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QT-Brightek Lamp with Housing Series
3mm Round Lamp with Eight level Housing
Part No.: QBL7XX80D-MP8B2_series

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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: 80° typ.

Description:

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

Application:

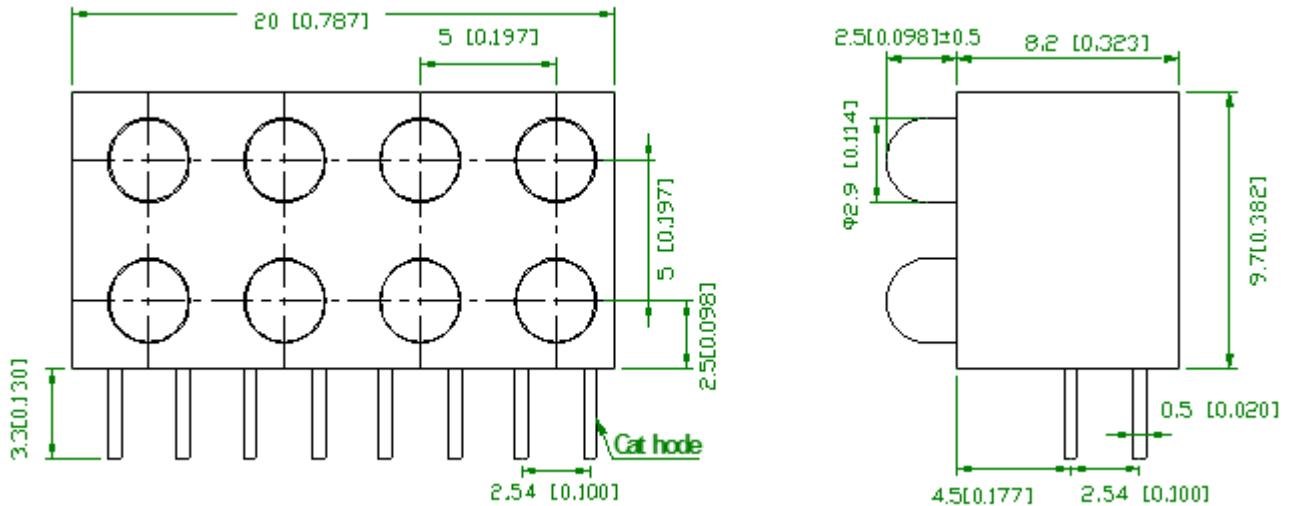
- General purpose indicator application
- Electronic instrument

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:

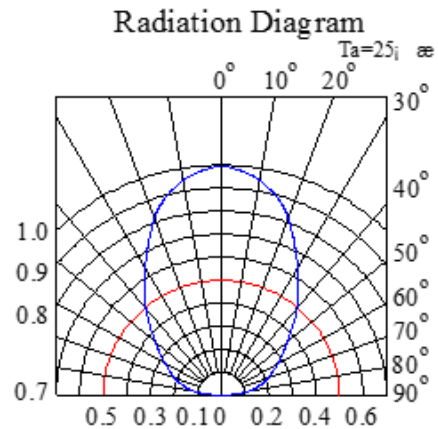
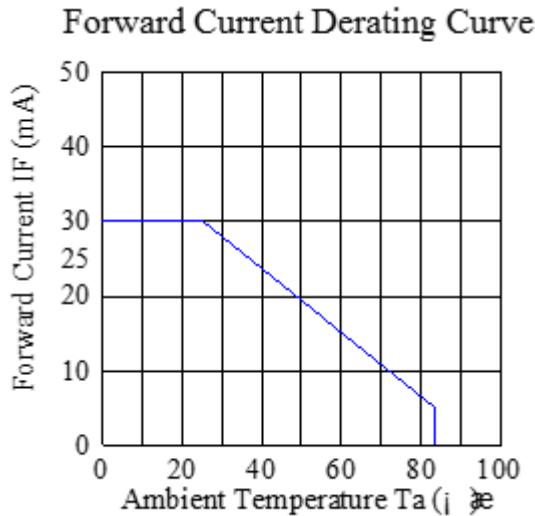
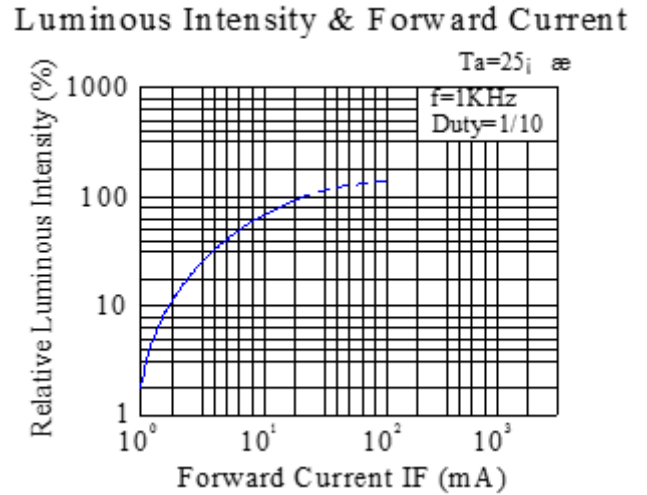
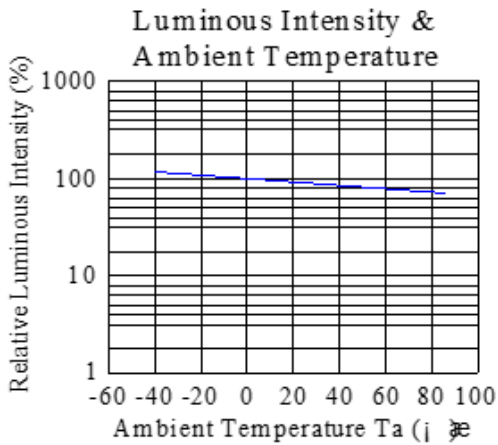
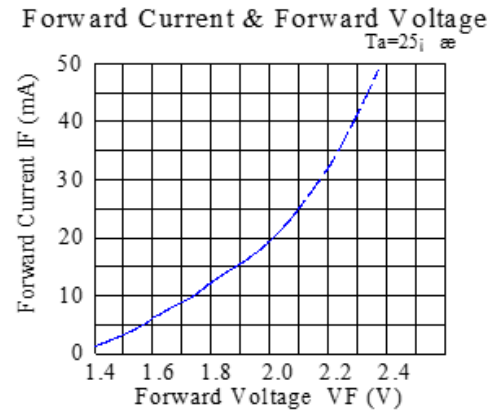
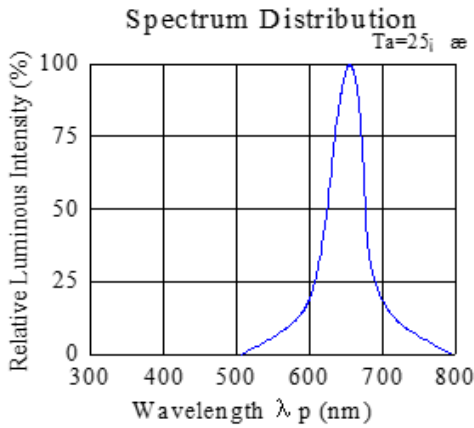
Tolerance of measurement of forward voltage: ±0.1V

