QT-Brightek Chip LED Series

SMD 1209 Blue LED

Part No.: QBLP653-IB-2897

2897: High Brightness Version

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Introduction

Feature:

- Water clear lens
- Package in tap and reel
- Bright 1209 LED package
- Beam angle: 15 deg typ.
- Pkg height: 2.5mm

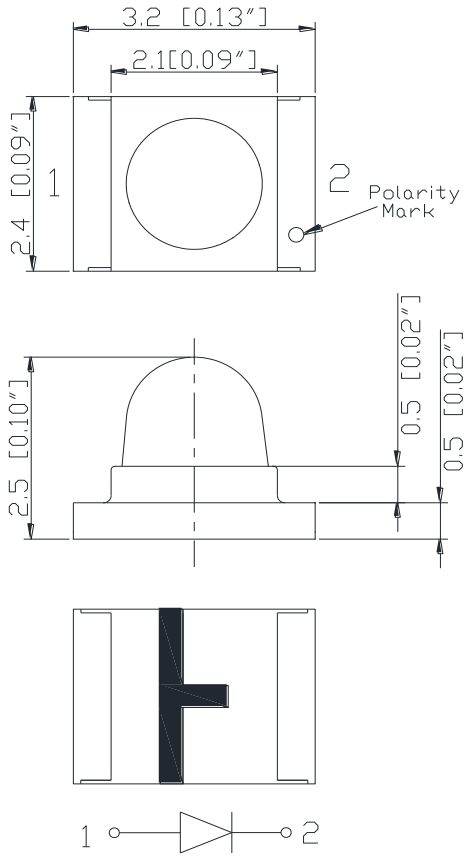
Application:

- Status indication
- Back lighting application
- Light pipe
- Emergency lighting

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)			λ_P (nm)	I_V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Typ.	Min.	Typ.
QBLP653-IB-2897	Blue	20	3.1	3.7	460	465	475	460	1300	2400

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)**
InGaN	111	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
f	2.8	3.1	V
g	3.1	3.4	
h	3.4	3.7	

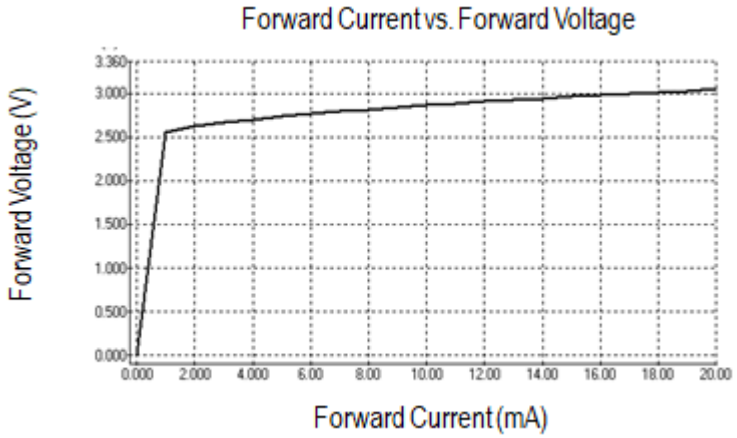
Luminous Intensity I_V @ I_F=20mA

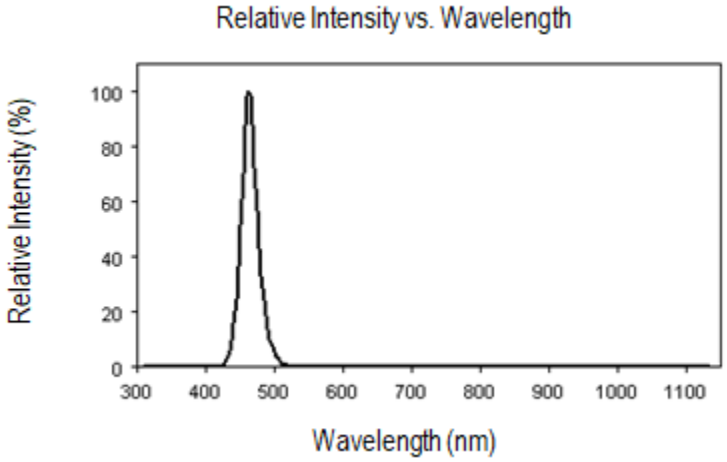
Bin	Min.	Max.	Unit
A	1300	1950	mcd
B	1950	2650	
C	2650	3800	
D	3800	5700	

