QT-Brightek PLCC Series

3528 PLCC2 IR LED

Part No.: QBLP670-IR3

Table of Contents:

Introduction

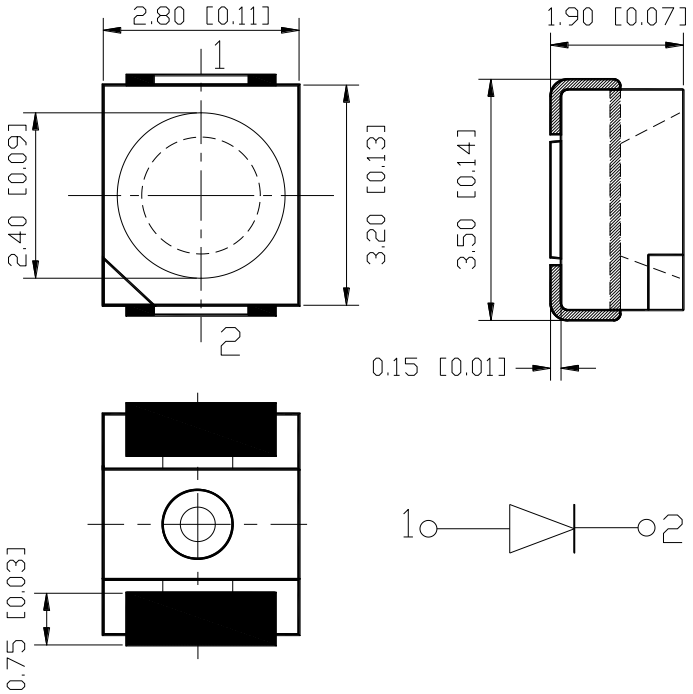
Feature:
- Water clear lens
- Package in tape and reel
- AlGaAs technology
- Viewing Angle = 120 deg

Description:
This reflector type PLCC2 IR LED has a height profile of 1.90mm with a clear lens that produces high radiant power with a wide viewing angle.

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

Certification & Compliance:
- ISO9001
- RoHS Compliant

Dimension:



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I_F (mA)	V_F (V)		λ_P (nm)			Ie (mW/sr)		
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.
QBLP670-IR3	Infrared	20	1.4	1.8	835	850	860	0.6	1.2	2.1

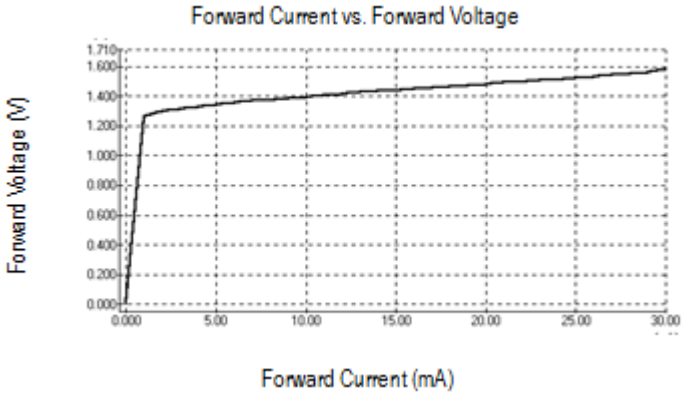
Absolute Maximum Rating

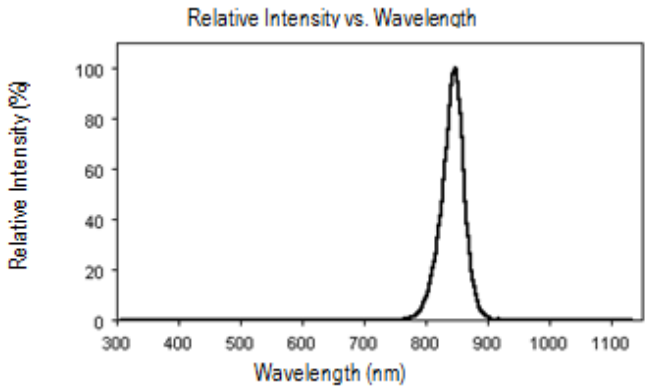
Material	P_d (mW)	I_F (mA)	I_{FP} (A)*	V_R (V)	T_{OP} (°C)	T_{ST} (°C)	T_{SOL} (°C)**
AlGaAs	90	50	1	5	-40 ~ +80	-40 ~ +85	260

