QT-Brightek Chip LED Series

SMD 1208 Orange LED

Part No.: QBLP653-O-2897

2897: High Brightness Version

Table of Contents:

Introduction

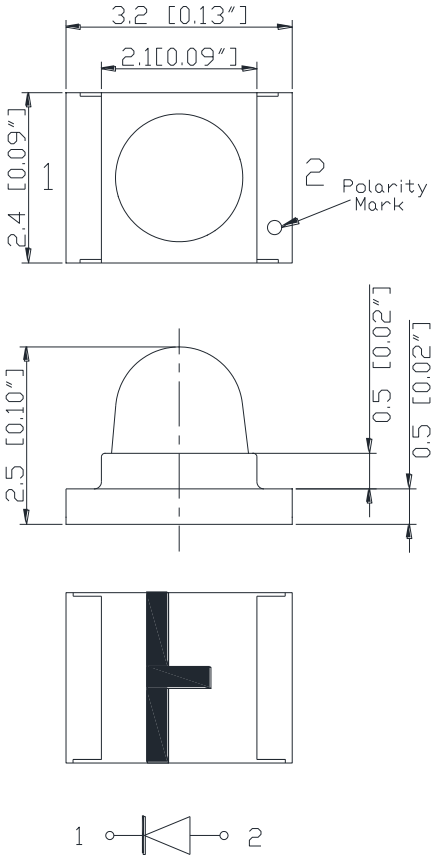
Feature:
- Water clear lens
- Package in tap and reel
- Bright 1208 LED package
- AllnGaP technology
- Viewing angle: 15 deg typ.

Description:
This bright 1208 LED 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-O-2897	Orange	20	2.0	2.5	600	605	610	4000	8500

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)**
AlInGaP	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 @I_F=20mA

Bin	Min.	Max.	Unit
☐	1.7	2.5	V

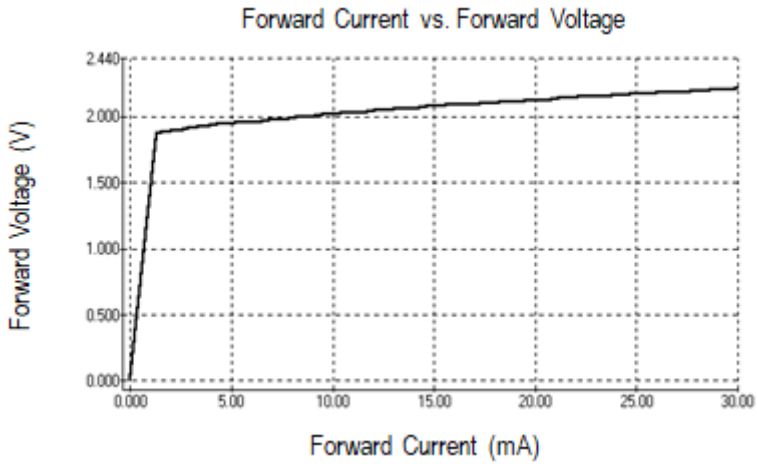
Luminous Intensity I_V @ I_F=20mA

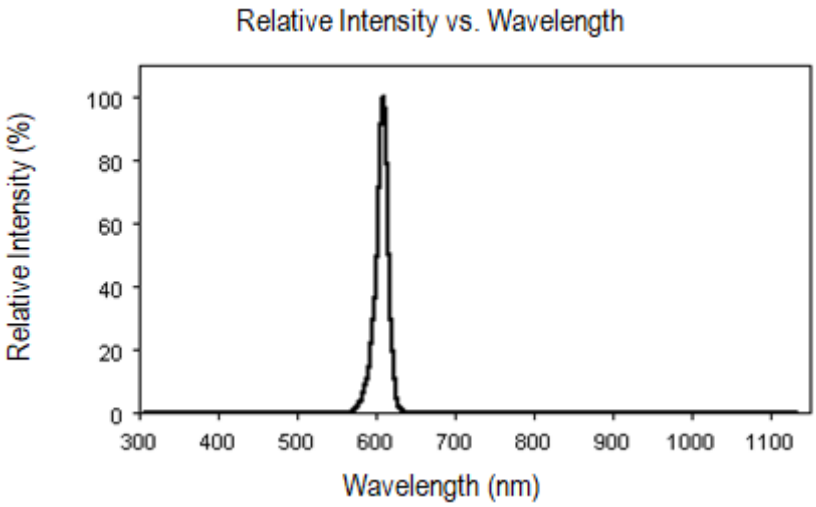
Bin	Min.	Max.	Unit
Z	4000	5200	mcd
a	5200	6800	
b	6800	8800	
c	8800	11200	
d	11200	14200	

