

# **QT-Brightek Lamp Series**

**5mm Round Lamp** 

Part No.: QBL8IW60D-XX

XX (Color Code) = WW/NW/CW

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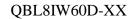




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### Introduction

#### Feature:

- White diffused lens
- Packed in bulk
- 5mm round lamp
- InGaN technology
- Viewing angle: 60° typ.

### **Description:**

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

#### **Application:**

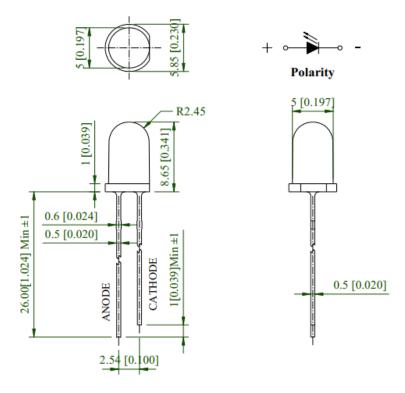
- General purpose indicator application
- Electronic signs and electronics board
- Indicator

### **Certification & Compliance:**

- TS16949
- ISO9001
- RoHS Compliant



#### **Dimension:**



Units: mm / general tolerance =  $\pm -0.25$ mm unless otherwise specified

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Electrical / Optical Characteristic (Ta=25°C)

Product	Color	I <sub>F</sub> (mA)	V <sub>F</sub> (V) Chromaticity Coordinate I <sub>V</sub> (m				ıcd)		
			Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.
QBL8IW60D-WW	Warm White	20	3.1	3.6	-	X=0.43 Y=0.395		2200	3800
QBL8IW60D-NW	Natural White	20	3.1	3.6	-	X=0.335 Y=0.325		2200	3800
QBL8IW60D-CW	Cool White	20	3.1	3.6	-	X=0.28 Y=0.28	-	2200	3800

# **Absolute Maximum Rating**

Material	P <sub>d</sub> (mW)	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)*	<b>V</b> <sub>R</sub> <b>(V)</b>	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)	T <sub>SOL</sub> (°C)**
InGaN	90	25	100	5	-40 to +85	-40 to +100	260

<sup>\*</sup>Pulse width 0.1msec, duty 1/10

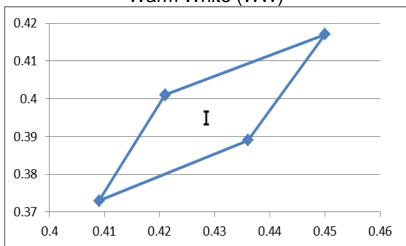
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<sup>\*\*</sup>Wave Soldering for no more than 3 sec @ 260 °C



# **CIE Chromaticity Diagram**



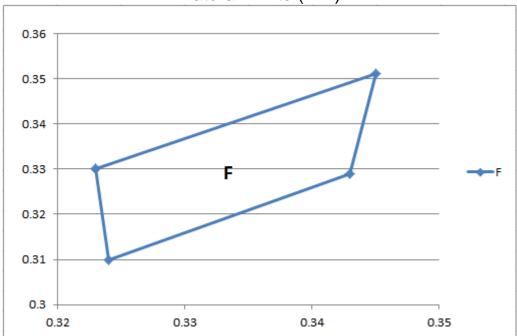


I		
Χ	Υ	
0.421	0.401	
0.45	0.417	
0.436	0.389	
0.409	0.373	
0.421	0.401	

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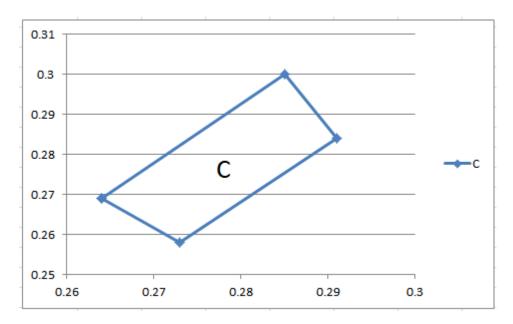


F		
Χ	Υ	
0.323	0.33	
0.345	0.351	
0.343	0.329	
0.324	0.31	
0.323	0.33	

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## Cool White (CW)



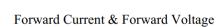
С		
Χ	Υ	
0.264	0.269	
0.273	0.258	
0.291	0.284	
0.285	0.3	
0.264	0.269	

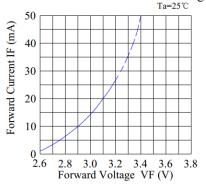
Tolerance of measurement of color coordinates: ±0.01

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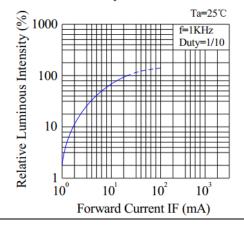


### **Characteristic Curves**

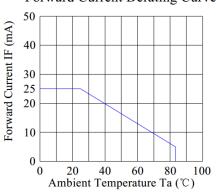


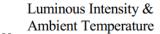


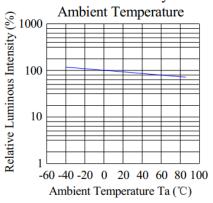
### Luminous Intensity & Forward Current



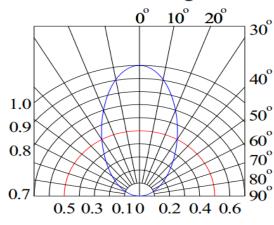




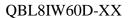




### **Radiation Diagram**



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**Ordering Information** 

Part #	Orderable Part #	Spec Range	Quantity per bag
QBL8IW60D-WW	QBL8IW60D-WW	Iv=3800mcd typ. @ 20mA, CCT Coordinate : (0.43, 0.395) typ.	500pcs
QBL8IW60D-NW	QBL8IW60D-NW	Iv=3800mcd typ. @ 20mA, CCT Coordinate : (0.335, 0.325) typ.	500pcs
QBL8IW60D-CW	QBL8IW60D-CW	Iv=3800mcd typ. @ 20mA, CCT Coordinate : (0.28, 0.28) typ.	500pcs

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**Revision History** 

Description:	Revision #	Revision Date
New Release of QBL8IW60D-XX	V1.0	03/23/2018
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.

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