

QT-Brightek Chip LED Series

SMD 1208 LED

Part No.: QBLP653-R-2897

2897: High Brightness Version

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Introduction

Feature:

- Water clear lens
- Package in tap and reel
- Bright 1208 LED package
- AllnGaP technology
- Viewing angle: 15 deg typ.

Description:

This bright 1208 LED with dome lens has a height profile of 2.5mm. With narrow viewing angle, LED produces high bright light output.

Application:

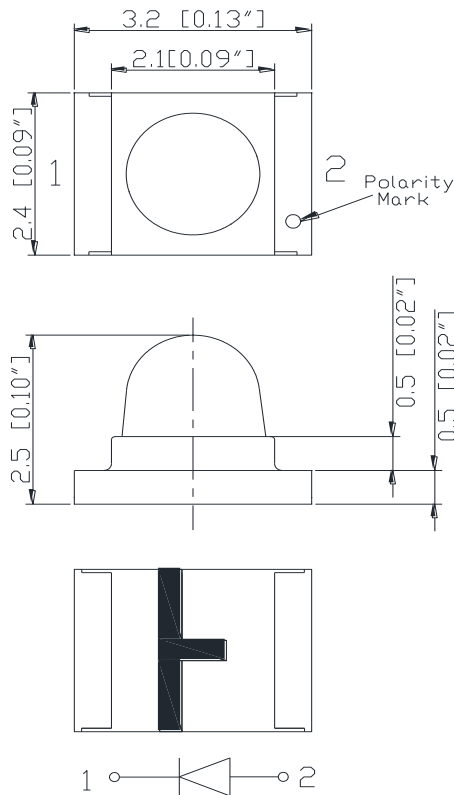
- Status indication
- Back lighting application

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.15mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)		λ _D (nm)			I _V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBLP653-R-2897	Red	20	2.0	2.5	618	621	630	6800	12300

Absolute Maximum Rating

Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SO L} (°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

Forward Voltage V_F for AllnGaP @ I_F=20mA

Bin	Min.	Max.	Unit
□	1.7	2.5	V

Luminous Intensity I_V @ I_F=20mA

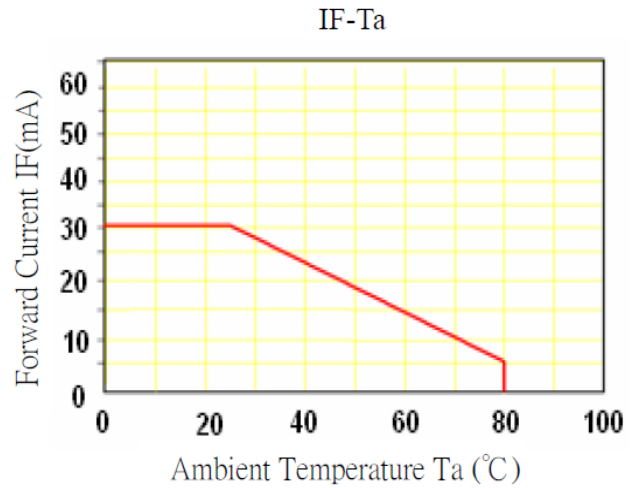
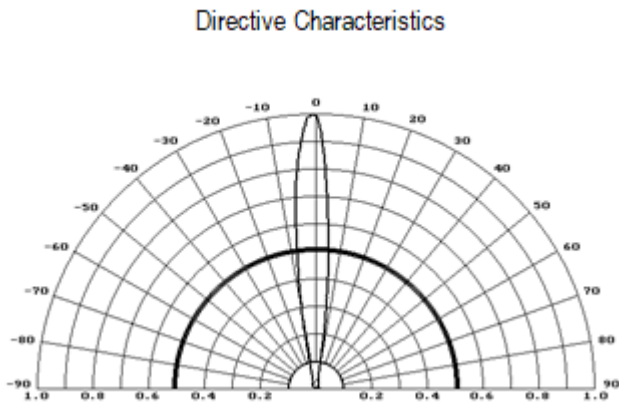
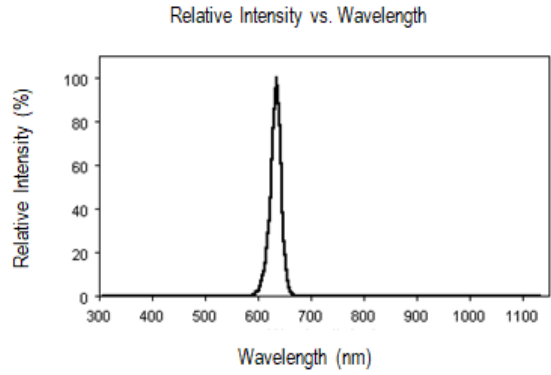
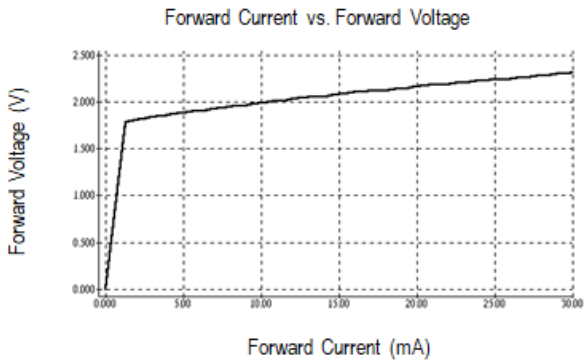
Bin	Min.	Max.	Unit
b	6800	8800	mcd
c	8800	11200	
d	11200	14200	
e	14200	18000	
f	18000	22500	

