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# **QT-Brightek Lamp with Housing Series**

## **5mm Round Lamp with Housing**

**Part No.: QBL8XX60D-MP7\_series**

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**Table of Contents:**

Introduction .....	3
Electrical / Optical Characteristic (Ta=25 °C) .....	4
Absolute Maximum Rating .....	4
Characteristic Curves.....	5
Labeling .....	9
Ordering Information .....	9
Revision History .....	10
Disclaimer .....	10

## Introduction

**Feature:**

- Color Diffused lens
- Packaged in bulk pack
- 5mm round TH lamp with housing
- GaAsP technology for OA, YA
- GaP technology for YG
- AlGaAs technology for Deep red (SA)
- Viewing angle: 60° typ.

**Description:**

These 5mm round type lamps with housing is easy to mount on the panels.

**Application:**

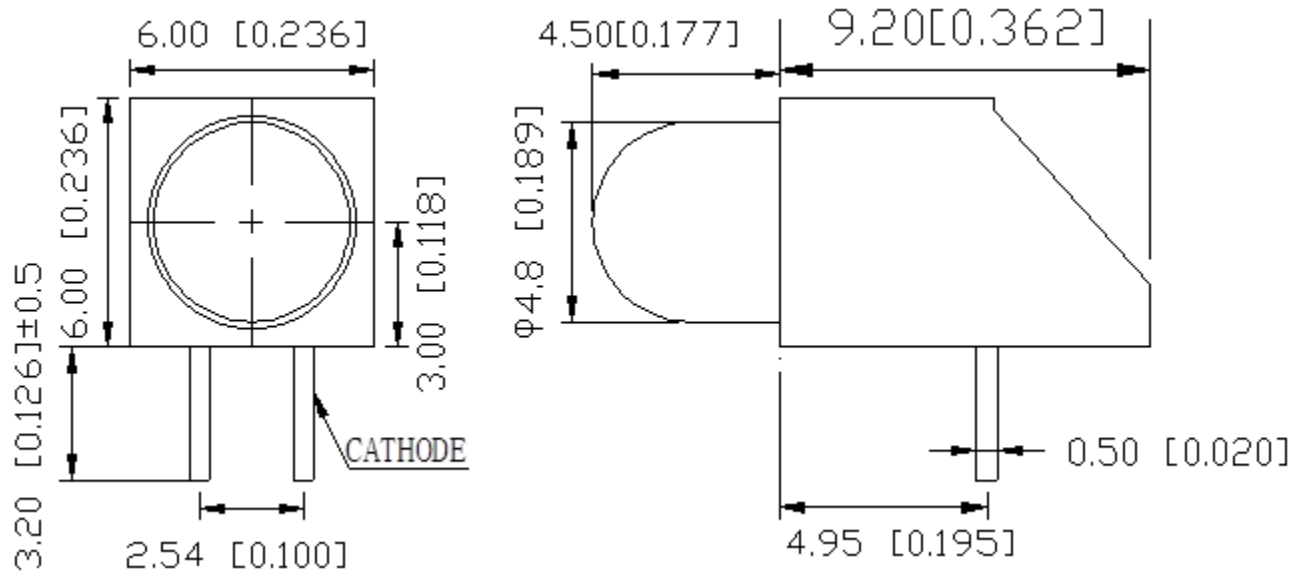
- General purpose indicator application
- Electronic instrument

**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 <sub>F</sub> (mA)	V <sub>F</sub> (V)		λ <sub>D</sub> (nm)			I <sub>V</sub> (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBL8SA60D-MP7	Deep Red	20	1.8	2.6	--	640	--	20	45
QBL8OA60D-MP7	Orange	20	2.0	2.6	--	603	--	9	20
QBL8YA60D-MP7	Yellow	20	2.0	2.6	--	588	--	9	20
QBL8YG60D-MP7	GaP Green	20	2.2	2.6	--	570	--	9	20

**Absolute Maximum Rating**

Material	P <sub>d</sub> (mW)	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)*	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)	T <sub>SOL</sub> (°C)**
AlGaAs	60	25	100	5	-40 to +80	-40 to +85	260
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:

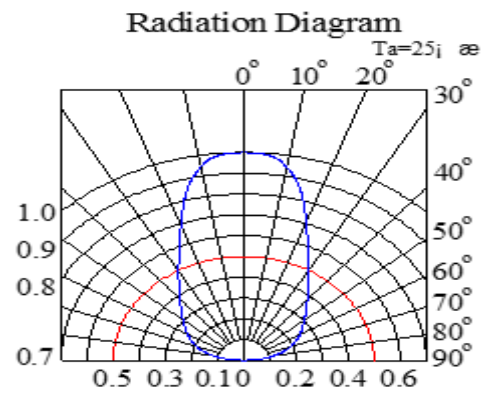
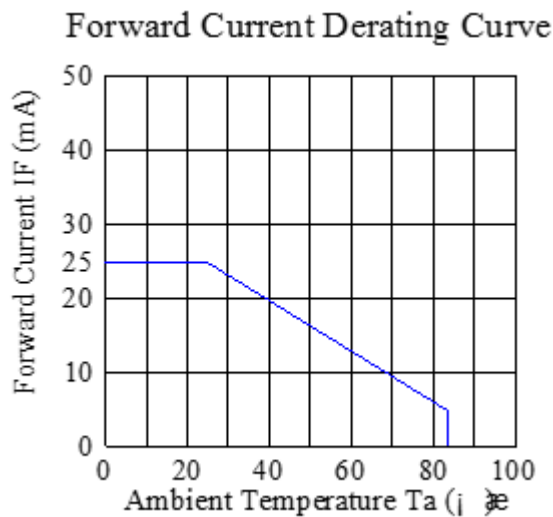
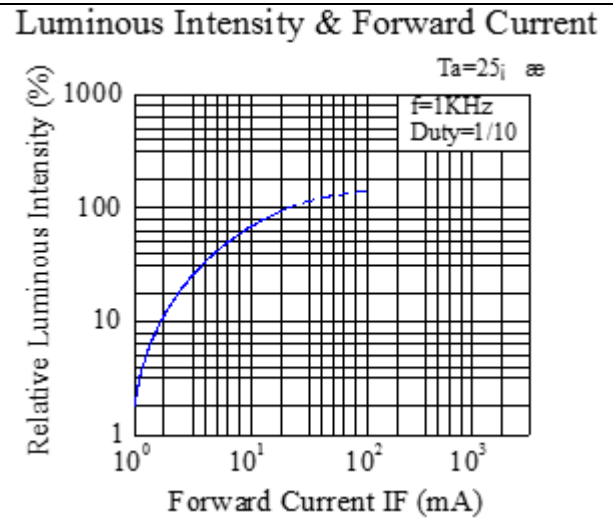
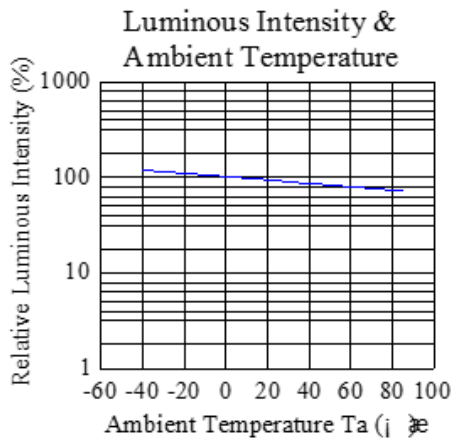
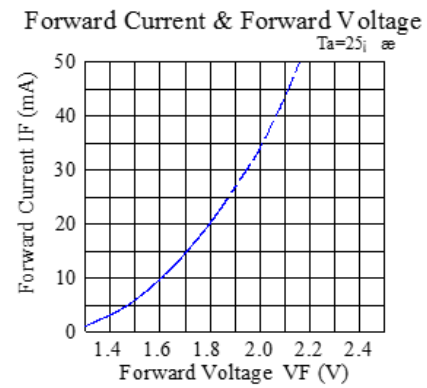
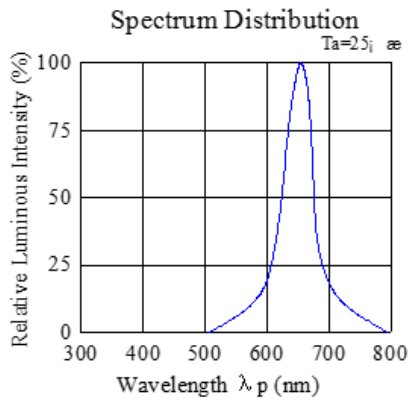
Tolerance of measurement of forward voltage: ±0.1V

