

**QT-Brightek Chip LED Series**

**SMD 1209 Green LED**

**Part No.: QBLP653R-IG5-2897**

**R: Reverse Mount**

**5: 5mA**

**2897: High Brightness Version**



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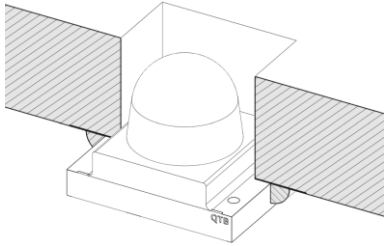
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## Introduction

### 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:

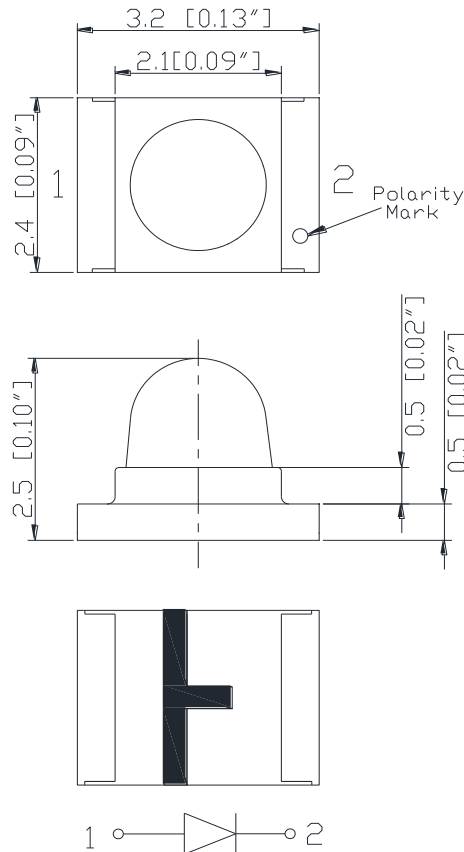
- Status indication
- Back lighting application
- Light pipe
- Signal

### 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-IG5-2897	Green	5	2.9	3.4	525	530	535	523	3200	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>SO L</sub> (°C)**
InGaN	102	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>=5mA

Bin	Min.	Max.	Unit
e	2.5	2.8	V
f	2.8	3.1	
g	3.1	3.4	

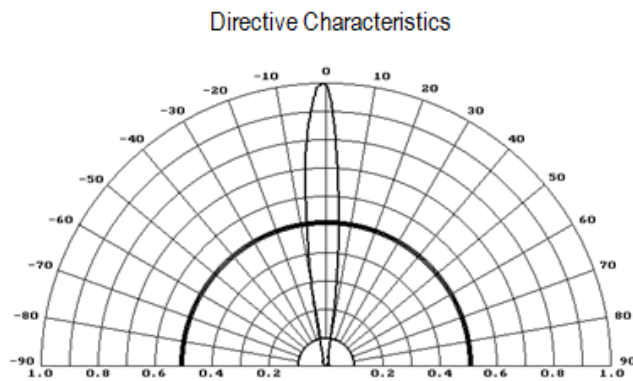
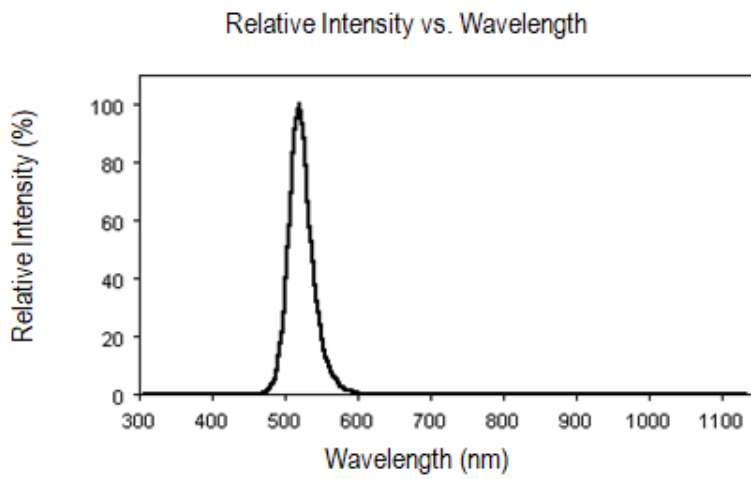
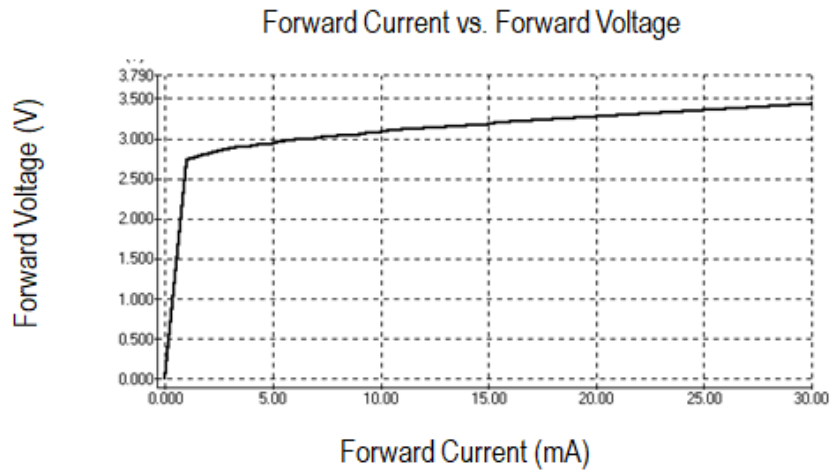
## Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=5mA

