QT-Brightek Chip LED Series

1206 (with Inner Lens) IR LED

Part No.: QBLP650-IR3

Table of Contents:

Introduction

Feature:	**Application:**
• Water clear lens • Package in tape and reel • 1206 Package with Inner Lens • AlGaAs technology • Viewing Angle = 40 deg	• Infrared Sensor • Optoelectronic Switch • Smoke detector • Drive sensor

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.
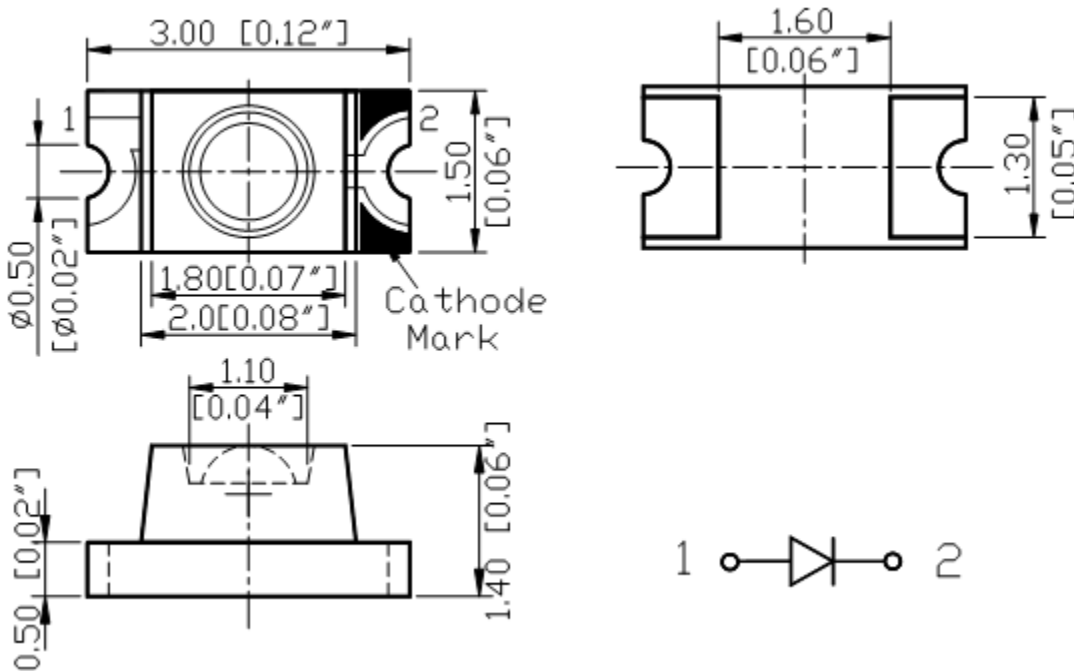
Certification & Compliance:
• TS16949
• ISO9001
• RoHS Compliant

Dimension:

Units: mm / tolerance = +/-0.1mm

Electrical / Optical Characteristic (Ta=25 ^{o}C)

Product	Color	I_F (mA)	V_F (V)		λ_P (nm)			Ie (mW/sr)		
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.
QBLP651-IR1	Infrared	20	1.4	1.8	-	850	-	0.6	1.9	2.6

Absolute Maximum Rating

Material	P_d (mW)	I_F (mA)	I_{FP} (A)*	V_R (V)	T_{OP} (^{o}C)	T_{ST} (^{o}C)	T_{SOL} (^{o}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 ^{o}C

