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[QT Brightek \(QTB\)](#)
[QBLP650-IR3](#)

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QT-Brightek Chip LED Series

1206 IR LED

Part No.: QBLP650-IR3

Product: QBLP650-IR3	Date: May 11, 2015	Page 1 of 9
	Version# 1.1	



QBLP650-IR3

1206 LED

Table of Contents:

Introduction 3

Electrical / Optical Characteristic (Ta=25 °C) 4

Absolute Maximum Rating 4

Characteristic Curves..... 5

Solder Profile & Footprint 6

Packing 7

Labeling 8

Ordering Information 8

Revision History 9

Disclaimer 9

Product: QBLP650-IR3	Date: May 11, 2015	Page 2 of 9
	Version# 1.1	

Introduction

Feature:

- Water clear lens
- Package in tape and reel
- 1206 Package
- AlGaAs technology
- Viewing Angle = 140 deg

Description:

This top mount bright 1206 LEDs have a height profile of 1.1mm, which is ideal in any kind of back lighting application. Also, it is a light weight model that is good for miniature products.

Application:

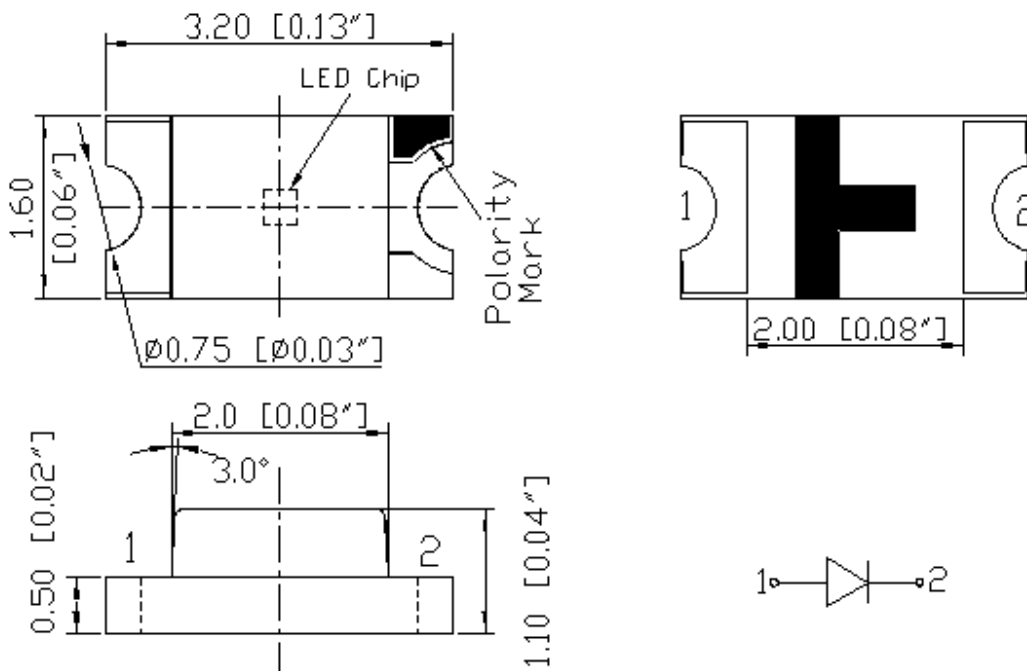
- Infrared Sensor
- Optoelectronic Switch
- Smoke detector
- Drive sensor

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.1mm

Product: QBLP650-IR3	Date: May 11, 2015	Page 3 of 9
	Version# 1.1	



QBLP650-IR3

1206 LED

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.
QBLP650-IR3	Infrared	20	1.4	1.8	-	850	-	0.3	0.8	2.1

