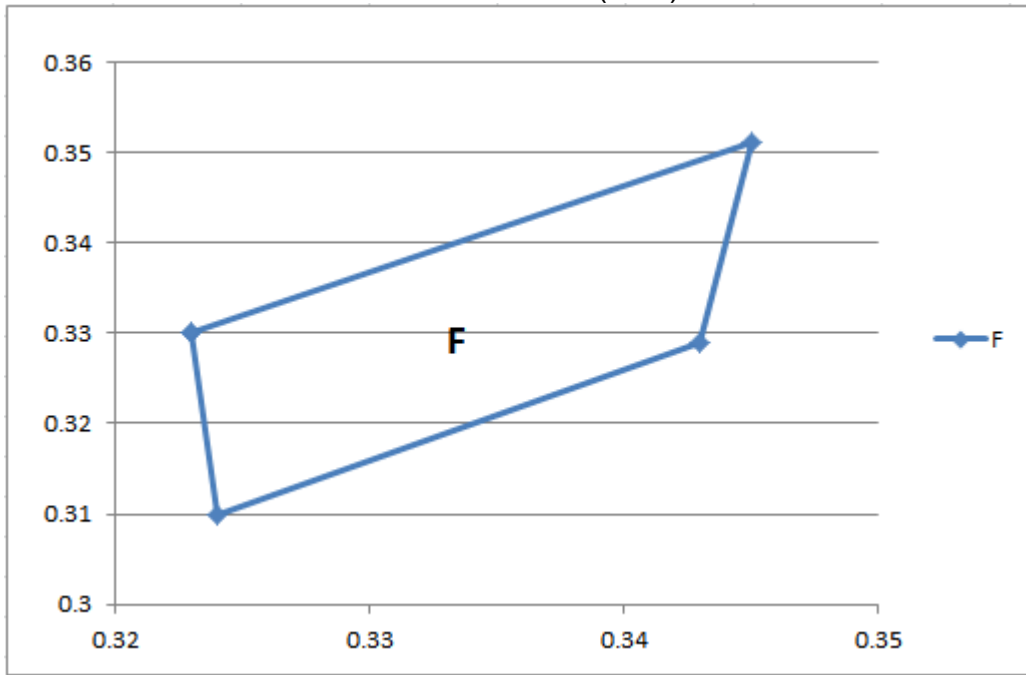
*Pulse width 0.1msec, duty 1/10

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

CIE Chromaticity Diagram

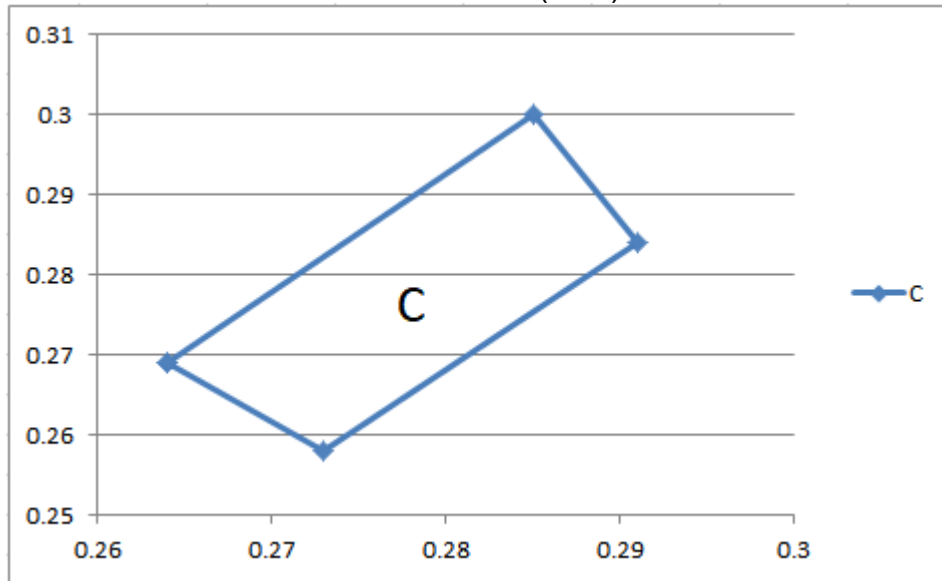
I	
X	Y
0.421	0.401
0.45	0.417
0.436	0.389
0.409	0.373
0.421	0.401

Natural White (NW)



