QT-Brightek 1.8mm Round Subminiature LED Series

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

Part No.: QBL912ZC-IR3

Table of Contents:

Introduction

Feature:

- Water clear lens
- Package in tape and reel
- AlGaAs technology
- Viewing Angle = 20 deg
- Reverse Mount

Description:

This 1.8mm round subminiature IR lamp with z-bend lead configuration are suitable for surface mount applications.

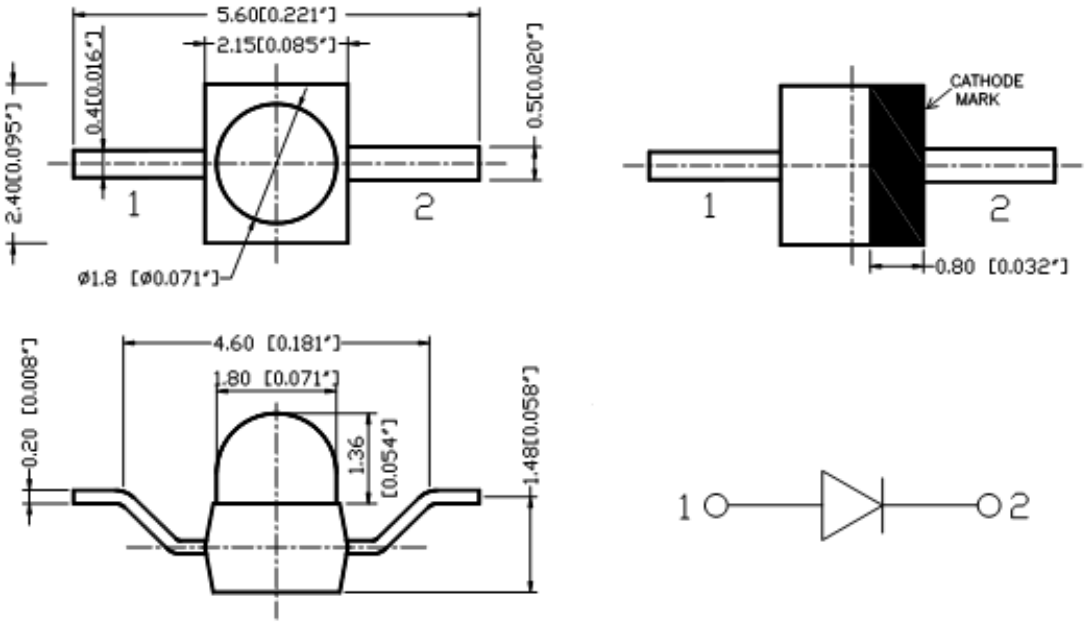
Application:

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

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant

Dimension:



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 °C)

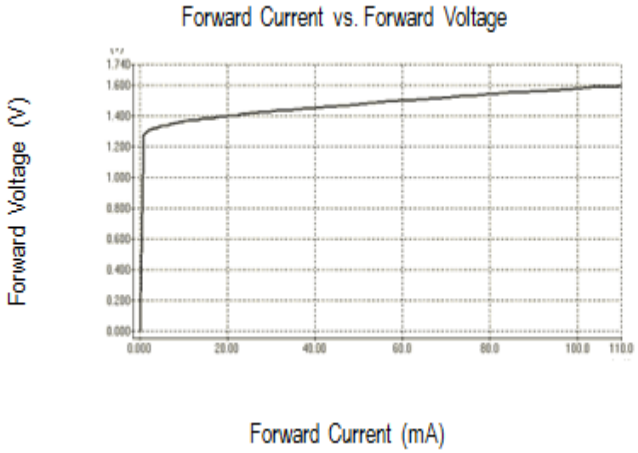
Product	Color	I_F (mA)	V_F (V)		λ_P (nm)			Ie (mW/sr)		
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.
QBL912ZC-IR3	Infrared	100	1.5	1.8	840	850	860	-	22	-

