QT-Brightek Lamp with Housing Series

3mm Round Lamp with Eight level Housing

Part No.: QBL7XX80D-MP8B2_series

Table of Contents:

Introduction

Feature:
- Color Diffused lens
- Packaged in Tray
- 3mm round TH lamp with housing
- GaAsP technology for Orange, Yellow
- GaP technology for Yellow-Green, Red
- Viewing angle: 80º typ.

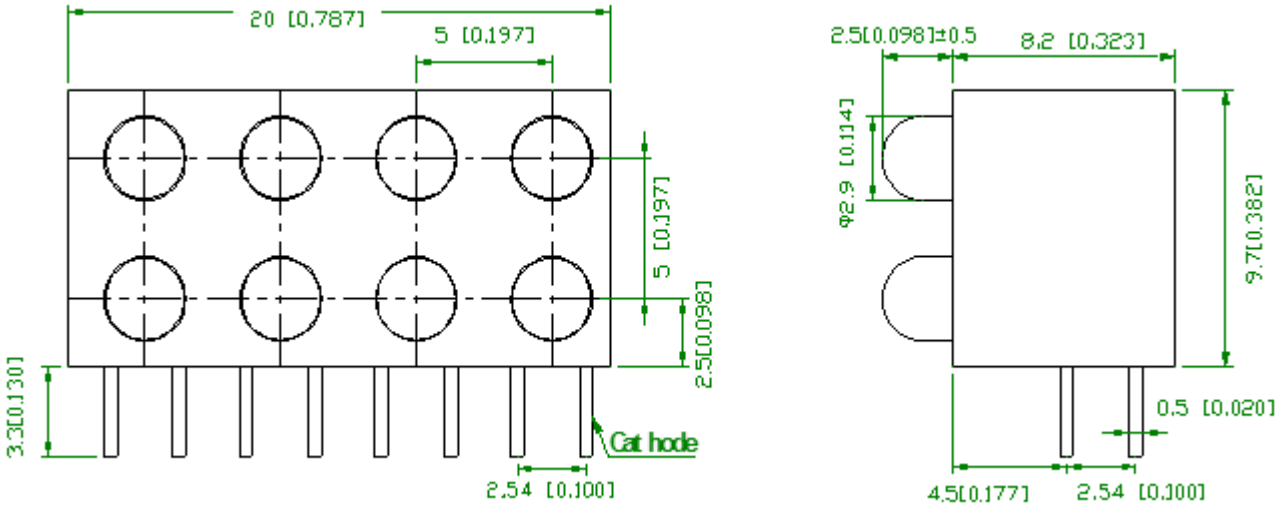
Description:

These 3mm round type lamps with eight level housing is easy to mount on the panels.

Application:
- General purpose indicator application
- Electronic instrument

Certification & Compliance:
- TS16949
- ISO9001
- RoHS Compliant

Dimension:



Units: mm / general tolerance = +/-0.5mm unless otherwise specified

Electrical / Optical Characteristic (Ta=25°C)

Product	Color	I_F (mA)	V_F (V)		λ_D (nm)			I_V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBL7SB80D-MP8B2	GaP Red	20	2.0	2.6	--	640	--	15	30
QBL7OA80D-MP8B2	Orange	20	2.0	2.6	--	603	--	13	30
QBL7YA80D-MP8B2	Yellow	20	2.0	2.6	--	588	--	13	30
QBL7YG80D-MP8B2	GaP Green	20	2.2	2.6	--	570	--	13	30

Absolute Maximum Rating

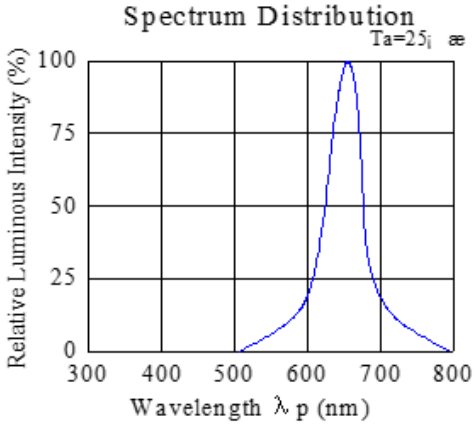
Material	P_d (mW)	I_F (mA)	I_{FP} (mA)*	V_R (V)	T_{OP} (°C)	T_{ST} (°C)	T_{SOL} (°C)**
GaAsP	78	30	100	5	-40 to +80	-40 to +85	260
GaP	78	30	100	5	-40 to +80	-40 to +85	260

