

QT-Brightek Chip LED Series

SMD 1208 Bi-Color LED

Part No.: QBLP653-RAG

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Introduction

Feature:

- Water clear lens
- Package in tap and reel
- Bright 1208 LED package
- AllnGaP technology
- R: 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:

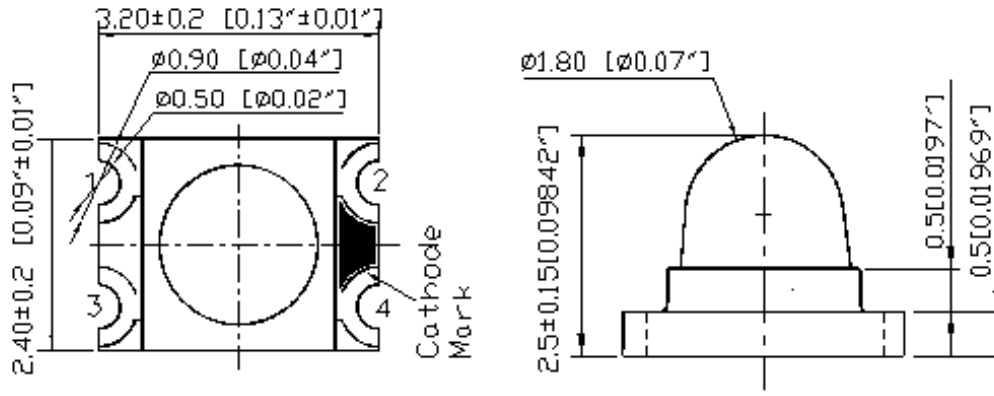
- Status indication
- Back lighting application

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



AG (Yellow Green)



R (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-RAG	Red	20	2.0	2.5	615	620	630	80	-
	Yellow Green	20	2.0	2.5	565	570	575	25	-

