Chipsmall

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-Brightek 1.8mm Round Subminiature LED Series

1.8mm Round Subminiature "Z-Bend" Lead IR LEDs

Part No.: QBL912ZC-IR2

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Introduction

Feature:	**Application:**
• Water clear lens	• Infrared Sensor
• Package in tape and reel	• Optoelectronic Switch
• AlGaAs technology	• Smoke detector
• Viewing Angle = 20 deg	• Drive sensor
• Reverse Mount	

Description:

This 1.8mm round subminiature IR lamp with z-bend lead configuration are suitable for surface mount applications.
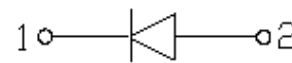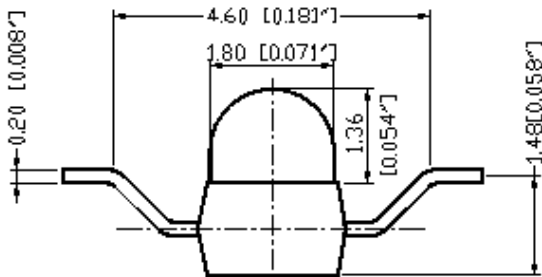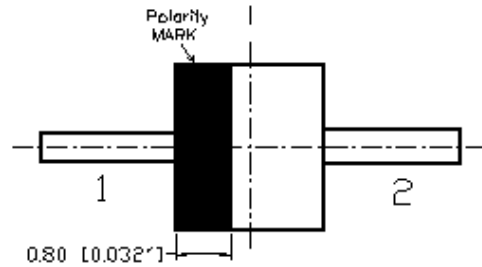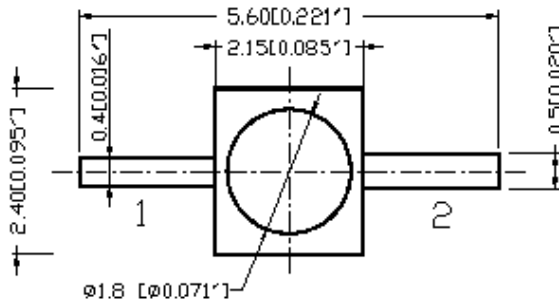
Certification & Compliance:
- TS16949
- ISO9001
- RoHS Compliant

Dimension:

Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 ^{o}C)

Product	Color	I_F (mA)	V_F (V)		λ_P (nm)			le (mW/sr)		
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.
QBL912ZC-IR2	Infrared	20	1.4	1.8	870	880	890	0.6	1.3	2.6

