

QT-Brightek Chip LED Series

SMD 1208 LED

Part No.: QBLP653-R5-2897

5: 5mA

2897: High Brightness Version

Table of Contents:

Introduction	3
Electrical / Optical Characteristic (Ta=25 °C)	4
Absolute Maximum Rating	4
Characteristic Curves.....	5
Solder Profile & Footprint.....	6
Packing	7
Labeling	8
Ordering Information	8
Revision History	9
Disclaimer	9

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:

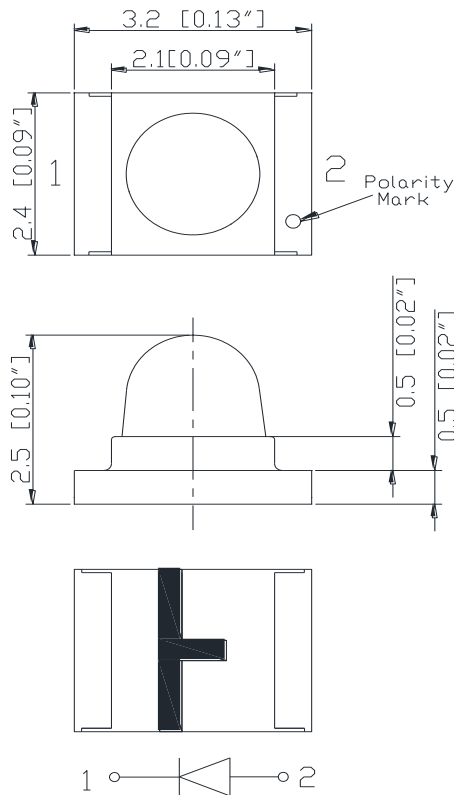
- Status indication
- Back lighting application

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-R5-2897	Red	5	1.9	2.5	618	621	630	1000	1950

