QT-Brightek Lamp Series

5mm Flat Top Cylindrical Lamp

Part No.: QBFL8XX110CL Series

L: Low Profile (Lens Height: 5.3mm)

Table of Contents:

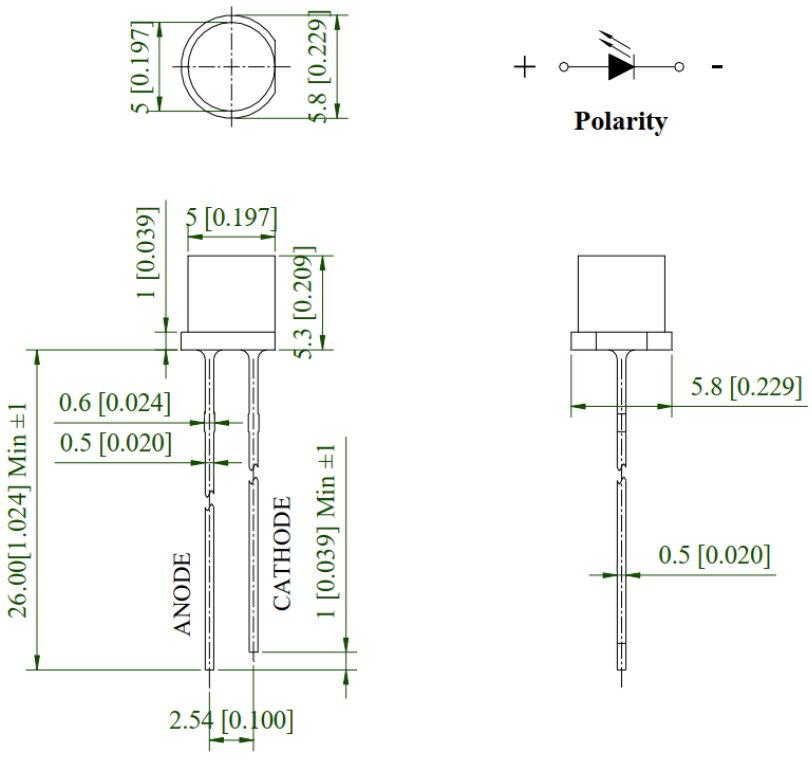
Introduction

Feature:
- Water clear lens
- Package in bulk pack
- 5mm flat top cylindrical lamp
- AlInGaP technology
- Viewing angle: 110° typ.
- Height profile: 5.3mm

Application:
- General purpose indicator application
- Electronic signs and electronics board
- Circuit board

Certification & Compliance:
- ISO9001
- RoHS Compliant

Dimension:



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

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I_F (mA)	V_F (V)		λ_d (nm)	Iv (mcd)	
			Typ.	Max.	Typ.	Min.	Typ.
QBFL8R110CL	Red	20	2.0	2.6	624	120	210
QBFL8O110CL	Orange	20	2.0	2.6	605	120	210
QBFL8Y110CL	Yellow	20	2.0	2.6	590	160	270

Absolute Maximum Rating

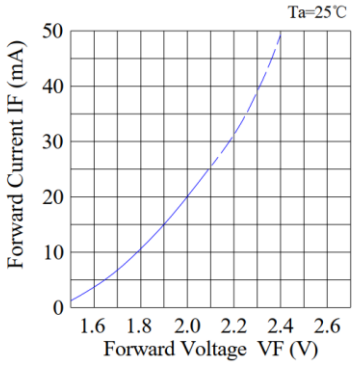
Material	P_d (mW)	I_F (mA)	I_{FP} (mA)*	V_R (V)	T_{OP} (°C)	T_{ST} (°C)	T_{sol} (°C)**
AlInGaP	65	25	100	5	-40 to + 85	-40 to +100	260

*Duty 1/10, 0.1ms pulse width

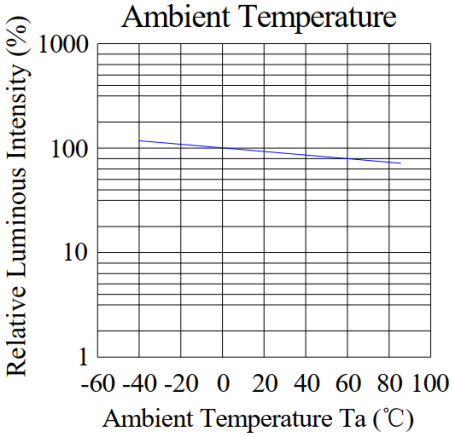
**Wave Soldering for no more than 5 sec @ 260 °C

