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[QT Brightek \(QTB\)](#)

[QBLP676-IR3](#)

For any questions, you can email us directly:

sales@integrated-circuit.com

QT-Brightek PLCC Series

3020 PLCC2 IR LED

Part No.: QBLP676-IR3

Product: QBLP676-IR3	Date: May 01, 2015	Page 1 of 9
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QBLP676-IR3

3020 PLCC2 IR LED

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QBLP676-IR3

3020 PLCC2 IR LED

Introduction

Feature:

- Water clear lens
- Package in tape and reel
- AlGaAs technology
- Viewing Angle = 120 deg

Description:

These ultra bright reflector type 3020 type PLCC2 LEDs have a height profile of 1.30mm. Combination of high brightness output and robust package, these LEDs are ideal for architecture lighting, status indication, and industrial equipment lighting applications.

Application:

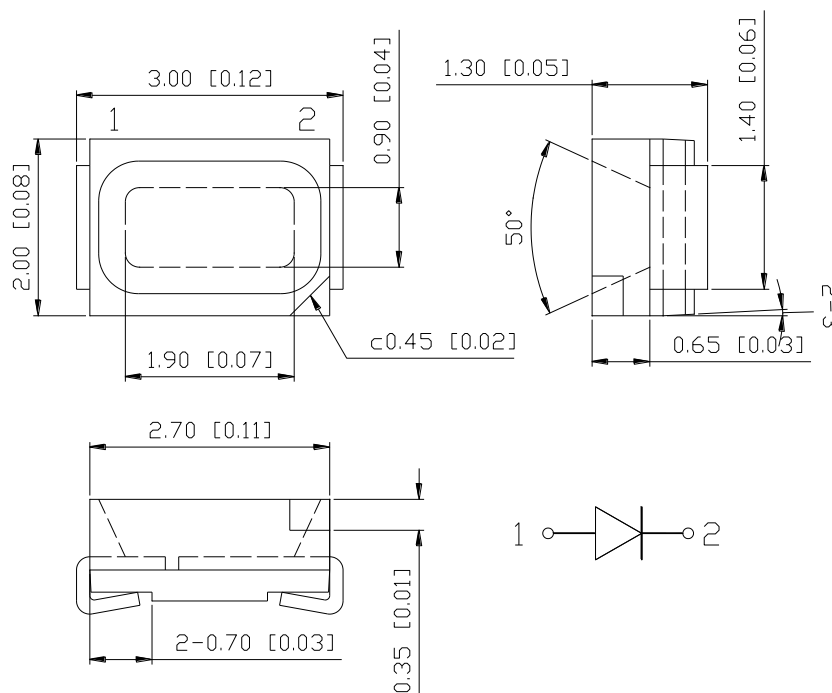
- Infrared Sensor
- Optoelectronic Switch
- Smoke detector
- Drive sensor

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.2mm

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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.
QBLP676-IR3	Infrared	20	1.4	1.8	840	850	860	0.6	1.1	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

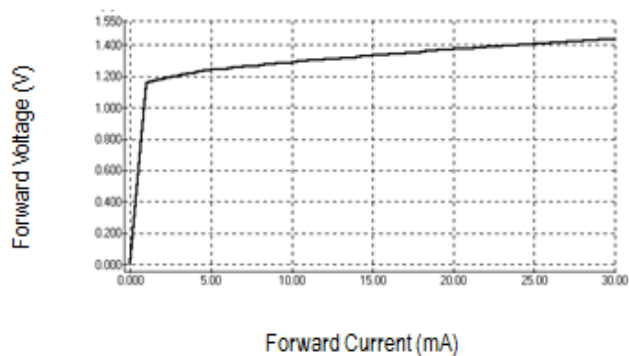
*Duty cycle=1%, Pulse width 100us

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

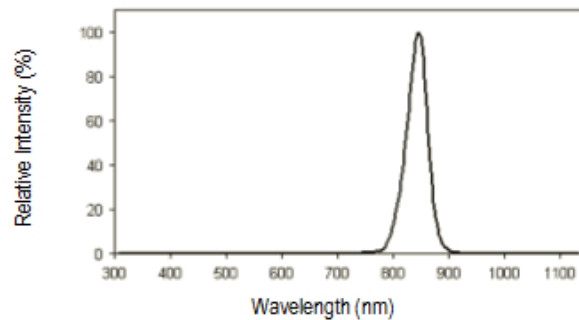
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Characteristic Curves

