

QT-Brightek Chip LED Series

SMD 1205 White LED

Part No.: QBLP655R-IW-M2897

**655R: Reverse Mount
M2897: Extra High Bright**

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	Version# 1.0	

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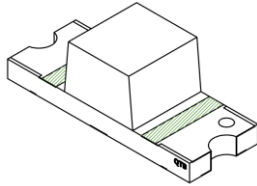
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Introduction

Feature:

- Yellow diffused lens
- Package in tape and reel
- Extra high bright white
- Viewing angle: 140 degrees
- Reverse mount



Application:

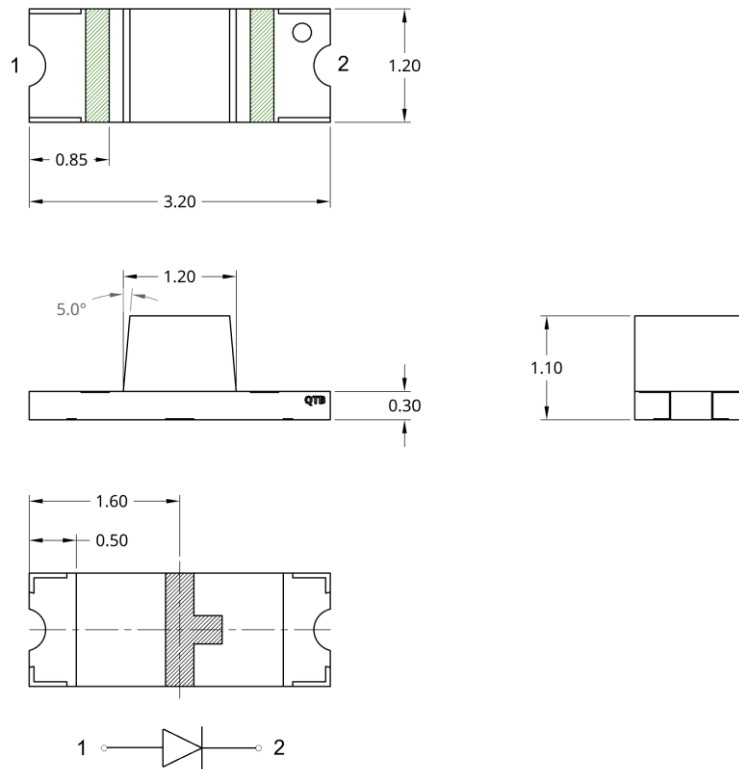
- Status indication
- Back lighting application

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)		CIE Coordinate	I _v (mcd)	
			Typ.	Max.		Min.	Typ.
QBLP655R-IW-M2897	White	20	3.2	3.6	X=0.29 Y=0.286	320	600

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)**
InGaN	108	30	100	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/8 @ 1kHz

