

QT-Brightek Lamp Series 5mm Round LED

Part No.: QBL8XX15C_series

XX: Color Code

Product: QBL8XX15C_series	Date: January 22, 2018	Page 1 of 8
	Version# 3.0	





Table of Contents:	
Introduction	3
Electrical / Optical Characteristic (Ta=25 °C)	4
Absolute Maximum Rating	
Characteristic Curves	
Ordering Information	7
Revision History	
Disclaimer	

Product: QBL8XX15C_series	Date: January 22, 2018	Page 2 of 8
	Version# 3.0	



Introduction

Feature:

- Clear lens
- Package in bulk pack
- 5mm round lamp
- AllnGaP technology for R/Y/O/AG
- InGaN technology for IG/IB
- Viewing angle: 15° typ.

Description:

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

Application:

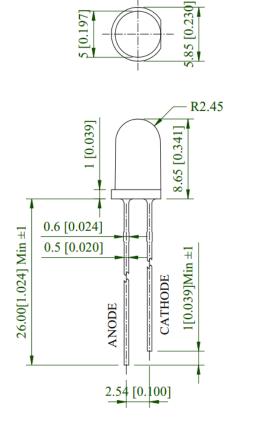
- General purpose indicator application
- Electronic signs and electronics board

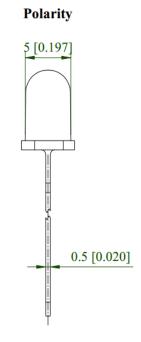
Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:





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

Product: QBL8XX15C_series	Date: January 22, 2018	Page 3 of 8
	Version# 3.0	



Electrical / Optical Characteristic (Ta=25°C)

Product	Color	I _F (mA)	V _F	V _F (V)		I _V (m	cd)
	Coloi		Тур.	Max.	Тур.	Min.	Тур.
QBL8R15C	Red	20	2.0	2.6	624	2900	5000
QBL8O15C	Orange	20	2.0	2.6	605	3800	6500
QBL8Y15C	Yellow	20	2.0	2.6	590	2900	5000
QBL8AG15C	Yellow Green	20	2.0	2.6	573	1000	1700
QBL8IG15C	True Green	20	3.2	3.6	525	30000	39000
QBL8IB15C	Blue	20	3.2	3.6	470	6500	11000

Absolute Maximum Rating

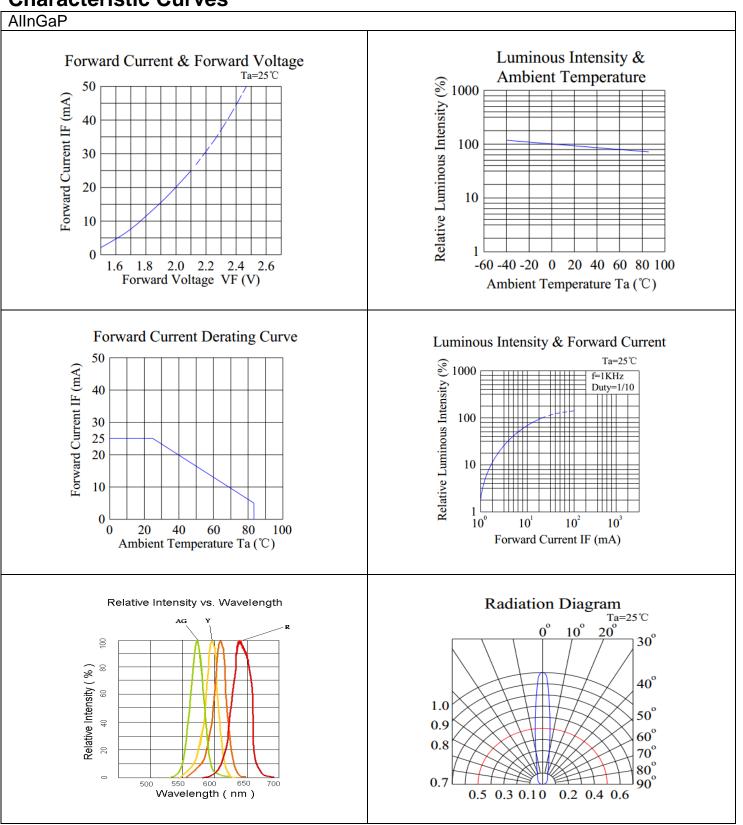
Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)
AlInGaP	65	25	100	5	-40 ~ +85	-40 ~ +100
InGaN	95	25	100	5	-40 ~ +85	-40 ~ +100