Tolerance of measurement of luminous intensity: ±15%

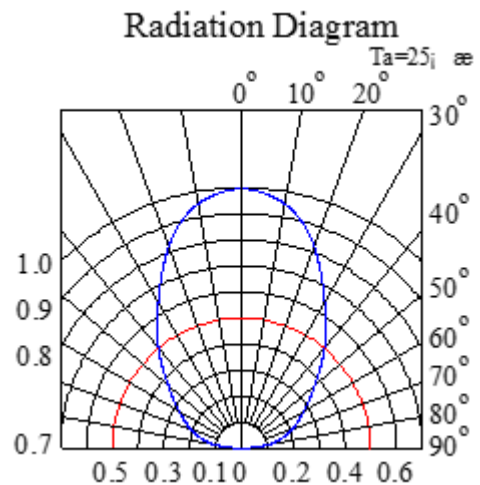
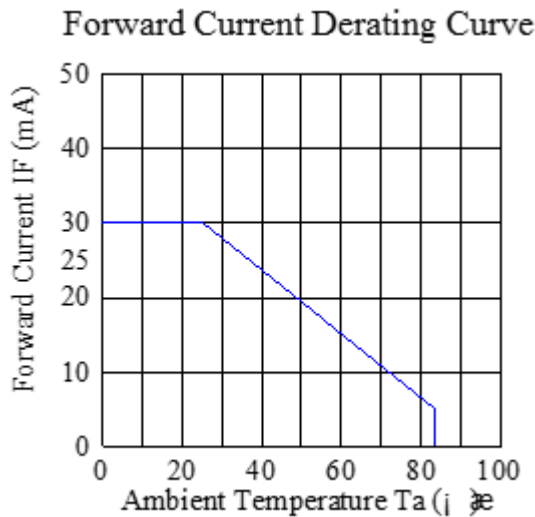
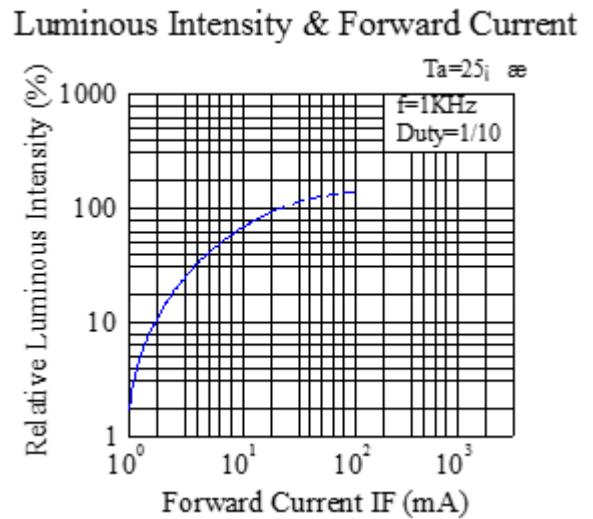
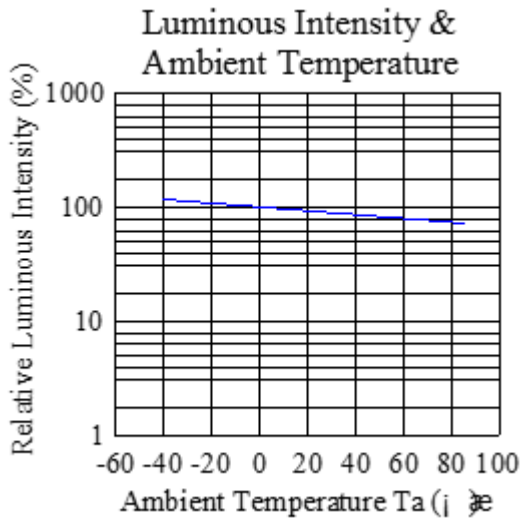
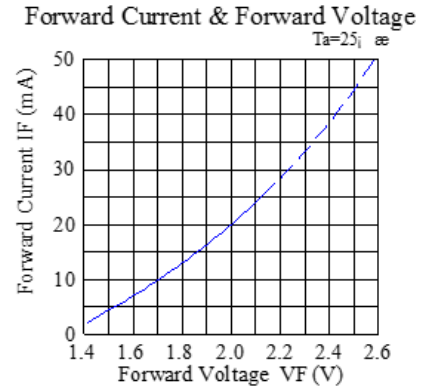
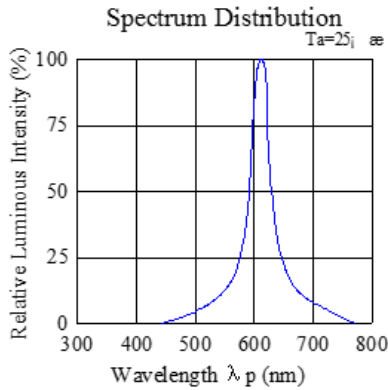
Tolerance of measurement of dominant wavelength: ±2nm