**IR Reflow for no more than 10 sec @ 260 °C

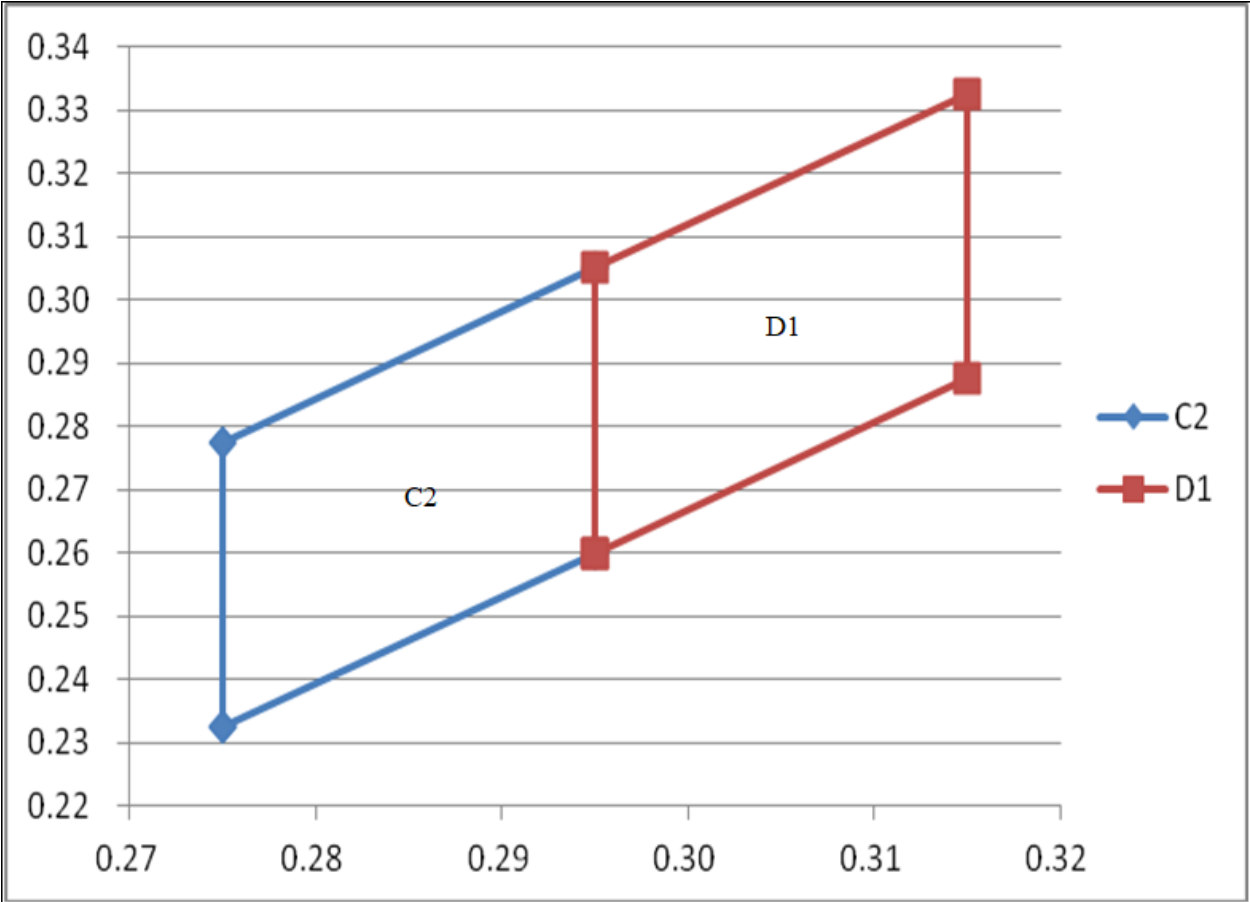
Forward Voltage V_F @ I_F=20mA

Bin	Min.	Max.	Unit
1f	2.7	3.0	V
2g	3.0	3.3	
2h	3.3	3.6	

Luminous Intensity I_v @ I_F=20mA

Bin	Min.	Max.	Unit
O	320	400	mcd
P	400	500	
Q	500	630	
R	630	800	
S	800	1000	

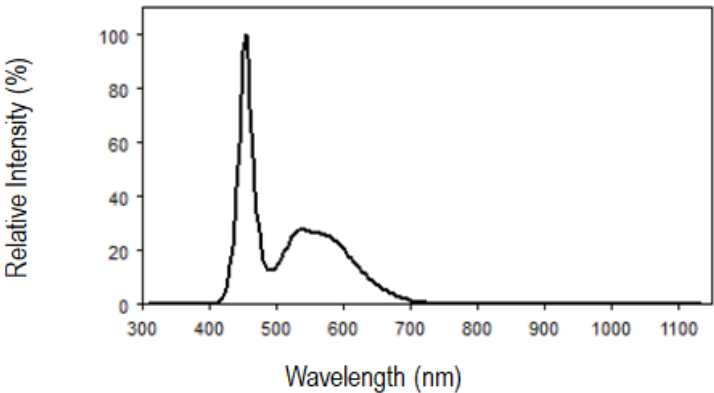