Absolute Maximum Rating

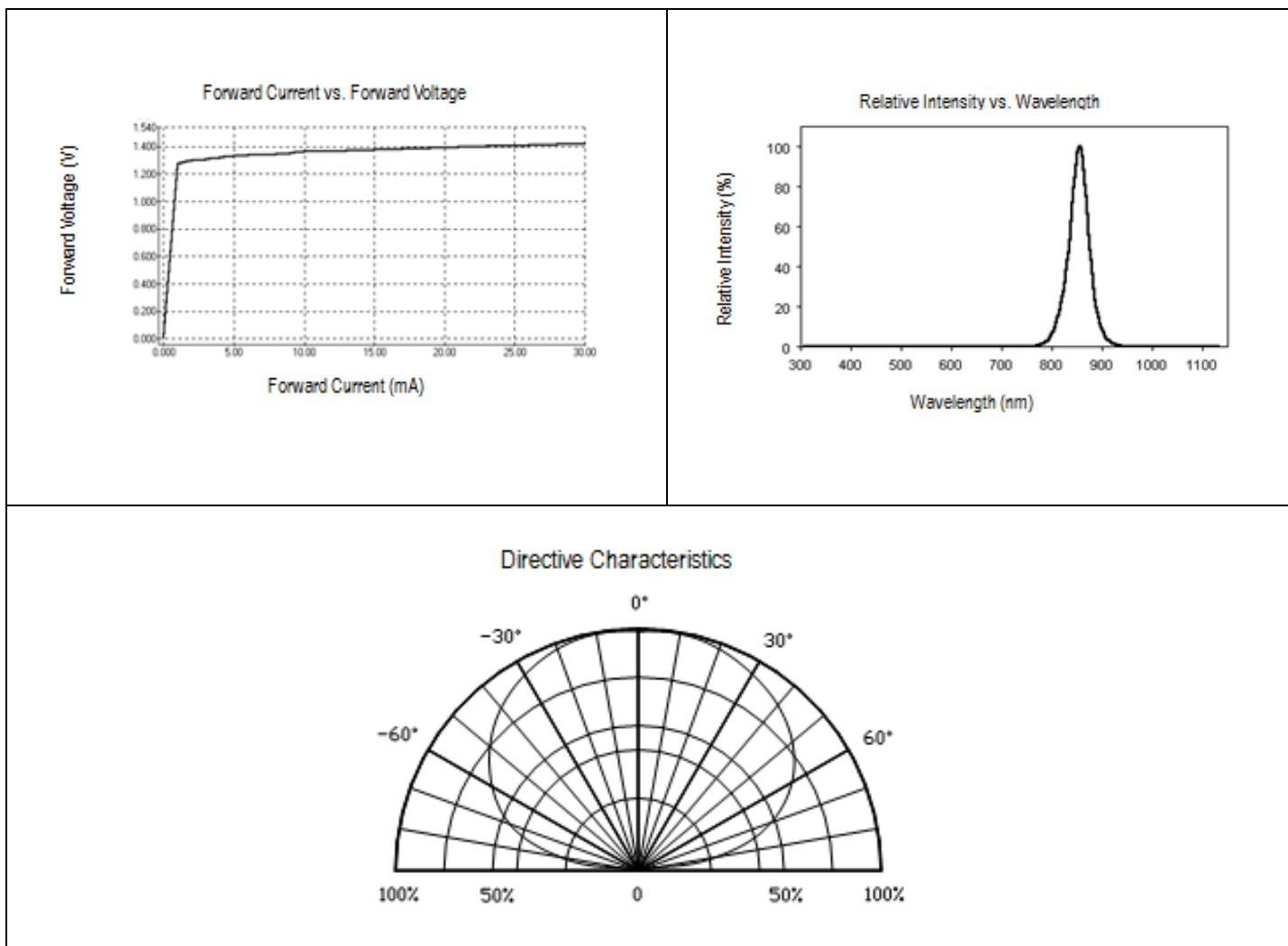
Material	P _d (mW)	I _F (mA)	I _{FP} (A)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
AlGaAs	90	50	1	5	-40 ~ +80	-40 ~ +85	260