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

Forward Voltage V_F for AllnGaP @ I_F=5mA

Bin	Min.	Max.	Unit
□	1.7	2.5	V

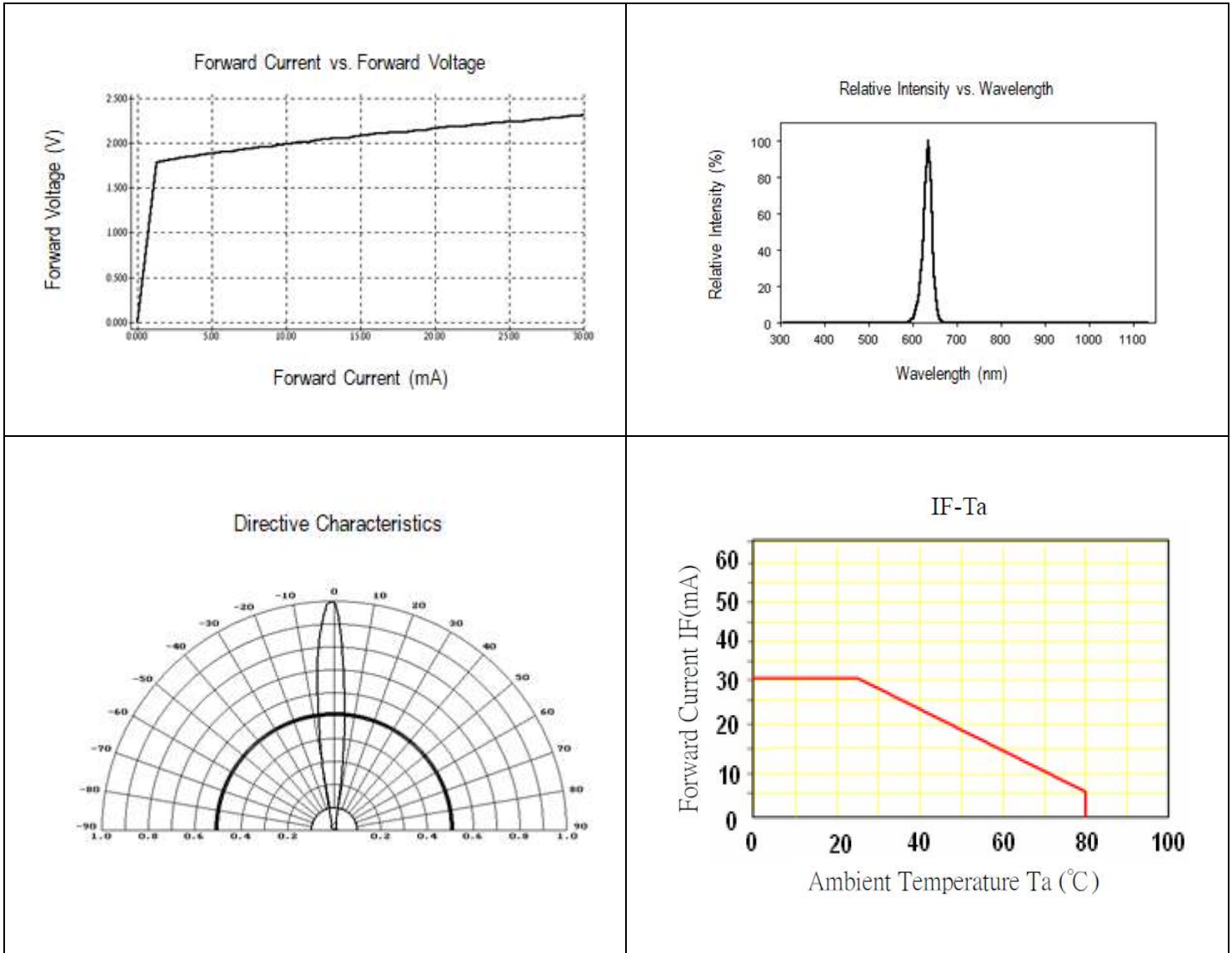
Luminous Intensity I_V @ I_F=5mA

Bin	Min.	Max.	Unit
T	1000	1250	mcd
U	1250	1600	
V	1600	2000	
W	2000	2500	
X	2500	3200	

Dominant Wavelength λ_D for Red @ I_F=5mA

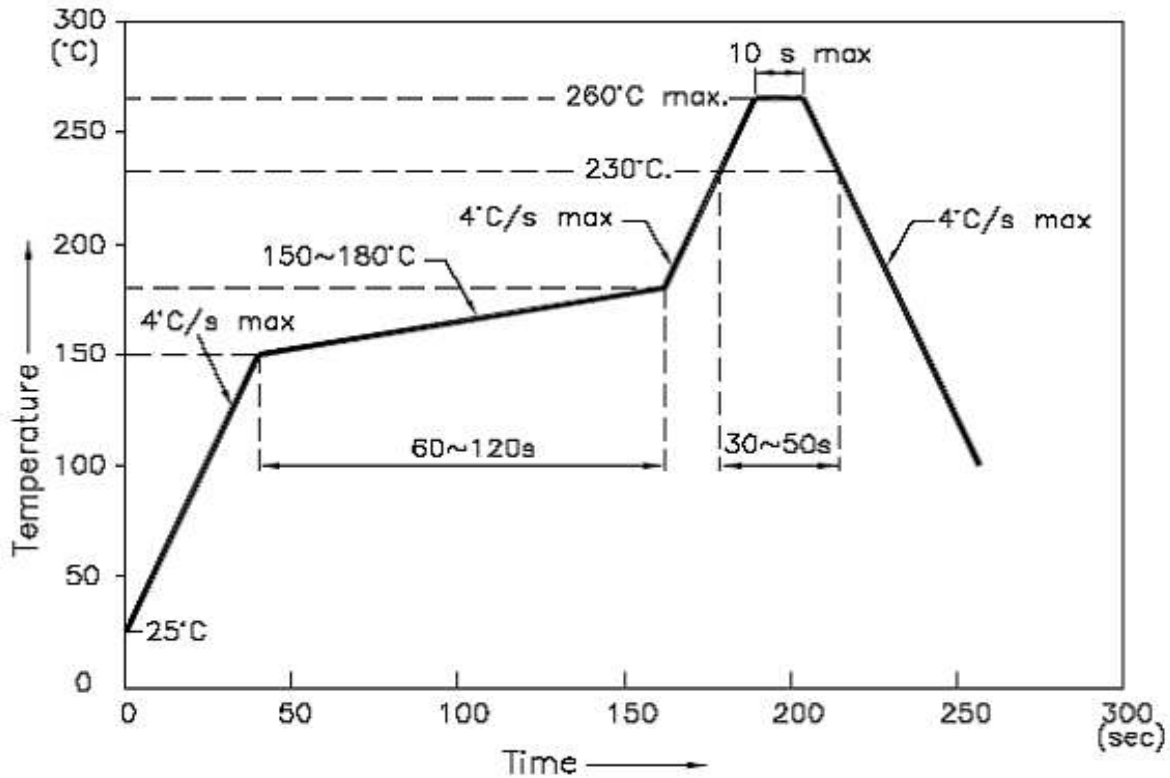
Bin	Min.	Max.	Unit
A	618	622	nm
B	622	626	
C	626	630	

