QT-Brightek PLCC Series

3020 PLCC2 IR LED

Part No.: QBLP676-IR3

IR3: 850nm

Table of Contents:

Introduction

| **Feature:**	**Application:**
• Water clear lens • Package in tape and reel • AlGaAs technology • Viewing Angle = 120 deg typ. **Description:** This reflector type PLCC2 IR LED has a height profile of 1.30mm with a clear lens that produces high radiant power with a wide viewing angle.	• Infrared Sensor • Optoelectronic Switch • Smoke detector • Drive sensor **Certification & Compliance:** • TS16949 • ISO9001 • RoHS Compliant

Dimension:
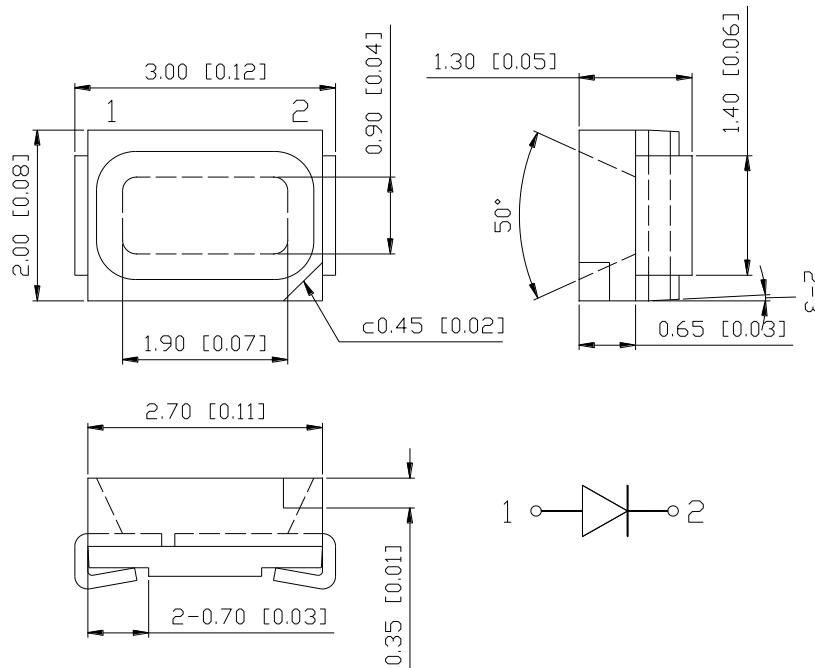
Units: mm / tolerance = +/-0.2mm

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.
QBLP676-IR3	Infrared	20	1.4	1.8	835	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} (^{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

