

**Feature:**

- Color Diffused lens
- Packed in Bulk, available in tape/reel
- Super bright 5mm oval lamp
- AllnGaP Red, InGaN Green/Blue
- 110/50 °viewing angle
- XX=Color (R/IG/IB)

**Description:**

These super bright 5mm oval lamps with 7.0 mm lens height are suitable for all applications requiring higher brightness.

**Application:**

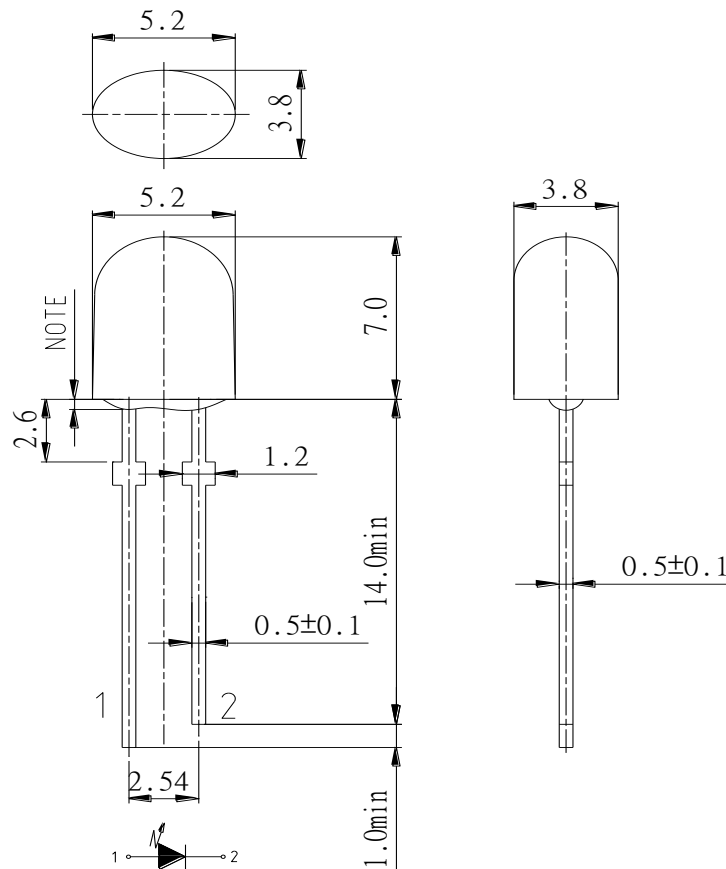
- Electronic signs and electronics board
- LED lighting

**Certification & Compliance:**

- TS16949
- ISO9001
- RoHS Compliant



**Dimension:**



Units: mm / tolerance = +/-0.25mm

**Electrical / Optical Characteristic (T=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.
QBOL4R50D	Red	20	2.0	2.6	619	--	628	600	900
QBOL4IG50D	True Green	20	3.2	3.6	519	--	528	1500	2200
QBOL4IB60D	Blue	20	3.2	3.6	465	--	471	290	480