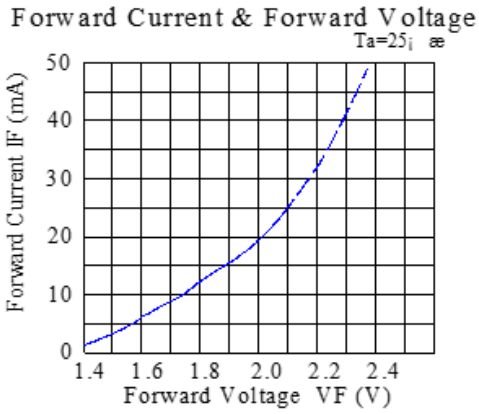
*Duty=0.1, 0.1ms Pulse Width
**Wave Soldering for no more than 3 sec @ 260 °C

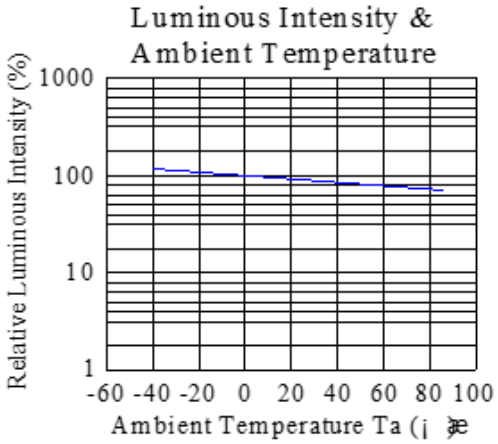
Note:
Tolerance of measurement of forward voltage: ±0.1V
Tolerance of measurement of luminous intensity: ±15%
Tolerance of measurement of dominant wavelength: ±2nm

