

**QT-Brightek Chip LED Series**

**SMD 1209 Yellow LED**

**Part No.: QBLP653R-Y-2897**

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



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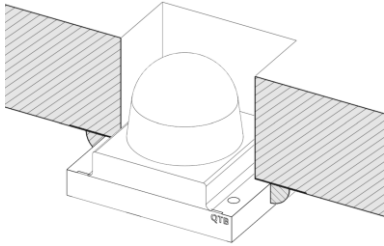
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## Introduction

### 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:

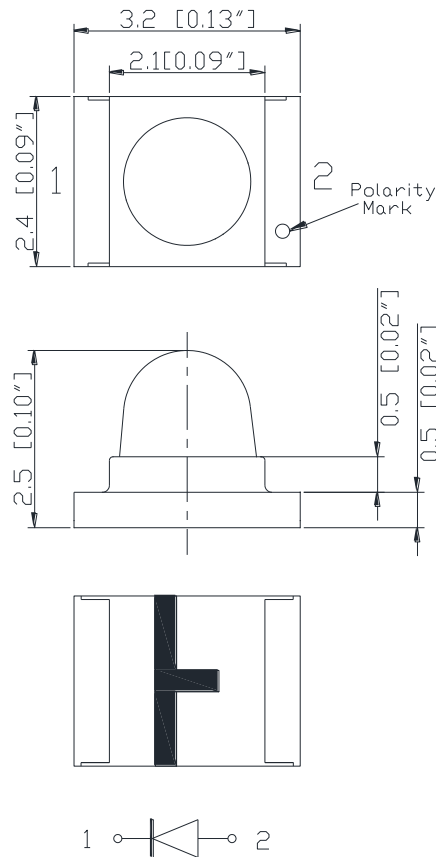
- Status indication
- Back lighting application

### Certification & Compliance:

- ISO9001
- RoHS Compliant



### Dimension:



Units: mm / tolerance = +/-0.15mm

## Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I <sub>F</sub> (mA)	V <sub>F</sub> (V)		λ <sub>D</sub> (nm)			λ <sub>P</sub> (nm)	I <sub>V</sub> (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Typ.	Min.	Typ.
QBLP653R-Y-2897	Yellow	20	2.1	2.5	585	590	595	595	4000	6600

## Absolute Maximum Rating

Material	P <sub>d</sub> (mW)	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)*	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)	T <sub>SOL</sub> (°C)**
AllnGaP	69	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<sub>F</sub> @ I<sub>F</sub>=20mA

Bin	Min.	Max.	Unit
□	1.7	2.5	V

## Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=20mA

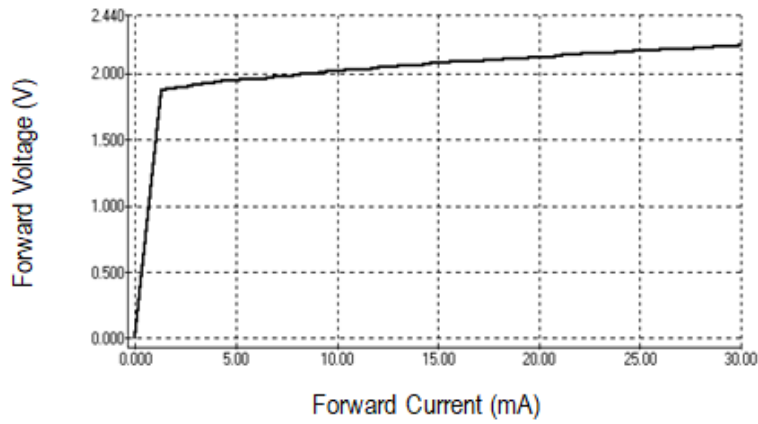
Bin	Min.	Max.	Unit
Z	4000	5200	mcd
a	5200	6800	
b	6800	8800	
c	8800	11200	

