

**Feature:**

- Color Diffused lens
- Packed in Bulk, available in tape/reel
- Super bright 4mm oval lamp
- AllnGaP Red, InGaN Green/Blue
- 110/60 °viewing angle

**Description:**

These super bright 4mm oval lamps with 6.2mm lens height are suitable for all applications requiring higher brightness.

**Application:**

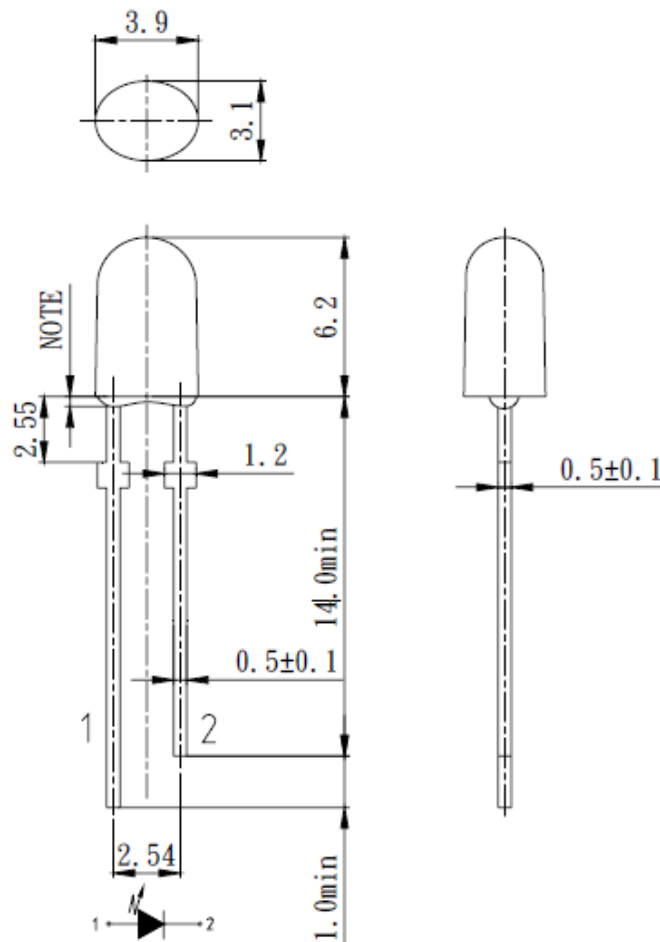
- Electronic signs and electronics board
- LED lighting

**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(nm)			I <sub>V</sub> (mcd)	
			Typ.	max	λ <sub>D</sub>	λ <sub>P</sub>	Δλ	min	typ.
QBOL4R60D	Red	20	2.0	2.6	624	630	--	600	1000
QBOL4IG60D	True Green	20	3.2	3.6	525	520	--	2160	3200
QBOL4IB60D	Blue	20	3.2	3.6	470	468	--	420	620