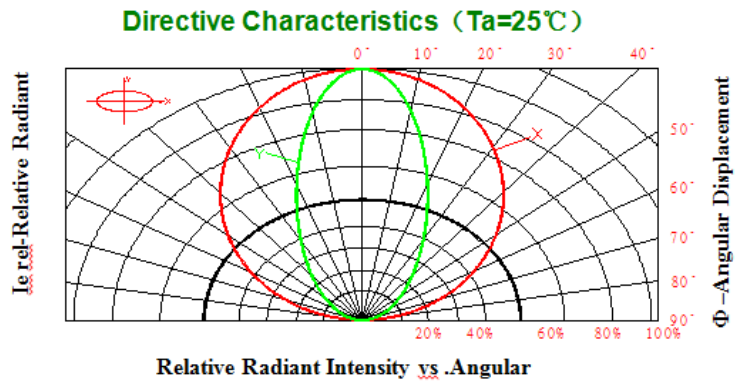
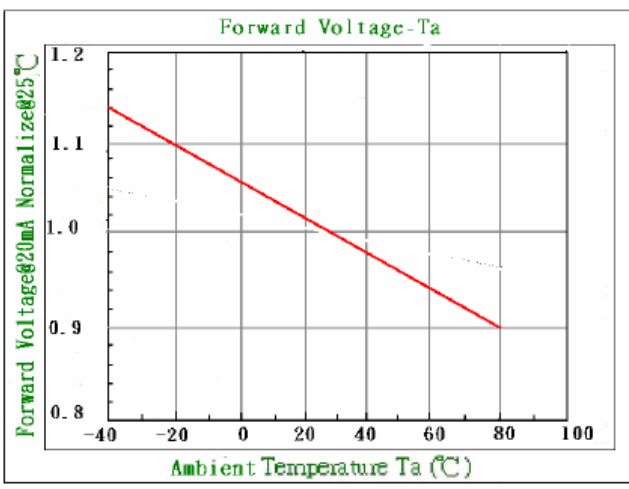
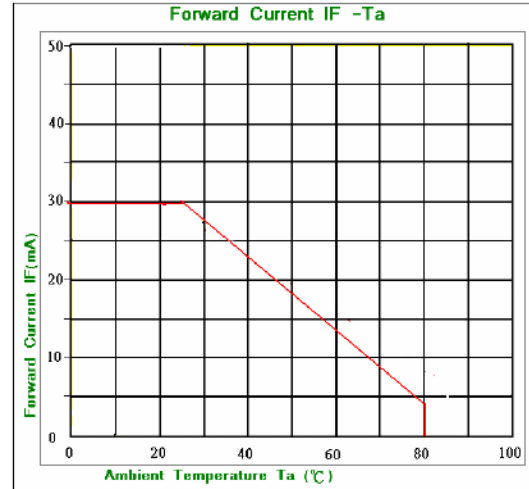
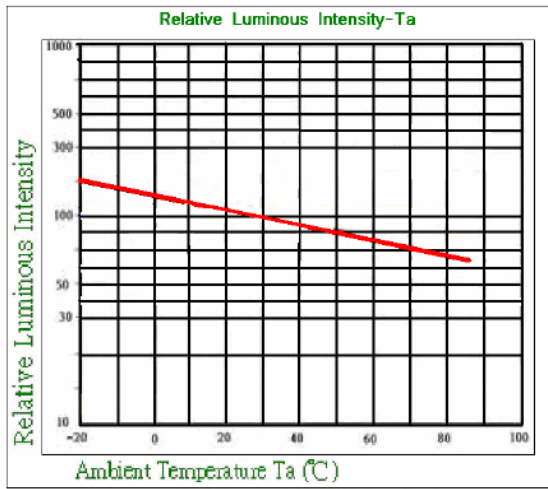
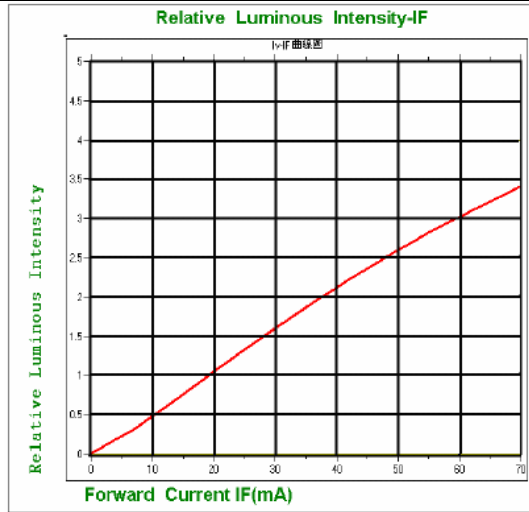
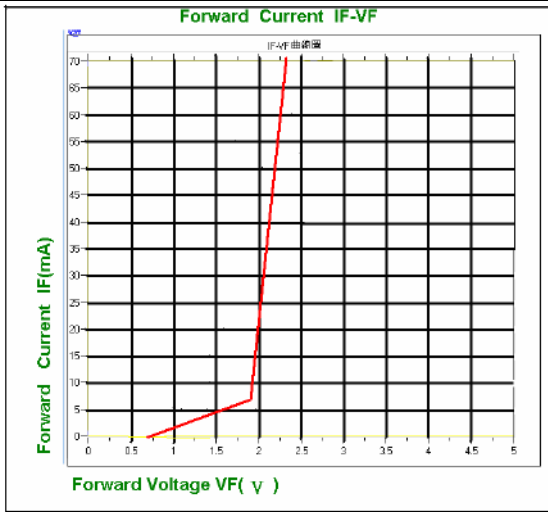
**Absolute Maximum Rating**