## Dominant Wavelength λ<sub>D</sub> @ I<sub>F</sub>=20mA

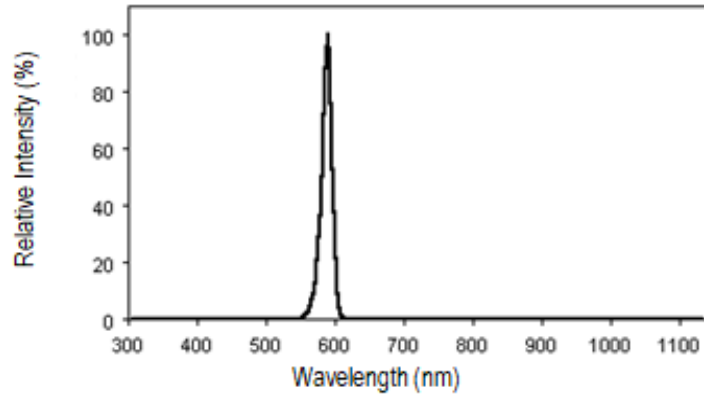
Bin	Min.	Max.	Unit
m	585	590	nm
n	590	595	

## Characteristic Curves

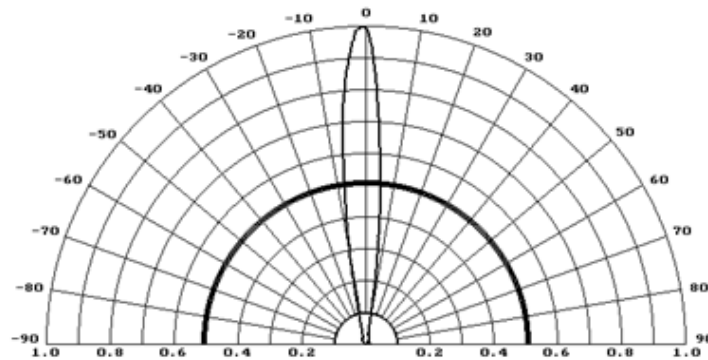
Forward Current vs. Forward Voltage



Relative Intensity vs. Wavelength

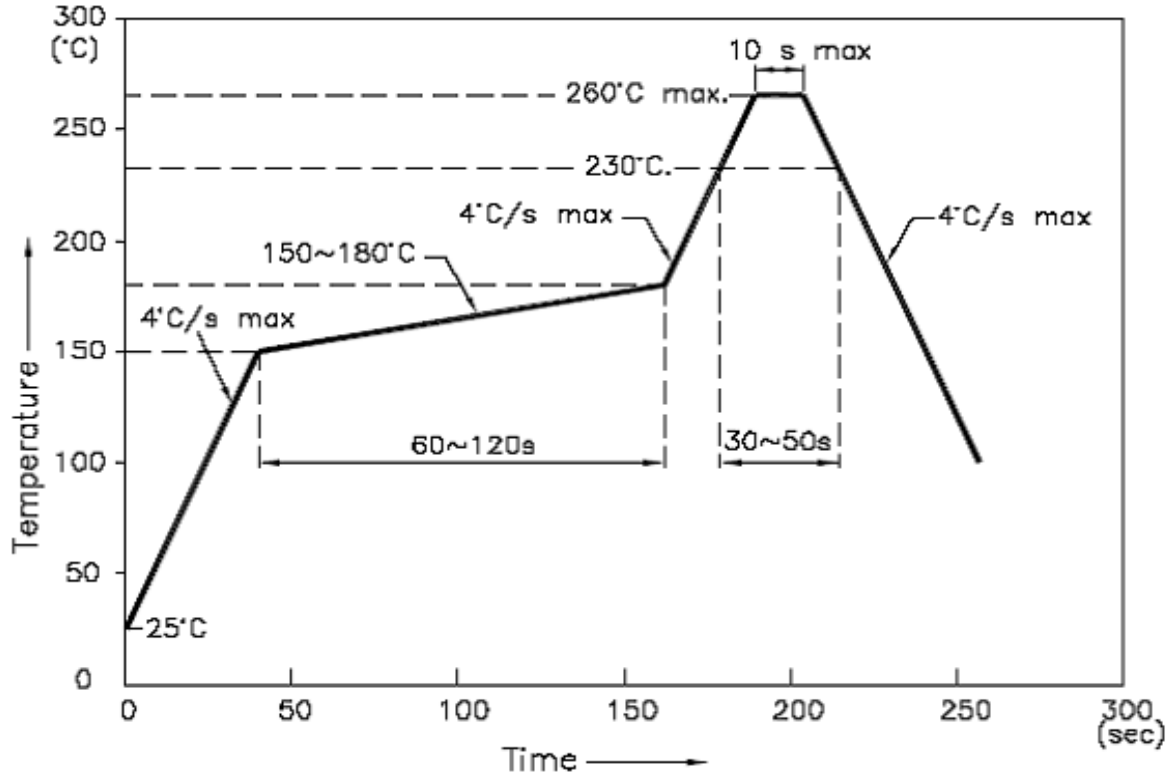


Directive Characteristics



## Solder Profile & Footprint

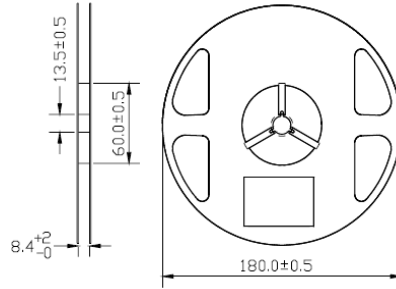
-The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



Recommended Pad Layout	Mounting Illustration
Unit: mm	

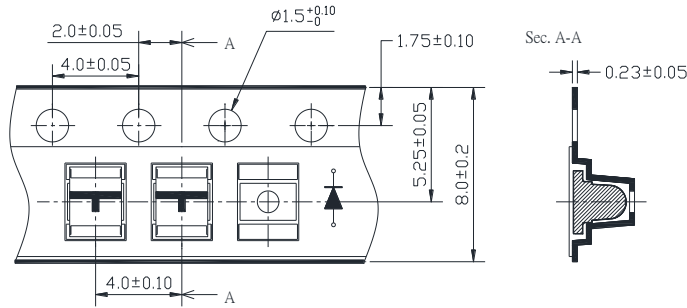
