

## Excellent Integrated System Limited

Stocking Distributor

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[QT Brightek \(QTB\)](#)  
[QBLP653-SAG](#)

For any questions, you can email us directly:

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## **QT-Brightek Chip LED Series**

### **SMD 1208 Bi-Color LED**

**Part No.: QBLP653-SAG**

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QBLP653-SAG

1208 Bi-Color LED

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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:**

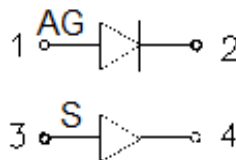
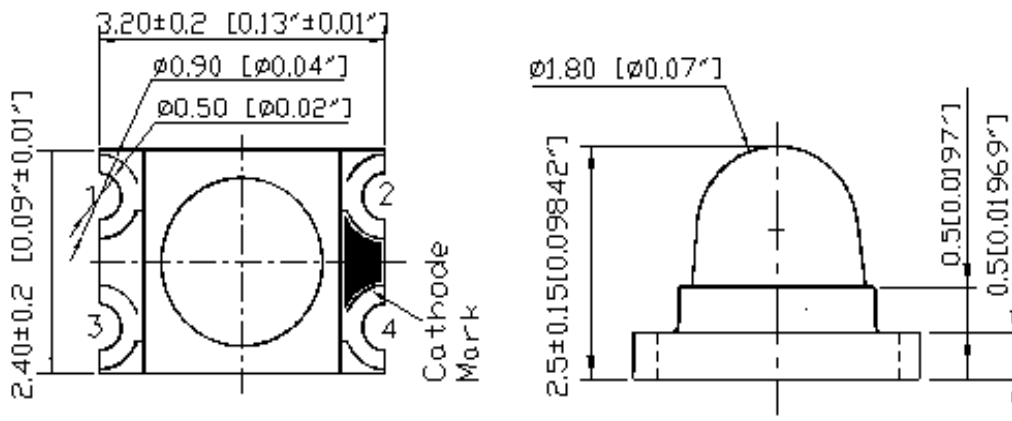
- Status indication
- Back lighting application

**Certification & Compliance:**

- TS16949
- ISO9001
- RoHS Compliant



**Dimension:**



Units: mm / tolerance = +/-0.1mm



QBLP653-SAG

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### Electrical / Optical Characteristic (T=25 °C)

Product	Color	I <sub>F</sub> (mA)	V <sub>F</sub> (V)		λ <sub>D</sub> (nm)			I <sub>V</sub> (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBLP653-SAG	Deep Red	20	2.0	2.5	630	640	650	40	-
	Yellow Green	20	2.0	2.5	565	570	575	30	-

