

QT-Brightek High Power Series

1.0 W High Power IR LED

Part No.: QBHP684-IR3XU

U = 350mA

3 = 850nm

X = Viewing Angle (X=A:60° ; X=B:120°)

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Introduction

Feature:

- 1W High Bright IR LED
- Packed in tape and reel
- High radiant power output
- Viewing Angle 60° typ. (QBHP684-IR3AU)
- Viewing Angle 120° typ. (QBHP684-IR3BU)
- Isolated Heat Slug

Description:

This 1W high power IR LED has compact size of 3.5 x 3.5mm. It is ideal for both infrared sensing applications.

Application:

- Data transmission
- Sensing
- Remote control

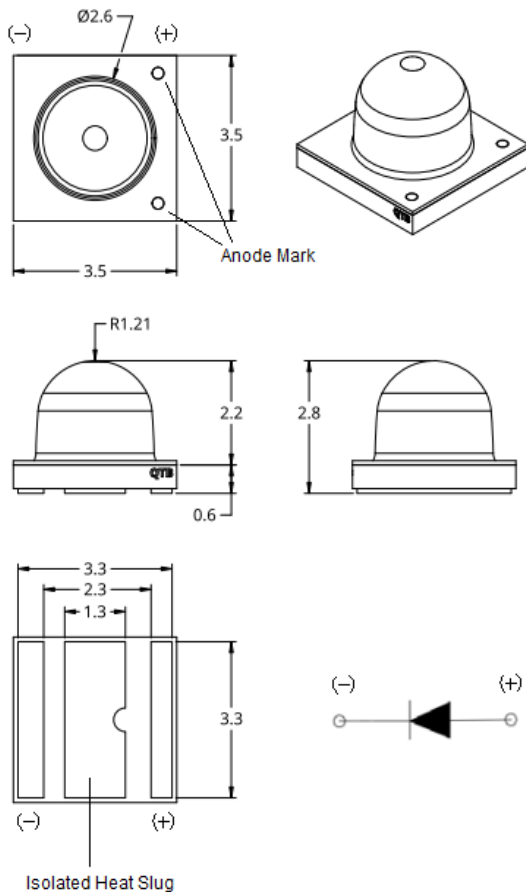
Certification & Compliance:

- ISO9001
- RoHS Compliant

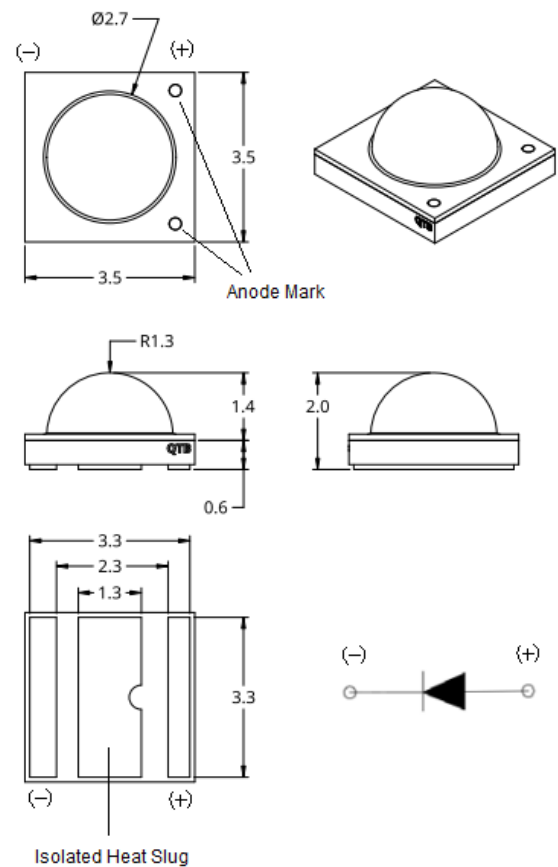


Outline Dimensions:

60°



120°



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 °C)

Product Number	Color	I _F (mA)	V _F (V)			λ _p (nm)			P _O (mW)	
			Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBHP684-IR3AU	Infrared	350	1.4	1.9	2.4	840	850	860	150	250
QBHP684-IR3BU										