*Duty cycle=1%, Pulse width 100us

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

Product: QBLP650-IR3	Date: May 11, 2015	Page 4 of 9
	Version# 1.1	

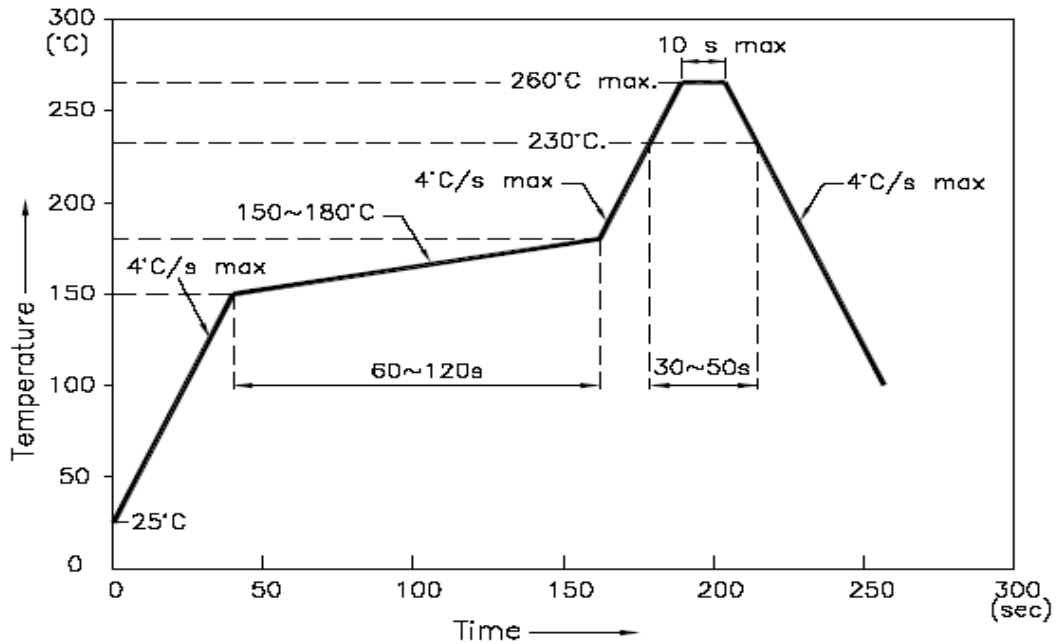
Characteristic Curves



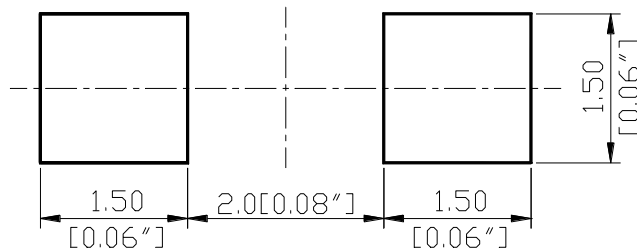
Product: QBLP650-IR3	Date: May 11, 2015	Page 5 of 9
	Version# 1.1	

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



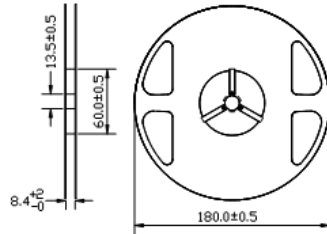
Units: mm

Tolerance: ± 0.1mm

Product: QBLP650-IR3	Date: May 11, 2015	Page 6 of 9
	Version# 1.1	

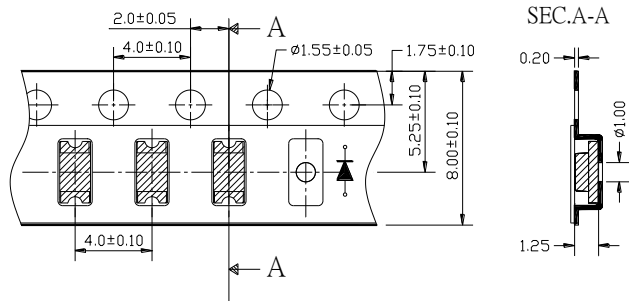
Packing

Reel Dimension:



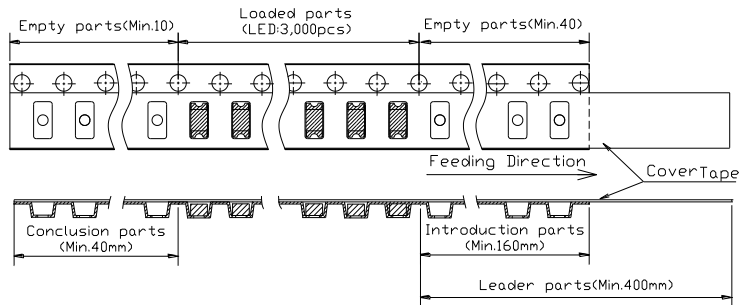
Unit: mm

Tape Dimension:

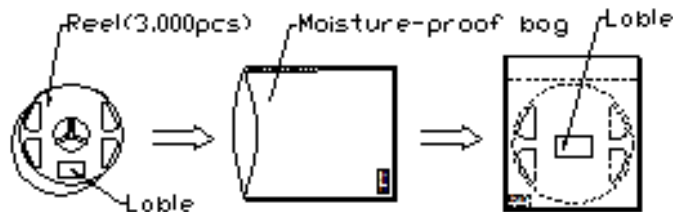


Unit: mm

Arrangement of Tape:



Packaging Specification:



Product: QBLP650-IR3	Date: May 11, 2015	Page 7 of 9
	Version# 1.1	



QBLP650-IR3

1206 LED

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
QBLP650-IR3	QBLP650-IR3	Ie=0.8mW/sr typ. / λp=850nm typ. @ If=20mA	3,000 units

Product: QBLP650-IR3	Date: May 11, 2015	Page 8 of 9
	Version# 1.1	



QBLP650-IR3

1206 LED

Revision History

Description:	Revision #	Revision Date
New Release of QBLP650-IR3	V1.0	02/05/2015
Update spec (add min. le)	V1.1	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.

Product: QBLP650-IR3	Date: May 11, 2015	Page 9 of 9
	Version# 1.1	