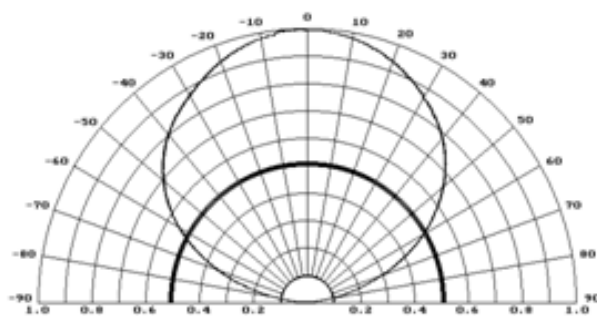
Forward Current vs. Forward Voltage



Relative Intensity vs. Wavelength

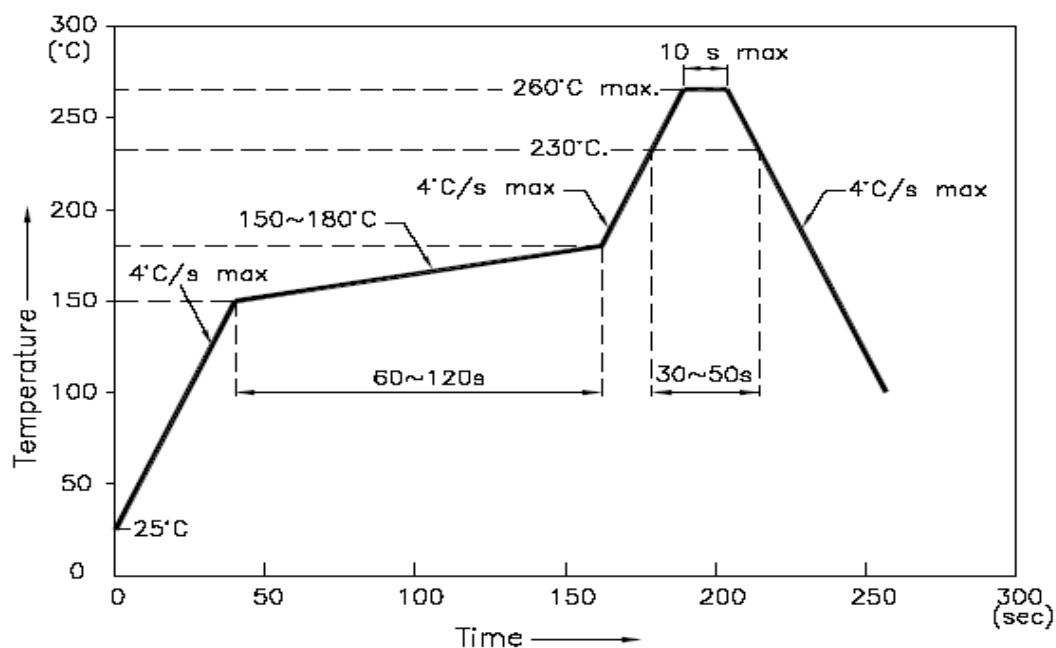


Directive Characteristics

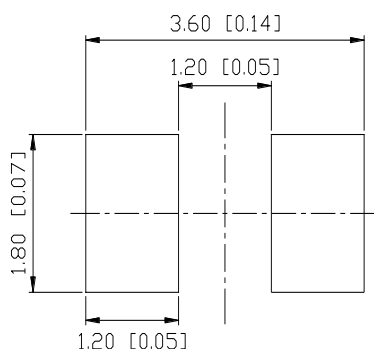


Solder Profile & Footprint

- 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: $\pm 0.2\text{mm}$

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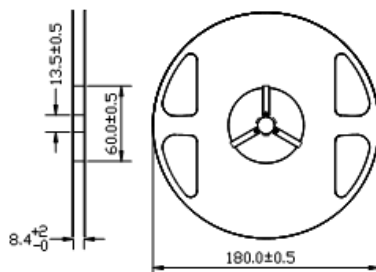


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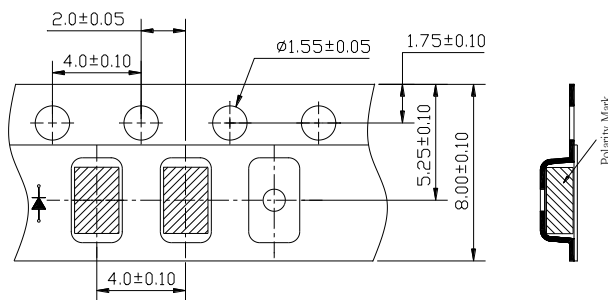
Packing

Reel Dimension:



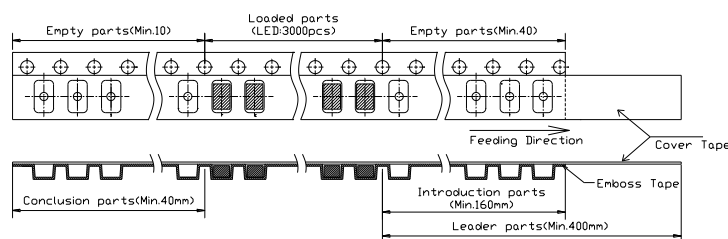
Unit: mm

Tape Dimension:

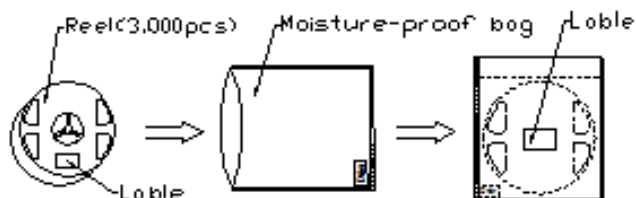


Unit: mm

Arrangement of Tape:



Packaging Specification:



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QBLP676-IR3

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Labeling

 QT-Brightek 	
	
Part No: _____	
Customer P/N: _____	
Item: _____	
Q'ty: _____	
Vf: _____	
Iv: _____	
Wl: _____	
Date: _____	
Made in China	

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP676-IR3	QBLP676-IR3	I _e =1.1mW/sr typ. @ I _F =20mA / λ _P =850nm typ.	3,000 units

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Revision History

Description:	Revision #	Revision Date
New Release of QBLP676-IR3	V1.0	05/01/2015

Disclaimer

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QT-BRIGHTTEK's products are not authorized for use as critical components in life support devices or systems without the express written approval of QT-BRIGHTTEK. As used herein:

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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