

# **QT-Brightek Oval Lamp Series**

## **5mm Oval Lamp**

**Part No.: QBOL5IW40D-XX**

**XX (Color Code) = WW/NW/CW**



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## Introduction

### Feature:

- White diffused lens
- Packed in bulk
- Super bright 5mm oval lamp
- InGaN technology for IG/IB
- Viewing angle (X/Y): 110°/40° typ.

### Description:

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

### Application:

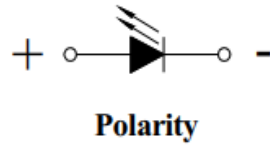
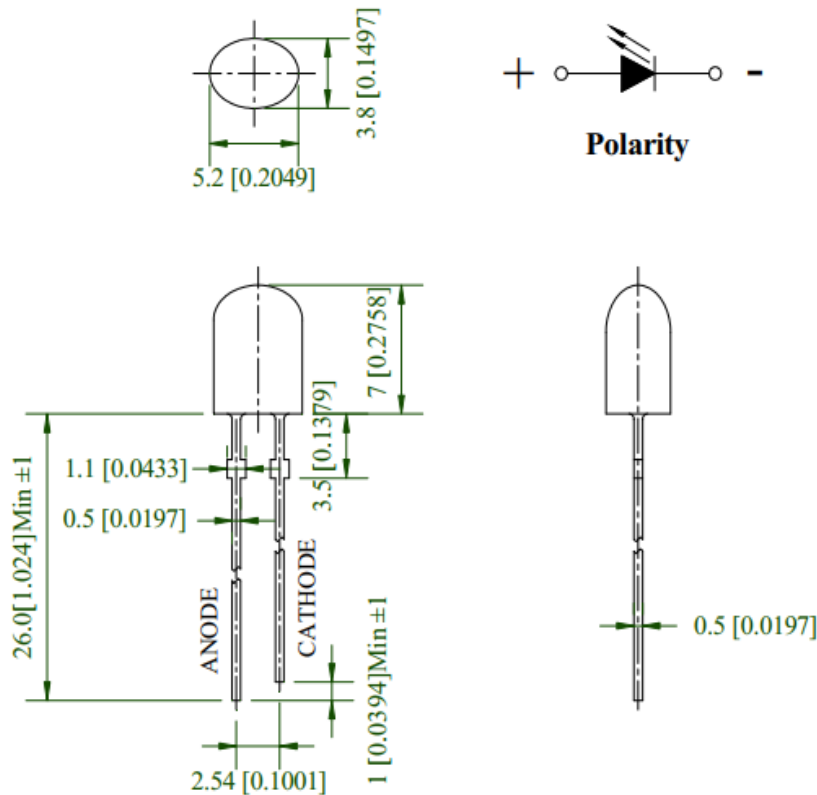
- Electronic signs and electronics board
- LED lighting

### Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



### Dimension:



Units: mm / tolerance = +/-0.25mm

**Electrical / Optical Characteristic (Ta=25 °C)**

Product	Color	I <sub>F</sub> (mA)	V <sub>F</sub> (V)		Chromaticity Coordinate			I <sub>V</sub> (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBOL5IW40D-WW	Warm White	20	3.1	3.6	-	X=0.43 Y=0.395	-	1700	2900
QBOL5IW40D-WW	Natural White	20	3.1	3.6		X=0.335 Y=0.325		1700	2900
QBOL5IW40D-CW	Cool White	20	3.1	3.6	-	X=0.28 Y=0.28	-	1700	2900