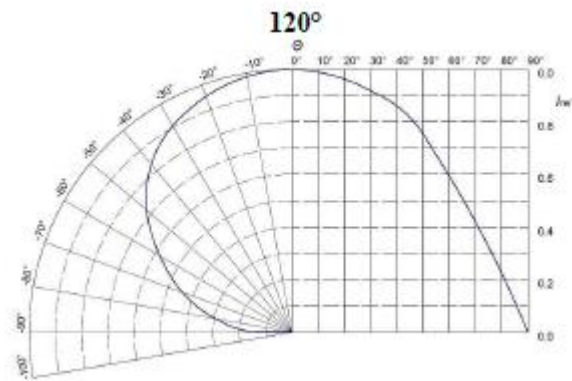
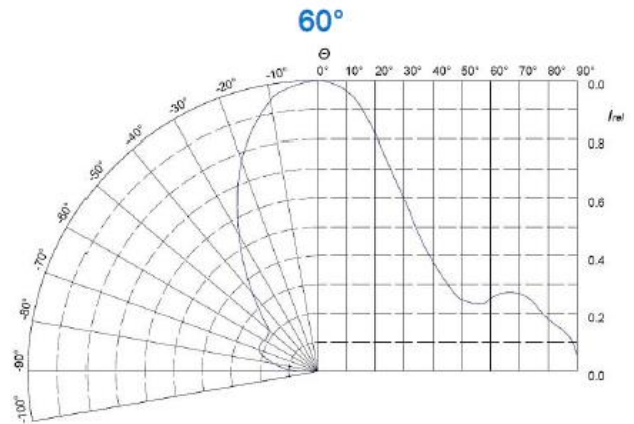
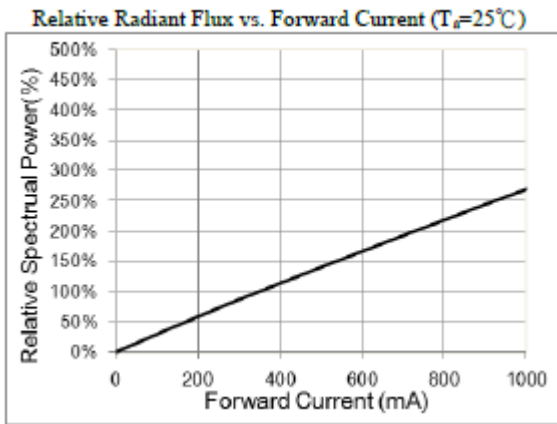
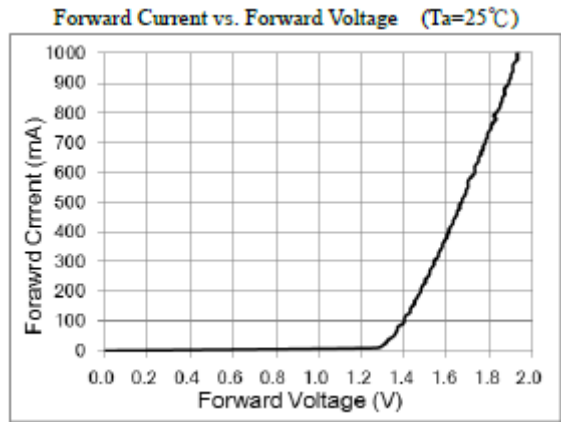
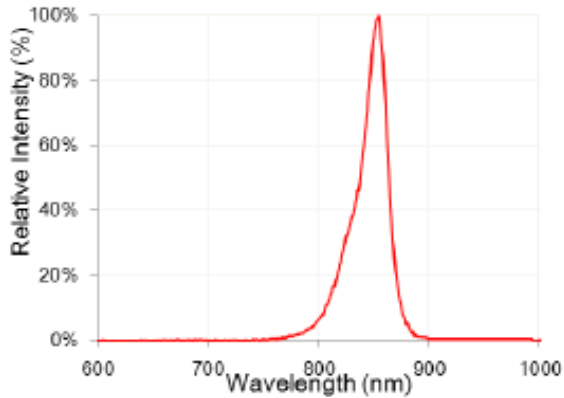
Absolute Maximum Rating

P _d (W)	I _F (mA)	I _{FP} (mA)	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)
1.68	700	1000	5	-40 to +85	-40 to +100	260

