

QT-Brightek Chip LED Series

SMD 1209 Blue LED

Part No.: QBLP653R-IB-2897

**R: Reverse Mount
2897: High Brightness Version**



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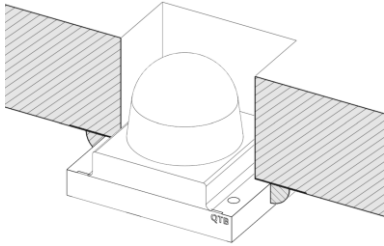
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Introduction

Feature:

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



Application:

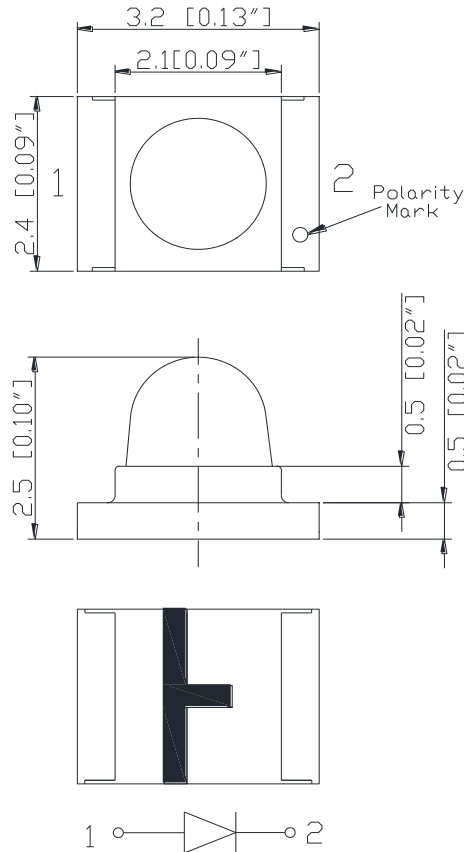
- Status indication
- Back lighting application
- Light pipe
- Emergency lighting

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.
QBLP653R-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 _{SO L} (°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

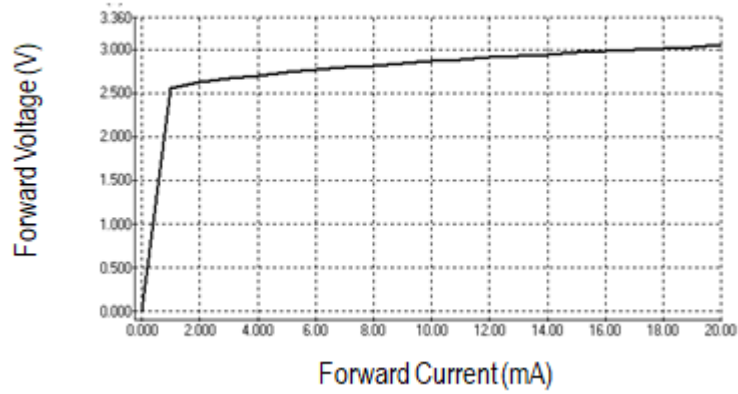
Bin	Min.	Max.	Unit
A	1300	1950	mcd
B	1950	2650	
C	2650	3800	
D	3800	5700	

Dominant Wavelength λ_D @ I_F=20mA

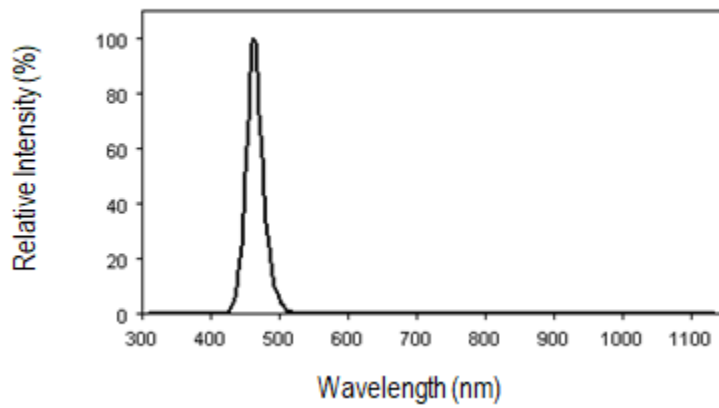
Bin	Min.	Max.	Unit
E	460	465	nm
F	465	470	
G	470	475	