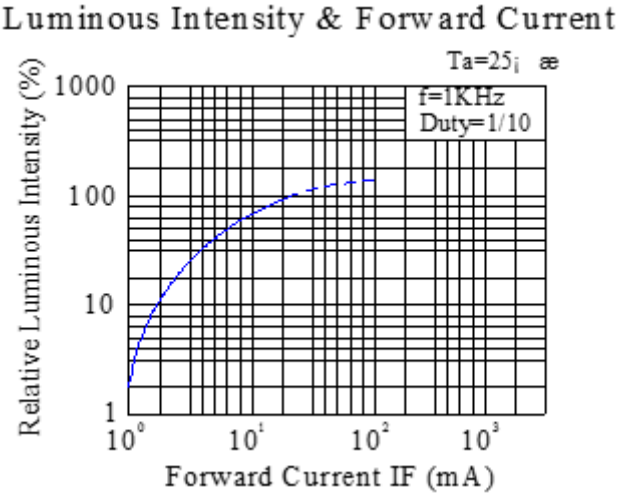
Characteristic Curves

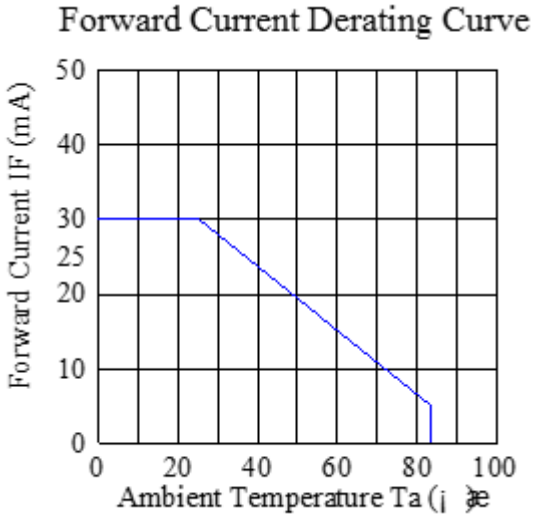
GaP Red

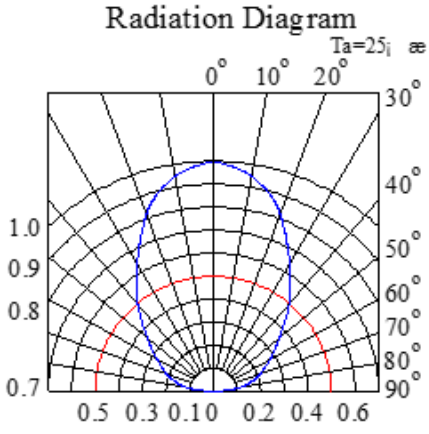




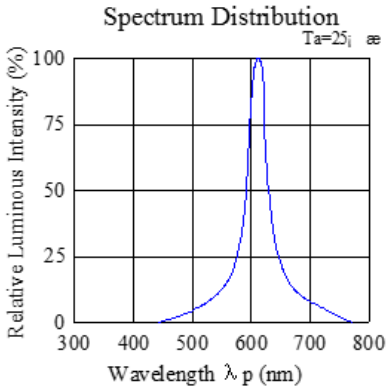


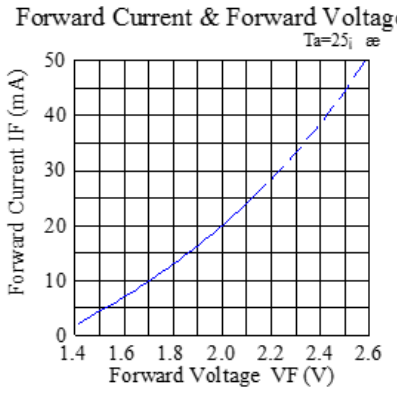


