

QT-Brightek Chip LED Series
1206 (with Inner Lens) IR LED
Part No.: QBLP650-IR1

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	Version# 1.0	

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Introduction

Feature:

- Water clear lens
- Package in tape and reel
- 1206 Package with Inner Lens
- AlGaAs technology
- Viewing Angle = 40 deg

Description:

These top mount bright 1206 LEDs have a height profile of 1.4mm, which is ideal in any kind of back lighting application. Also, it is a light weight model that is good for miniature products.

Application:

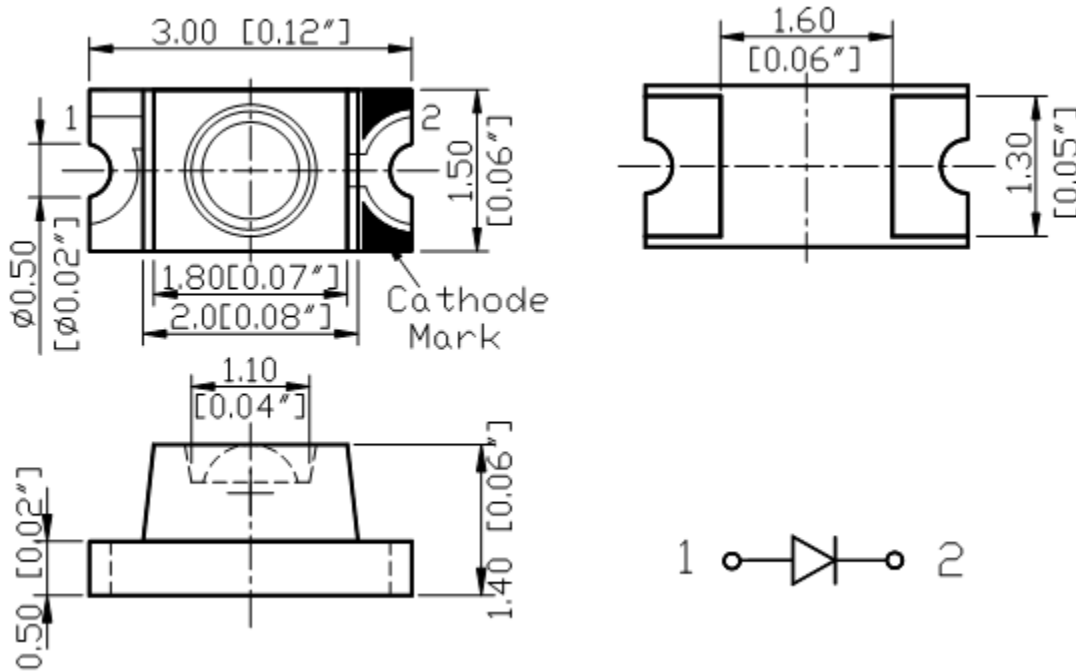
- Infrared Sensor
- Optoelectronic Switch
- Smoke detector
- Drive sensor

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.1mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)		λ _P (nm)			I _e (mW/sr)		
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.
QBLP651-IR1	Infrared	20	1.3	1.8	-	940	-	0.6	1.6	-