Tolerance of measurement of luminous intensity: ±15%

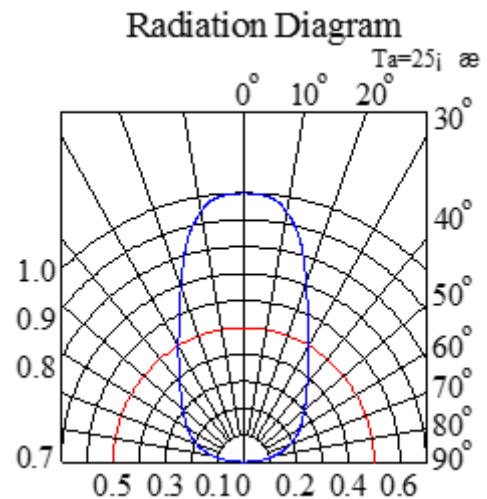
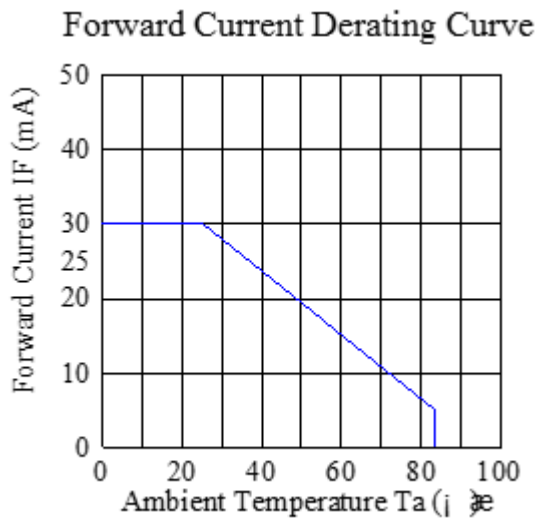
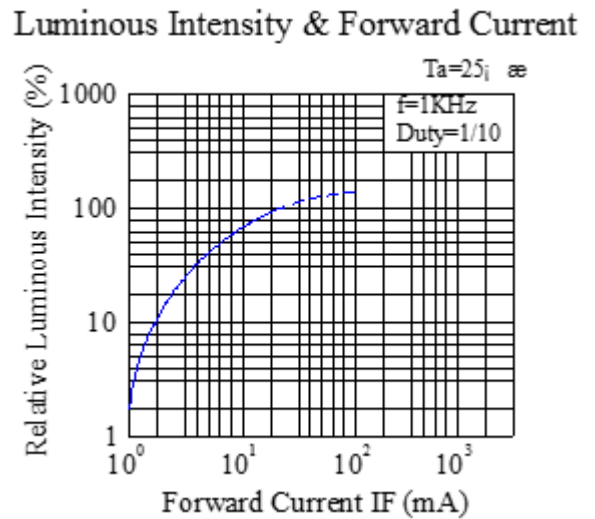
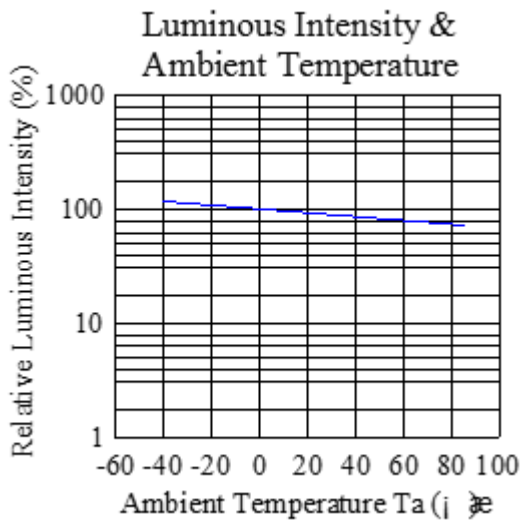
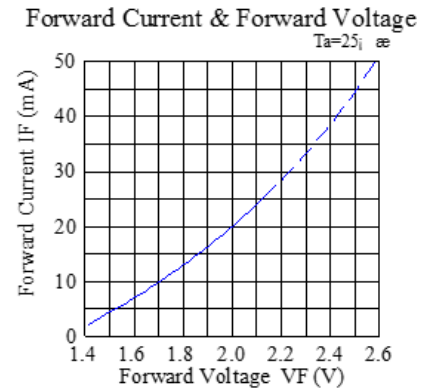
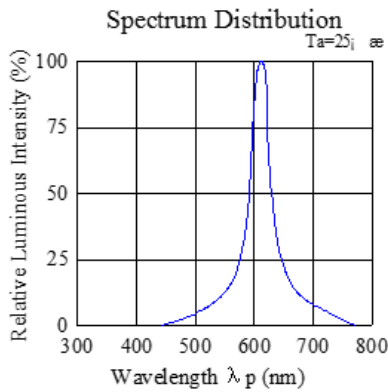
Tolerance of measurement of dominant wavelength: ±2nm

