

QT-Brightek Lamp Series

3mm Flat Top Cylindrical Lamp

Part No.: QBFL7XX120CL Series

L: Low Profile (Lens Height: 3.85mm)



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Introduction**Feature:**

- Water clear lens
- Package in bulk pack
- 3mm flat top cylindrical lamp
- AlInGaP technology
- Viewing Angle: 120° typ.

Description:

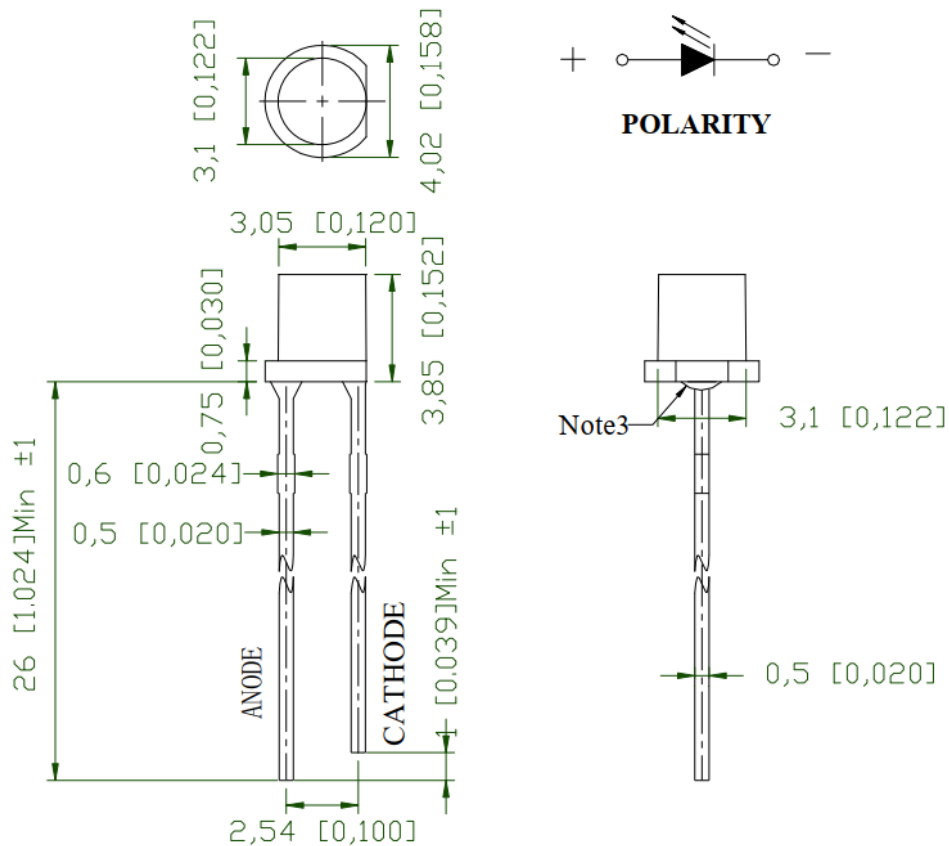
These 3mm flat top round lamps with 3.85mm lens height are suitable for all indicator applications.

Application:

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

Certification & Compliance:

- TS16949
- 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)	I _v (mcd)	
			Typ.	Max.	Typ.	Min.	Typ.
QBFL7R120CL	Red	20	2.0	2.6	624	90	160
QBFL7O120CL	Orange	20	2.0	2.6	605	45	90

Absolute Maximum Rating

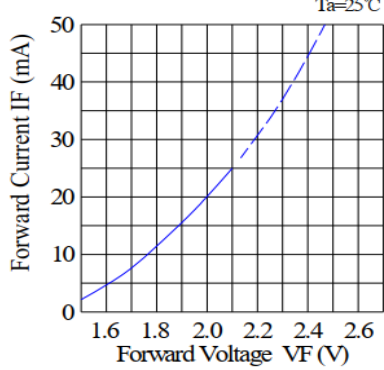
Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{sol} (°C)**
AllnGaP	65	25	100	5	-40 to +85	-40 to +100	260