Characteristic Curves

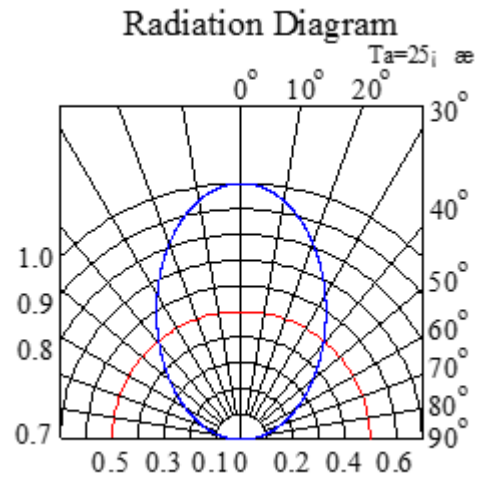
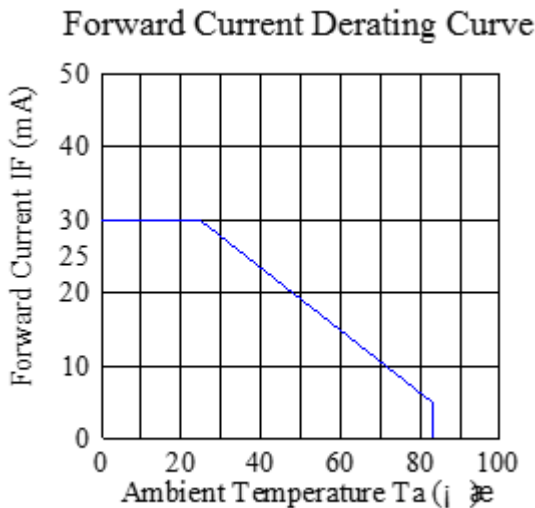
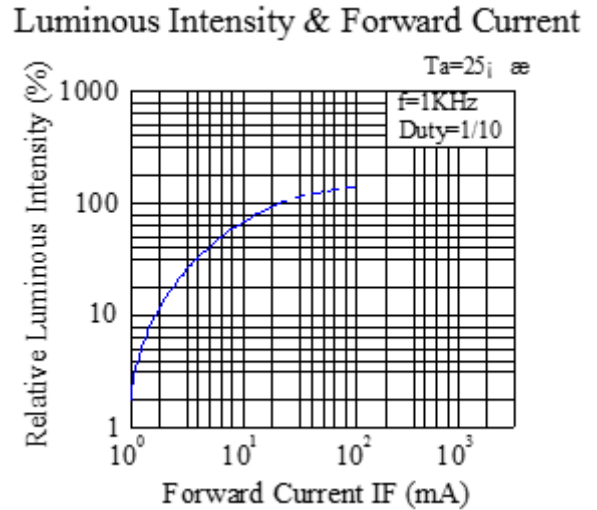
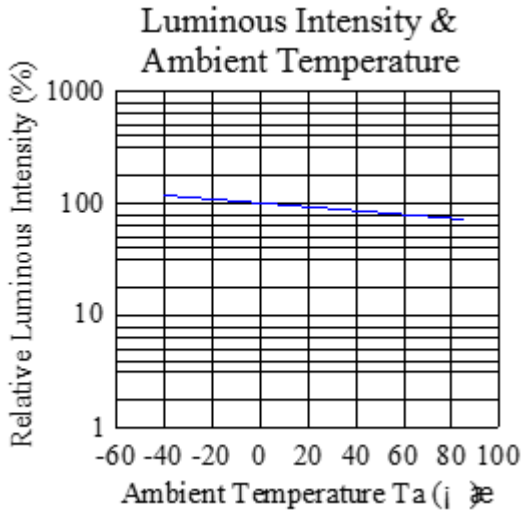
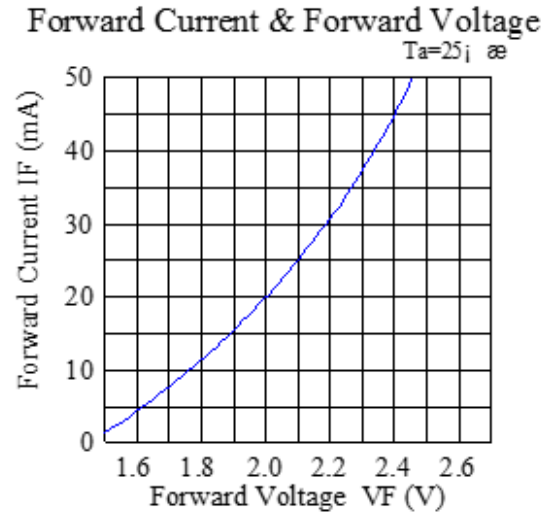
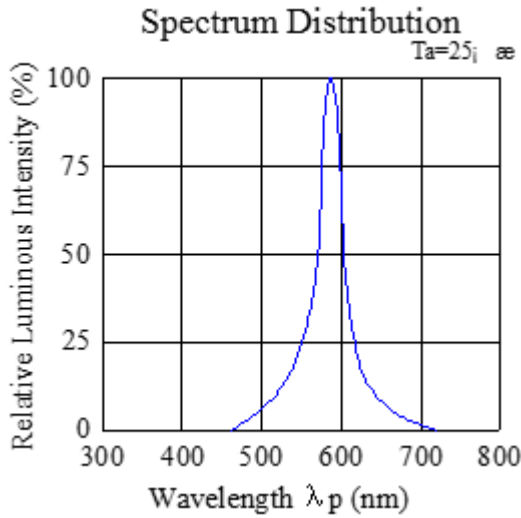
GaP Red