Bin	Min.	Max.	Unit
Y	3200	4000	mcd
Z	4000	5200	
a	5200	6800	
b	6800	8800	
c	8800	11200	

## Dominant Wavelength λ<sub>D</sub> @ I<sub>F</sub>=5mA

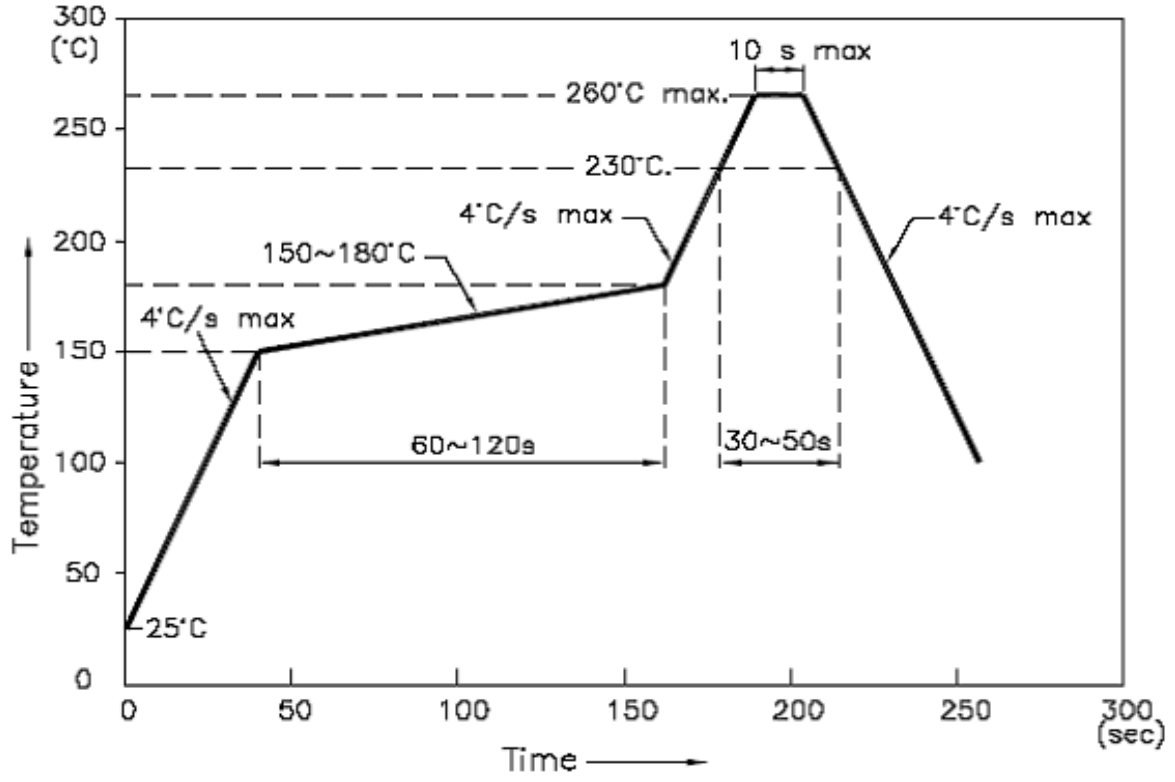
Bin	Min.	Max.	Unit
W	525	527.5	nm
X	527.5	530	
Y	530	532.5	
Z	532.5	535	