## Packing

Reel Dimension:



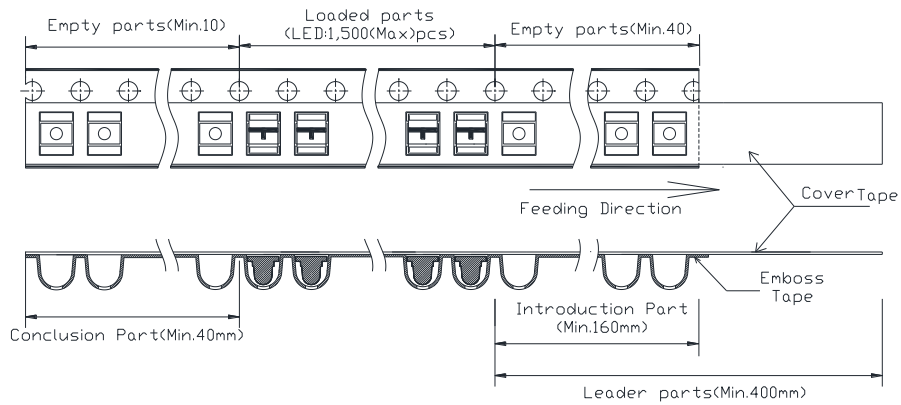
Unit: mm

Tape Dimension:

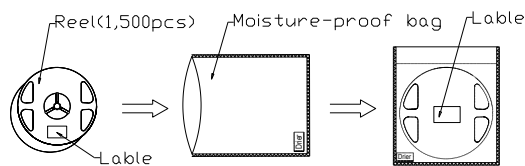


Unit: mm

Arrangement of Tape:



Packaging Specification:



## Labeling



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

**Made in China**

## Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP653R-Y-2897	Iv=6600mcd typ. / Color = 585nm to 595nm @ 20mA	1,500 units





## Revision History

Description:	Revision #	Revision Date
New Release of QBLP653R-Y-2897	V1.0	July 03, 2024

## 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.