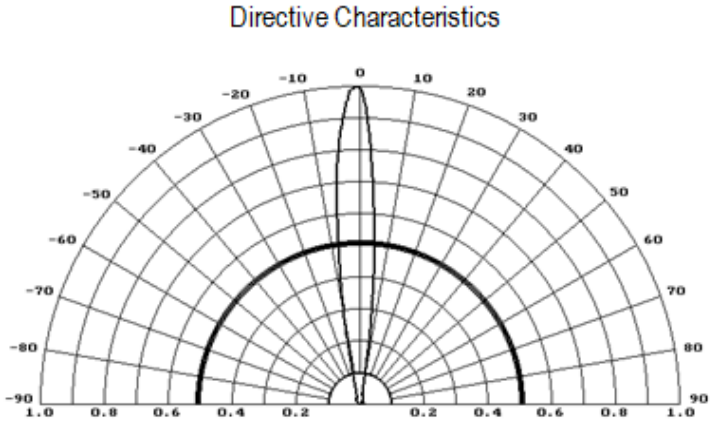
Dominant Wavelength λ_D @ I_F=20mA

Bin	Min.	Max.	Unit
p	600	605	nm
q	605	610	

Characteristic Curves

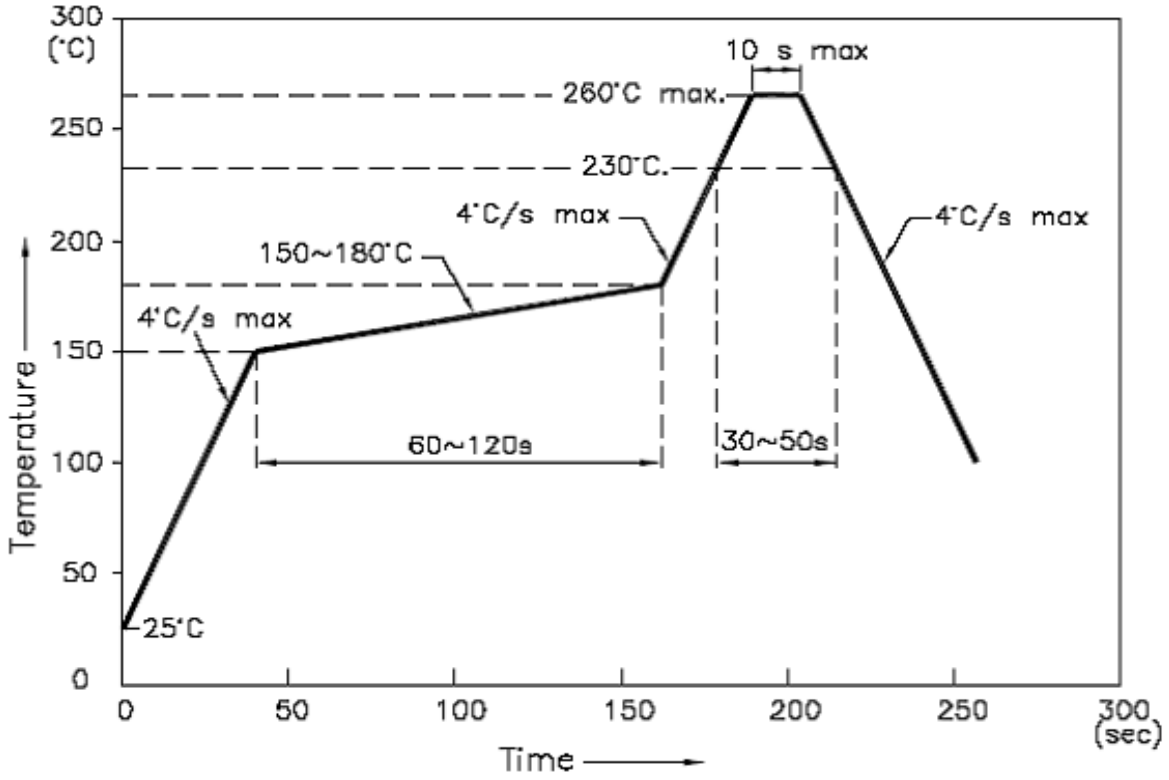




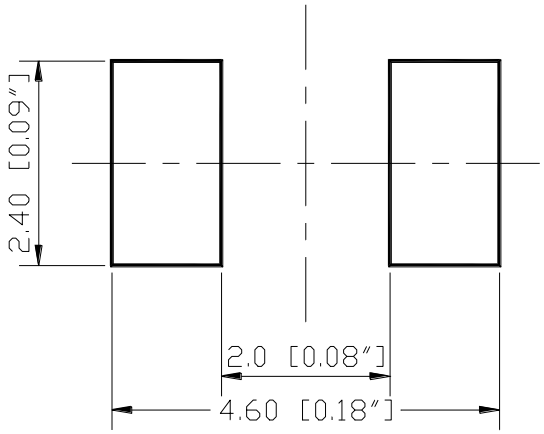


Solder Profile & Footprint

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



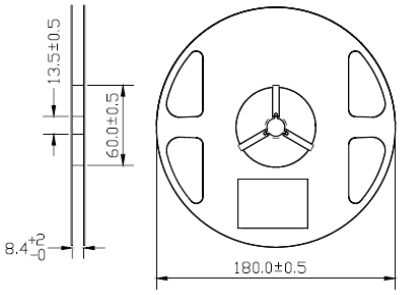
Recommended Pad Layout



Units: mm

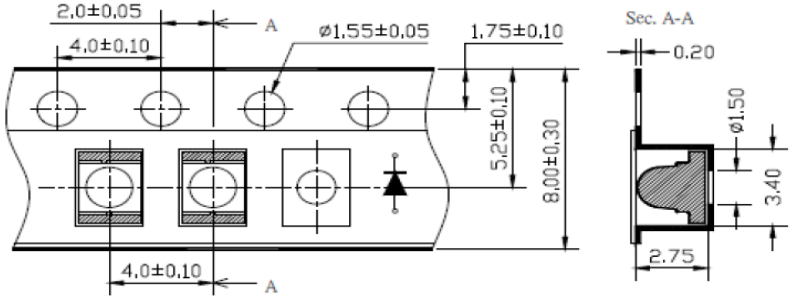
Packing

Reel Dimension:



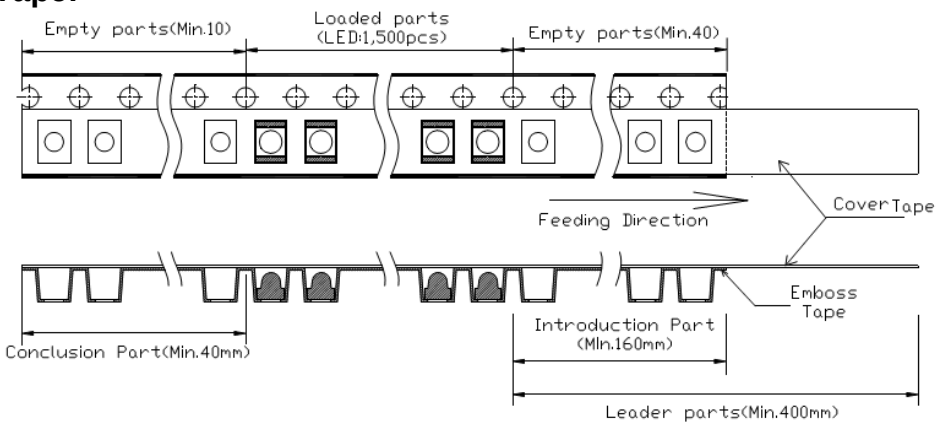
