

QT-Brightek Chip LED Series

SMD 1208 Bi-Color LED

Part No.: QBLP653-SAG

Product: QBLP653-SAG	Date: September 16, 2016	Page 1 of 9
	Version# 1.2	

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Introduction

Feature:

- Water clear lens
- Package in tap and reel
- Bright 1208 LED package
- AllnGaP technology
- S: Deep Red / AG: Yellow Green
- 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:

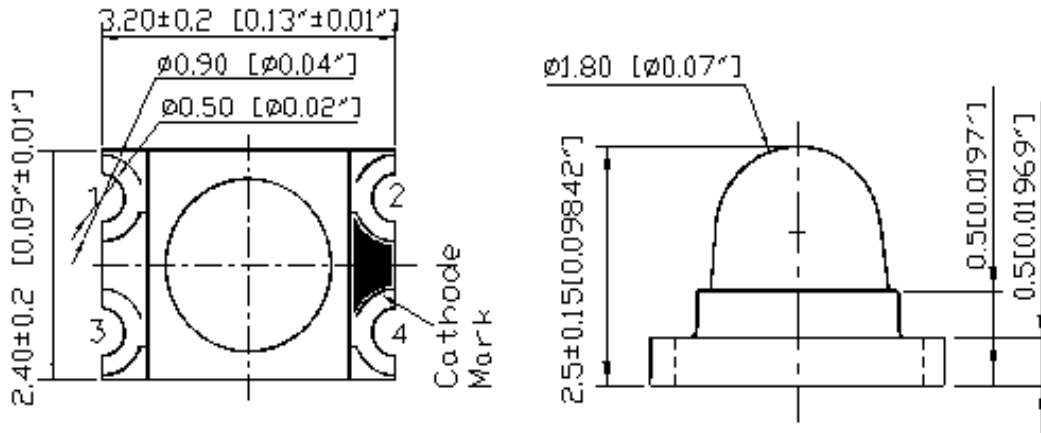
- Status indication
- Back lighting application

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



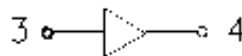
Dimension:



AG (Yellow Green)



S (Deep Red)



Units: mm / tolerance = +/-0.1mm

Electrical / Optical Characteristic (T=25 °C)

Product	Color	I _F (mA)	V _F (V)		λ _D (nm)			I _V (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	-