Characteristic Curves

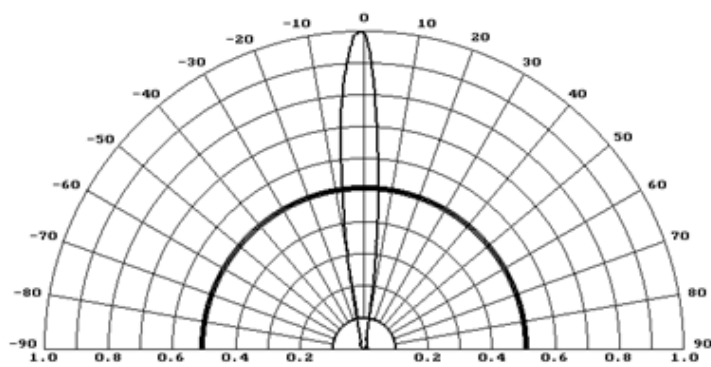
Forward Current vs. Forward Voltage



Relative Intensity vs. Wavelength

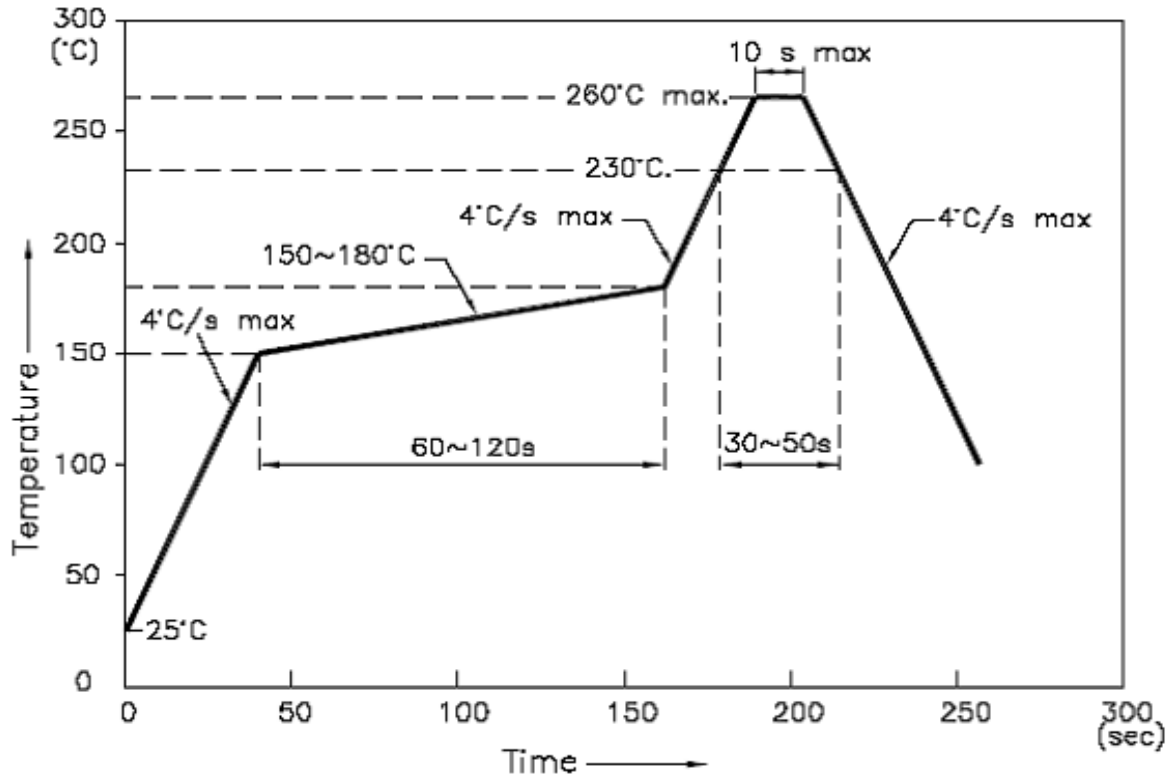


Directive Characteristics



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	Mounting Illustration
Unit: mm	

Labeling



Part No: _____
Customer P/N: _____
Item: _____
Q'ty: _____
Vf: _____
Iv: _____
WI: _____
Date: _____

Made in China

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP653R-IB-2897	Iv=2400mcd typ. / $\lambda_D = 460\text{nm to } 475\text{nm @ } 20\text{mA}$	1,500 units



Revision History

Description:	Revision #	Revision Date
New Release of QBLP653R-IB-2897	V1.0	07/01/2024

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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.