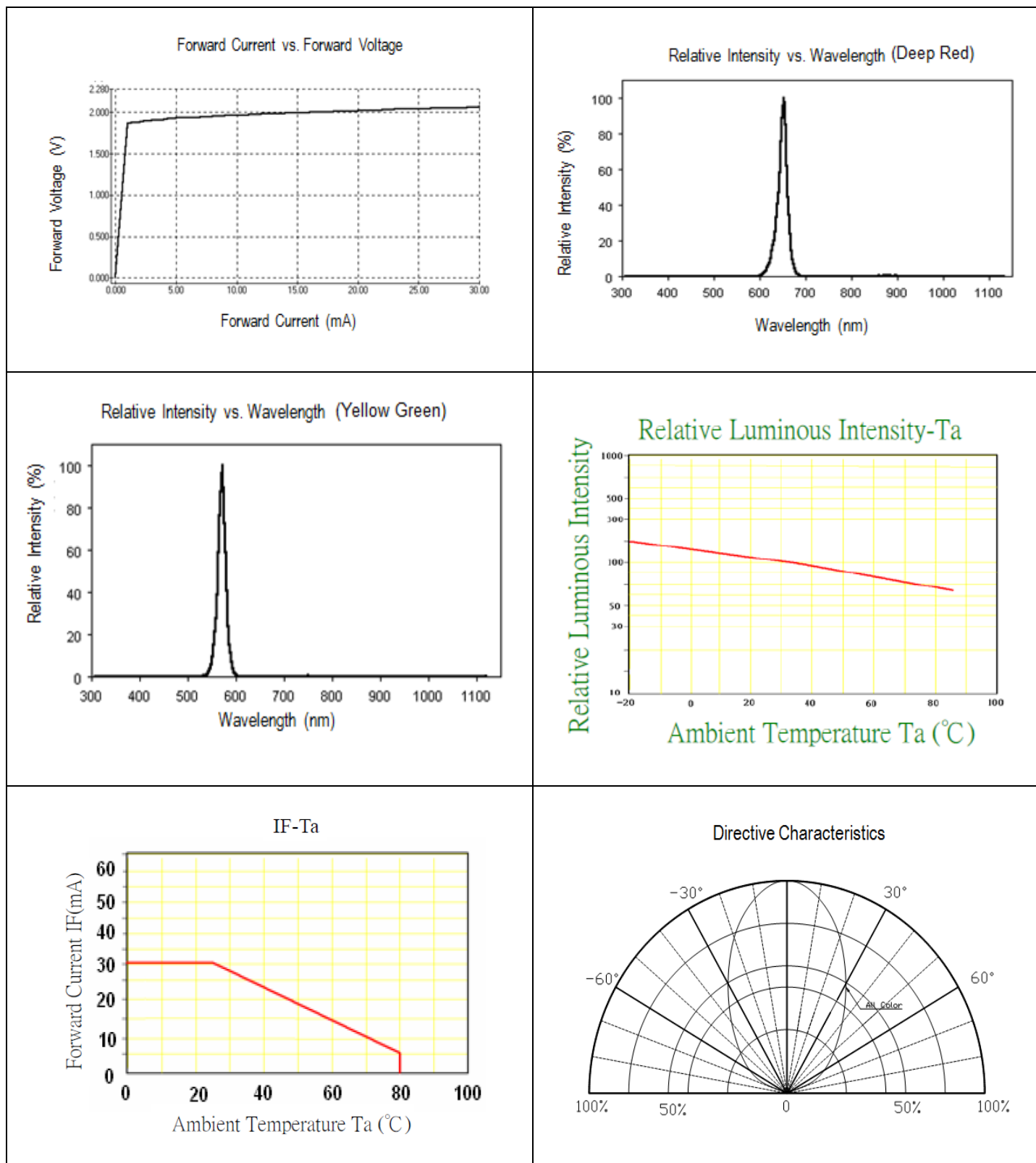
### Absolute Maximum Rating

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

\*Duty 1/8 @ 1kHz

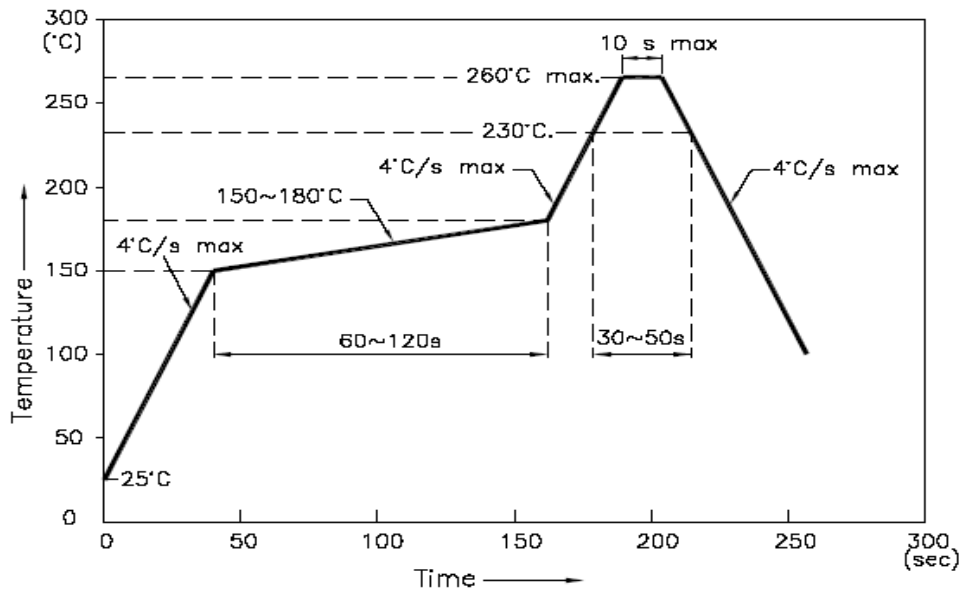
\*\* IR Reflow for no more than 10 sec @ 260 °C

**Characteristic Curves**

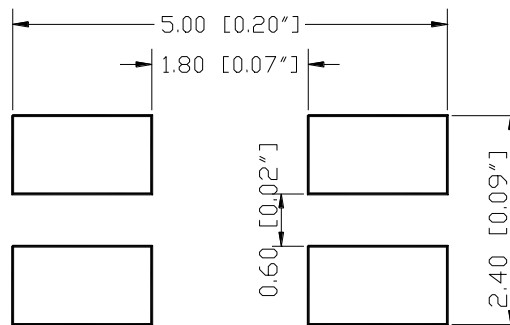


**Solder Profile & Footprint**

- 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):



**Recommend Pad Layout**



Units: mm

tolerance: +/- 0.1mm







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**Labeling**



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
QBLP653-SAG	QBLP653-SAG	Deep Red: Iv=40mcd min., λ <sub>D</sub> : 630nm to 650nm @ I <sub>F</sub> =20mA	1,500 units
		Yellow Green: Iv=30mcd min., λ <sub>D</sub> : 565nm to 575nm @ I <sub>F</sub> =20mA	



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## Revision History

Description:	Revision #	Revision Date
New Release of QBLP653-SAG	V1.0	01/23/2013
Update Labeling	V1.1	04/14/2016

## 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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