Unit: mm

Tape Dimension:

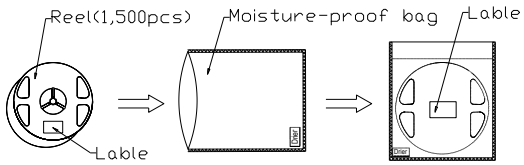


Unit: mm

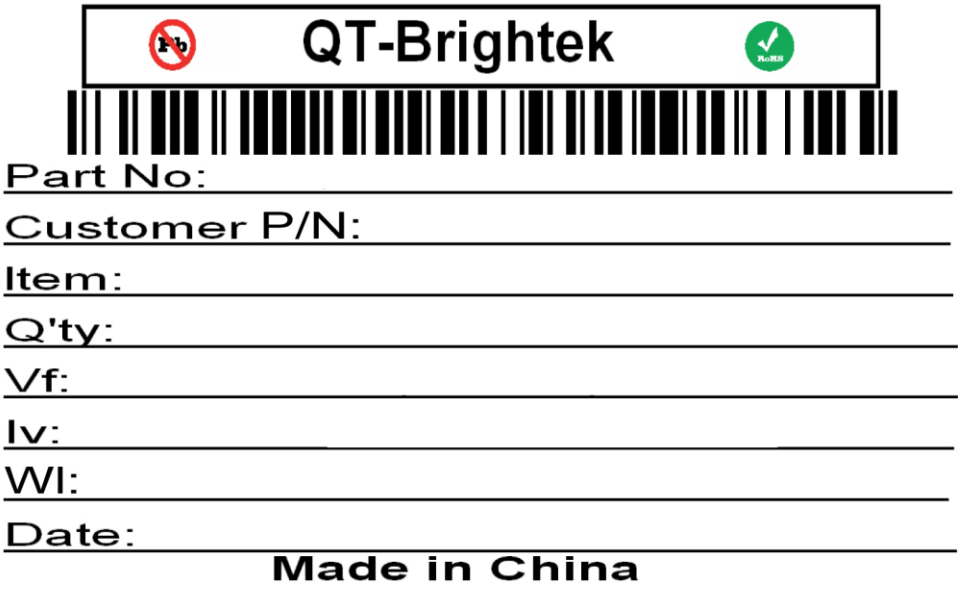
Arrangement of Tape:



Packaging Specification:



Labeling



Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP653-O-2897	QBLP653-O-2897	Iv=8500mcd typ. / Color = 600nm to 610nm @ 20mA	1,500 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP653-O-2897	V1.0	03/16/2023

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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.