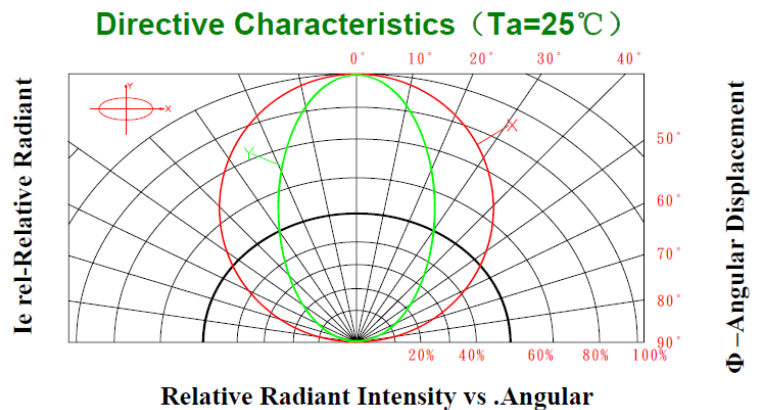
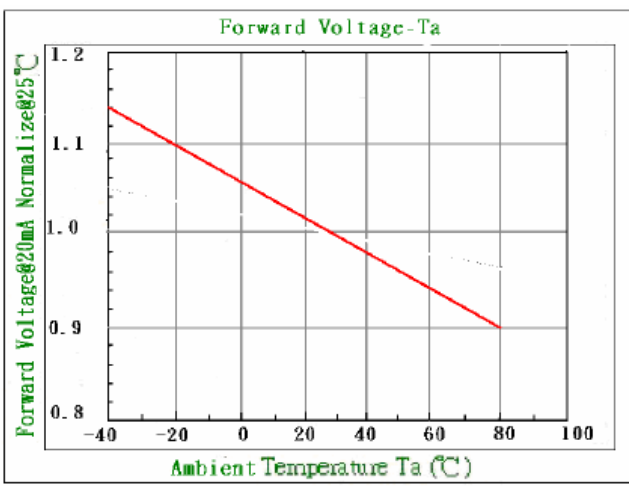
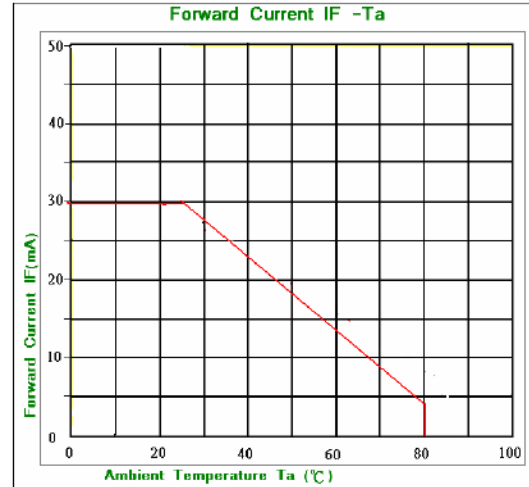
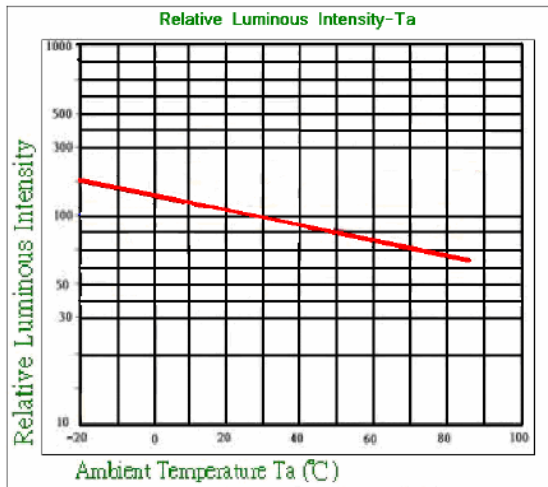
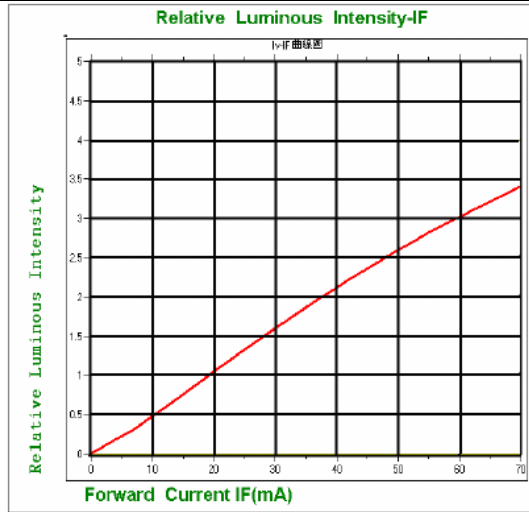
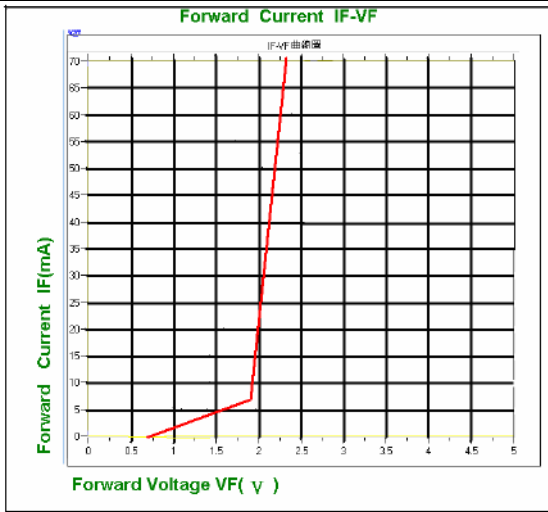
**Absolute Maximum Rating**

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)
QBOL4R60D	Red	90	30	5	-30 to + 80	-40 to +100
QBOL4IG60D	True Green	110	30	5	-30 to + 80	-40 to +100
QBOL4IB60D	Blue	110	30	5	-30 to + 80	-40 to +100