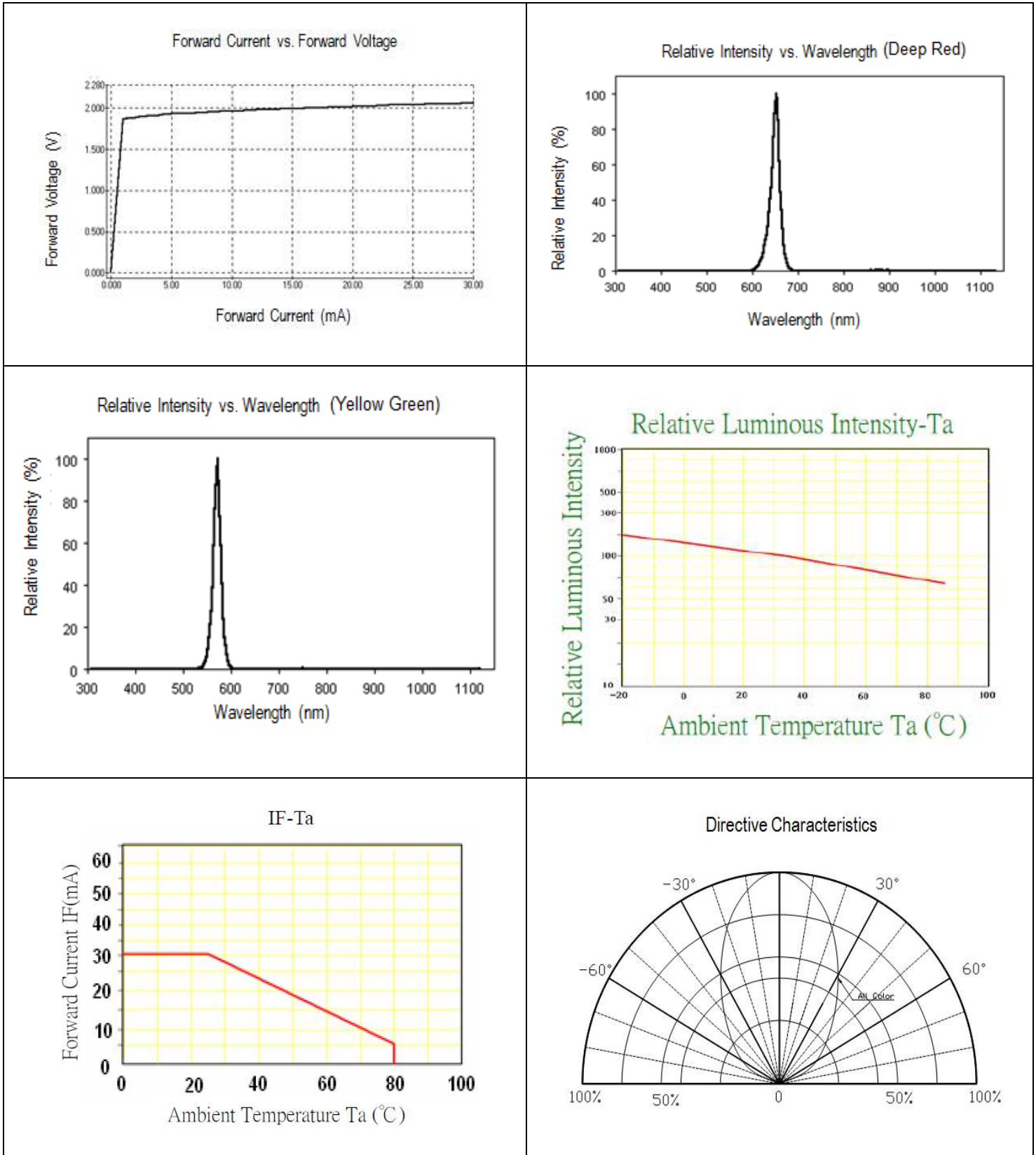
Absolute Maximum Rating

Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)**	T _{SOL} (°C)**
AllnGaP	75	30	125	5	-40 ~ +80	40 ~ +85	260

*Duty 1/8 @ 1kHz

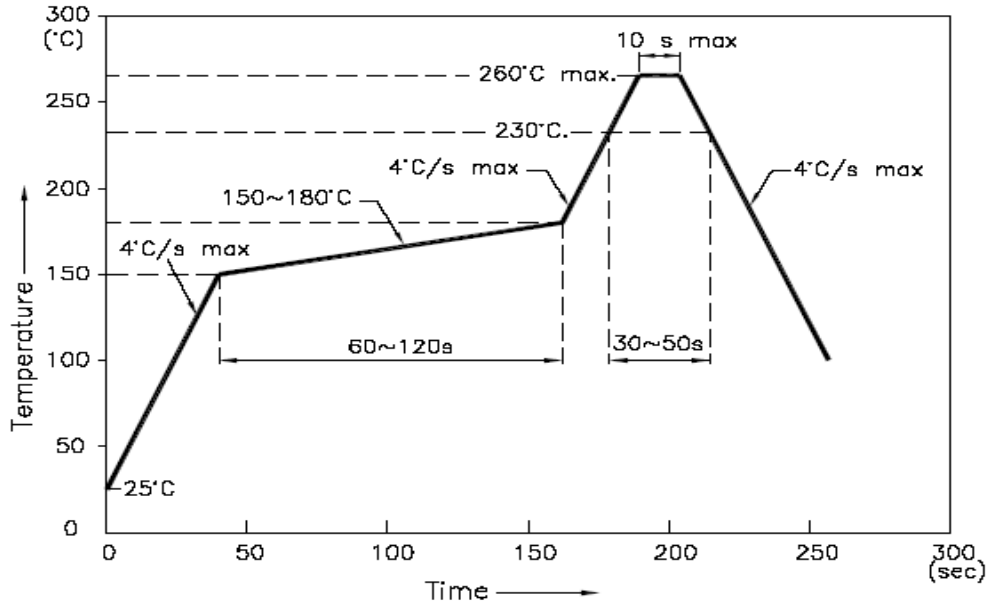
** IR Reflow for no more than 10 sec @ 260 °C