^{*1/10} Duty Cycle, 0.1ms Pulse Width

Product: QBL8XX15C_series	Date: January 22, 2018	Page 4 of 8
	Version# 3.0	



Characteristic Curves

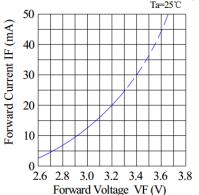


Product: QBL8XX15C_series	Date: January 22, 2018	Page 5 of 8
	Version# 3.0	

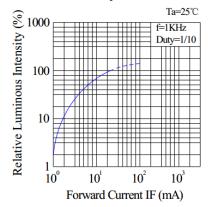




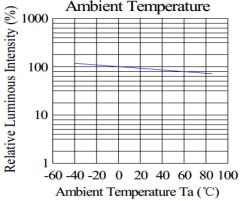
Forward Current & Forward Voltage $$^{\text{Ta=25}\,\text{°C}}$$



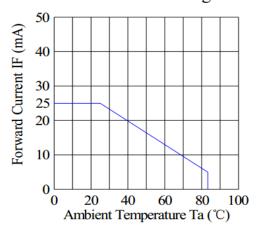
Luminous Intensity & Forward Current



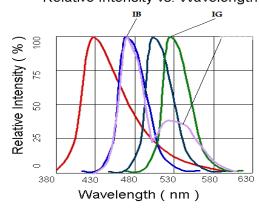
Luminous Intensity & Ambient Temperature



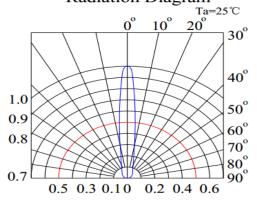
Forward Current Derating Curve



Relative Intensity vs. Wavelength



Radiation Diagram



Product: QBL8XX15C_series	Date: January 22, 2018	Page 6 of 8
	Version# 3.0	



Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per bag
QBL8R15C	QBL8R15C	Iv=5000mcd typ. @ 20mA, λ_D =624nm typ.	500pcs
QBL8O15C	QBL8O15C	Iv=6500mcd typ. @ 20mA, λ _D =605nm typ.	500pcs
QBL8Y15C	QBL8Y15C	Iv=5000mcd typ. @ 20mA, λ _D =590nm typ.	500pcs
QBL8AG15C	QBL8AG15C	Iv=1700mcd typ. @ 20mA, λ _D =573nm typ.	500pcs
QBL8IG15C	QBL8IG15C	Iv=39000mcd typ. @ 20mA, λ_D =525nm typ.	500pcs
QBL8IB15C	QBL8IB15C	Iv=11000mcd typ. @ 20mA, λ_D =470nm typ.	500pcs

Product: QBL8XX15C_series	Date: January 22, 2018	Page 7 of 8
	Version# 3.0	



Revision History

Description:	Revision #	Revision Date
New Release of QBL8XX15C_series	V1.0	06/25/2011
Update format	V1.1	08/21/2012
Amend spec	V1.2	11/12/2012
Update spec, dimension drawing and binning	V2.0	01/13/2016
Update spec and dimension drawing	V3.0	01/22/2018

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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.

Product: QBL8XX15C_series	Date: January 22, 2018	Page 8 of 8
	Version# 3.0	