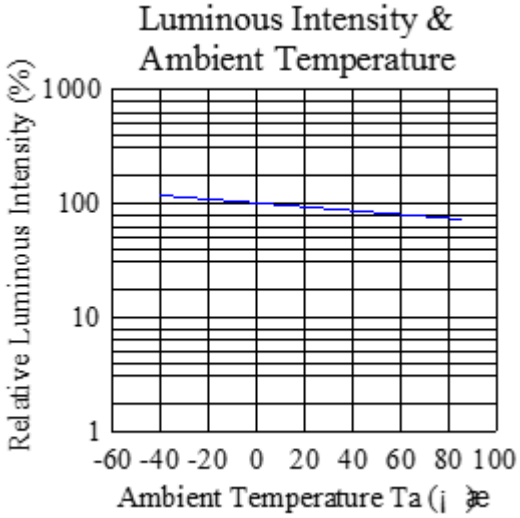


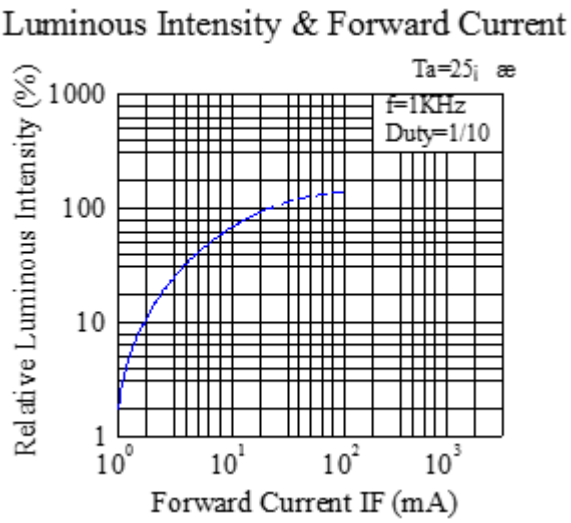


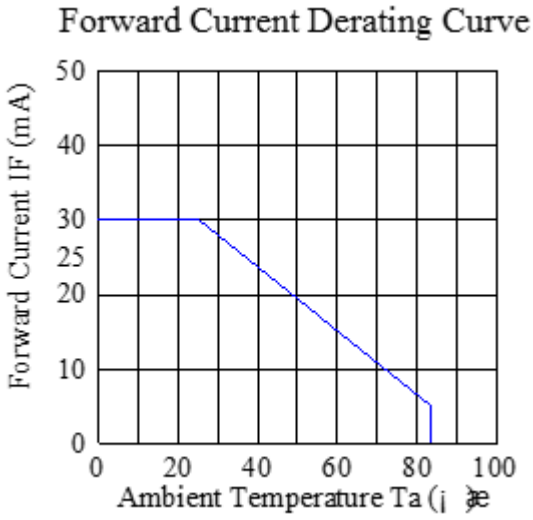
GaAsP Orange

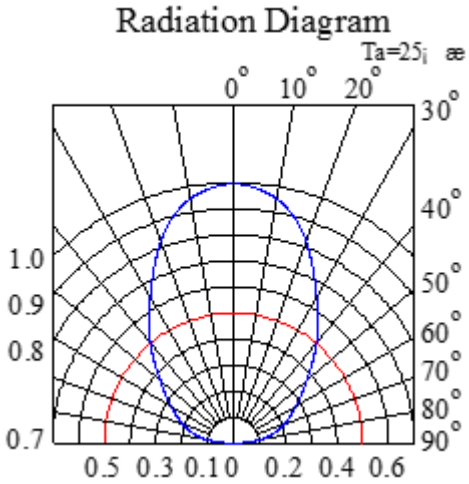






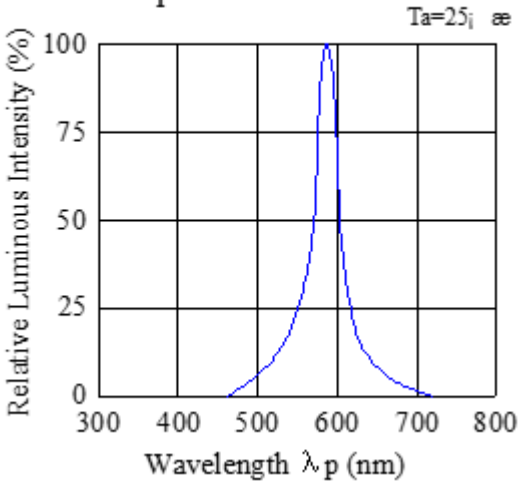




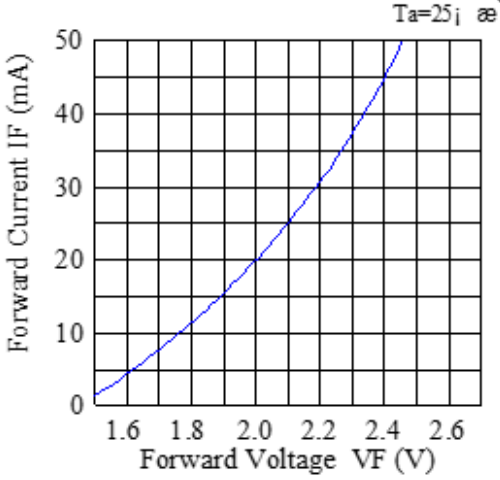