F	
X	Y
0.323	0.33
0.345	0.351
0.343	0.329
0.324	0.31
0.323	0.33

Cool White (CW)

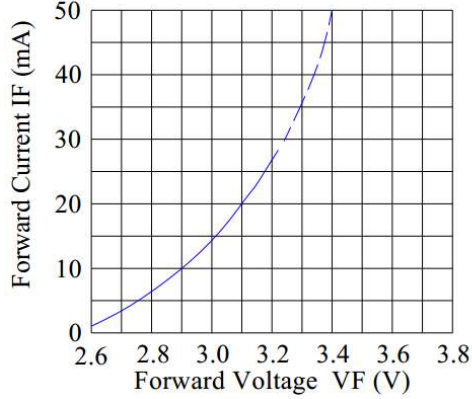


C	
X	Y
0.264	0.269
0.273	0.258
0.291	0.284
0.285	0.3
0.264	0.269

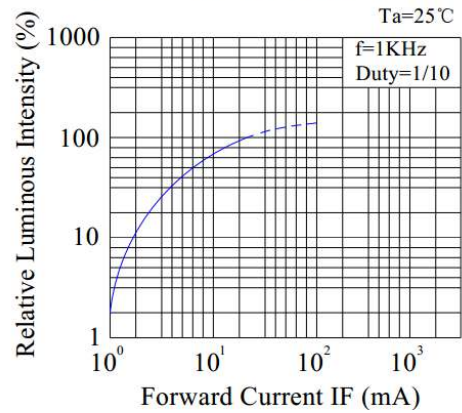
Tolerance of measurement of color coordinates: ± 0.01

Characteristic Curves

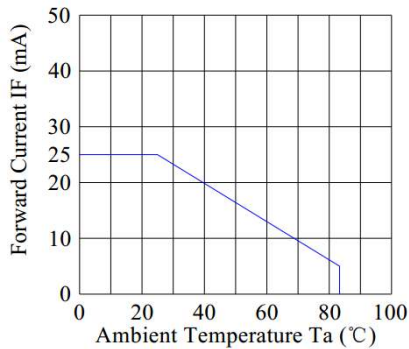
Forward Current & Forward Voltage
Ta=25°C



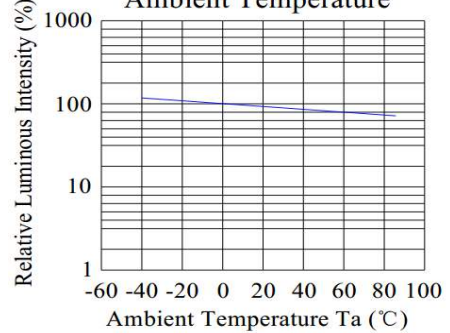
Luminous Intensity & Forward Current
Ta=25°C



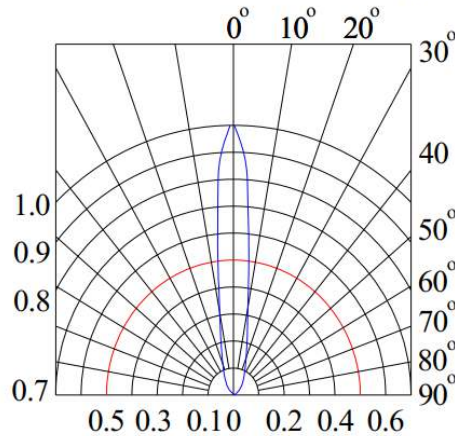
Forward Current Derating Curve



Luminous Intensity & Ambient Temperature



Radiation Diagram Ta=25°C



Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per bag
QBL8IW15C-WW	QBL8IW15C-WW	Iv=23000mcd typ. @ 20mA, CCT Coordinate : (0.43, 0.395) typ.	500pcs
QBL8IW15C-NW	QBL8IW15C-NW	Iv=23000mcd typ. @ 20mA, CCT Coordinate : (0.335, 0.325) typ.	500pcs
QBL8IW15C-CW	QBL8IW15C-CW	Iv=2300mcd typ. @ 20mA, CCT Coordinate : (0.28, 0.28) typ.	500pcs

Revision History

Description:	Revision #	Revision Date
New Release of QBL8IW15C-XX	V1.0	01/31/2018
Update Warm White CIE Chromaticity Diagram	V1.1	11/28/2018

Disclaimer

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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.