Characteristic Curves

Forward Current vs. Forward Voltage

Relative Intensity vs. Wavelength

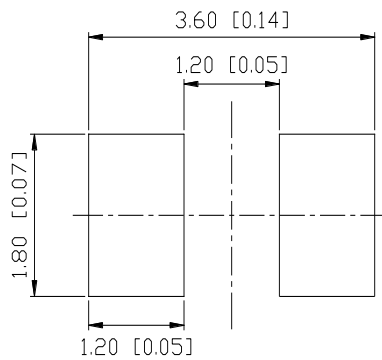Directive Characteristics

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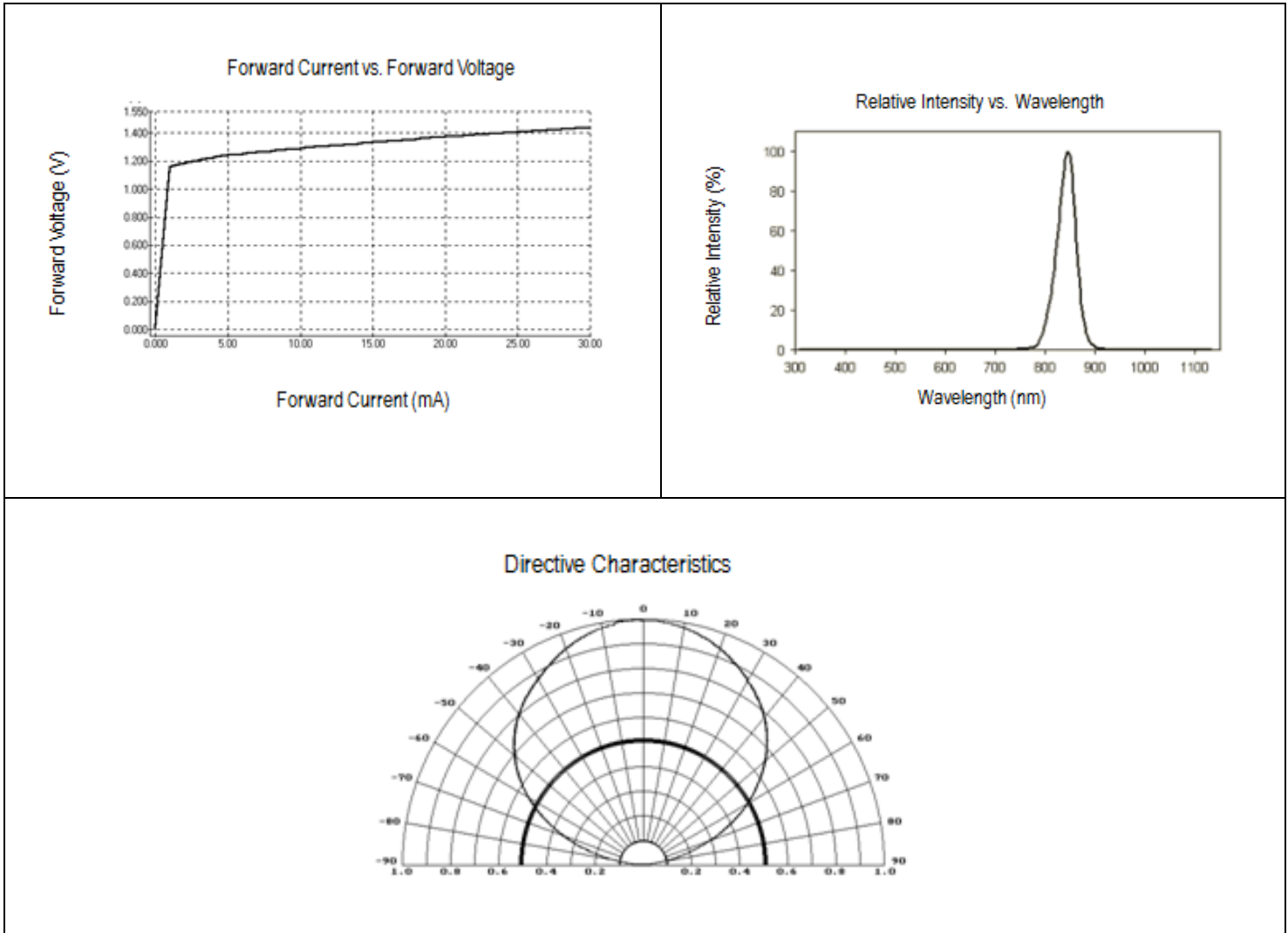
Solder Profile & Footprint

