QT-Brightek IR emitter Series

5mm lamp LED

Part No.: QBED8240

Tablet of Contens

Introduction

Feature:

- Clear transparent lens
- High radiant intensity
- 5mm round type TH lamp
- 2.54mm Lead spacing
- Peak wavelength λp = 890nm
- 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.

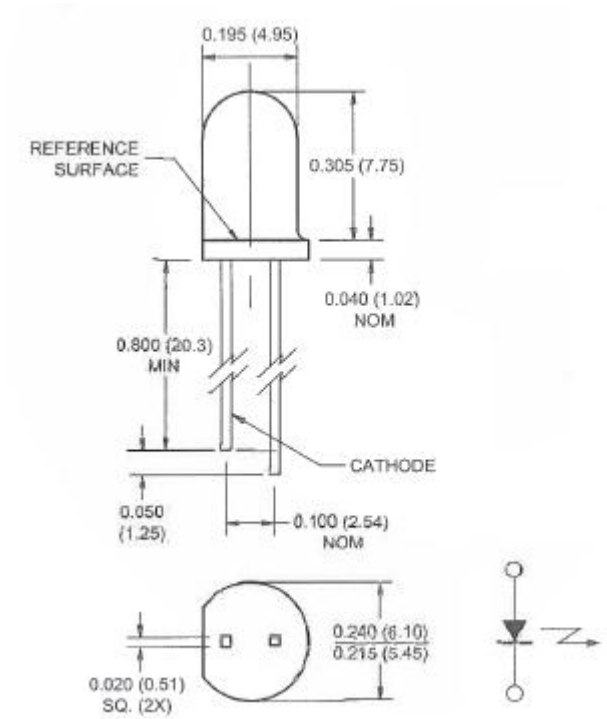
Application:

- 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	Ie	7.5	-	14.5	mW/sr	I_F=20mA
		25	-	-		I_F=100mA, tp=20ms
Peak Wavelength	λp	-	880	-	nm	I_F=20mA
Reverse Current	I_R	-	-	10	μA	V_R=5V
Viewing Angle	VA	-	40	-	deg	I_F=20mA
Forward Voltage	VF	1.0	-	1.7	V	I_F=100mA, tp=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

Figure 2. Peak Wavelength vs. Ambient Temperature

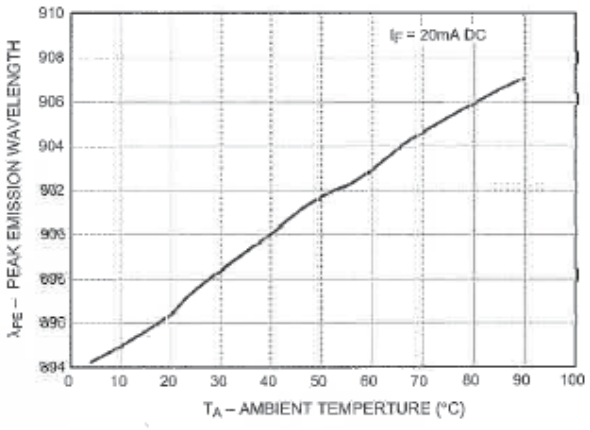
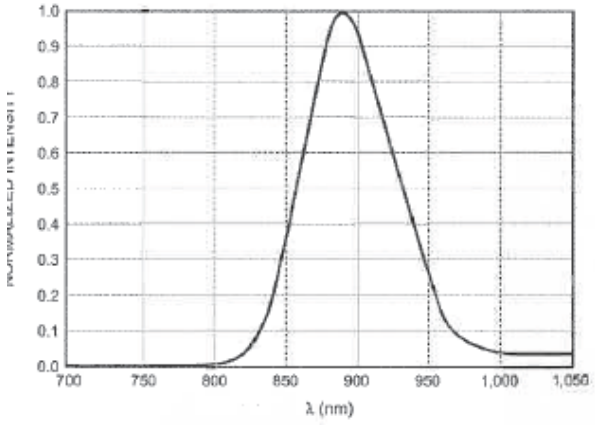
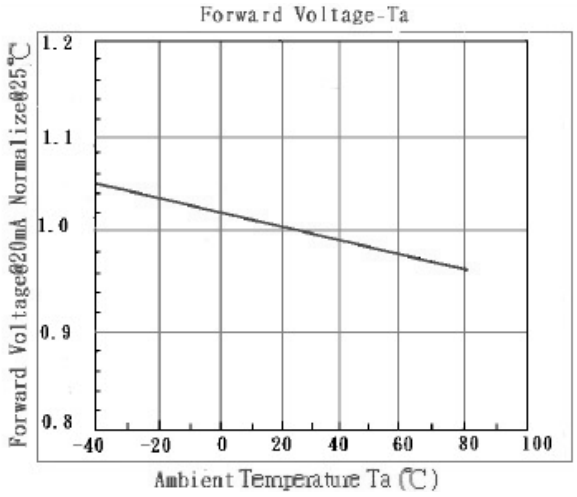
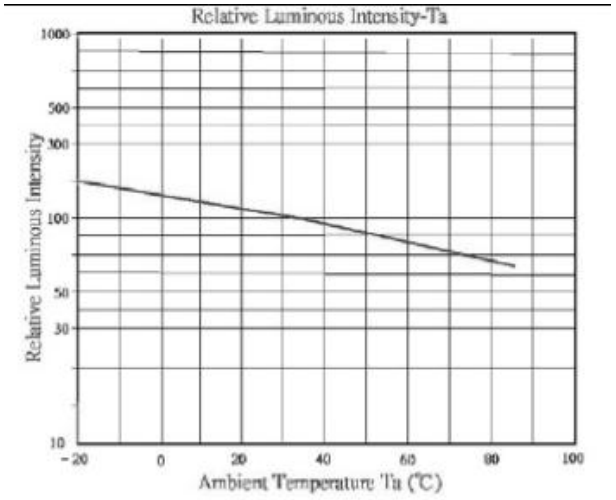
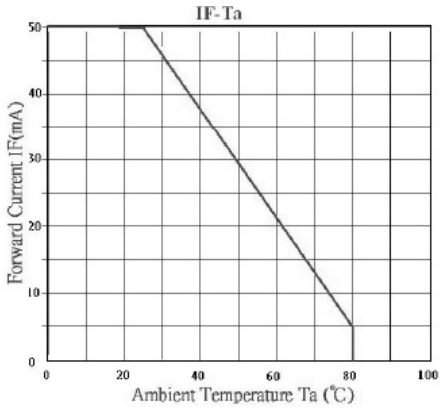


