QT-Brightek Chip LED Series

SMD 1205 LED

Part No.: QBLP655R-R03-S2897

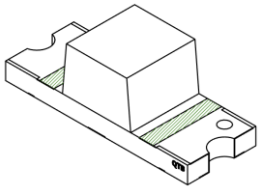
655R: Reverse Mount
3mA
S2897: Ultra High Bright

Table of Contents:

Introduction

Feature:

- Clear lens
- Package in tape and reel
- Ultra high bright red
- Viewing angle:140 degrees typ.
- Reverse mount
- Height profile: 1.1mm



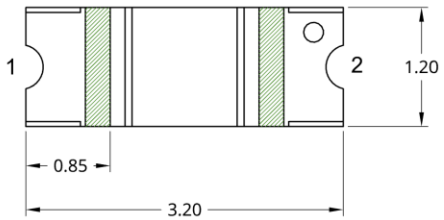
Application:

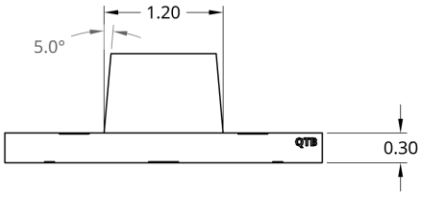
- Status indication
- Back lighting application

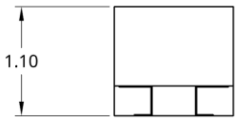
Certification & Compliance:

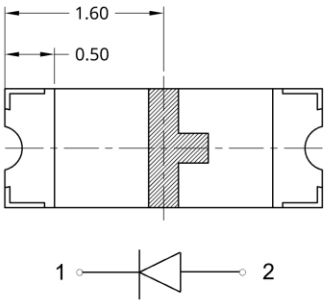
- ISO9001
- RoHS Compliant

Dimension:









Units: mm / tolerance = +/-0.1mm

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.
QBLP655R-R03-S2897	Red	3	1.8	2.2	615	618	628	629	41	80

Absolute Maximum Rating

Chip Material	P_d (mW)	I_F (mA)	I_{FP} (mA)*	V_R (V)	T_{OP} (°C)	T_{ST} (°C)	T_{SOL} (°C)**
AlInGaP	66	30	100	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/10 @ 1kHz
**IR Reflow for no more than 10 sec @ 260 °C