GaAsP Yellow

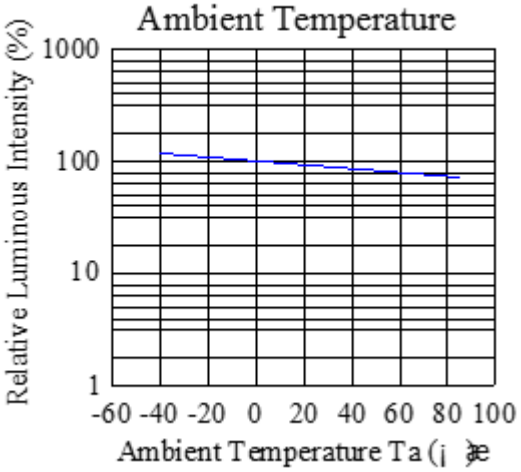
Spectrum Distribution



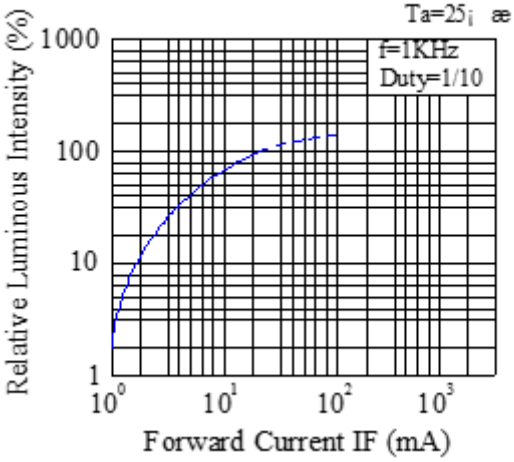
Forward Current & Forward Voltage



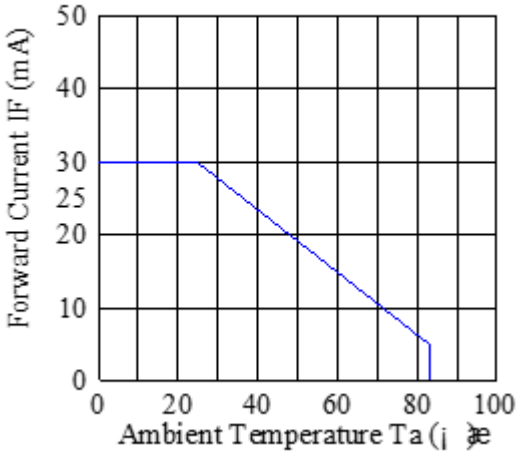
Luminous Intensity & Ambient Temperature