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 3 sec @ 260 ^{o}C

Characteristic Curves

Forward Current vs. Forward Voltage

Relative Intensity vs. Wavelength

Directive Characteristics
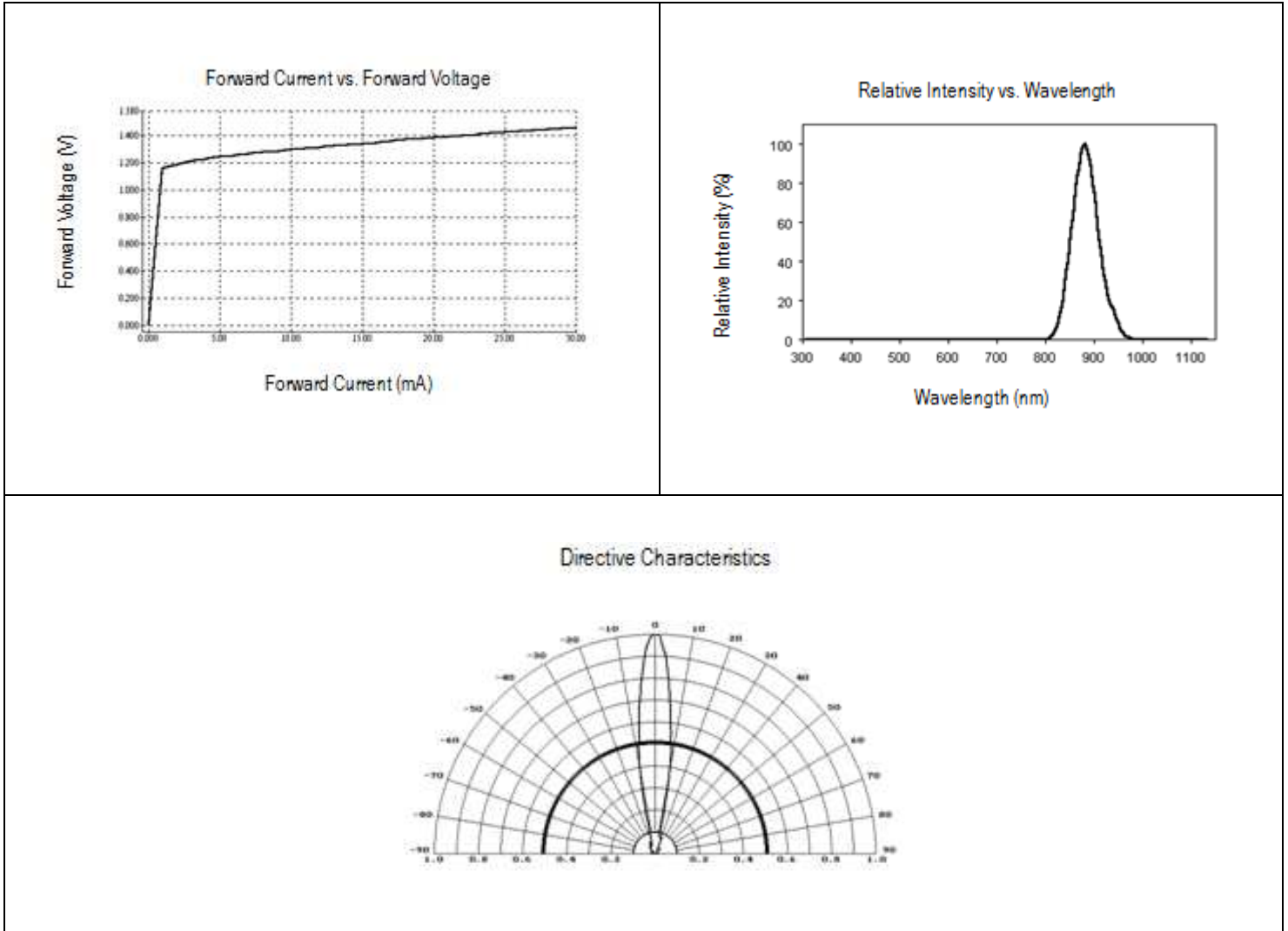
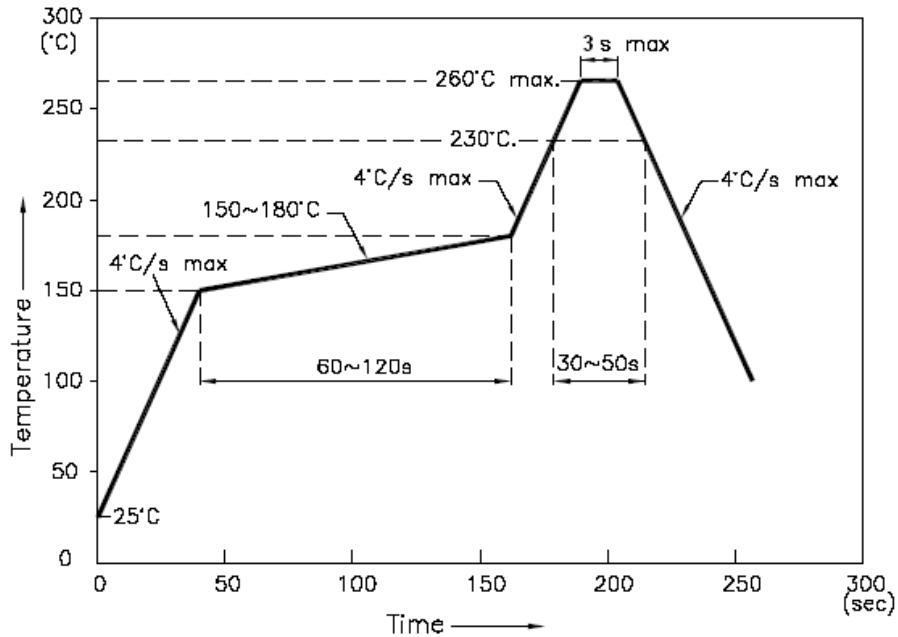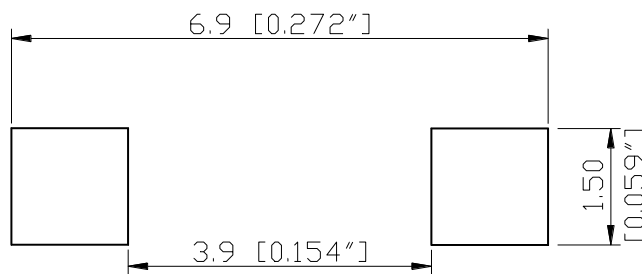
Solder Profile & Footprint