**Characteristic Curves**

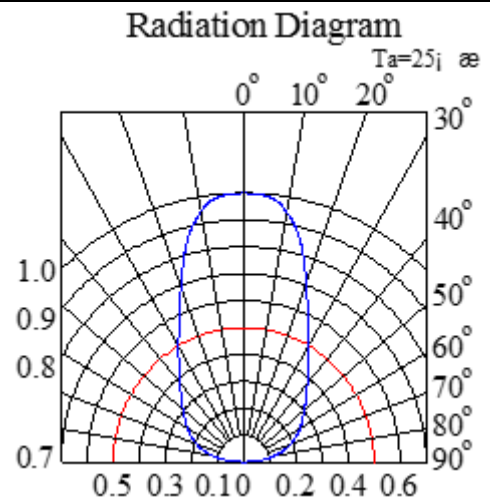
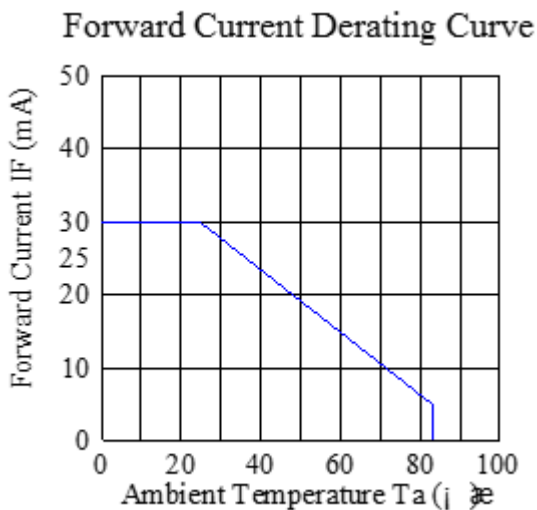
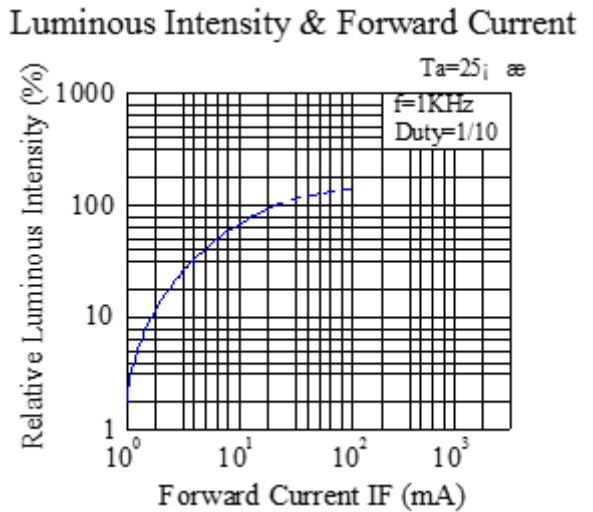
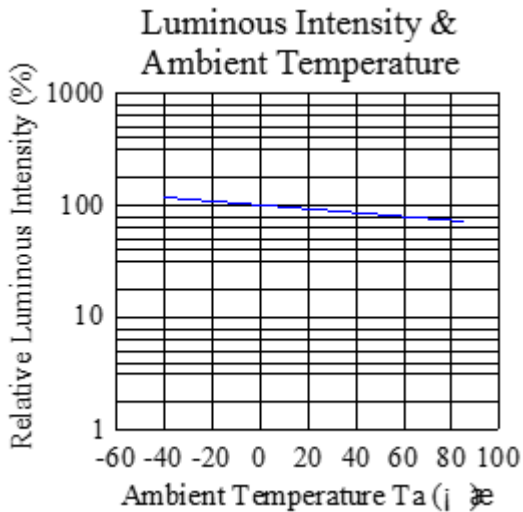
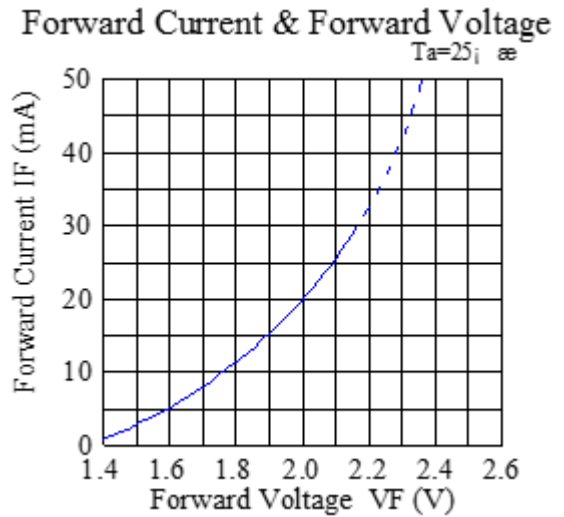
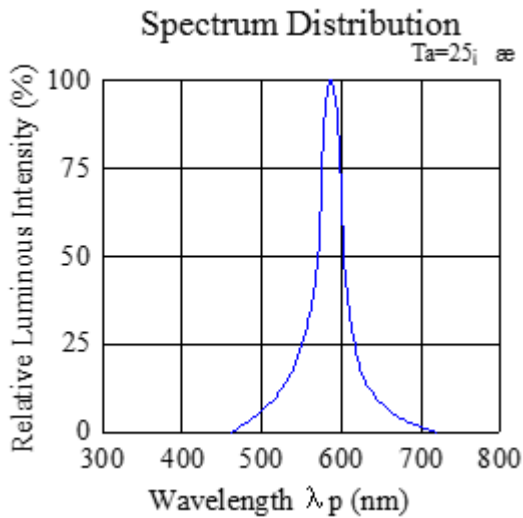
AlGaAs Deep Red