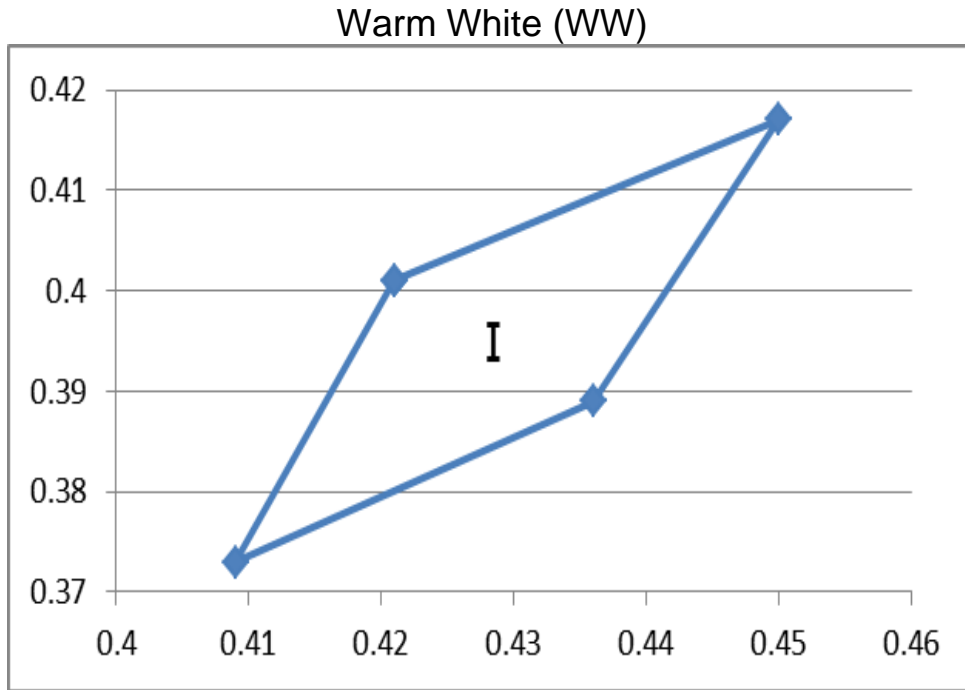
**Absolute Maximum Rating**

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>SO L</sub> (°C)**
InGaN	90	25	100	5	-40 to +85	-40 to +100	260

\*1/10 Duty Cycle, 0.1ms Pulse Width

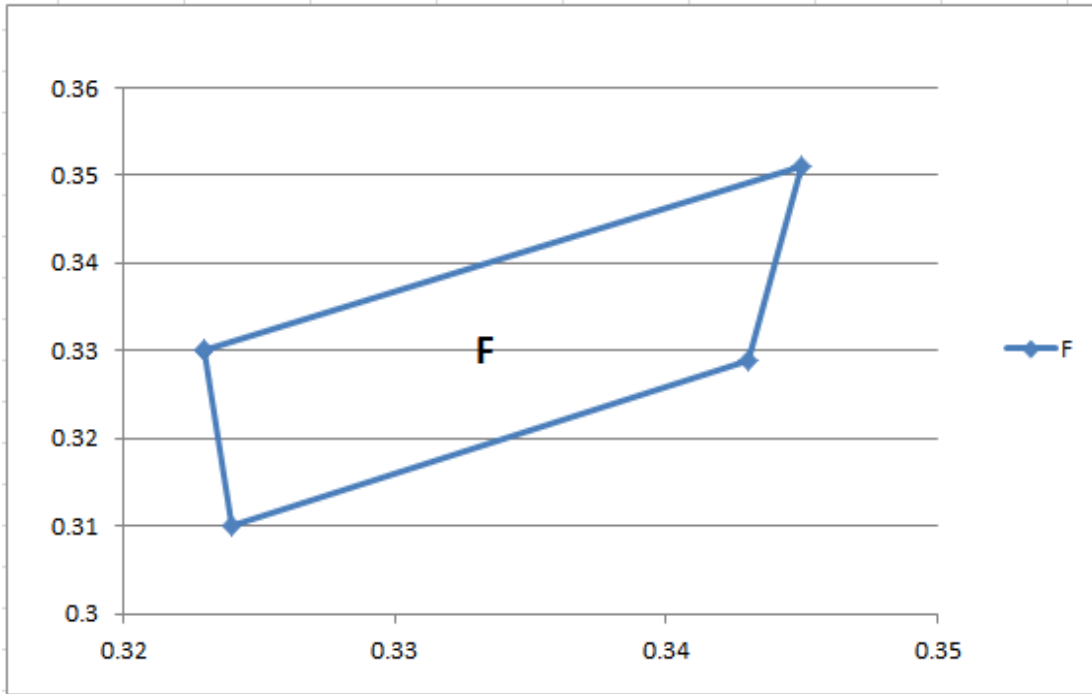
\*\*Wave Soldering for no more than 5 sec @ 260 °C

**CIE Chromaticity Diagram**



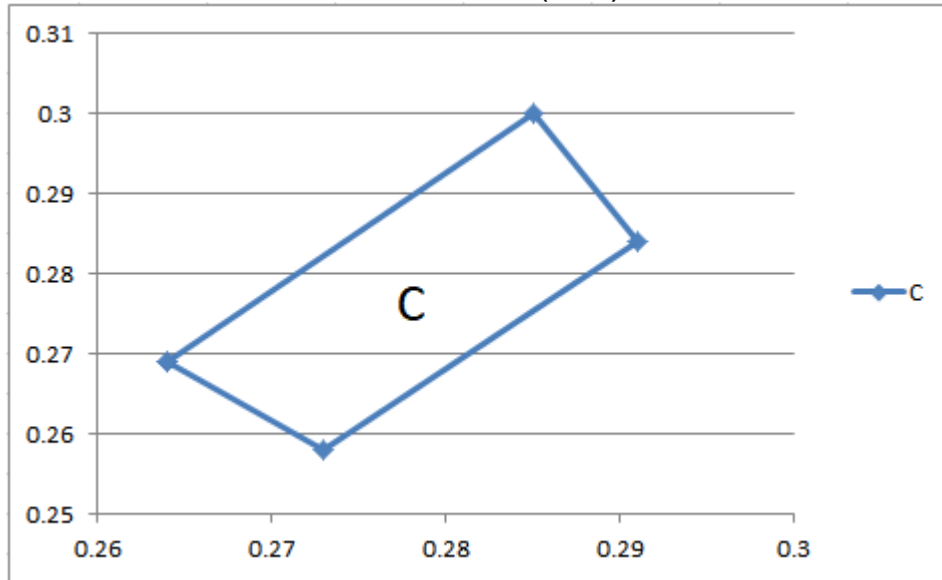
I	
X	Y
0.421	0.401
0.45	0.417
0.436	0.389
0.409	0.373
0.421	0.401