-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):
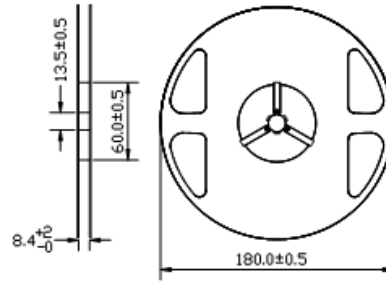

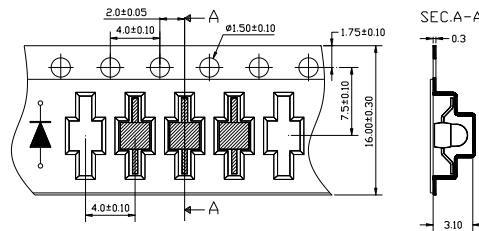## Recommended Pad Layout

Units: mm	Tolerance: ± 0.2mm

Packing

Reel Dimension:

Unit: mm

Tape Dimension:

Unit: mm

Arrangement of Tape:
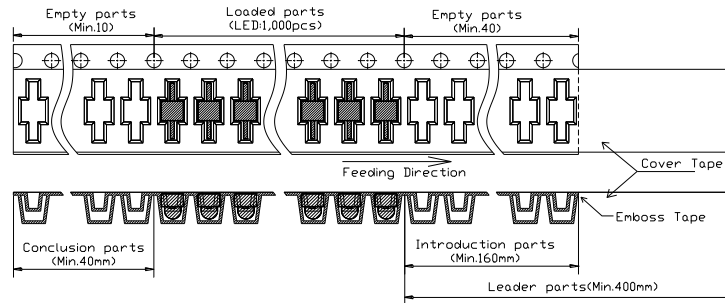
Packaging Specification:

Labeling

QT-Brightek
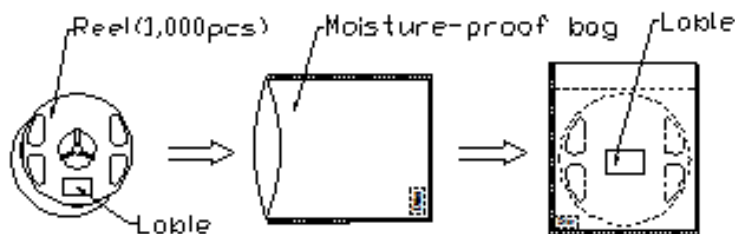
Part No:

Customer P/N:

Item:

Q'ty:

Vf:

Iv:

Wl:

Date:

Made in China

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBL912ZC-IR2	QBL912ZC-IR2	Ie=1.3mW/sr typ. @ I_F=20mA / $λ_P$=880nm typ.	1,000 units

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Revision History

Description:	Revision #	Revision Date
New Release of QBL912ZC-IR2	V1.0	05/14/2015

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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.