GaAsP Orange

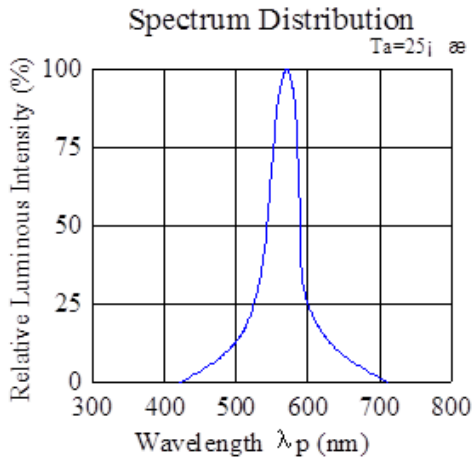


GaAsP Yellow

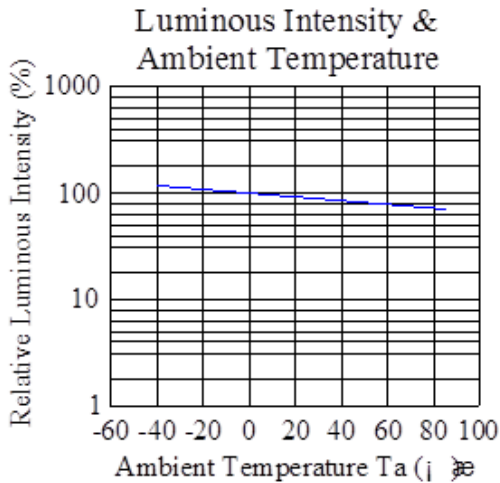
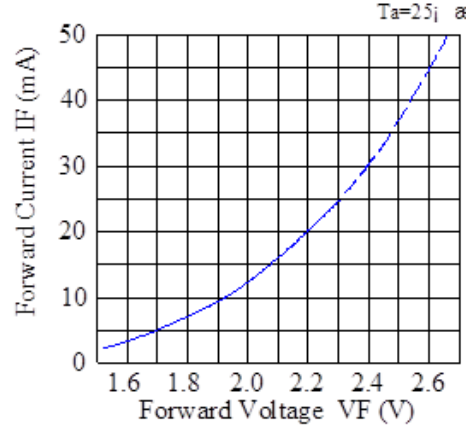