*Duty 1/10, 0.1ms pulse width

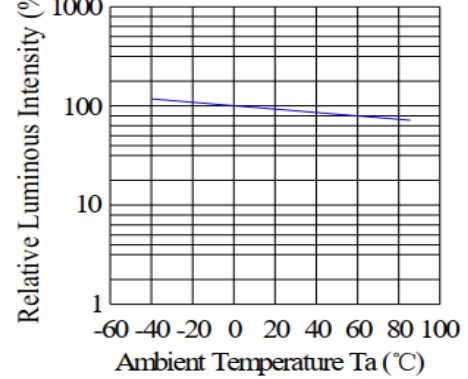
**Wave Soldering for no more than 5 sec @ 260°C

Characteristic Curves

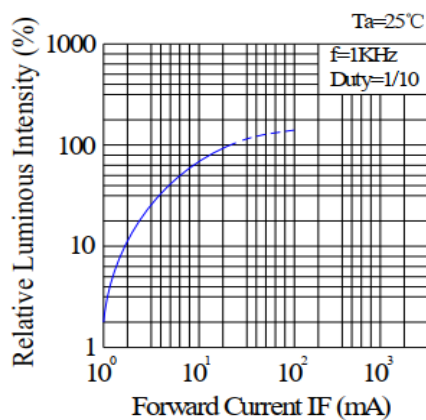
Forward Current & Forward Voltage



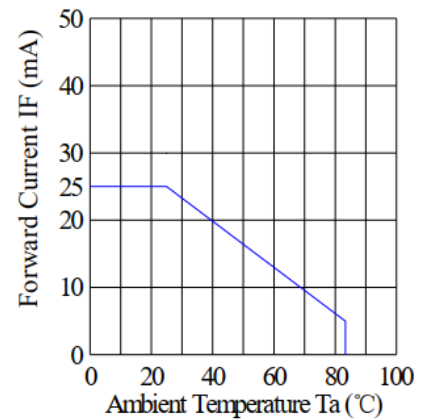
Luminous Intensity & Ambient Temperature



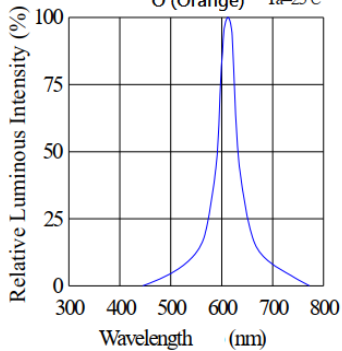
Luminous Intensity & Forward Current



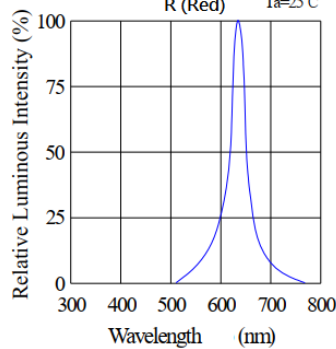
Forward Current Derating Curve



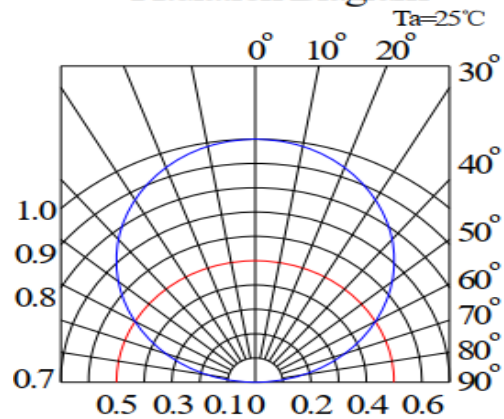
Spectrum Distribution
O (Orange) $T_a=25^{\circ}\text{C}$



Spectrum Distribution
R (Red) $T_a=25^{\circ}\text{C}$



Radiation Diagram





Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per bag
QBFL7R120CL	QBFL7R120CL	Iv=160mcd typ. @ 20mA, $\lambda_d=624\text{nm}$ typ.	500pcs
QBFL7O120CL	QBFL7O120CL	Iv=90mcd typ. @ 20mA, $\lambda_d=605\text{nm}$ typ.	500pcs



Revision History

Description:	Revision #	Revision Date
New Release of QBFL7XX120CL Series	V1.0	10/03/2018

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.