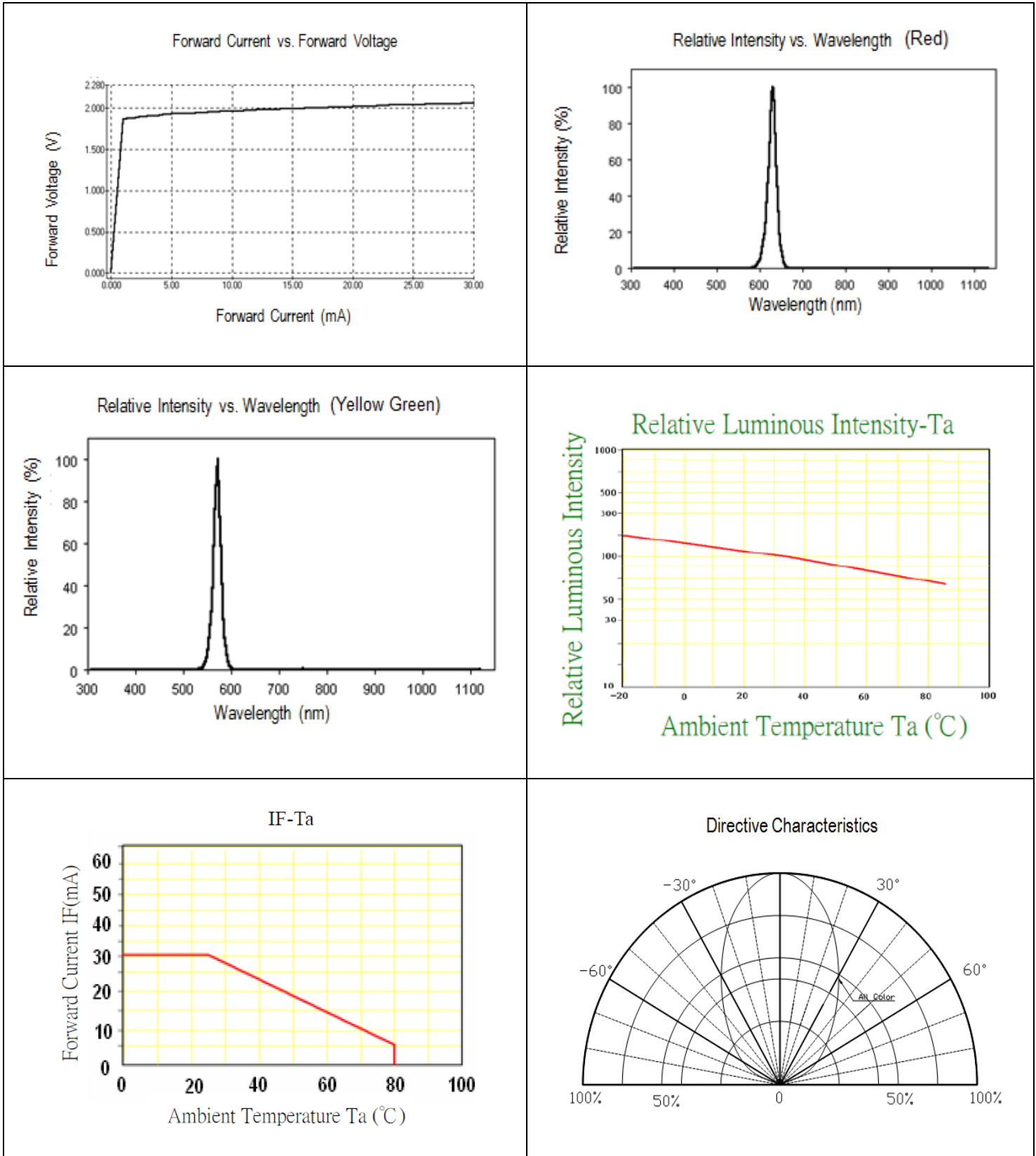
Absolute Maximum Rating

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

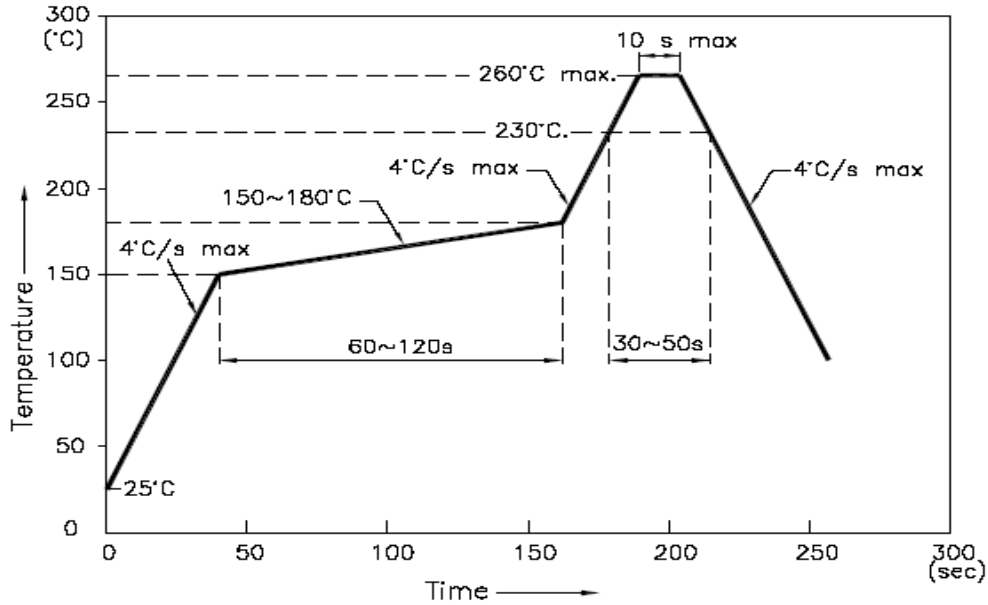
** IR Reflow for no more than 10 sec @ 260 °C