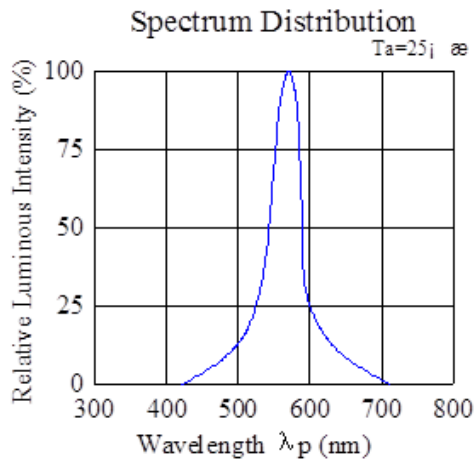
GaAsP Orange



GaAsP Yellow

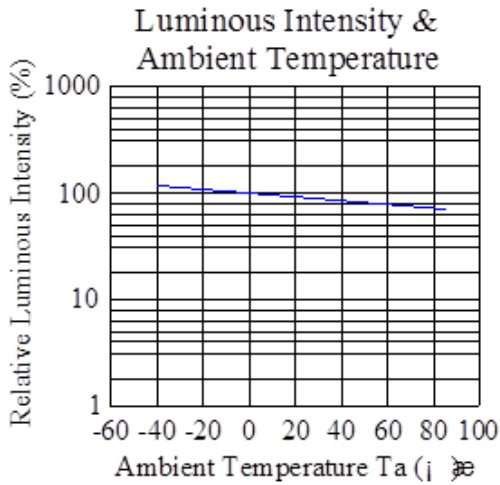
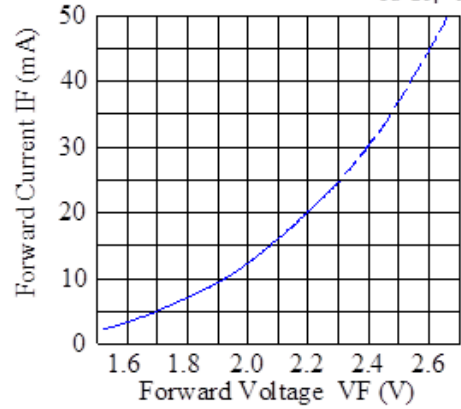