Forward Voltage V_F @ I_F=3mA

Bin	Min.	Max.	Unit
☐	1.6	2.2	V

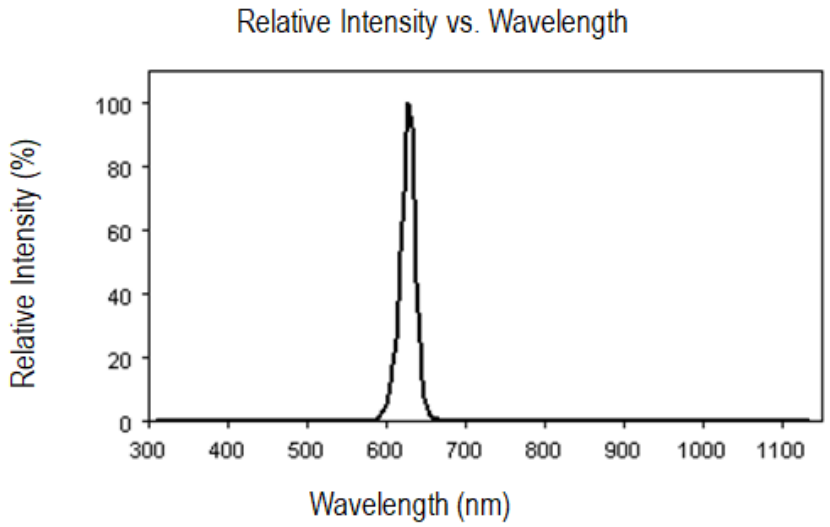
Luminous Intensity I_V @ I_F=3mA

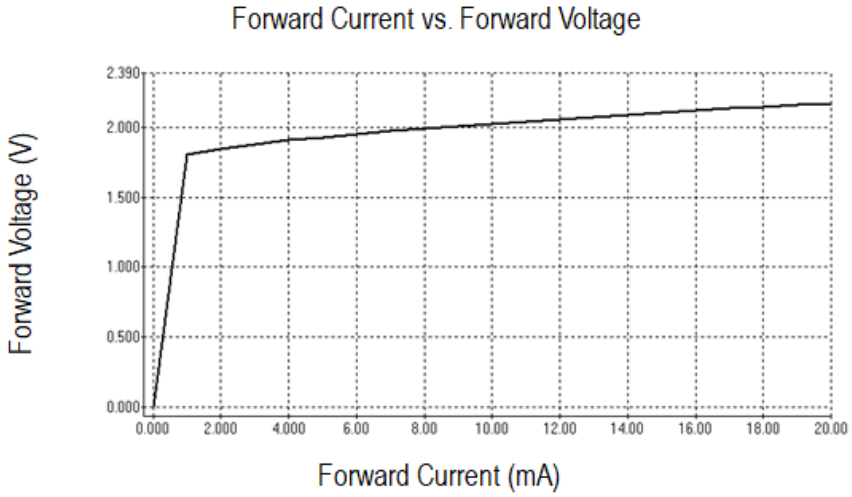
Bin	Min.	Max.	Unit
2E	41	51	mcd
2F	51	65	
2G	65	82	
2H	82	103	
2I	103	128	