Chromaticity Coordinates



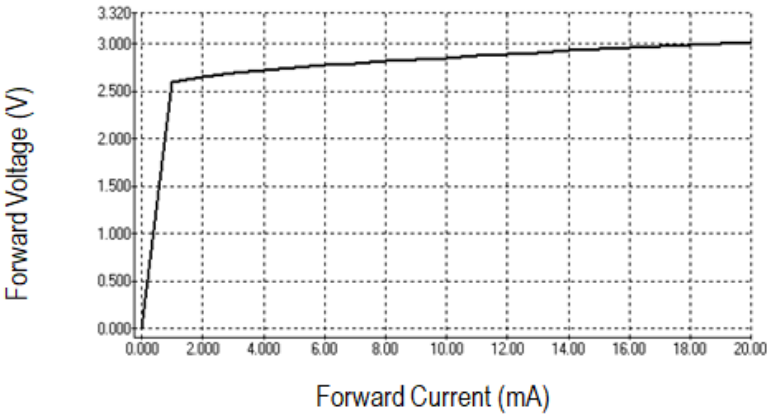
Rank	Chromaticity Coordinates				
C2	X	0.27	0.27	0.29	0.29
	Y	0.2325	0.2775	0.3050	0.2600
D1	X	0.29	0.29	0.31	0.31
	Y	0.26	0.305	0.3325	0.2875

Characteristic Curves

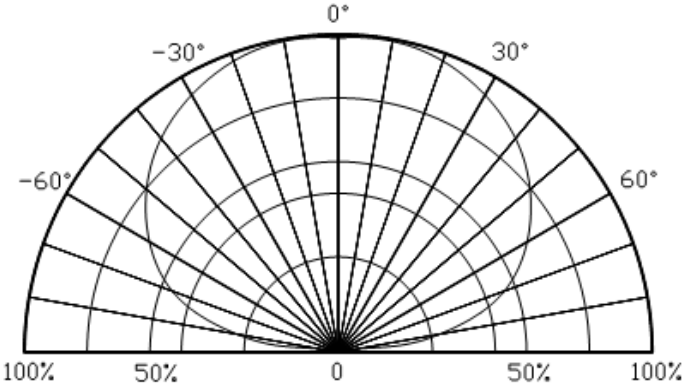
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