-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):
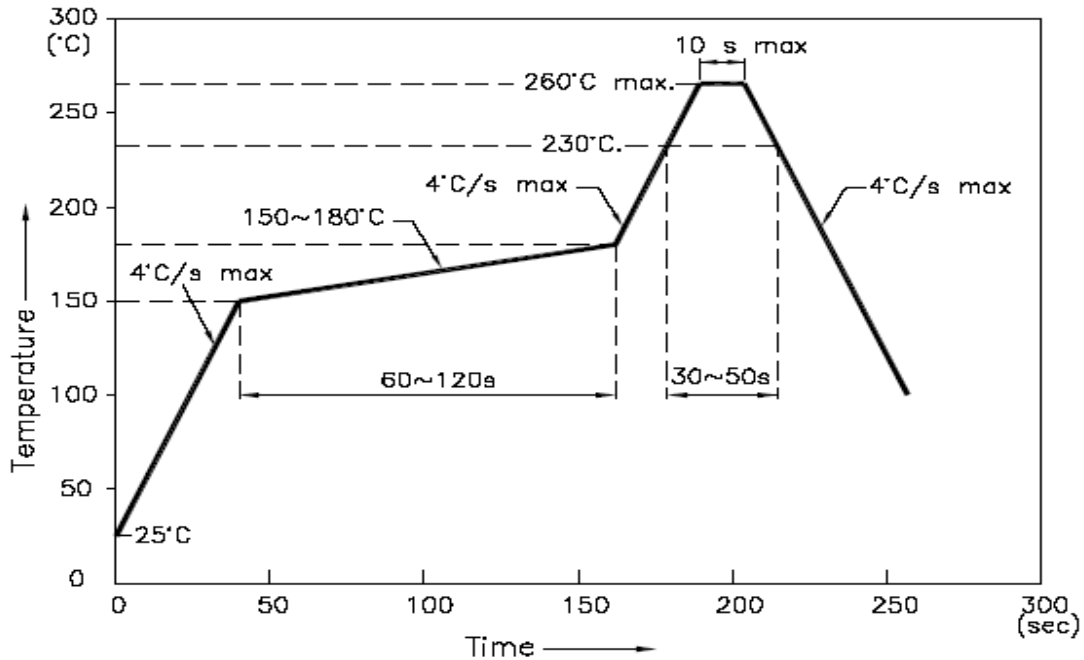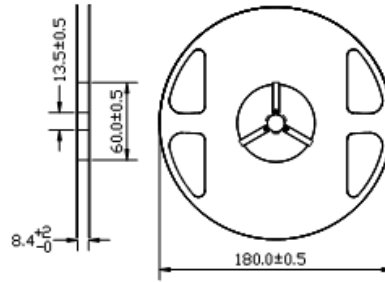

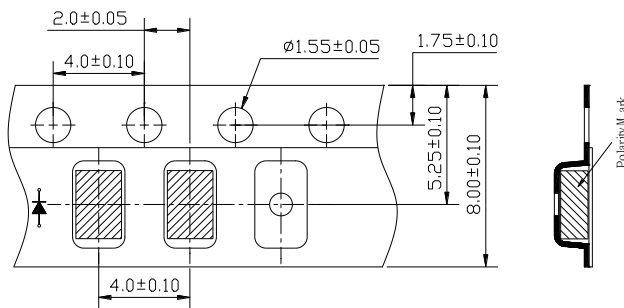
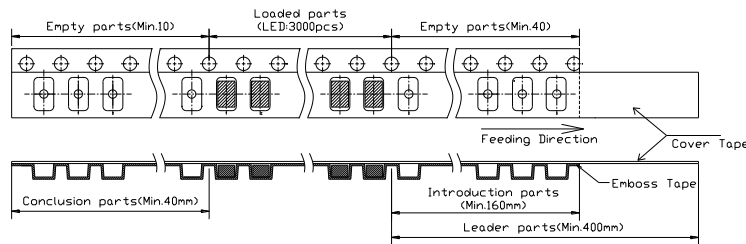**Recommended Pad Layout**

Units: mm	Tolerance: ± 0.2mm

Packing

Reel Dimension:

Unit: mm

Tape Dimension:

Unit: mm

Arrangement of Tape:

Packaging Specification:
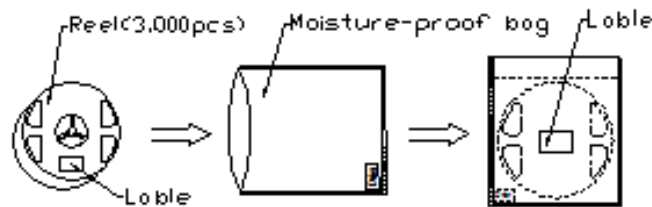
Labeling

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP676-IR3	QBLP676-IR3	Ie=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
Update wavelength Min. value to 835nm / update logo	V1.1	06/11/2021

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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.