Characteristic Curves

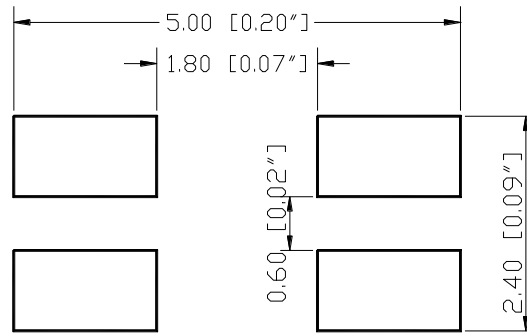


Solder Profile & Footprint

- 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

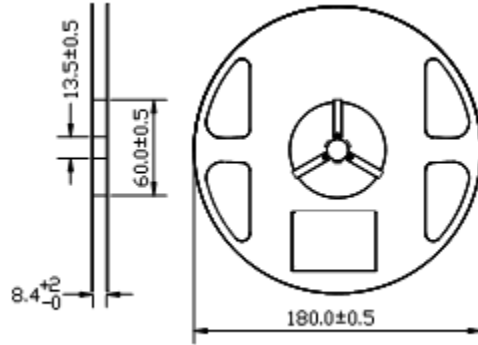


Units: mm

tolerance: +/- 0.1mm

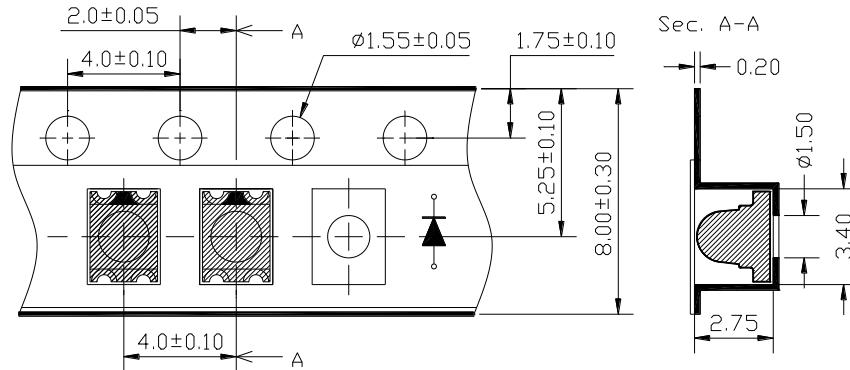
Packing

Reel Dimension:



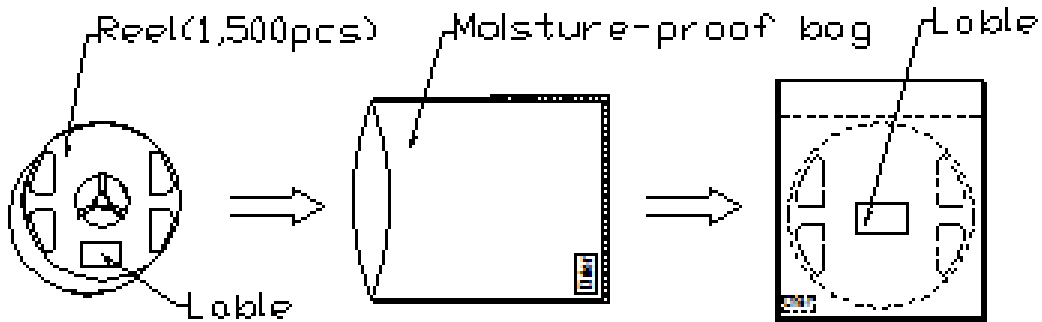
Unit: mm

Tape Dimension:



Unit: mm

Packaging Specification:



Labeling

Part No: _____

Customer P/N: _____

Item: _____

Q'ty: _____

Vf: _____

Iv: _____

WI: _____

Date: _____

Made in China**Ordering Information**

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP653-SAG	QBLP653-SAG	Deep Red: I _v =40mcd min., λ _D : 630nm to 650nm @ I _F =20mA	1,500 units
		Yellow Green: I _v =30mcd min., λ _D : 565nm to 575nm @ I _F =20mA	

Revision History

Description:	Revision #	Revision Date
New Release of QBLP653-SAG	V1.0	01/23/2013
Update Labeling	V1.1	04/14/2016
Add part numbers denotation to indicate color	V1.2	09/16/2016

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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.