## Characteristic Curves



## Solder Profile & Footprint

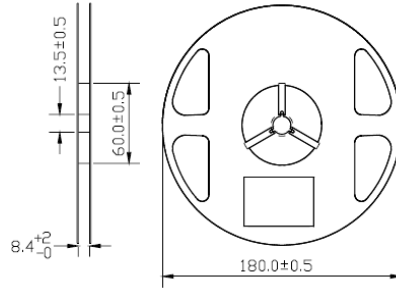
-The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



Recommended Pad Layout	Mounting Illustration
Unit: mm	

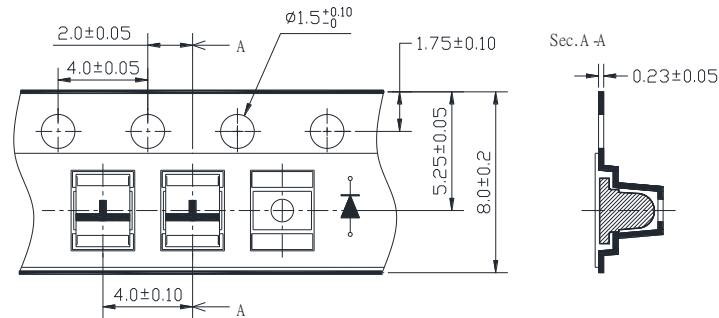
## Packing

Reel Dimension:



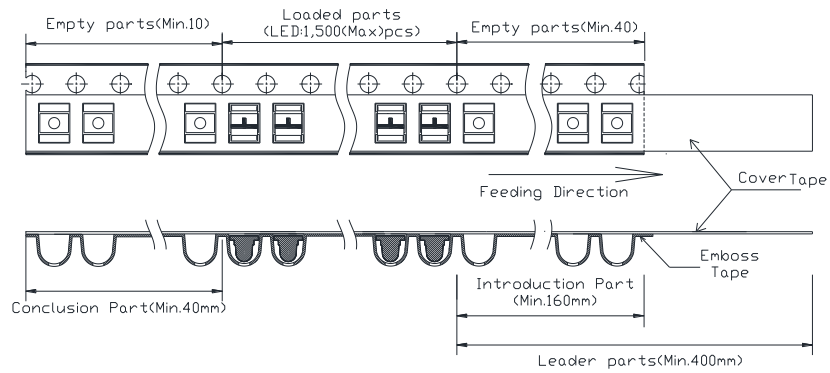
Unit: mm

Tape Dimension:

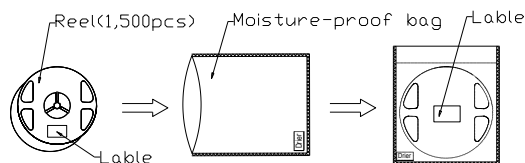


Unit: mm

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-IG5-2897	Iv=6600mcd typ. / Color = 525nm to 535nm @ 5mA	1,500 units





## Revision History

Description:	Revision #	Revision Date
New Release of QBLP653R-IG5-2897	V1.0	07/03/2024

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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.