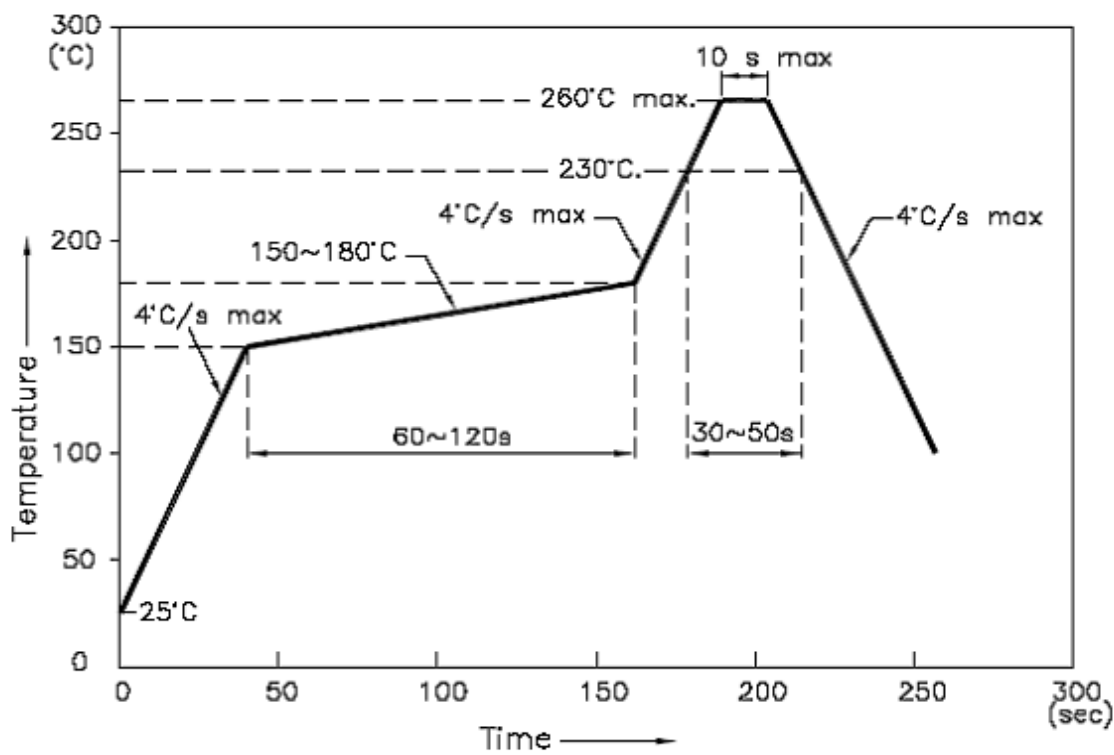


Directive Characteristics

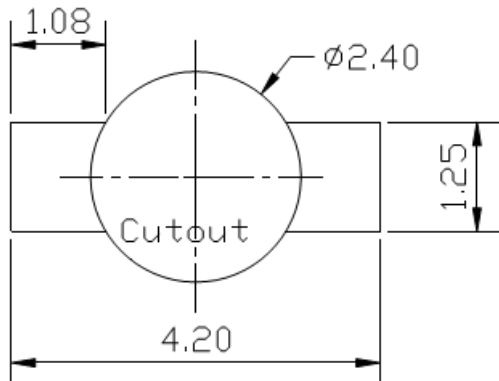


Solder Profile & Footprint

- Recommended tin solder specifications: melting temperature in the range of 178~192 °C
- The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



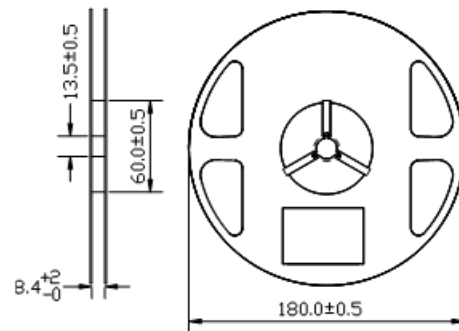
Recommended Pad Layout



Units: mm

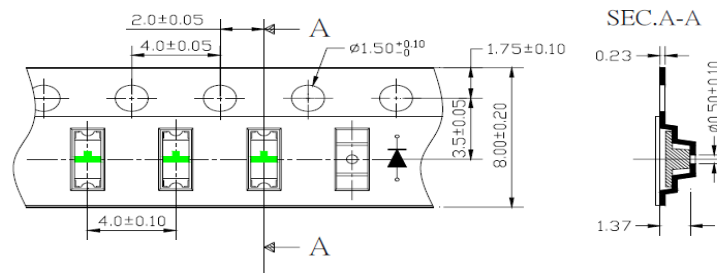
Packing

Reel Dimension:



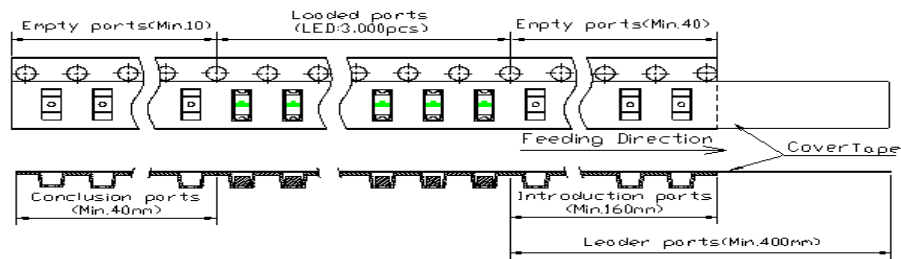
Unit: mm

Tape Dimension:

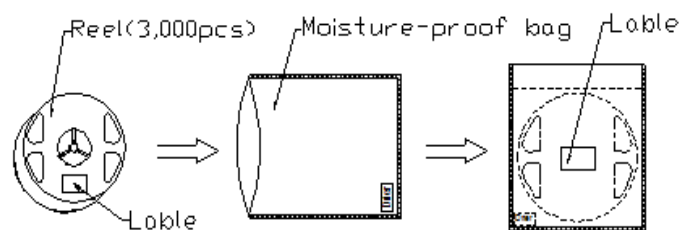


Unit: mm

Arrangement of Tape:



Packaging Specification:



Labeling



QT-Brightek





Part No:

Customer P/N:

Item:

Q'ty:

Vf:

Iv:

WI:

Date:

Made in China

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP655R-IW-M2897	Iv=600mcd typ. / CIE Coordinate: (X=0.29, Y=0.286) typ. @ If=20mA	3,000 units



Revision History

Description:	Revision #	Revision Date
New Release of QBLP655R-IW-M2897	V1.0	03/10/2026

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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.