*Duty cycle=1%, Pulse width 100us

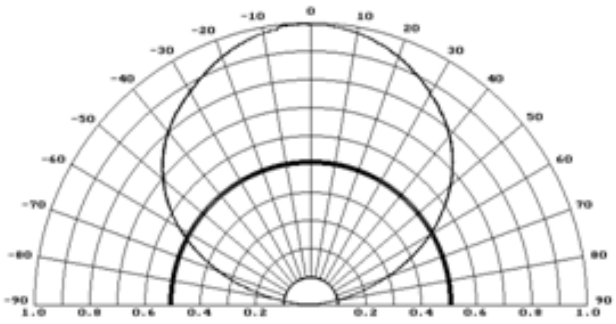
**IR Reflow for no more than 10 sec @ 260 °C

Characteristic Curves



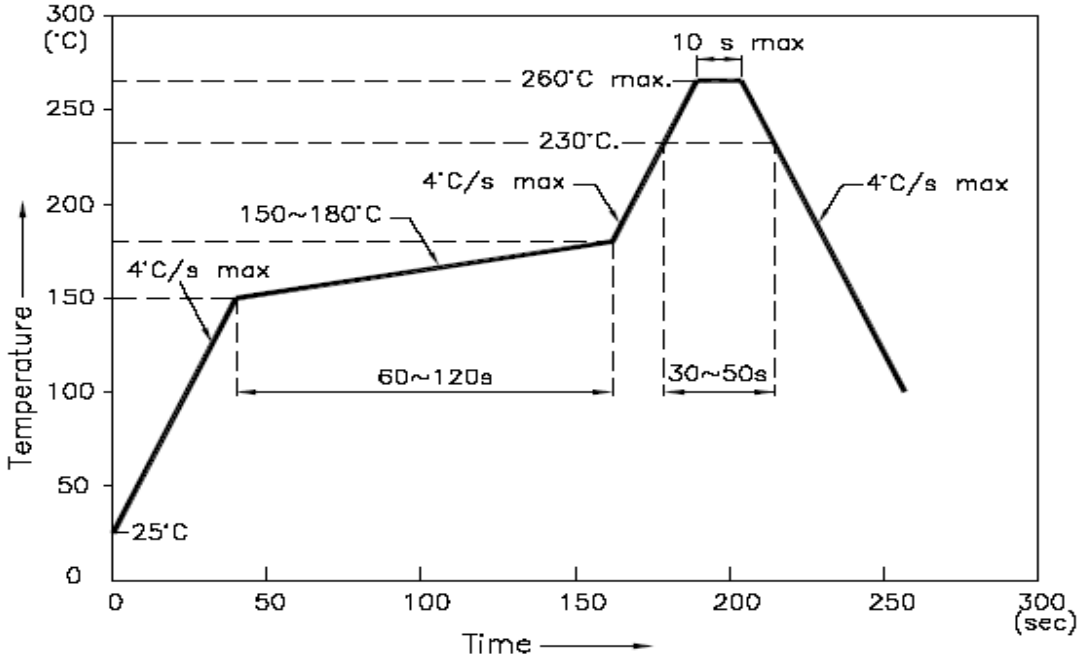


Directive Characteristics

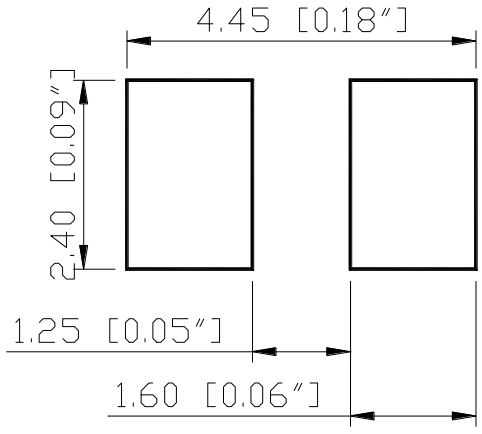


Solder Profile & Footprint

-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):