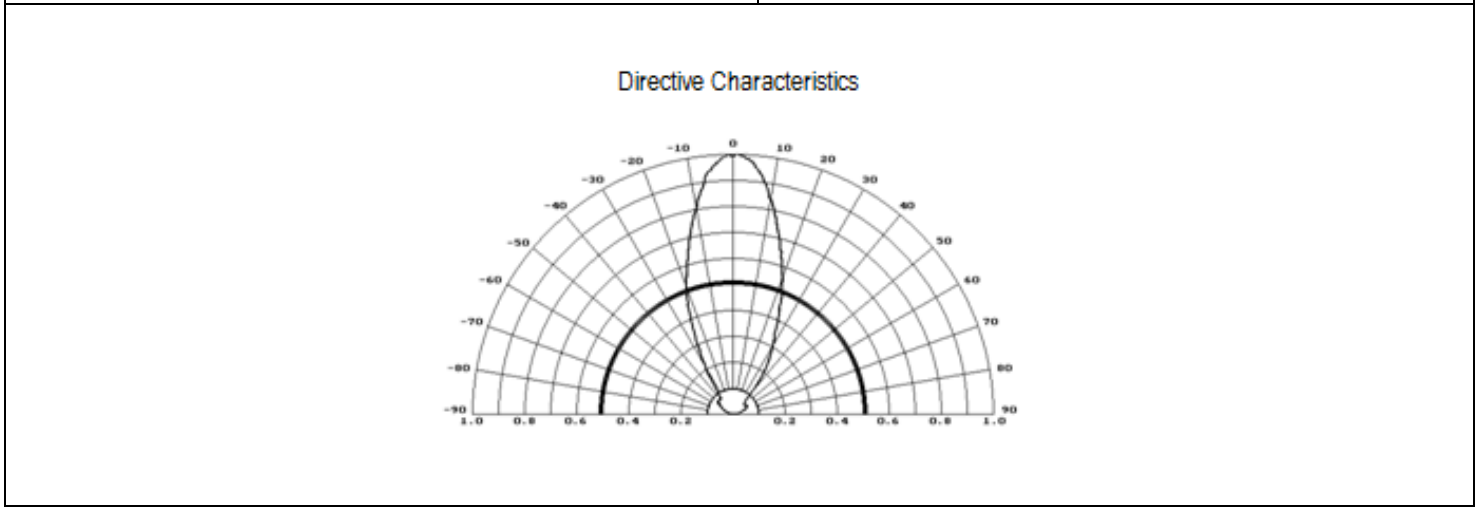
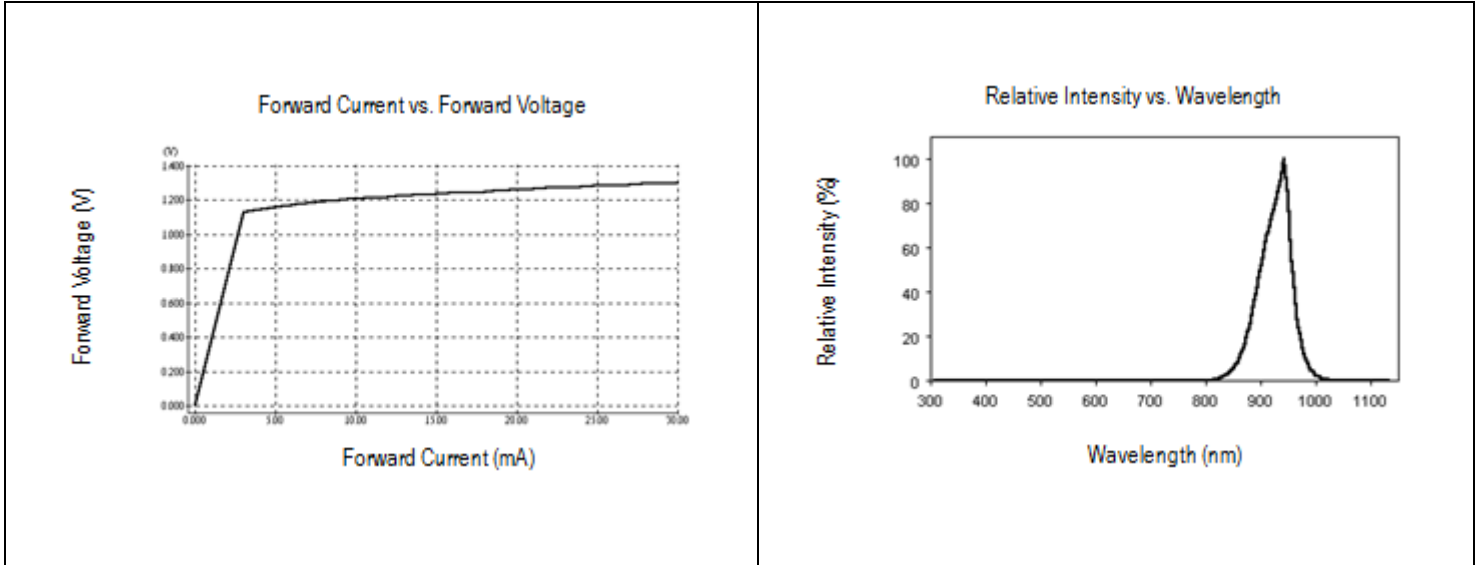
Absolute Maximum Rating

Material	P _d (mW)	I _F (mA)	I _{FP} (A)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
AlGaAs	90	50	1	5	-40 ~ +80	-40 ~ +85	260