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Characteristic Curves

Forward Current vs. Forward Voltage

Relative Intensity vs. Wavelength

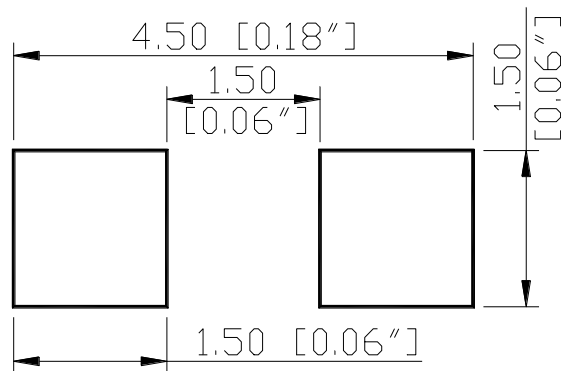Directive Characteristics

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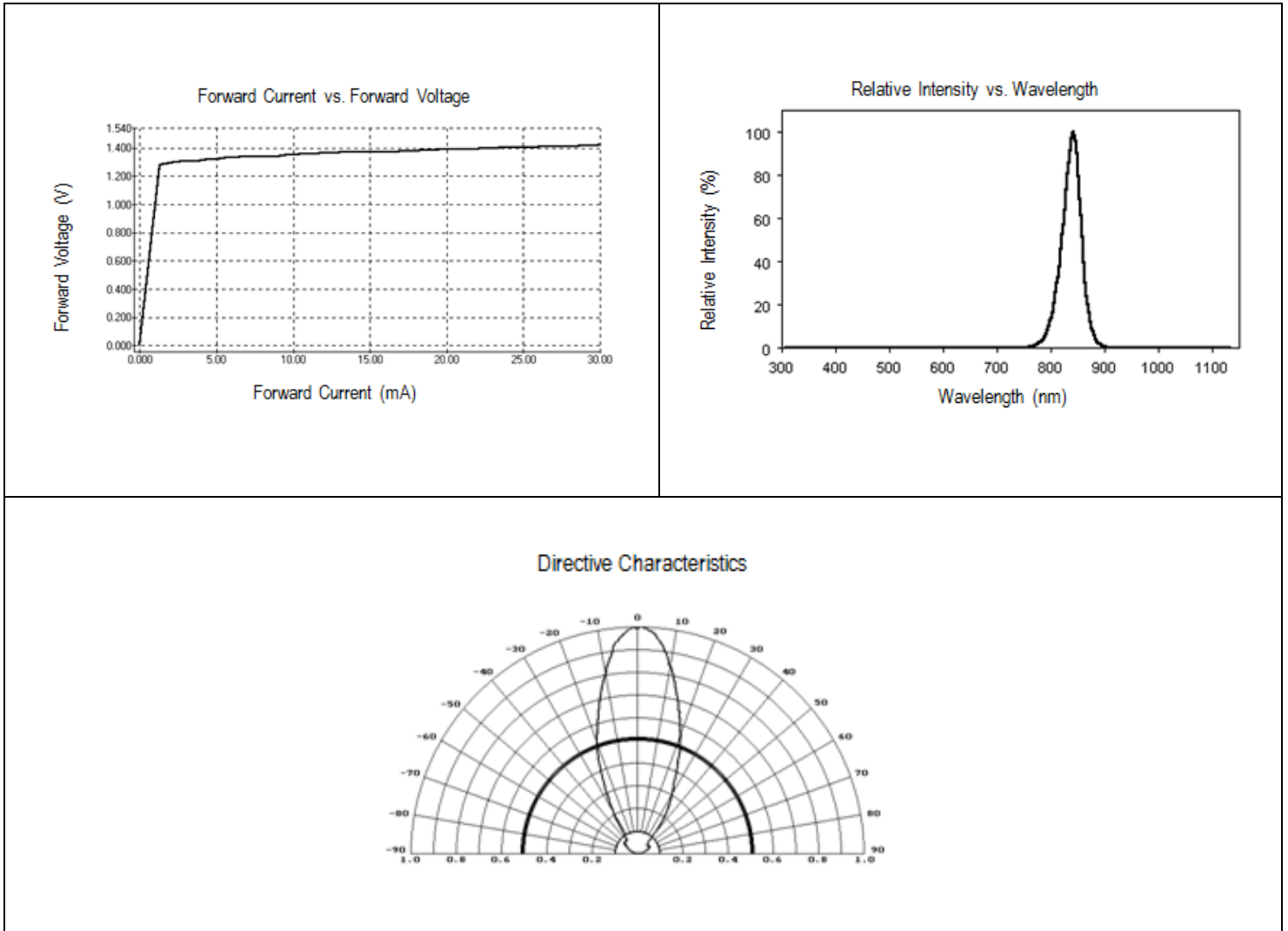
Solder Profile & Footprint