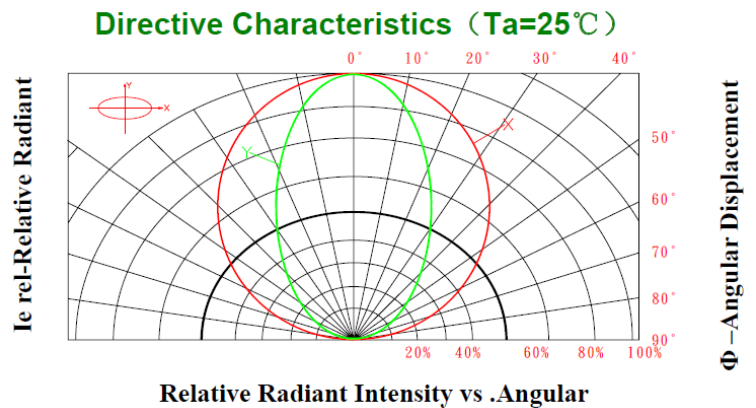
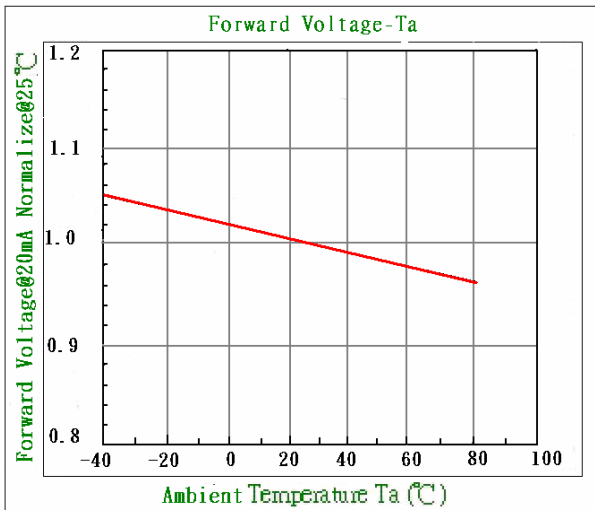
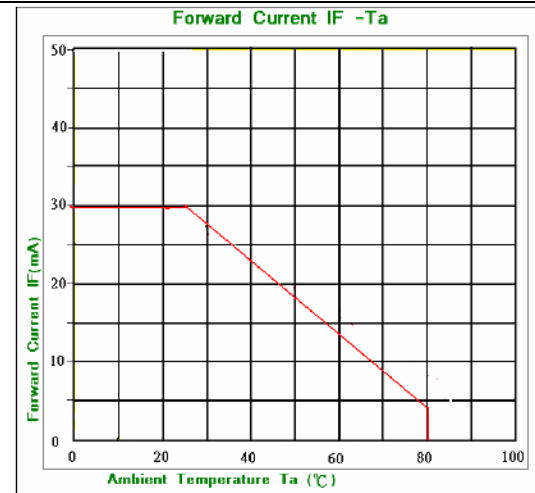
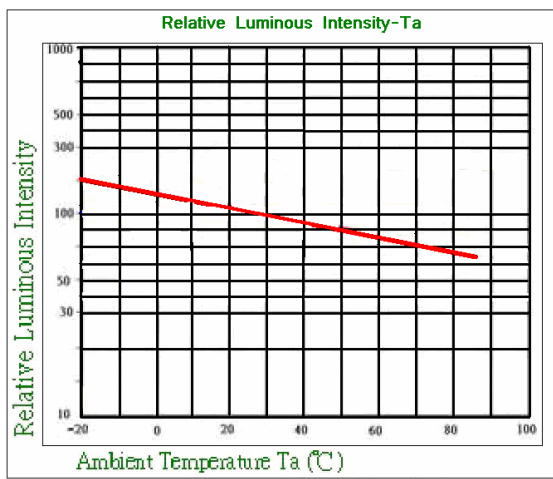
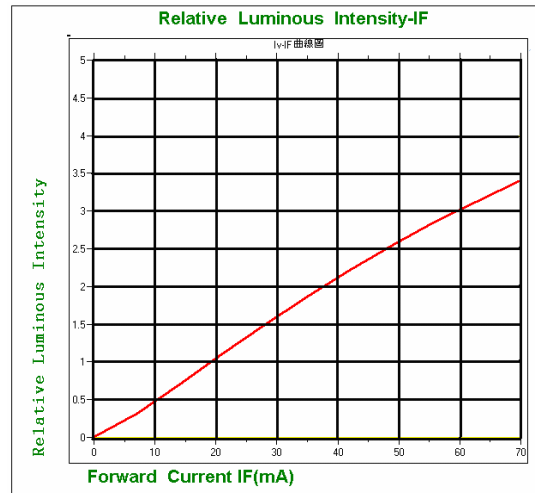
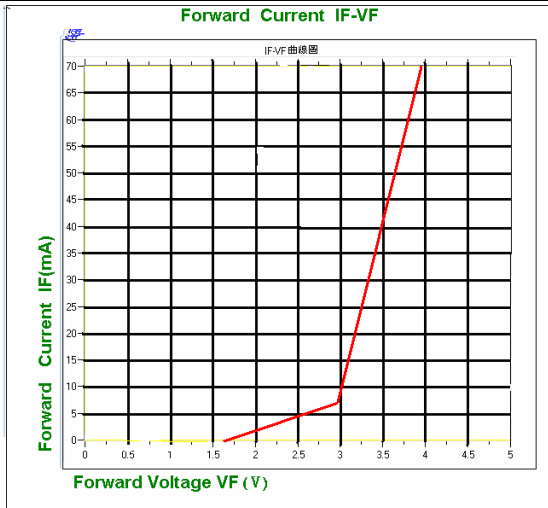
\*Duty 1/10 @ 1KHz

\*\* 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
QBOL4R60D	QBOL4R60D	lv=1000mcd typ.	TBD
QBOL4IG60D	QBOL4IG60D	lv=3200mcd typ.	TBD
QBOL4IB6D	QBOL4IB60D	lv=620 mcd typ.	TBD

**Revision History:**

Description:	Revision #	Revision Date
New Release of QBOL4X60D Series	V1.0	04/19/2011