

# **QT-Brightek Chip LED Series**

**SMD 1208 Bi-Color LED** 

Part No.: QBLP653-YAG

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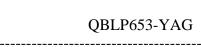




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### Introduction

#### Feature:

- Water clear lens
- Package in tap and reel
- Bright 1208 LED package
- AllnGaP technology
- 60° Viewing Angle

#### **Description:**

These 1208 bi-color LEDs have a height profile of 2.5mm. With narrow viewing angle, LED produces high bright light output.

### **Application:**

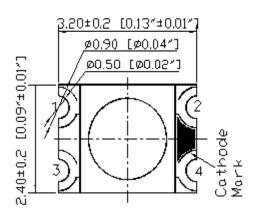
- Status indication
- Back lighting application

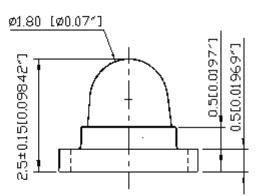
### **Certification & Compliance:**

- TS16949
- ISO9001
- RoHS Compliant



#### **Dimension:**





$$1 \stackrel{AG}{\longrightarrow} 2$$

$$3 \stackrel{Y}{\longrightarrow} 4$$

Units: mm / tolerance = +/-0.1mm

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Electrical / Optical Characteristic (T=25 °C)

Product	Color	I (m A)	$V_{F}$	(V)		λ <sub>D</sub> (nm)		l <sub>v</sub> (n	ncd)
Product	Coloi	I <sub>F</sub> (mA)	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.
QBLP653-YAG	Yellow	20	2.0	2.5	585	590	595	80	-
QDLP003-1AG	Yellow Green	20	2.0	2.5	565	570	575	25	-

**Absolute Maximum Rating** 

Material	P <sub>d</sub> (mW)	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)*	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)**	T <sub>SOL</sub> (°C)**
AllnGaP	75	30	125	5	-40 ~ +80	40 ~ +85	260

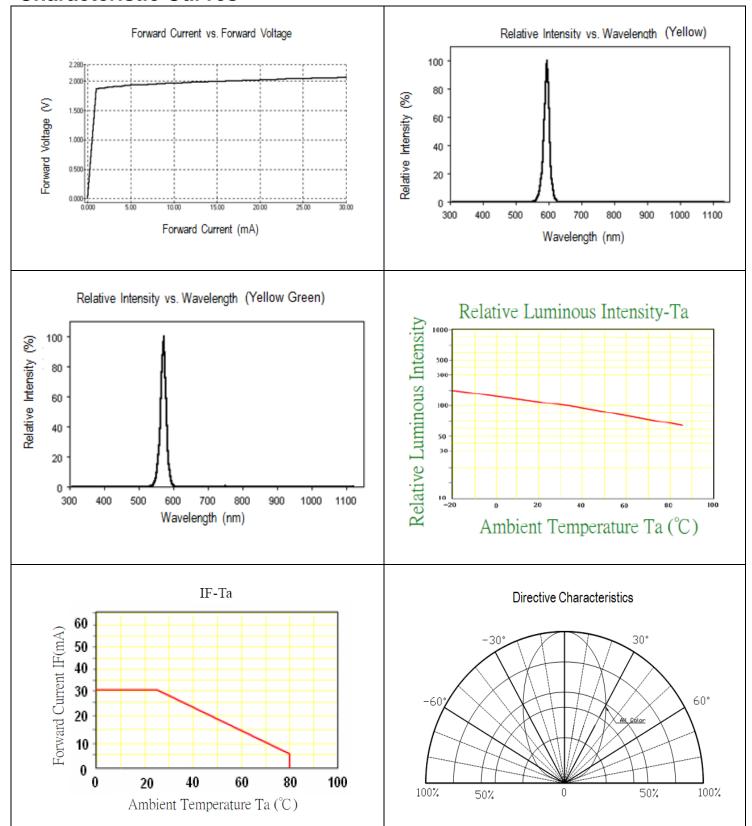
<sup>\*</sup>Duty 1/8 @ 1kHz

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<sup>\*\*</sup> IR Reflow for no more than 10 sec @ 260 °C



### **Characteristic Curves**

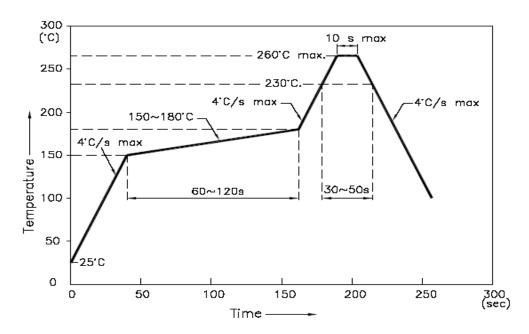


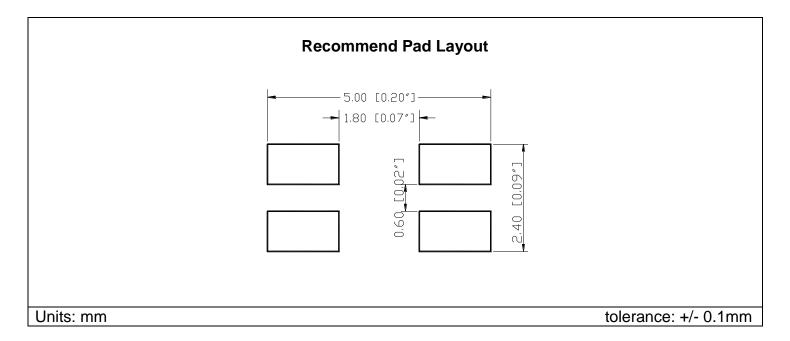
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## **Solder Profile & Footprint**

- -Recommended tin solder specifications: melting temperature in the range of 178~192 °C
- -The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



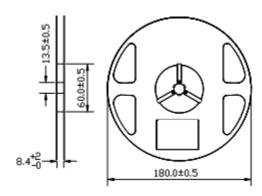


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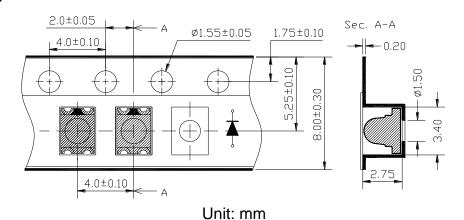
# **Packing**

### **Reel Dimension:**

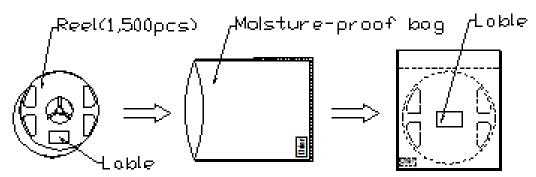


Unit: mm

### **Tape Dimension:**



### **Packaging Specification:**



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# Labeling



**Ordering Information** 

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP653-YAG	QBLP653-YAG	Yellow: Iv=80mcd min., $\lambda_D$ : 585nm to 595nm @ I <sub>F</sub> =20mA  Yellow Green: Iv=25mcd min., $\lambda_D$ : 565nm to 575nm @ I <sub>F</sub> =20mA	1,500 units

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**Revision History** 

Description:	Revision #	Revision Date
New Release of QBLP653-YAG	V1.0	01/23/2013

### **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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