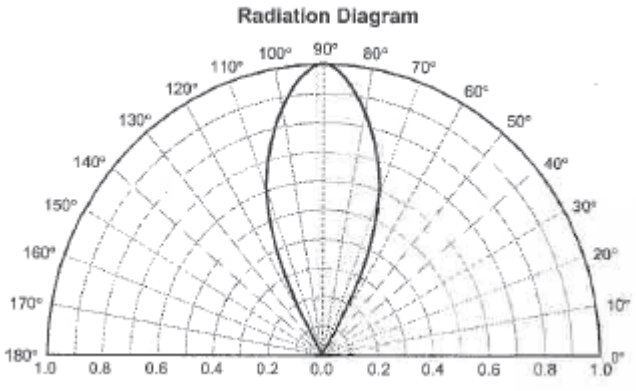
Figure 1. Normalized Intensity vs. Wavelength







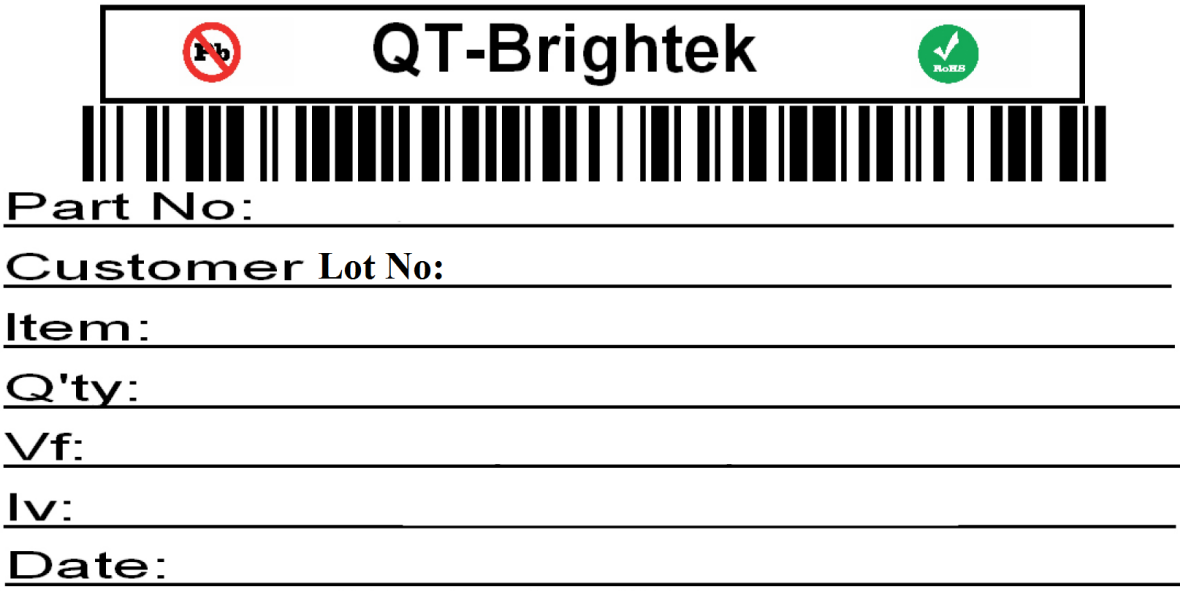




Packing

Bulk pack 500pcs

Labeling



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

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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.