QT-Brightek Chip LED Series

SMD 1209 Orange LED

Part No.: QBLP653R-O5-2897

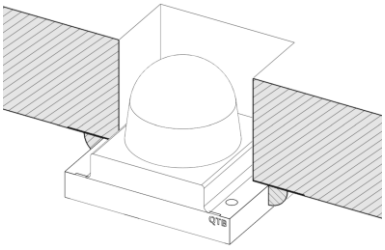
R: Reverse Mount
5: 5mA
2897: High Brightness Version

Table of Contents:

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



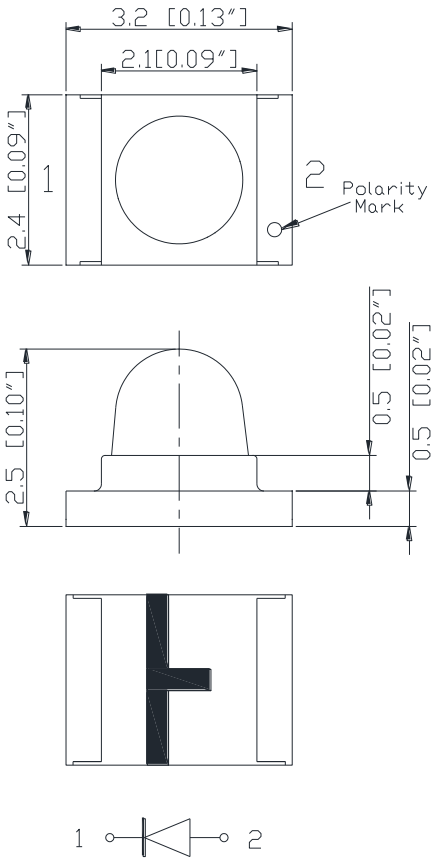
Application:

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

Certification & Compliance:

- ISO9001
- RoHS Compliant

Dimension:



Units: mm / tolerance = +/-0.15mm

Electrical / Optical Characteristic (Ta=25 ^{o}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-O5-2897	Orange	5	1.95	2.3	600	605	610	600	1000	1800

Absolute Maximum Rating

Material	P_d (mW)	I_F (mA)	I_{FP} (mA)*	V_R (V)	T_{OP} (^{o}C)	T_{ST} (^{o}C)	T_{SOL} (^{o}C)**
AlInGaP	75	30	125	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/8 @ 1KHz

**IR Reflow for no more than 10 sec @ 260 ^{o}C

Forward Voltage V_F @ I_F=5mA

Bin	Min.	Max.	Unit
☐	1.7	2.3	V

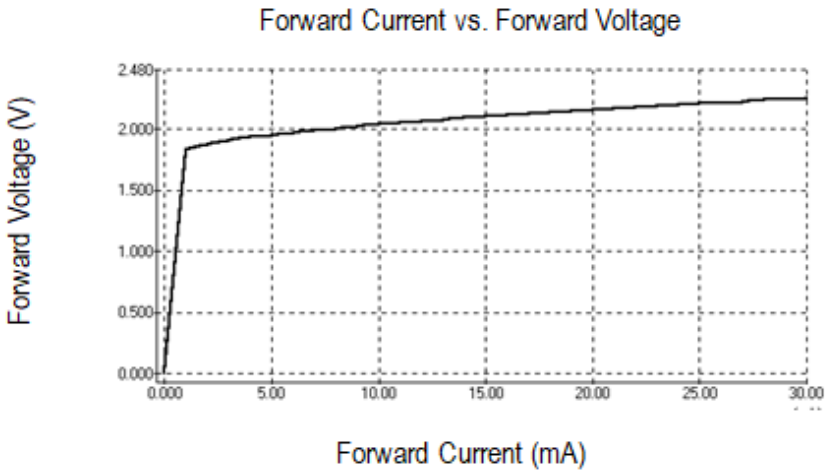
Luminous Intensity I_V @ I_F=5mA

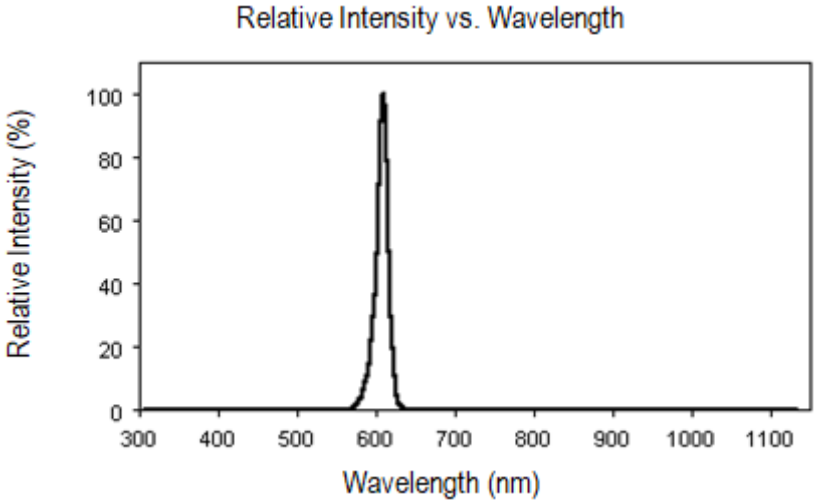
Bin	Min.	Max.	Unit
T	1000	1250	mcd
U	1250	1600	
V	1600	2000	
W	2000	2500	
X	2500	3200	