Part #	Color	P <sub>d</sub> (mW)	I <sub>F</sub> (mA)	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)
QBOL4R50D	Red	90	30	5	-30 to + 80	-40 to +100
QBOL4IG50D	True Green	110	30	5	-30 to + 80	-40 to +100
QBOL4IB50D	Blue	110	30	5	-30 to + 80	-40 to +100

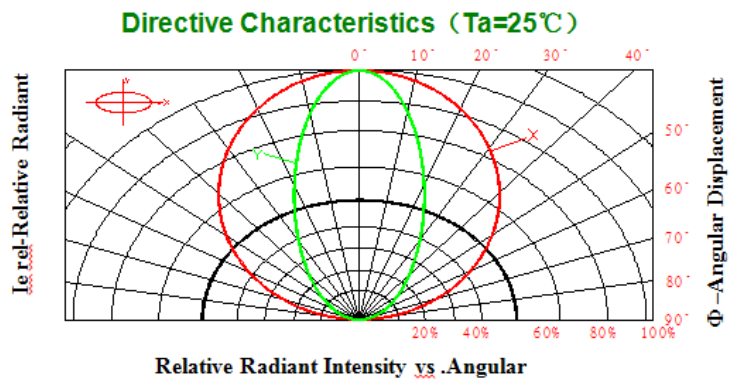
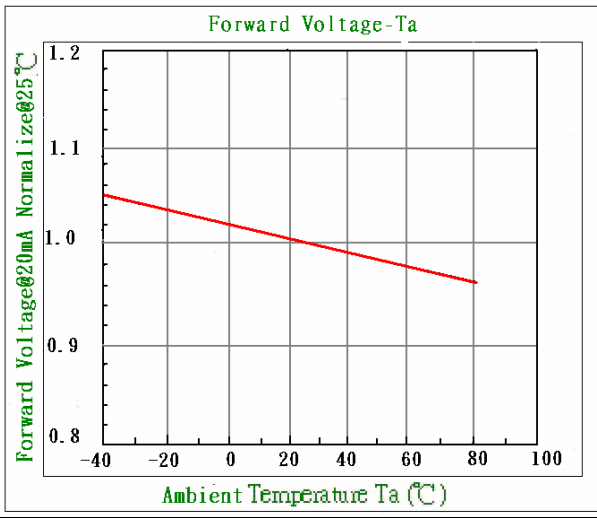
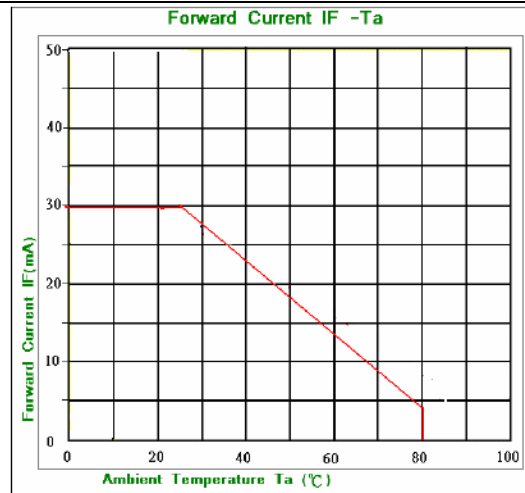
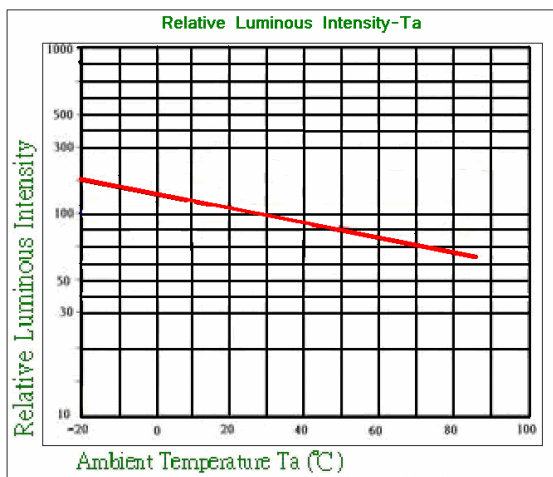
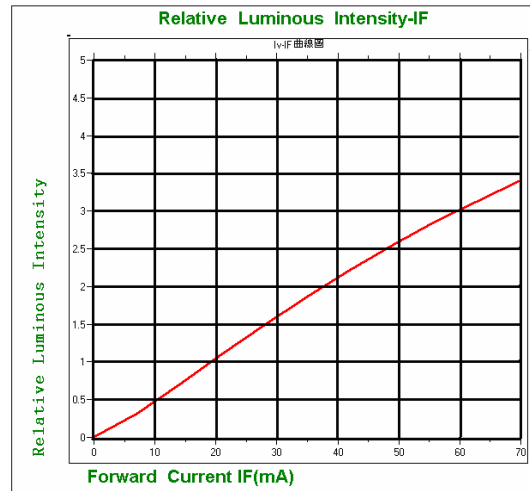
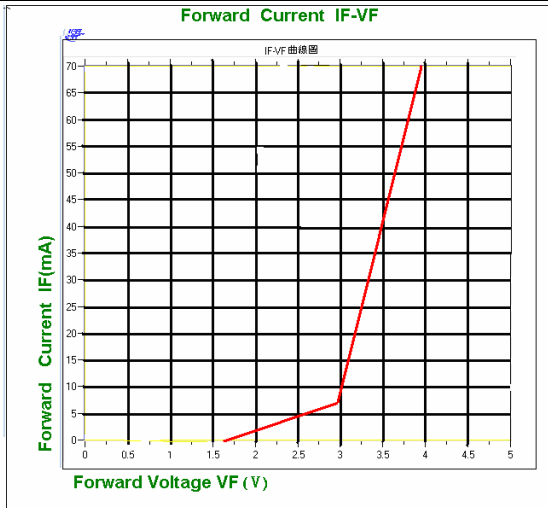
\*Duty 1/10 @ 1KHz

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

**Characteristic Curves for AlInGaP:**



**Characteristic Curves for InGaN:**



**Ordering Information:**

Part #	Orderable Part #	Spec Range	Quantity per bag
QBOL5R50D	QBOL5R50D	Iv=900mcd typ. @ I <sub>F</sub> =20mA	TBD
QBOL5IG50D	QBOL5IG50D	Iv=2200mcd typ. @ I <sub>F</sub> =20mA	TBD
QBOL5IB50D	QBOL5IB50D	Iv=480 mcd typ. @ I <sub>F</sub> =20mA	TBD

**Revision History:**

Description:	Revision #	Revision Date
New Release of QBOL5X50D Series	V1.0	06/06/2011
Amend the part number to QBOL5XX50D_series	V1.1	06/25/2011