GaP Yellow-Green



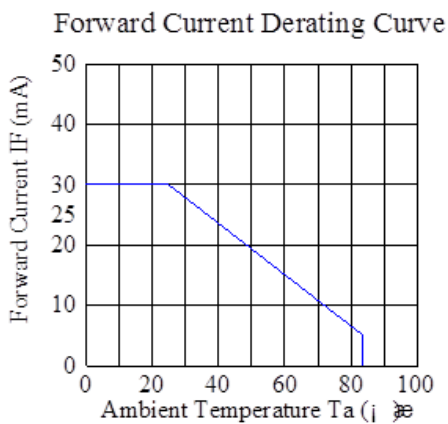
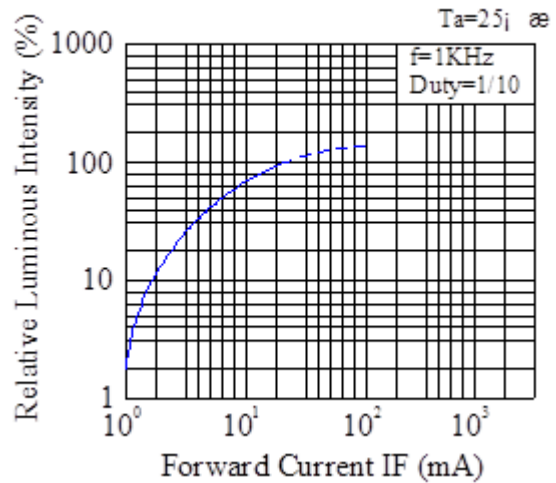
Forward Current & Forward Voltage

$T_a=25j\text{ }^{\circ}\text{C}$



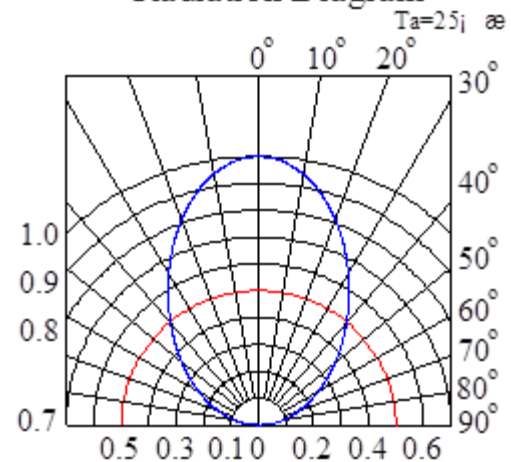
Luminous Intensity & Forward Current

$T_a=25j\text{ }^{\circ}\text{C}$



Radiation Diagram

$T_a=25j\text{ }^{\circ}\text{C}$



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 Tray |
|-----------------|------------------|-----------------------------------------------------|-------------------|
| QBL7SB80D-MP8B2 | QBL7SB80D-MP8B2 | Iv=30mcd typ. @ 20mA, $\lambda_D=640\text{nm}$ typ. | 120 |
| QBL7OA80D-MP8B2 | QBL7OA80D-MP8B2 | Iv=30mcd typ. @ 20mA, $\lambda_D=603\text{nm}$ typ. | 120 |
| QBL7YA80D-MP8B2 | QBL7YA80D-MP8B2 | Iv=30mcd typ. @ 20mA, $\lambda_D=588\text{nm}$ typ. | 120 |
| QBL7YG80D-MP8B2 | QBL7YG80D-MP8B2 | Iv=30mcd typ. @ 20mA, $\lambda_D=570\text{nm}$ typ. | 120 |

Revision History

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

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