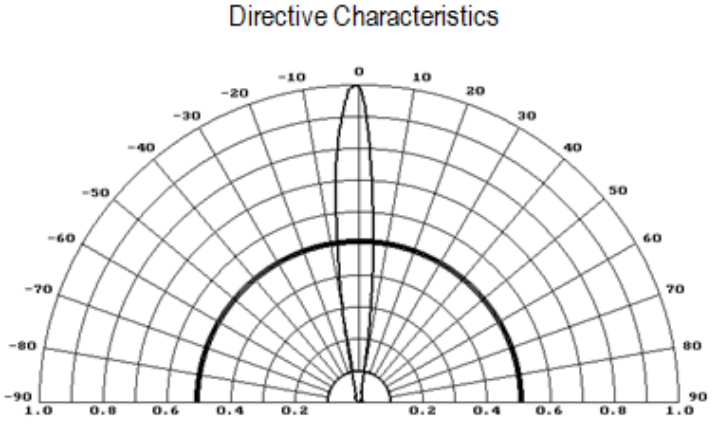
Dominant Wavelength λ_D @ I_F=5mA

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

Characteristic Curves

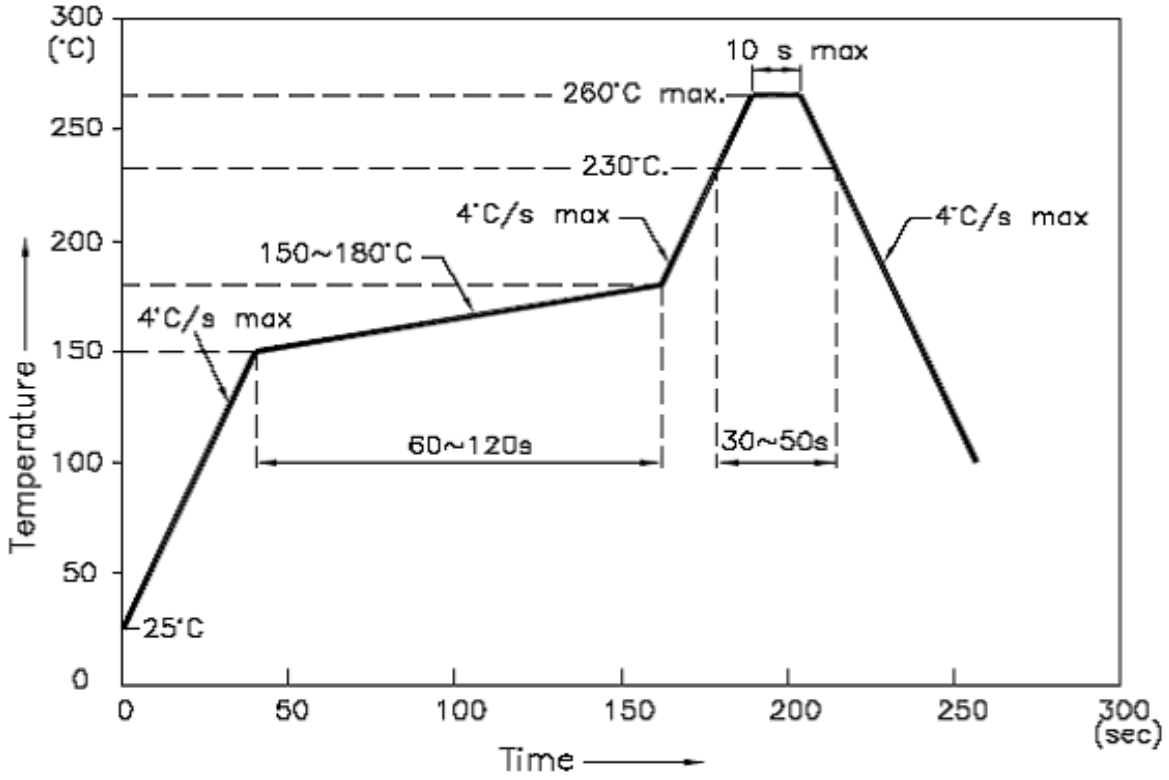


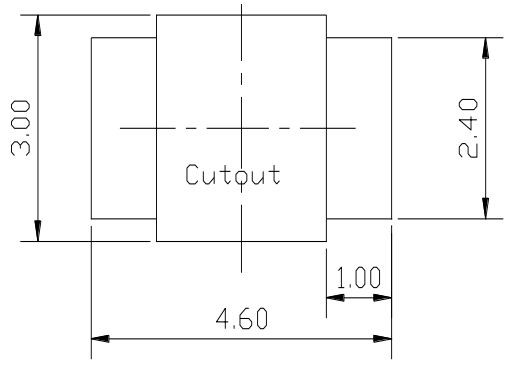
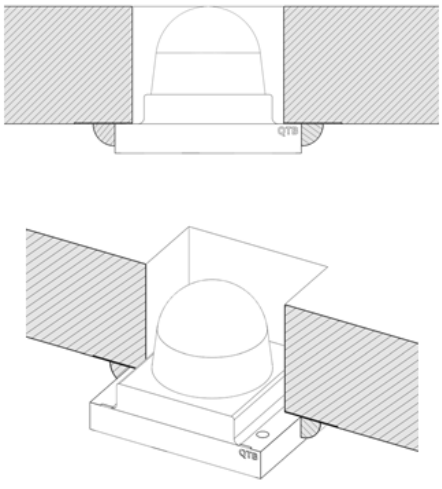




Solder Profile & Footprint

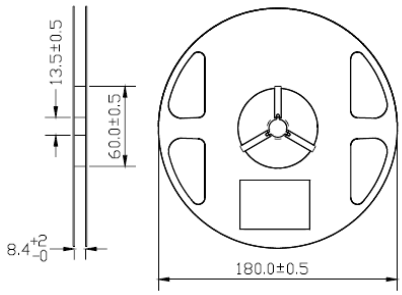
-The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



Recommended Pad Layout	Mounting Illustration
	
Unit: mm	