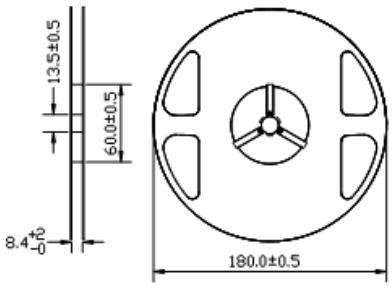
Recommended Pad Layout



Units: mm Tolerance: ± 0.2mm

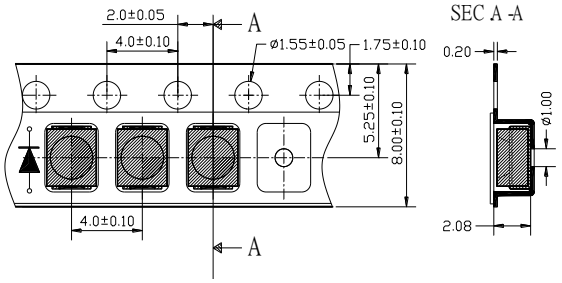
Packing

Reel Dimension:



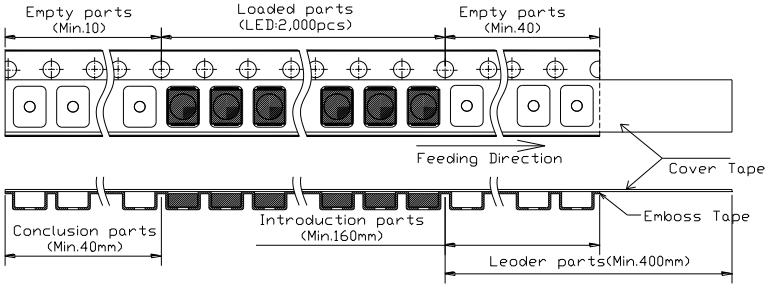
Unit: mm

Tape Dimension:

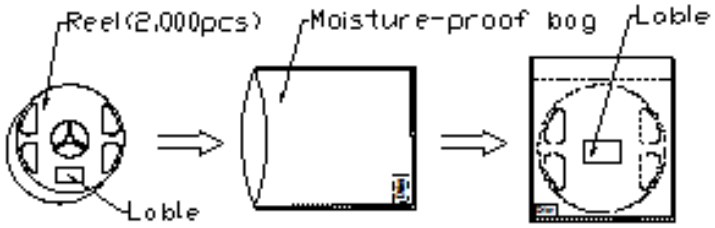


Unit: mm

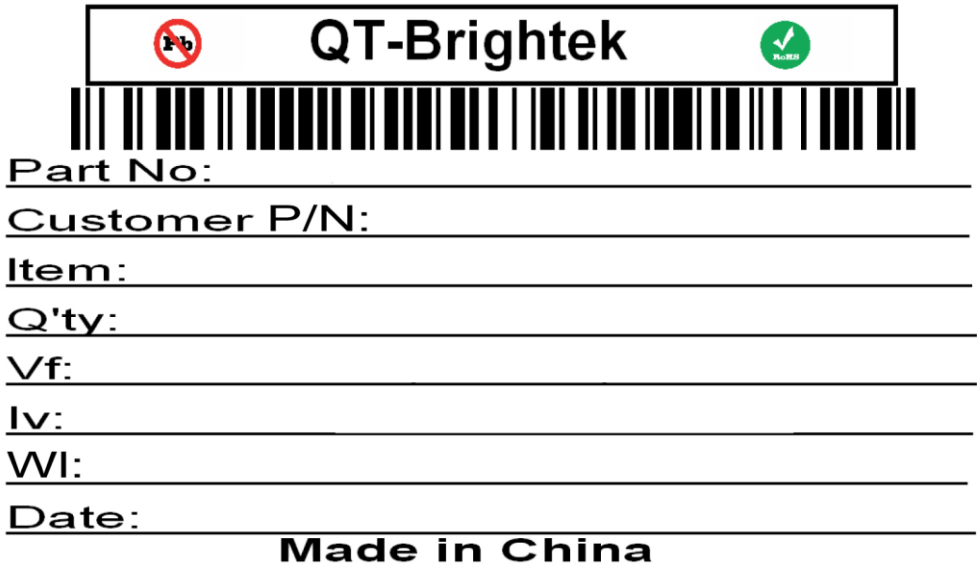
Arrangement of Tape:



Packaging Specification:



Labeling



Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP670-IR3	QBLP670-IR3	Ie=1.2mW/sr typ. @ I_F=20mA / λ_P=850nm typ.	2,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP670-IR3	V1.0	05/01/2015
Update datasheet wavelength spec	V1.1	05/25/2021

Disclaimer

QT-BRIGHTEK reserves the right to make changes without further notice to any products herein to improve reliability, function or design. QT-BRIGHTEK does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent rights, nor the rights of others.

Life Support Policy

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