



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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QT-Brighttek IR emitter Series

5mm lamp LED

Part No.: QBED8240

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	Version# 1.1	

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Introduction

Feature:

- Clear transparent lens
- High radiant intensity
- 5mm round type TH lamp
- 2.54mm Lead spacing
- Peak wavelength $\lambda_p = 880\text{nm}$
- 40° viewing angle
- AlGaAs technology

Description:

High intensity diode, molded in a clear transparent plastic package. This device is spectrally matched with phototransistor, photodiode and infrared receiver module.

Application:

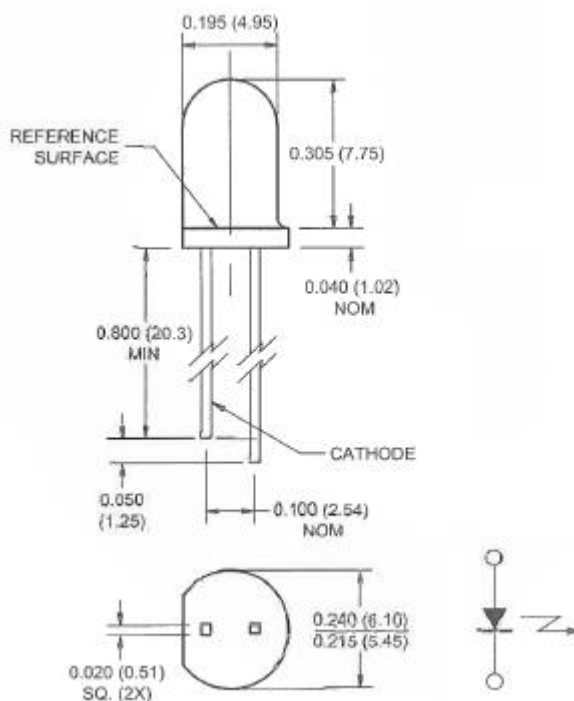
- Free air transmission system
- Optoelectronic switch
- Infrared applied system
- Smoke Detector

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.25mm

Electrical / Optical Characteristic (T=25 °C)

Parameter	Symbol	Output			Units	Test Conditions
		Min	Typ	Max		
Radiant Intensity	I _e	7.5	-	14.5	mW/sr	I _F =20mA
		25	-	-		I _F =100mA, t _p =20ms
Peak Wavelength	λ _p	-	880	-	nm	I _F =20mA
Reverse Current	I _R	-	-	10	μA	V _R =5V
Viewing Angle	VA	-	40	-	deg	I _F =20mA
Forward Voltage	V _F	1.0	-	1.7	V	I _F =100mA, t _p =20ms

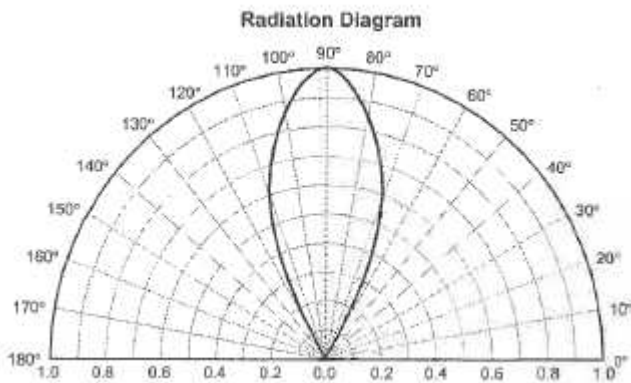
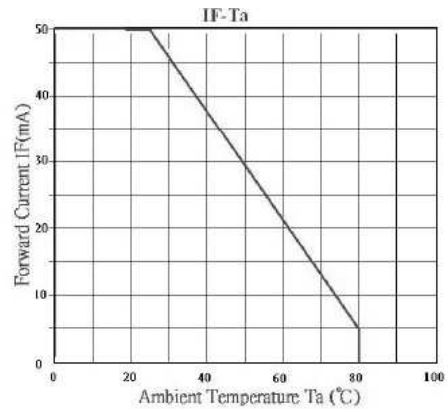
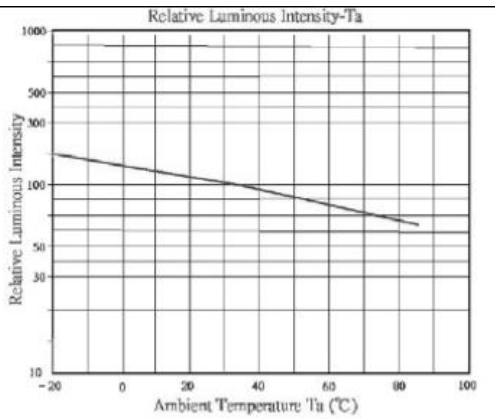
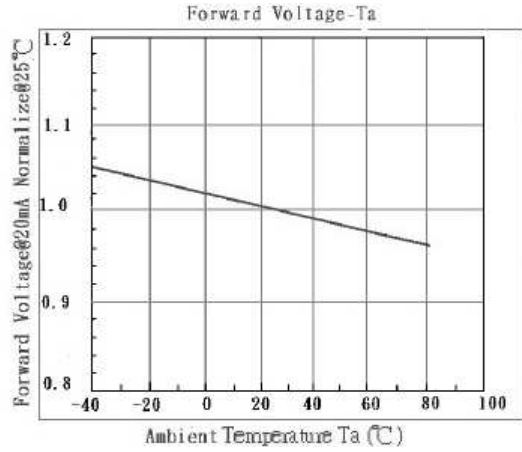
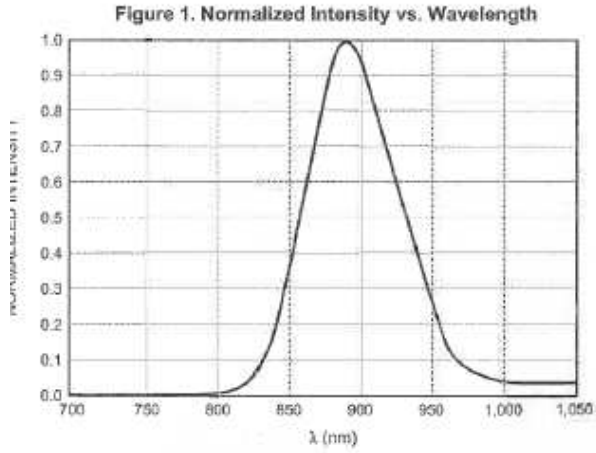
Absolute Maximum Rating

Parameter	Symbol	Rating	Units
Continuous Forward Current	I _F	100	mA
Peak Forward Current	I _{FP}	1.5	A
Reverse Voltage	V _R	5	V
Operating Temperature	T _{opr}	-40 ~ +100	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C
Soldering Temperature	T _{sol}	260	°C
Power Dissipation at (or below) 25 °C	P _d	200	mW

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

Characteristic Curves

AlGaAs



Packing

Bulk pack 500pcs

Labeling**Part No:** _____**Customer Lot No:** _____**Item:** _____**Q'ty:** _____**Vf:** _____**Iv:** _____**Date:** _____

ROHS PASS

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per bag
QBED8240	QBED8240	Radiant Intensity = 7.5 mW/sr @ 20mA, Peak Wavelength = 880nm	500 units

Revision History

Description:	Revision #	Revision Date
New Release of QBED8240	V1.0	09/15/2014
Updated Characteristic Curve	V1.1	02/13/2017

Disclaimer

QT-BRIGHTTEK reserves the right to make changes without further notice to any products herein to improve reliability, function or design. QT-BRIGHTTEK 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.

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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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