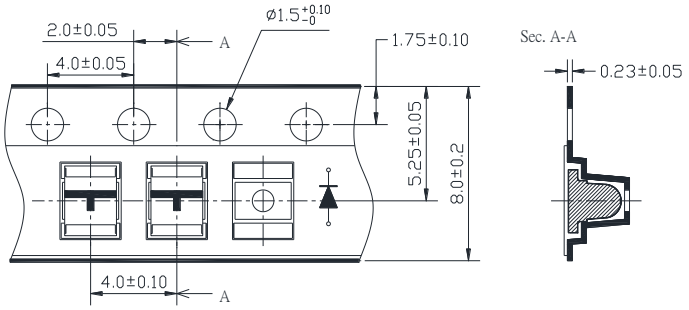
Packing

Reel Dimension:



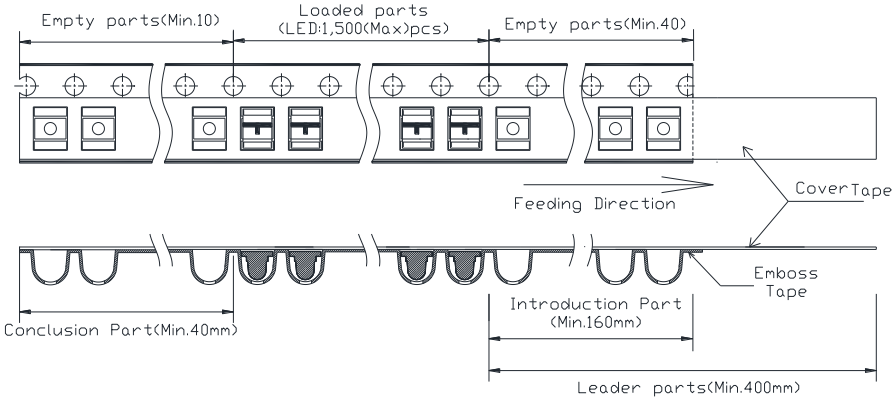
Unit: mm

Tape Dimension:

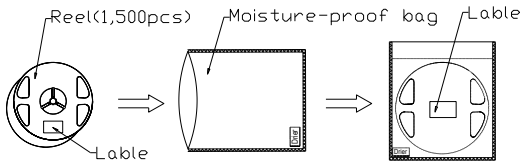


Unit: mm

Arrangement of Tape:



Packaging Specification:



Labeling

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP653R-O5-2897	Iv=1800mcd typ. / Color = 600nm to 610nm @ 5mA	1,500 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP653R-O5-2897	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.