## Natural White (NW)



F	
X	Y
0.323	0.33
0.345	0.351
0.343	0.329
0.324	0.31
0.323	0.33

### Cool White (CW)

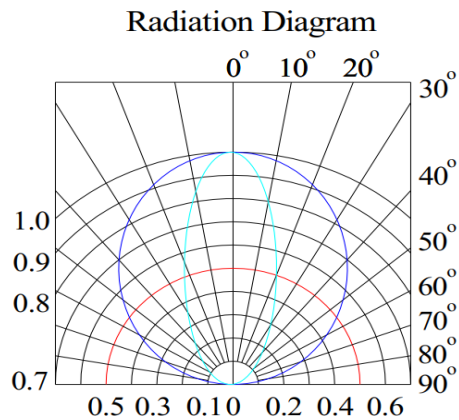
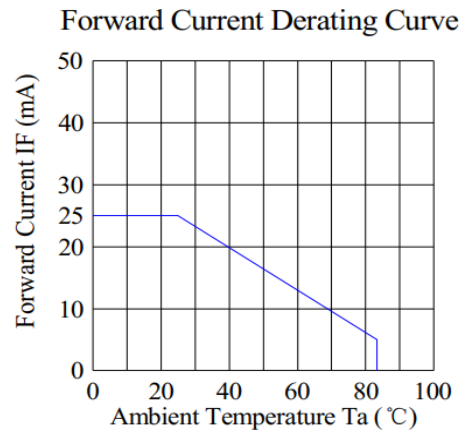
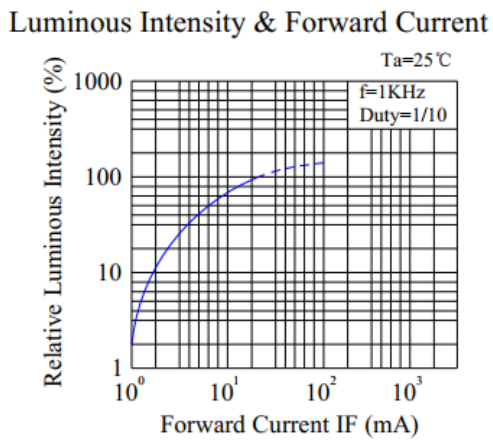
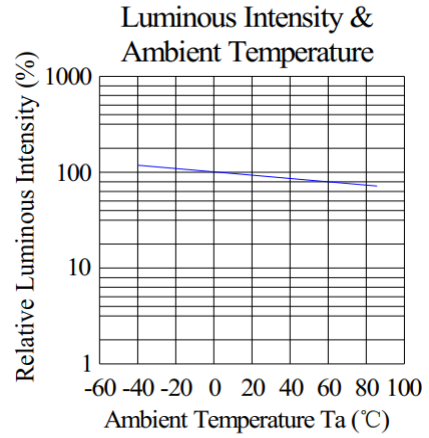
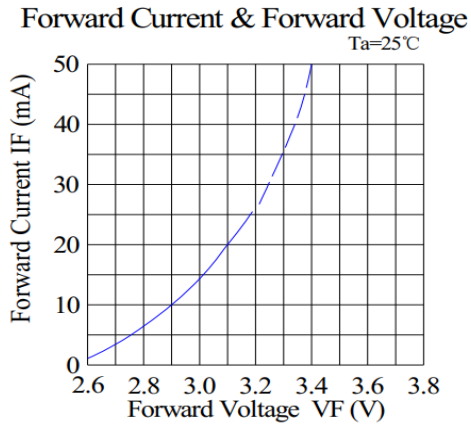


C	
X	Y
0.264	0.269
0.273	0.258
0.291	0.284
0.285	0.3
0.264	0.269

Tolerance of measurement of color coordinates:  $\pm 0.01$

## Characteristic Curves

InGaN







QBOL5IW40D-XX

4mm Oval Lamp

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### Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per bag
QBOL5IW40D-WW	QBOL5IW40D-WW	Iv=2900mcd typ. @ 20mA, CCT Coordinate : (0.43, 0.395) typ.	500pcs
QBOL5IW40D-NW	QBOL5IW40D-NW	Iv=2900mcd typ. @ 20mA, CCT Coordinate : (0.335, 0.325) typ.	500pcs
QBOL5IW40D-CW	QBOL5IW40D-CW	Iv=2900mcd typ. @ 20mA, CCT Coordinate : (0.28, 0.28) typ.	500pcs



### Revision History

Description:	Revision #	Revision Date
New Release of QBOL5IW40D-XX Series	V1.0	10/02/2018

### Disclaimer

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1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
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.