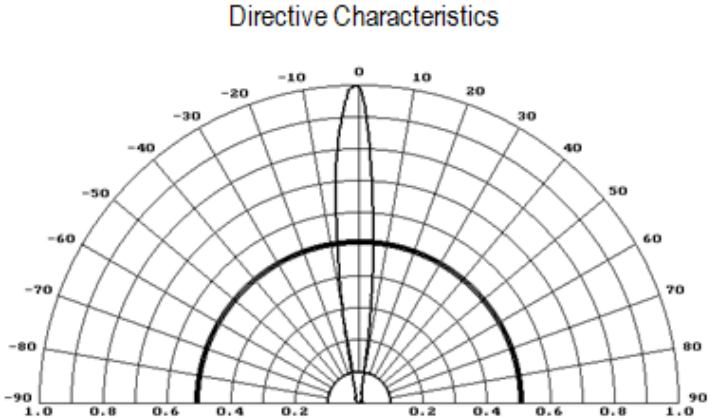
Dominant Wavelength λ_D @ I_F=20mA

Bin	Min.	Max.	Unit
E	460	465	nm
F	465	470	
G	470	475	

Characteristic Curves

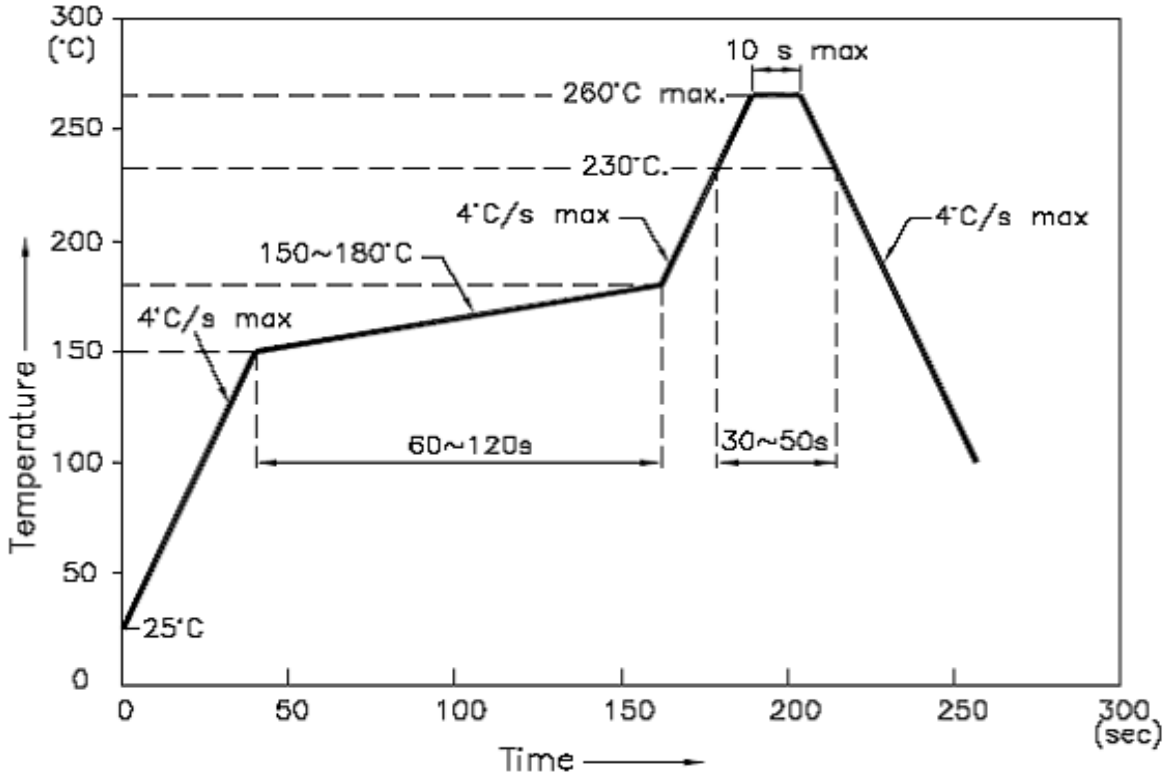




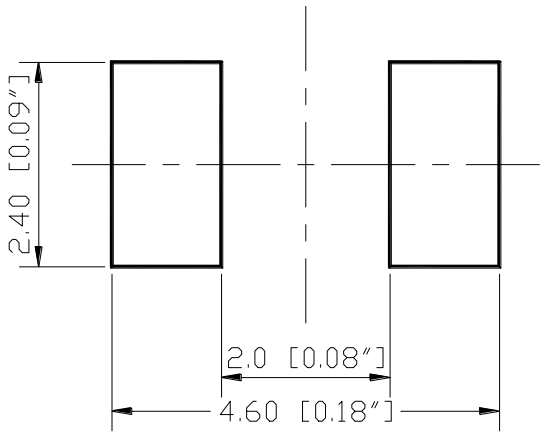


Solder Profile & Footprint

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



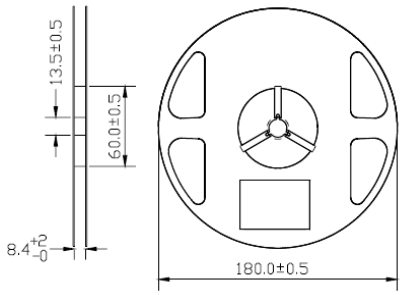
Recommended Pad Layout



Units: mm

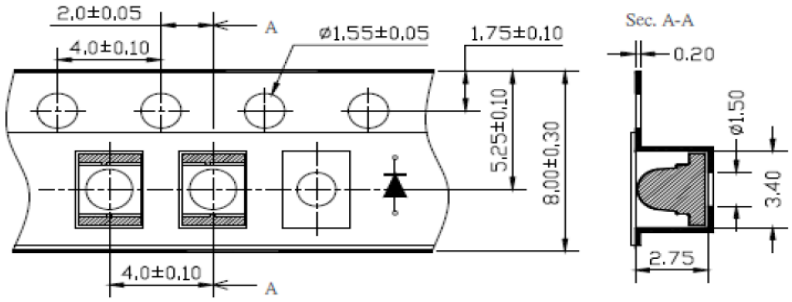
Packing

Reel Dimension:



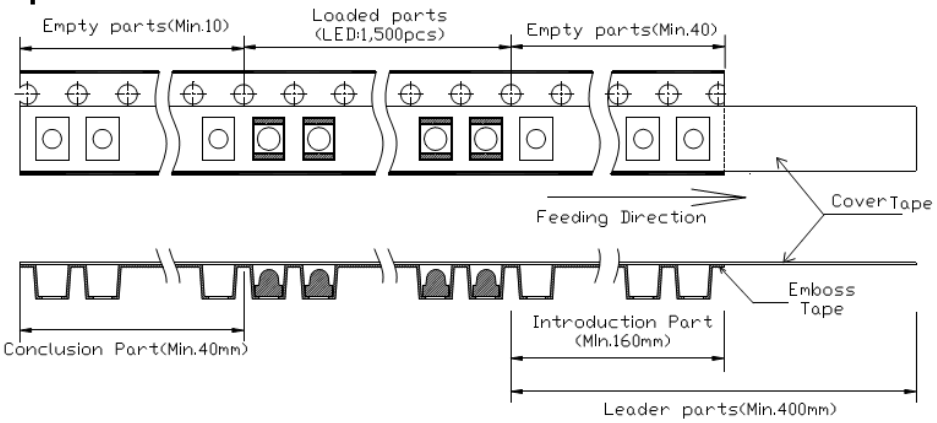
Unit: mm

Tape Dimension:

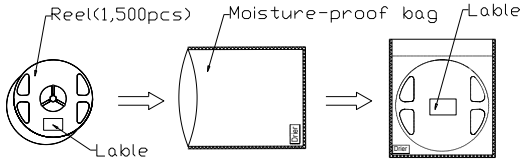


Unit: mm

Arrangement of Tape:



Packaging Specification:



Labeling

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP653-IB-2897	Iv=2400mcd typ. / λ_D = 460nm to 475nm @ 20mA	1,500 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP653-IB-2897	V1.0	06/07/2023

Disclaimer

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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.