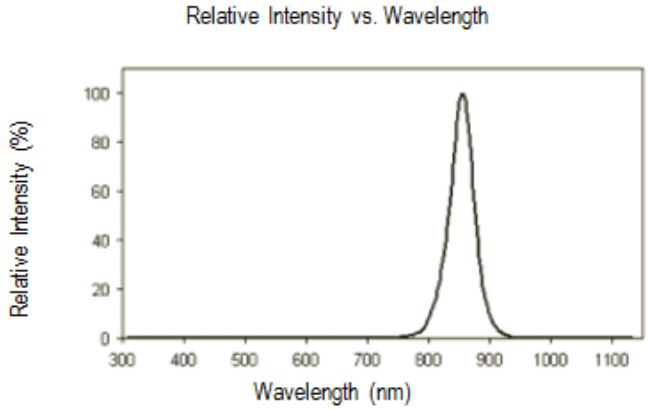
Absolute Maximum Rating

Material	P_d (mW)	I_F (mA)	I_{FP} (A)*	V_R (V)	T_{OP} (°C)	T_{ST} (°C)	T_{SOL} (°C)**
AlGaAs	180	100	1	5	-40 ~ +80	-40 ~ +85	260

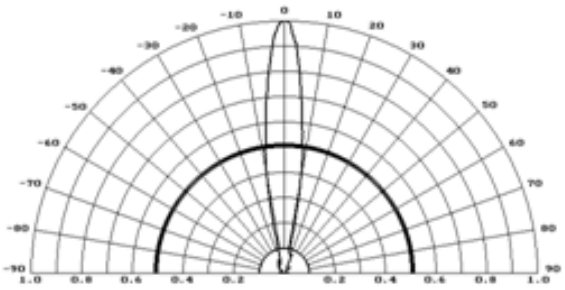
*Duty cycle=1%, Pulse width 100us
**IR Reflow for no more than 3 sec @ 260 °C

Characteristic Curves



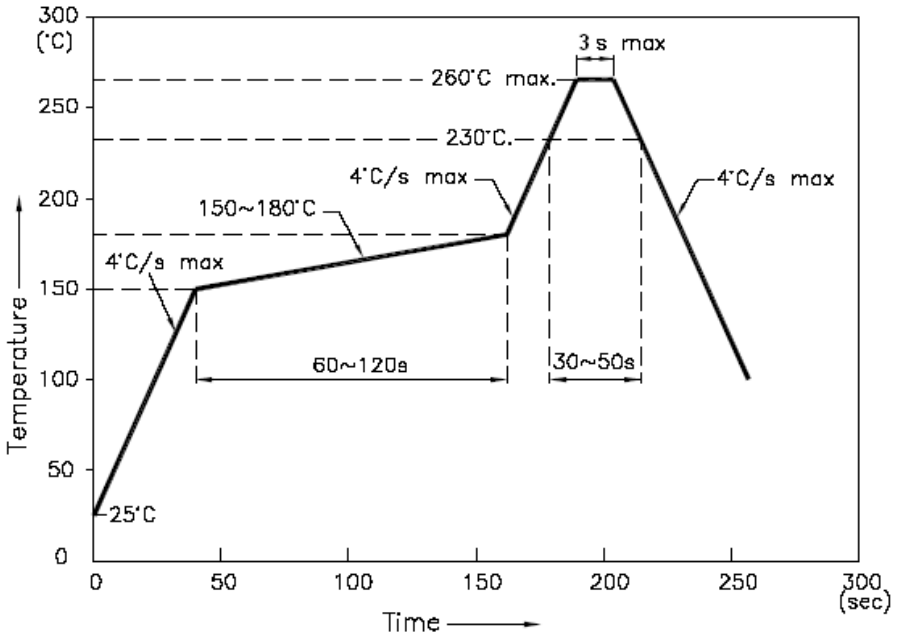


Directive Characteristics

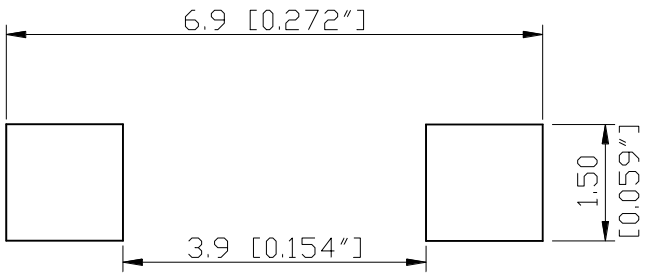


Solder Profile & Footprint

-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):