Characteristic Curves

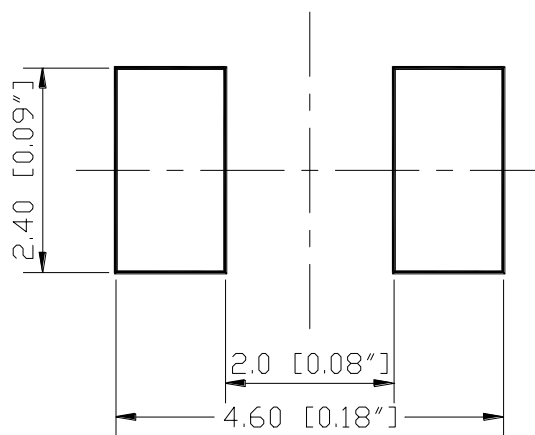


Solder Profile & Footprint

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



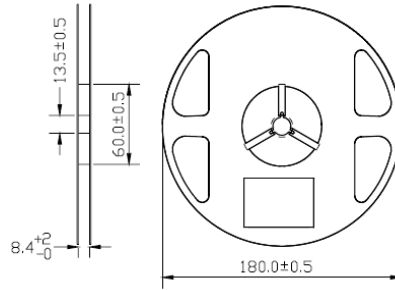
Recommended Pad Layout



Units: mm

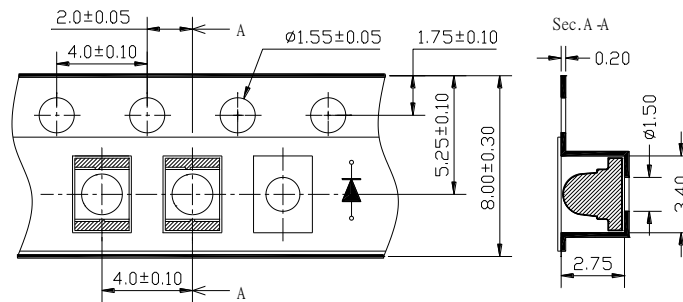
Packing

Reel Dimension:



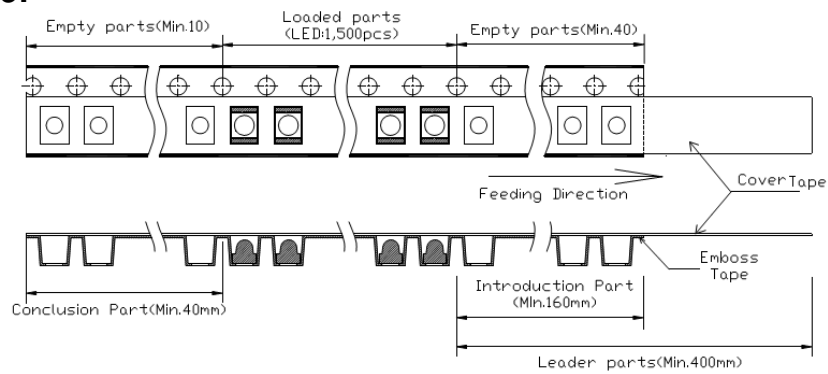
Unit: mm

Tape Dimension:

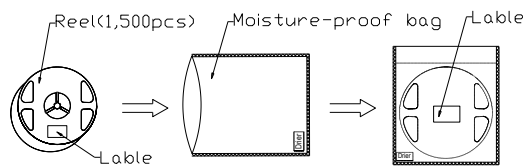


Unit: mm

Arrangement of Tape:



Packaging Specification:



Labeling



Part No: _____

Customer P/N: _____

Item: _____

Q'ty: _____

Vf: _____

Iv: _____

WI: _____

Date: _____

Made in China

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP653-R5-2897	QBLP653-R5-2897	Iv=1950mcd typ. / Color = 618nm to 630nm @ 5mA	1,500 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP653-R5-2897	V1.0	11/07/2022



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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.