Characteristic Curves

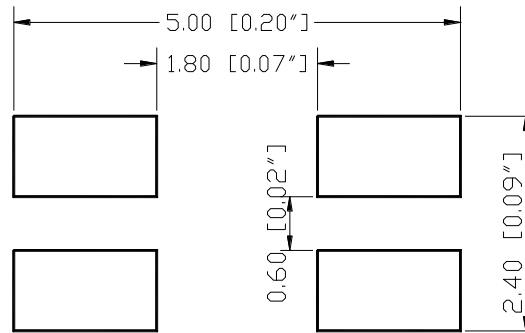


Solder Profile & Footprint

- 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

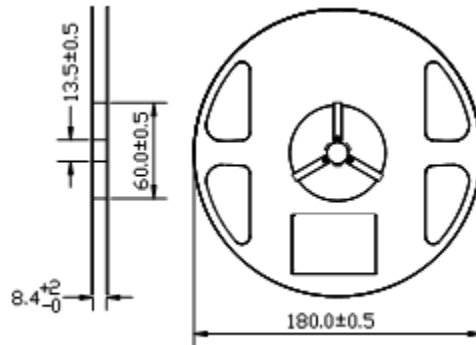


Units: mm

tolerance: +/- 0.1mm

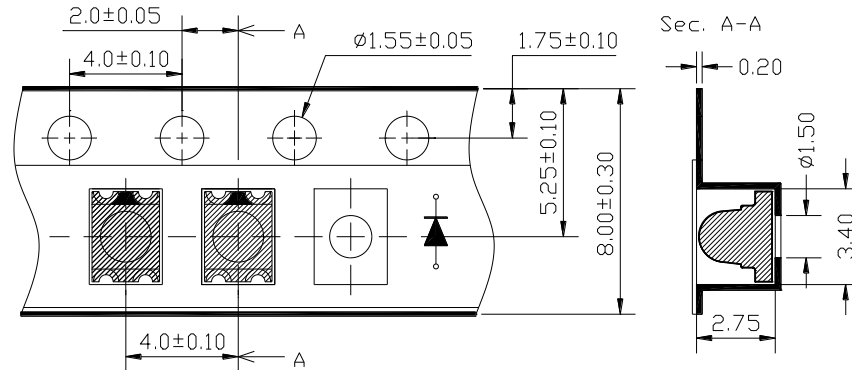
Packing

Reel Dimension:



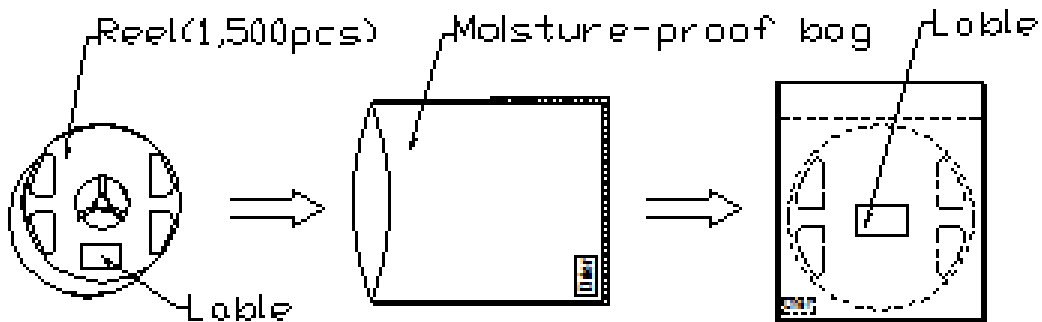
Unit: mm

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-RAG	QBLP653-RAG	Red: $I_v=80\text{mcd min.}$, $\lambda_D: 615\text{nm to }630\text{nm}$ @ $I_F=20\text{mA}$	1,500 units
		Yellow Green: $I_v=25\text{mcd min.}$, $\lambda_D: 565\text{nm}$ to 575nm @ $I_F=20\text{mA}$	

Revision History

Description:	Revision #	Revision Date
New Release of QBLP653-RAG	V1.0	01/23/2013
Update Labeling	V1.1	04/14/2016
Add part numbers denotation to indication color	V1.2	09/16/216

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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.