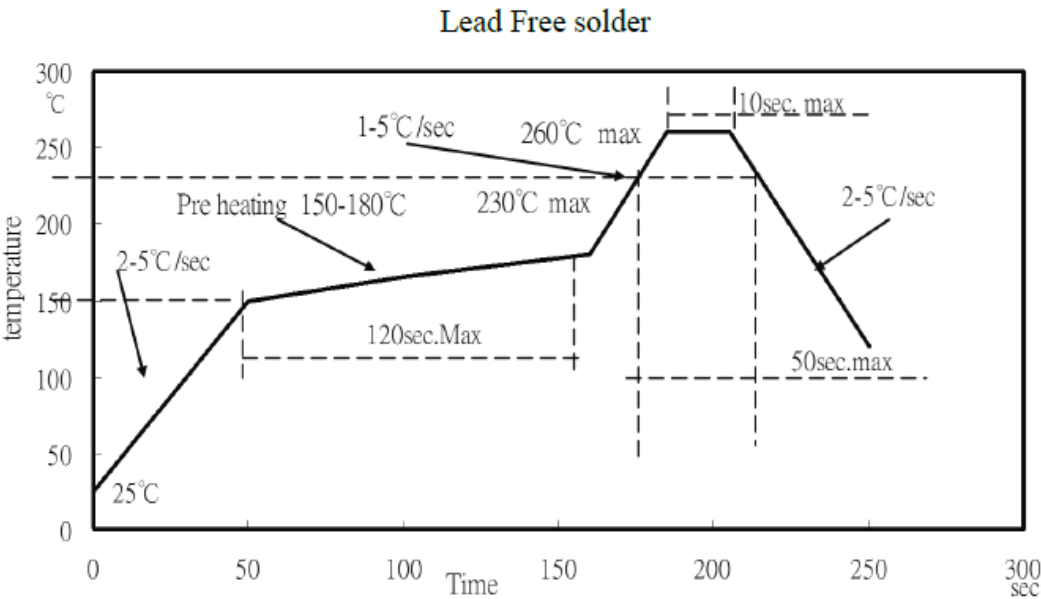
Radiometric Power P_O @ I_F=350mA

Bin	Min.	Max.	Unit
P20	150	200	mW
P25	200	250	
P30	250	300	

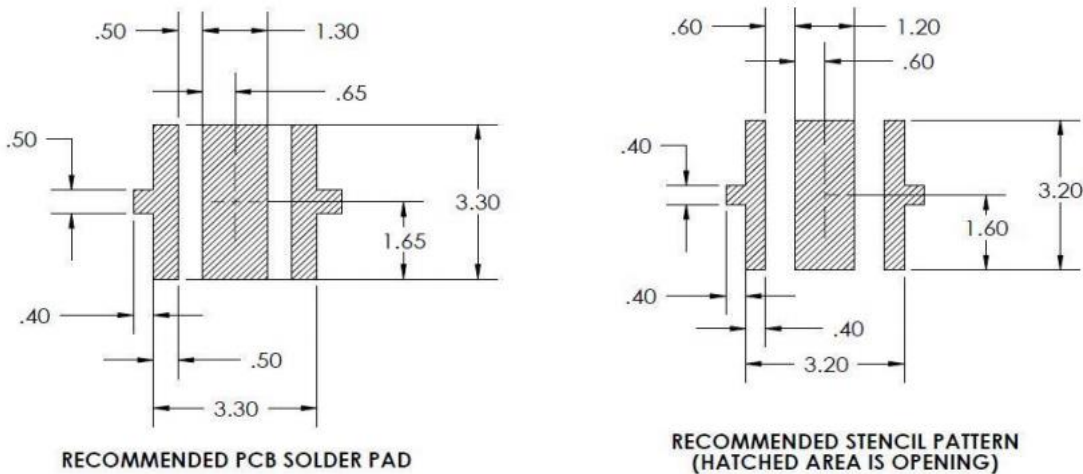
Characteristic Curves



IR Reflow Soldering Profile



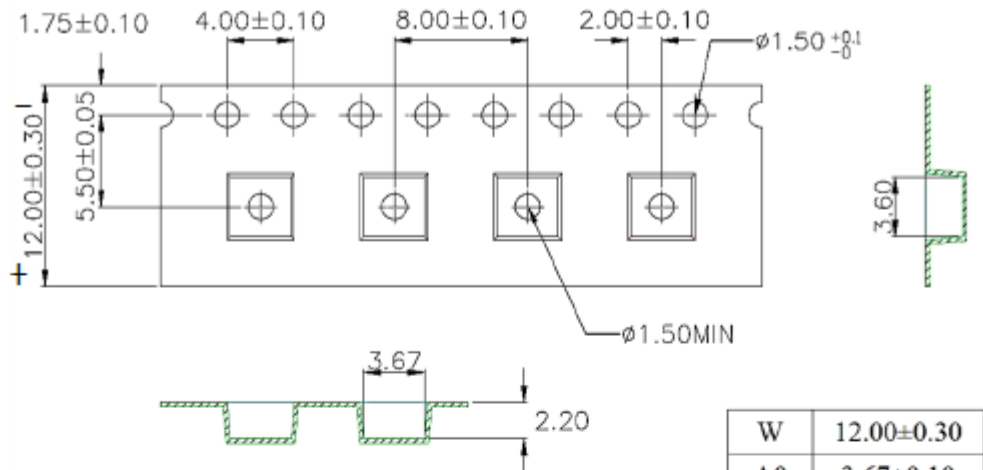
Recommended Soldering Pad:



Unit: mm

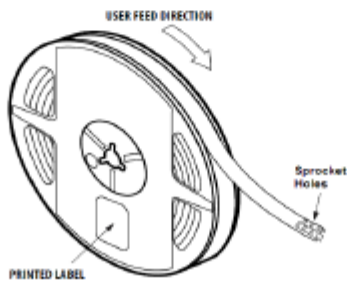
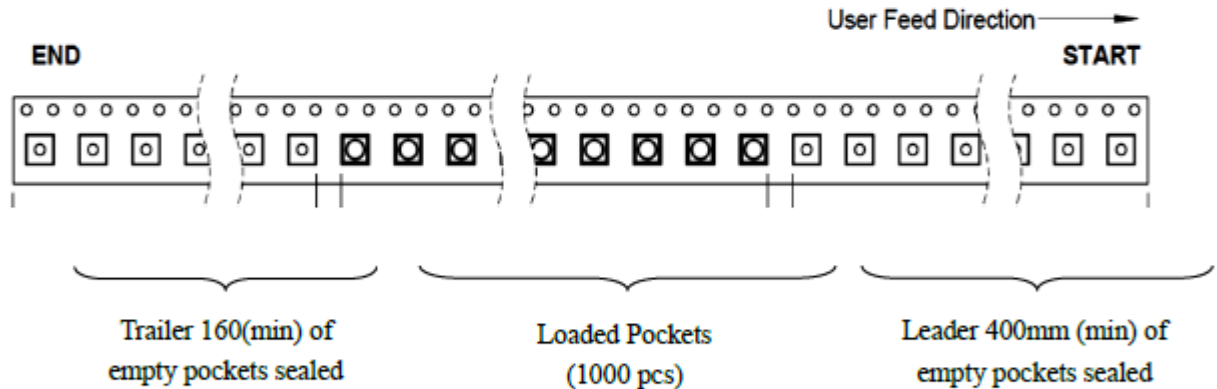
Packing

Tape and Reel:



1. 10 sprocket hole pitch cumulative tolerance ± 0.20 .
2. Carrier camber is within 1 mm in 250 mm.
3. Material : Black Conductive Polystyrene Alloy.
4. All dimensions meet EIA-481-D requirements.
5. Thickness : 0.30 ± 0.05 mm.

W	12.00±0.30
A0	3.67±0.10
B0	3.60±0.10
K0	2.20±0.10



Unit: mm

Labeling



Part No: _____

Customer P/N: _____

Item: _____

Q'ty: _____

Vf: _____

Iv: _____

WI: _____

Date: _____

Made in Taiwan

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBHP684-IR3AU	QBHP684-IR3AU	Po=250mW typ., $\lambda_p=850\text{nm}$ typ. @ $I_F=350\text{mA}$, $VA=60^\circ$	500
QBHP684-IR3BU	QBHP684-IR3BU	Po=250mW typ., $\lambda_p=850\text{nm}$ typ. @ $I_F=350\text{mA}$, $VA=120^\circ$	1000

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Revision History

Description:	Revision #	Revision Date
New Release of QBHP684-IR3BU	V1.0	01/26/2016
Add VA=60° option	V1.1	02/29/2016
Correct the packing spec for QBHP684-IR3AU	V1.2	03/24/2016
Update drawing dimension	V1.3	09/08/2016
Update logo and the drawing in the outline dimensions section	V1.4	09/07/2022

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.

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