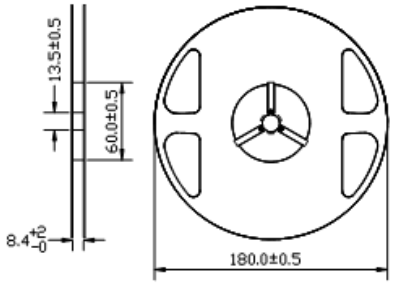
Recommended Pad Layout



Units: mm Tolerance:±0.2mm

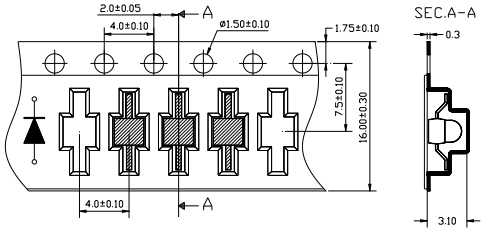
Packing

Reel Dimension:



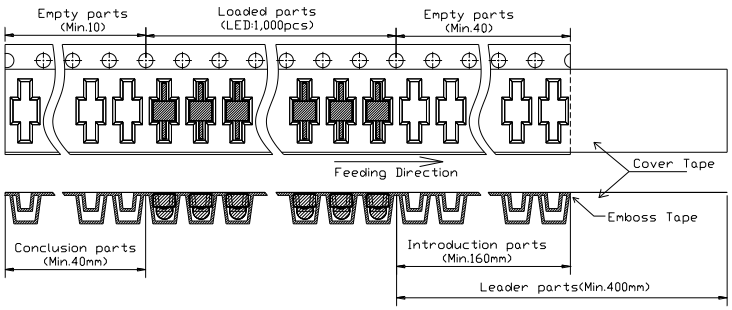
Unit: mm

Tape Dimension:

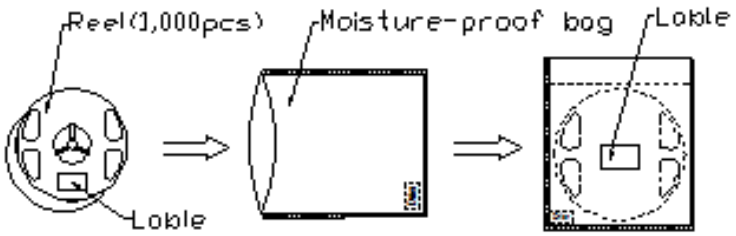


Unit: mm

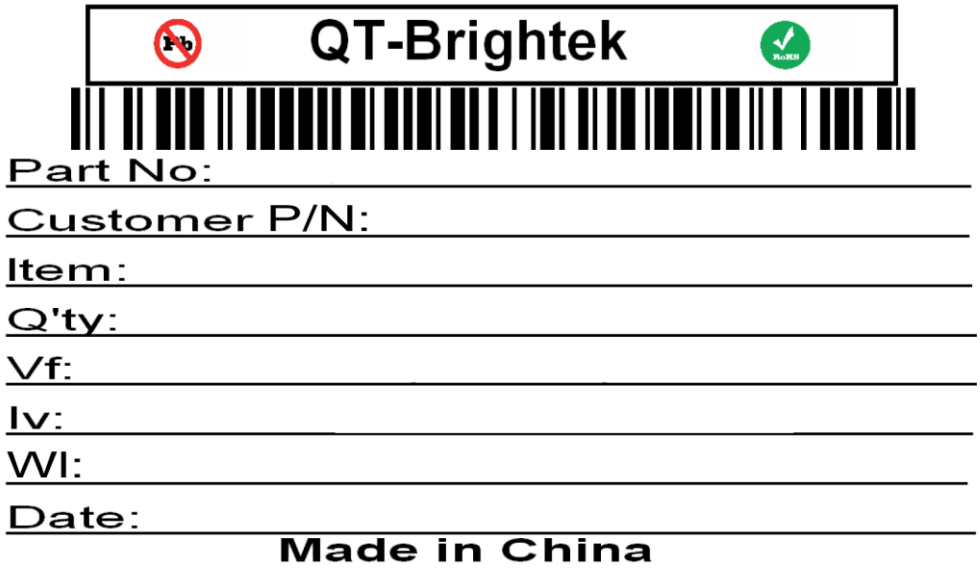
Arrangement of Tape:



Packaging Specification:



Labeling



Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBL912ZC-IR3	QBL912ZC-IR3	Ie=22mW/sr typ. @ I_F=100mA / λ_P=850nm typ.	1,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBL912ZC-IR3	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.