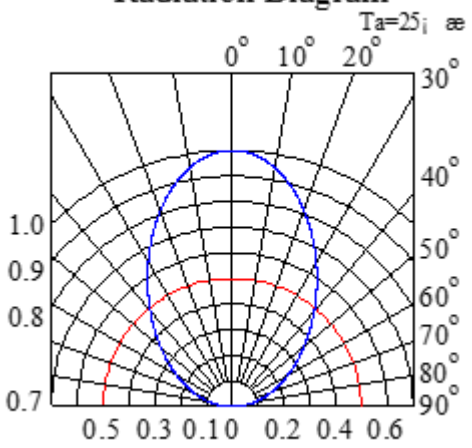
Luminous Intensity & Forward Current



Forward Current Derating Curve

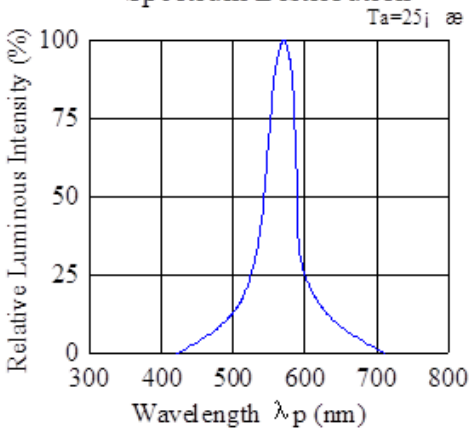


Radiation Diagram

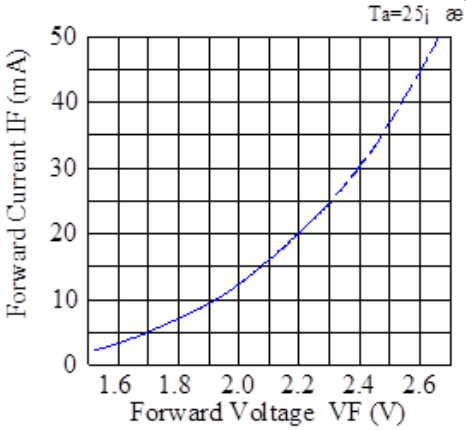


GaP Yellow-Green

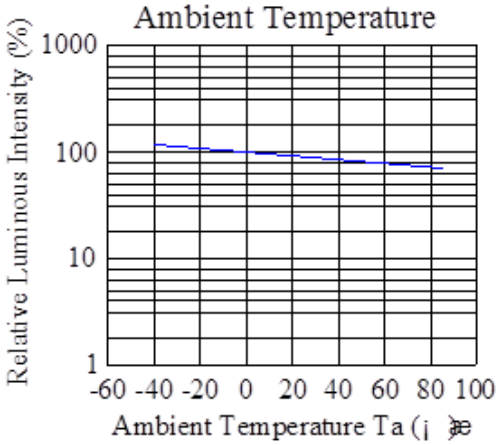
Spectrum Distribution



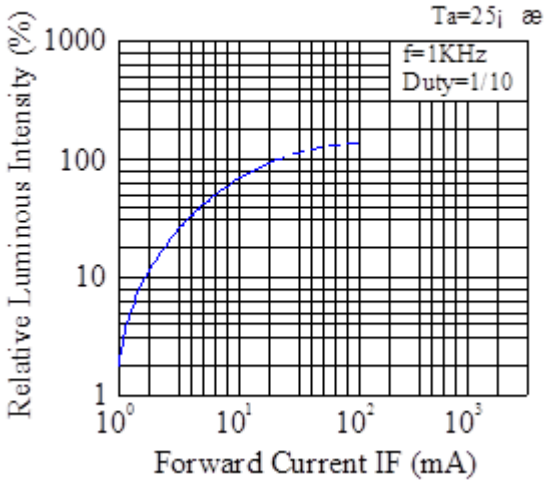
Forward Current & Forward Voltage



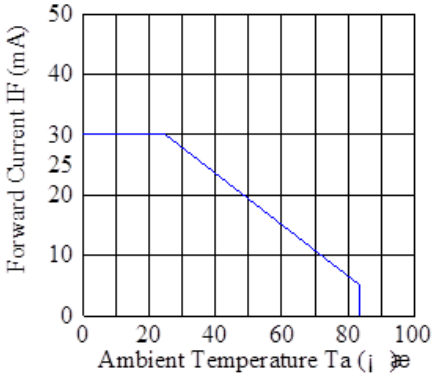
Luminous Intensity & Ambient Temperature



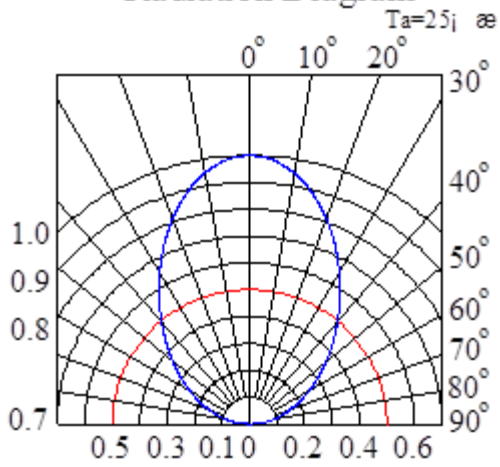
Luminous Intensity & Forward Current



Forward Current Derating Curve



Radiation Diagram



Labeling

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per Tray
QBL7SB80D-MP8B2	QBL7SB80D-MP8B2	Iv=30mcd typ. @ 20mA, λ_D=640nm typ.	120
QBL7OA80D-MP8B2	QBL7OA80D-MP8B2	Iv=30mcd typ. @ 20mA, λ_D=603nm typ.	120
QBL7YA80D-MP8B2	QBL7YA80D-MP8B2	Iv=30mcd typ. @ 20mA, λ_D=588nm typ.	120
QBL7YG80D-MP8B2	QBL7YG80D-MP8B2	Iv=30mcd typ. @ 20mA, λ_D=570nm typ.	120

Revision History

Description:	Revision #	Revision Date
New Release of QBL7XX80D-MP8B2_series	V1.0	06/29/2016

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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.