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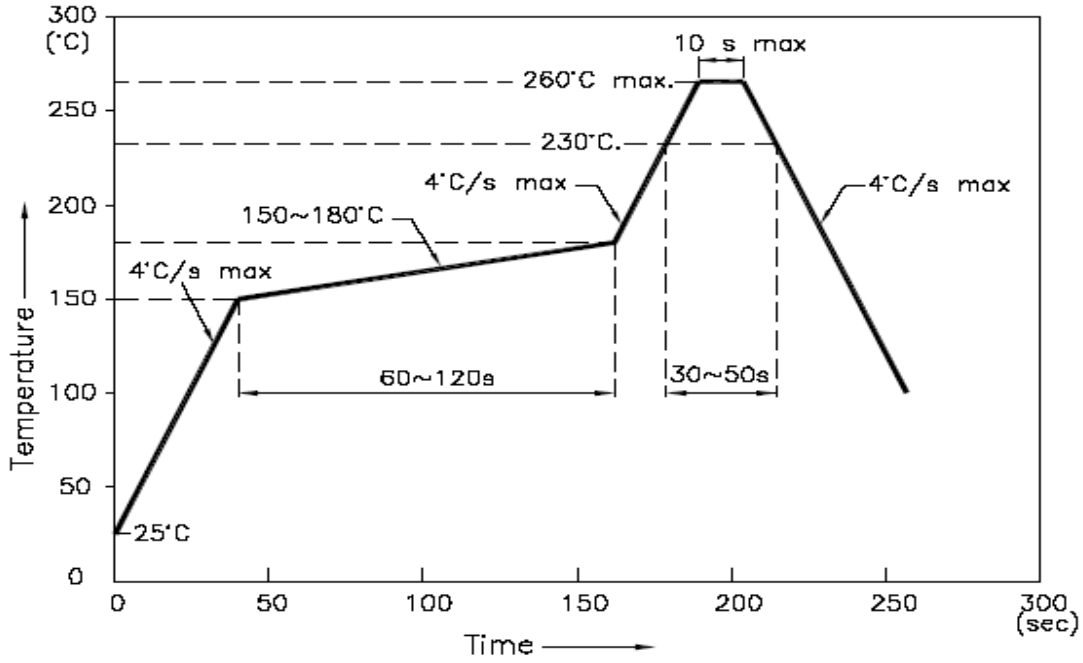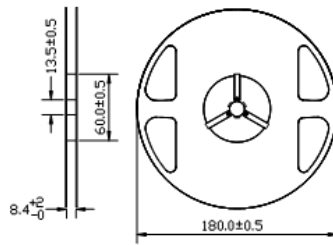

Recommended Pad Layout

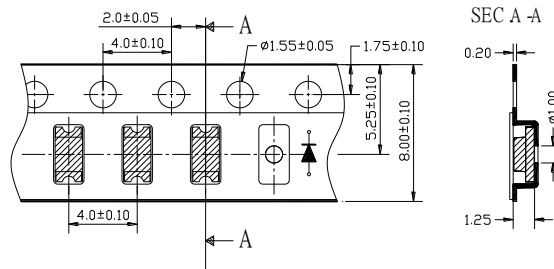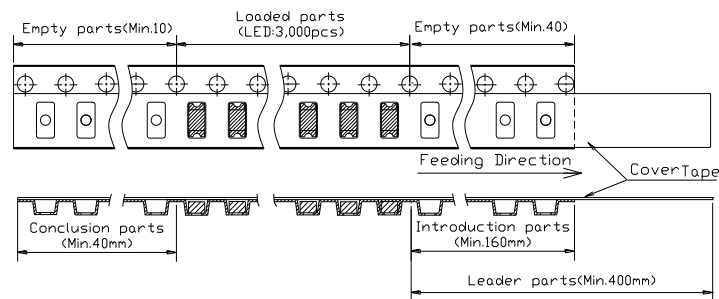Units: mm   Tolerance: ± 0.1mm

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Packing

Reel Dimension:

Unit: mm

Tape Dimension:

Unit: mm

Arrangement of Tape:

Packaging Specification:

Labeling

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP651-IR3	QBLP651-IR3	Ie=1.9mW/sr typ. / λ_P=850nm typ. @ I_F=20mA	3,000 units

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Revision History

Description:	Revision #	Revision Date
New Release of QBLP651-IR3	V1.0	05/11/2015

Disclaimer

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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.