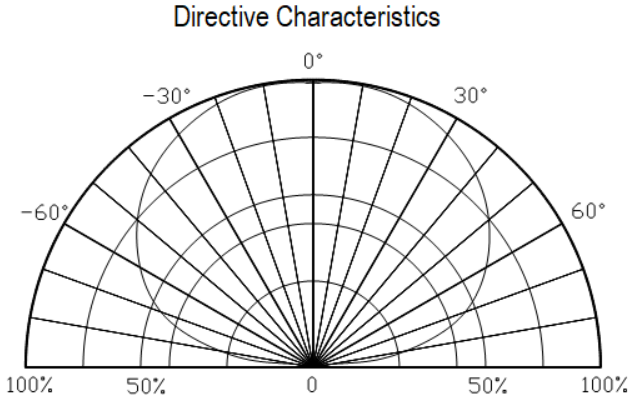
Dominant Wavelength λ_D @ I_F=3mA

Bin	Min.	Max.	Unit
2S	615	619	nm
2T	619	624	
2U	624	628	

Characteristic Curves

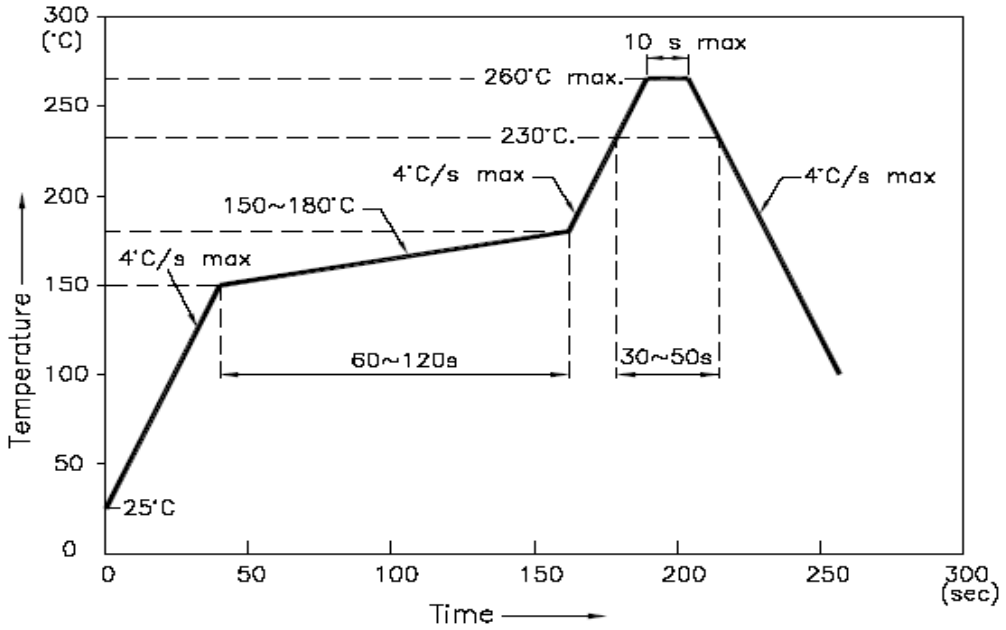




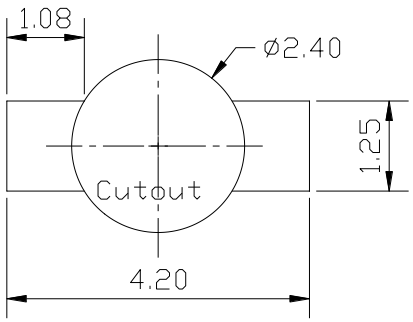


Solder Profile & Footprint

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



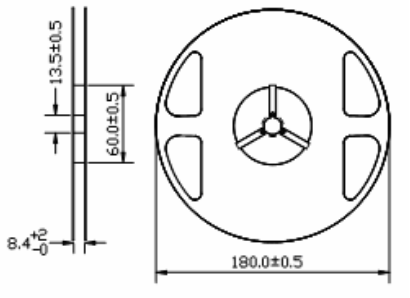
Recommended Pad Layout



Units: mm

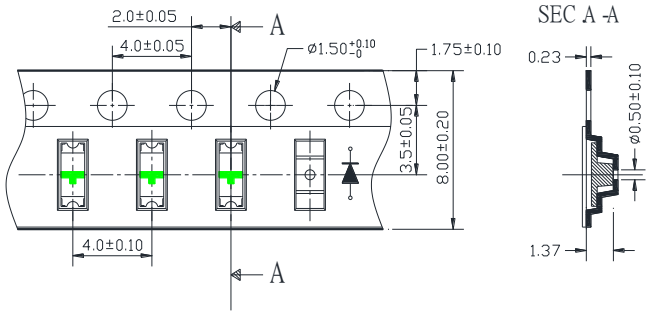
Packing

Reel Dimension:



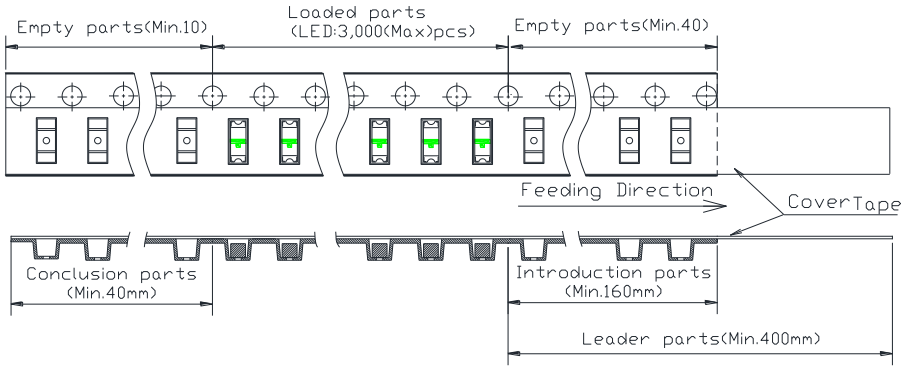
Unit: mm

Tape Dimension:

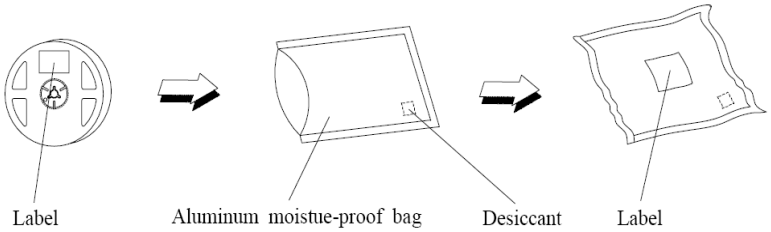


Unit: mm

Arrangement of Tape:



Packaging Specifications:



Labeling

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP655R-R03-S2897	Iv=80mcd typ. @ I_F=3mA / λ_D=615-628nm	3,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP655R-R03-S2897	V1.0	3/6/2026

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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.