Characteristic Curves

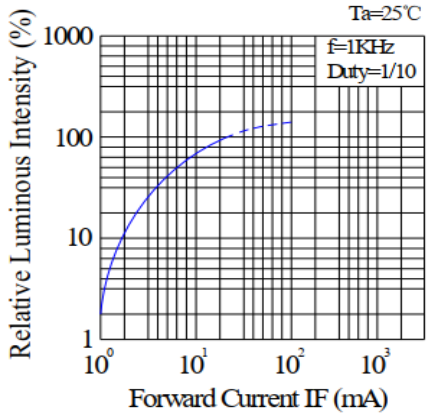
Forward Current & Forward Voltage



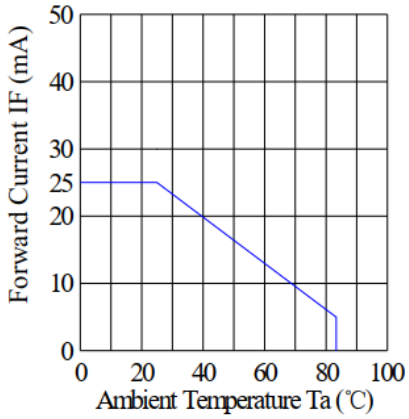
Luminous Intensity & Ambient Temperature



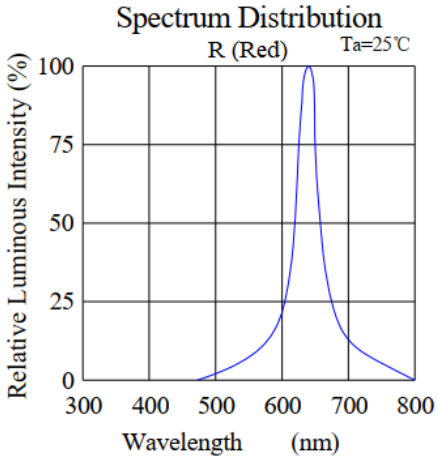
Luminous Intensity & Forward Current



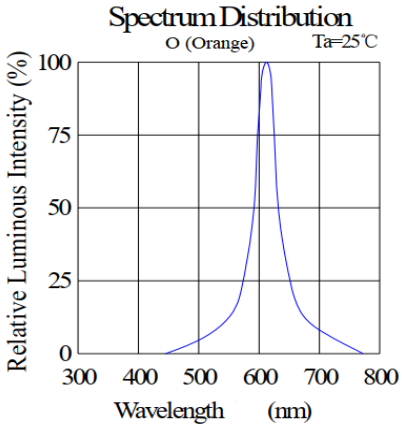
Forward Current Derating Curve

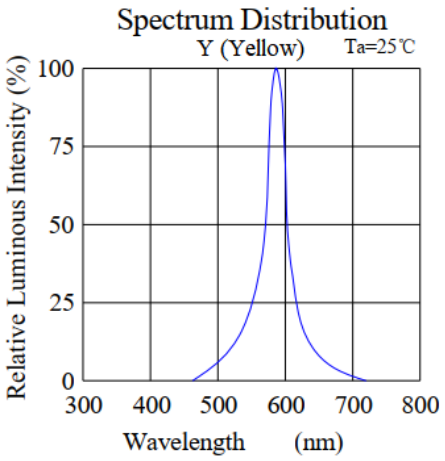


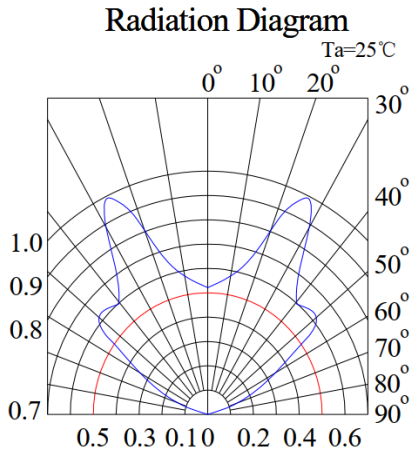
Spectrum Distribution



Spectrum Distribution




Spectrum Distribution
Y (Yellow)
Ta=25℃
Relative Luminous Intensity (%)
100
75
50
25
0
300
400
500
600
700
800
Wavelength
(nm)


Radiation Diagram
Ta=25℃
0°
10°
20°
30°
40°
50°
60°
70°
80°
90°
1.0
0.9
0.8
0.7
0.5 0.3 0.1 0 0.2 0.4 0.6

Ordering Information

Orderable Part #	Spec Range	Quantity per bag
QBFL8R110CL	Iv=210mcd typ. @ 20mA, λ_d=624nm typ.	1000pcs
QBFL8O110CL	Iv=210mcd typ. @ 20mA, λ_d=605nm typ.	
QBFL8Y110CL	Iv=270mcd typ. @ 20mA, λd=590nm typ.	

Revision History

Description:	Revision #	Revision Date
New Release of QBFL8XX110CL Series	V1.0	10/05/2018

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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.