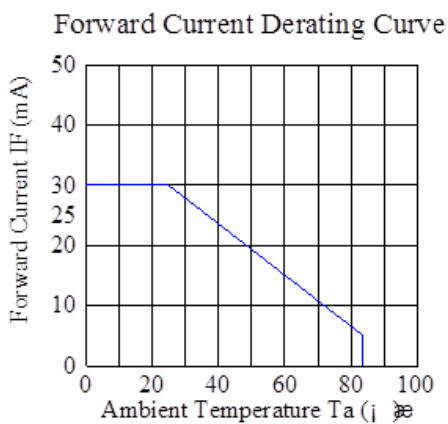
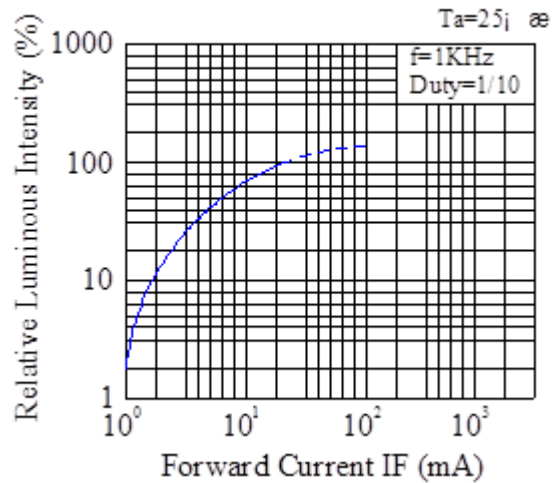
GaP Yellow-Green



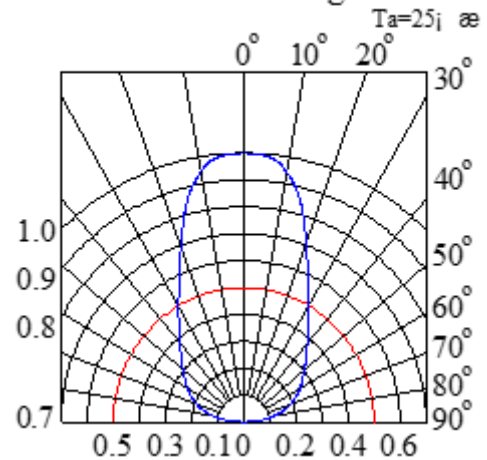
### Forward Current & Forward Voltage



### Luminous Intensity & Forward Current



### Radiation Diagram



**Labeling**

Part No: \_\_\_\_\_

Customer P/N: \_\_\_\_\_

Item: \_\_\_\_\_

Q'ty: \_\_\_\_\_

Vf: \_\_\_\_\_

Iv: \_\_\_\_\_

WI: \_\_\_\_\_

Date: \_\_\_\_\_

**Made in China****Ordering Information**

Part #	Orderable Part #	Spec Range	Quantity per bag
QBL8SA60D-MP7	QBL8SA60D-MP7	Iv=45mcd typ. @ 20mA, λ <sub>D</sub> =640nm typ.	500
QBL8OA60D-MP7	QBL8OA60D-MP7	Iv=20mcd typ. @ 20mA, λ <sub>D</sub> =603nm typ.	500
QBL8YA60D-MP7	QBL8YA60D-MP7	Iv=20mcd typ. @ 20mA, λ <sub>D</sub> =588nm typ.	500
QBL8YG60D-MP7	QBL8YG60D-MP7	Iv=20mcd typ. @ 20mA, λ <sub>D</sub> =570nm typ.	500

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## Revision History

Description:	Revision #	Revision Date
New Release of QBL8XX60D-MP7_series	V1.0	06/22/2016



## Disclaimer

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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.