*Duty cycle=1%, Pulse width 100us

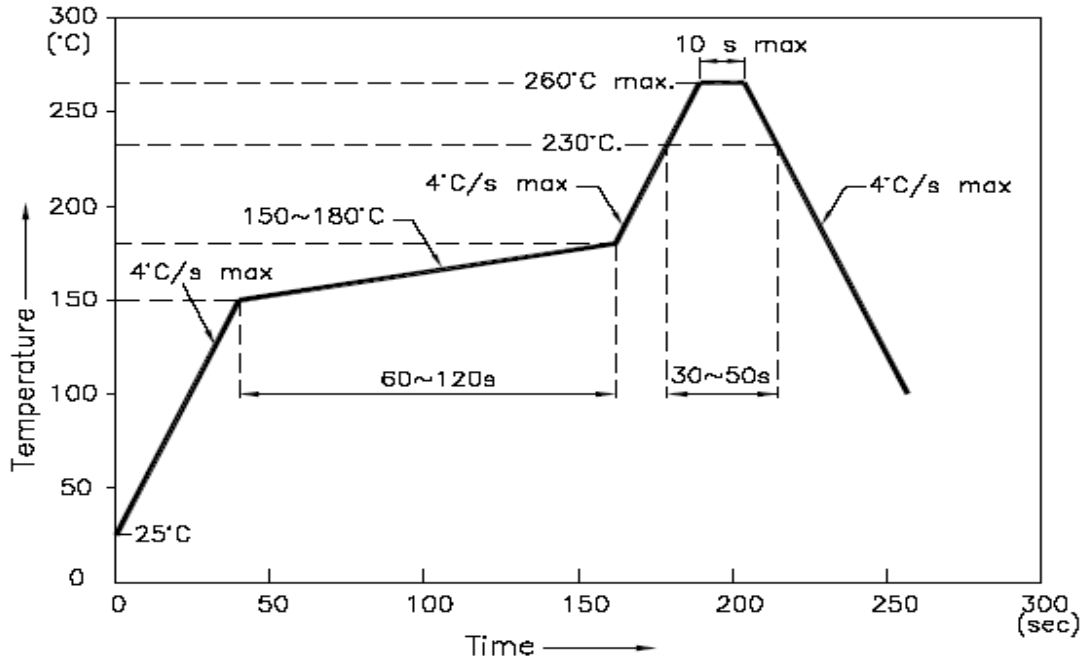
**IR Reflow for no more than 10 sec @ 260 °C

Characteristic Curves

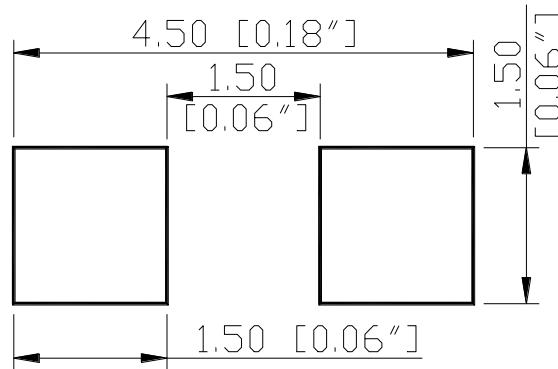


Solder Profile & Footprint

- Recommended tin solder specifications: melting temperature in the range of 178~192 °C
- The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



Recommended Pad Layout



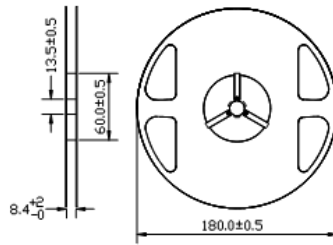
Units: mm

Tolerance: ± 0.1mm

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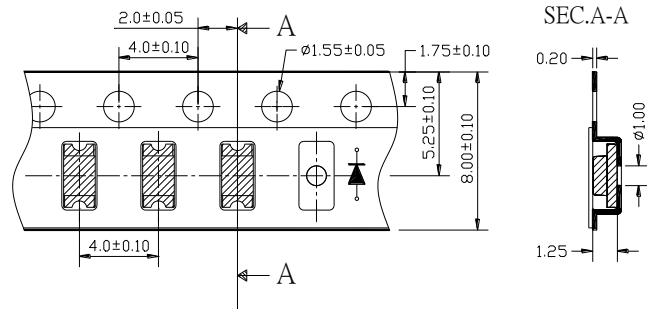
Packing

Reel Dimension:



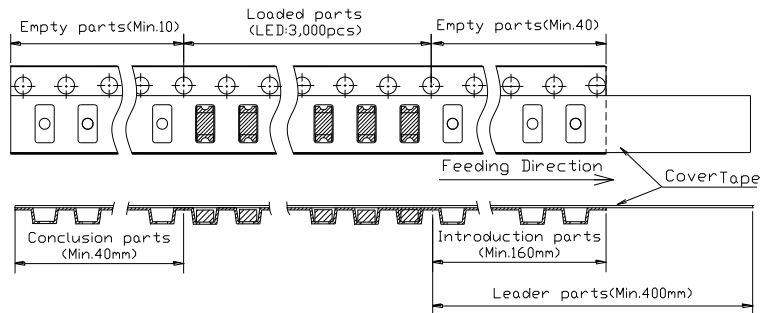
Unit: mm

Tape Dimension:

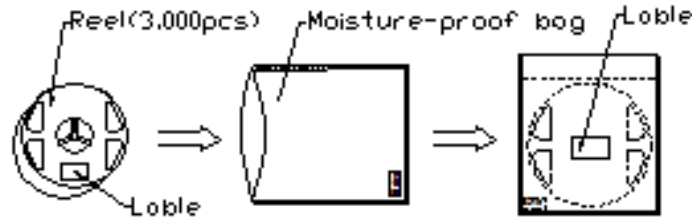


Unit: mm

Arrangement of Tape:



Packaging Specification:



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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 reel
QBLP651-IR1	QBLP651-IR1	I _e =1.6mW/sr typ. / λ _p =940nm typ. @ I _F =20mA	3,000 units

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Revision History

Description:	Revision #	Revision Date
New Release of QBLP651-IR1	V1.0	05/11/2015

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.

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