Dominant Wavelength λ_D for Red @ I_F=20mA

Bin	Min.	Max.	Unit
A	618	622	nm
B	622	626	
C	626	630	

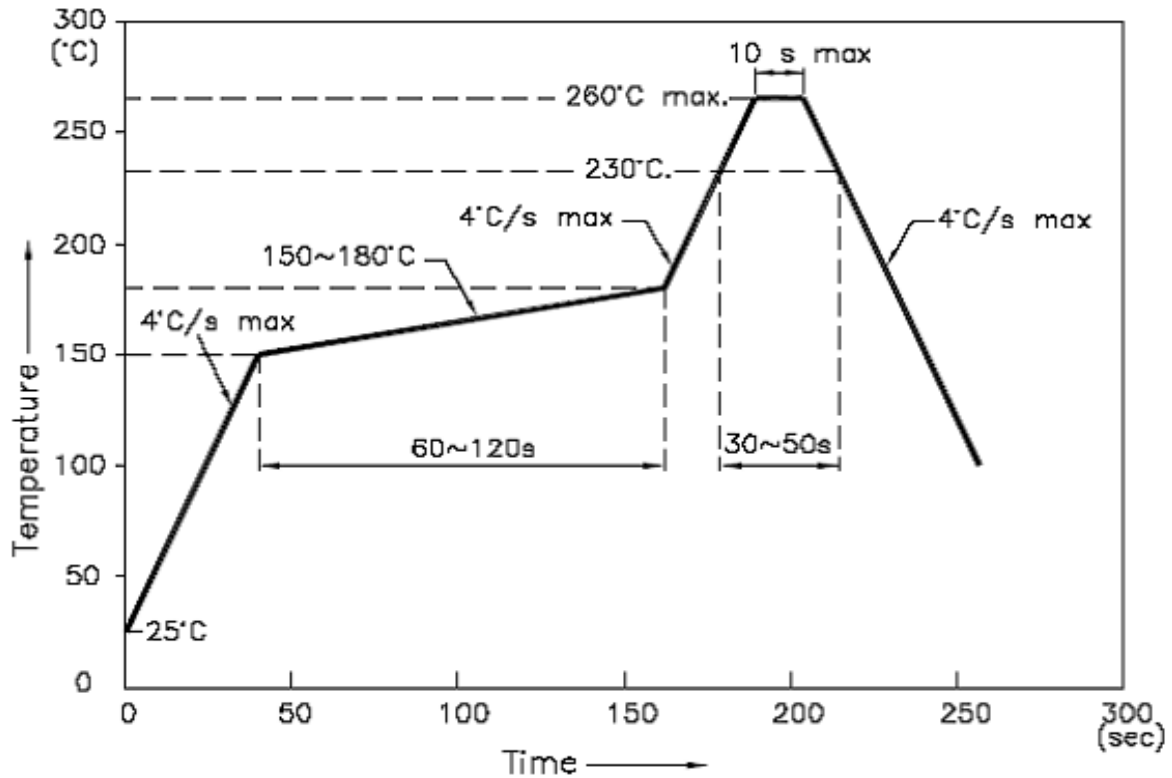
Characteristic Curves

AllnGaP

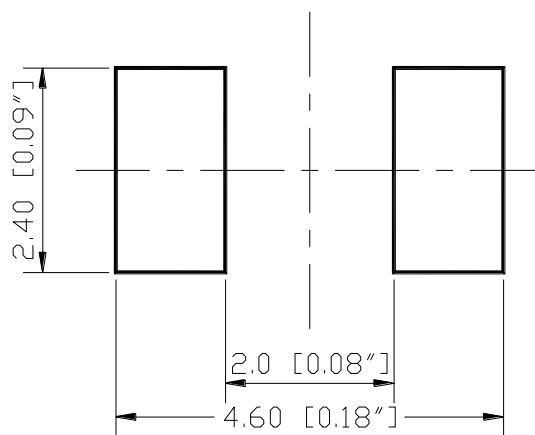


Solder Profile & Footprint

-The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



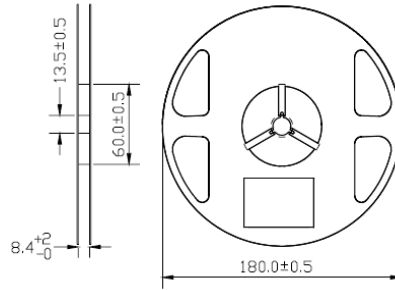
Recommended Pad Layout



Units: mm

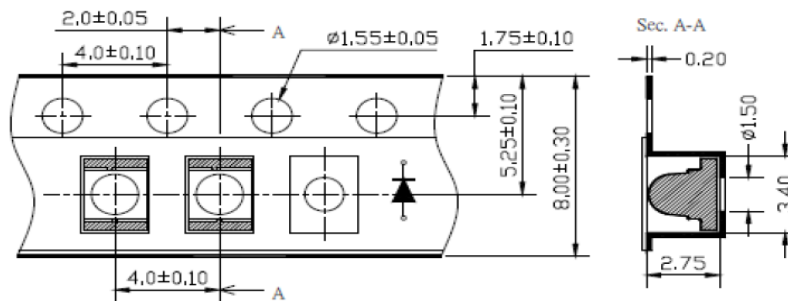
Packing

Reel Dimension:



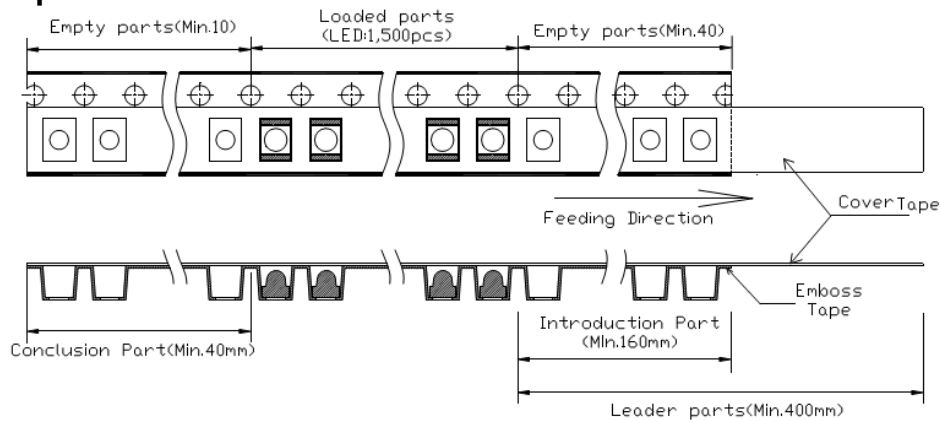
Unit: mm

Tape Dimension:

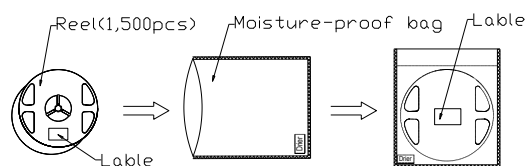


Unit: mm

Arrangement of Tape:



Packaging Specification:



Labeling

Part No: _____

Customer P/N: _____

Item: _____

Q'ty: _____

Vf: _____

Iv: _____

VI: _____

Date: _____

Made in China**Ordering Information**

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP653-R-2897	QBLP653-R-2897	Iv=12300mcd typ. / Color = 618nm to 630nm @ 20mA	1,500 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP653-R-2897	V1.0	06/10/2021



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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.