

QT-Brightek Chip LED Series

SMD 1205 White LED

Part No.: QBLP655R-IWA-S2897

**655R: Reverse Mount
A: 10mA
S2897: Ultra High Bright**

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	Version# 1.0	

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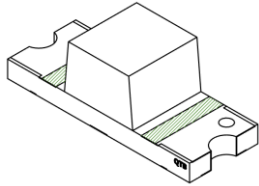
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Introduction

Feature:

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



Application:

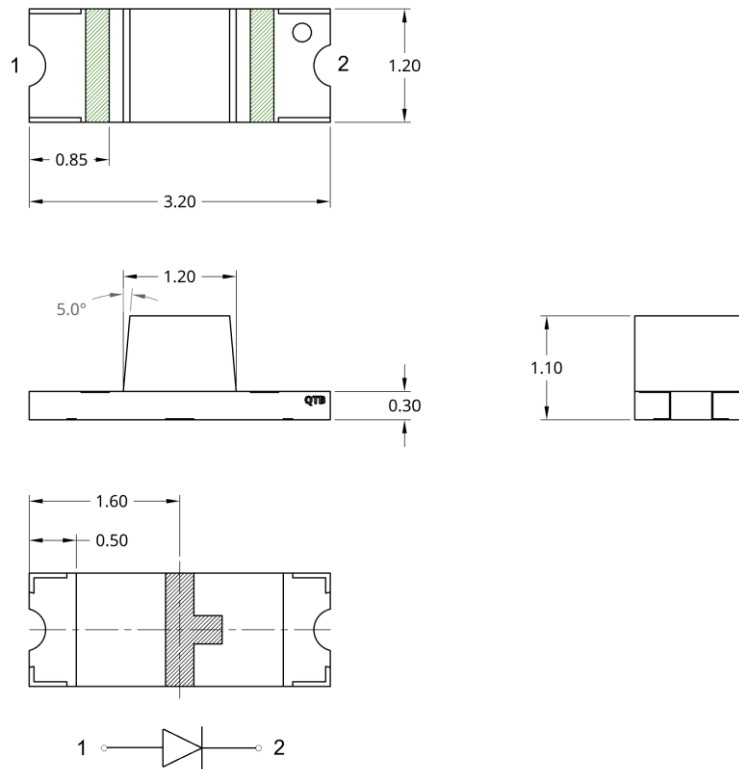
- Status indication
- Back lighting application

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 Typ.	I _V (mcd)	
			Typ.	Max.		Min.	Typ.
QBLP655R-IWA-S2897	White	10	3.1	3.4	X=0.298 Y=0.308	250	450

Absolute Maximum Rating

Chip Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SO L} (°C)**
InGaN	102	30	100	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/10 @ 1kHz

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

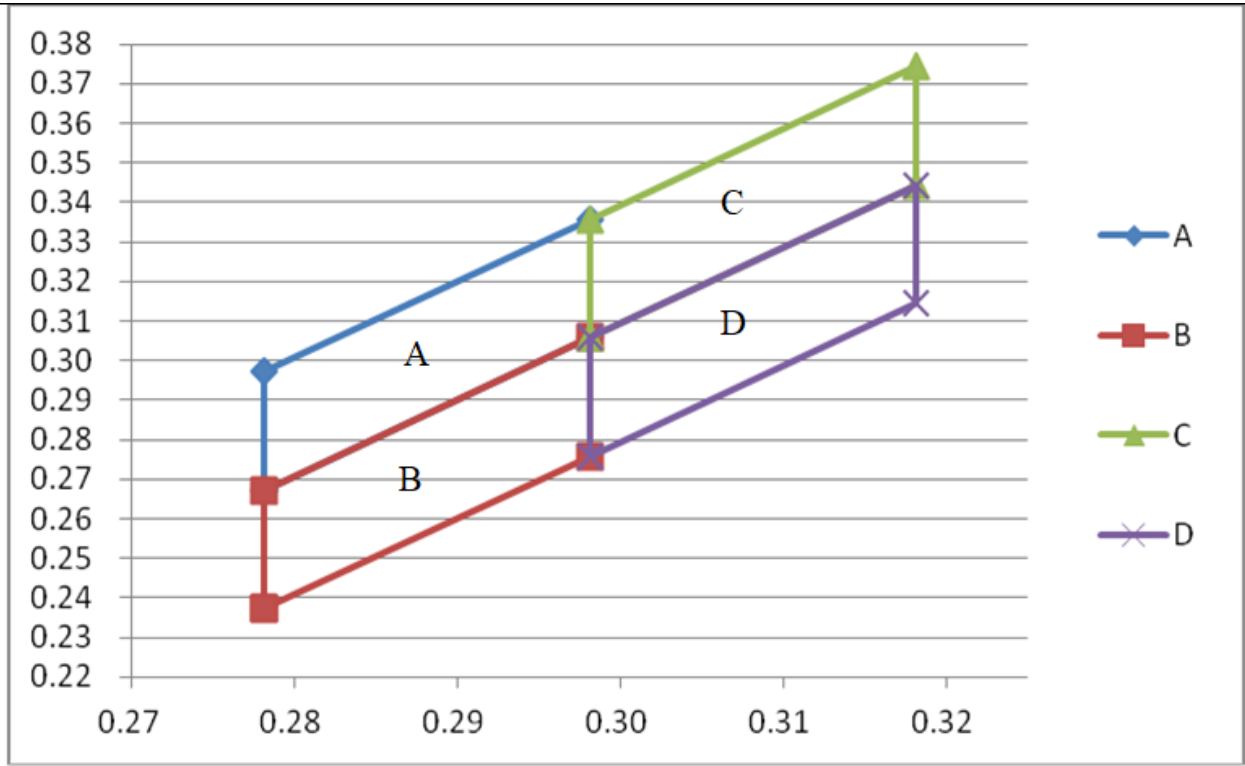
Forward Voltage V_F @ I_F=10mA

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

Luminous Intensity I_V @ I_F=10mA

Bin	Min.	Max.	Unit
N	250	320	mcd
O	320	400	
P	400	500	
Q	500	630	
R	630	800	

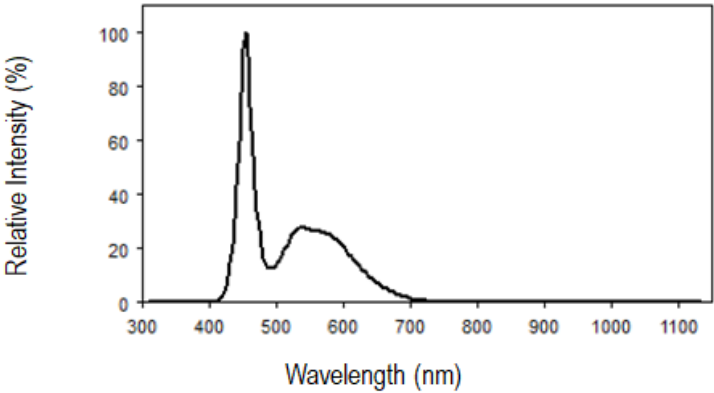
Chromaticity Coordinates



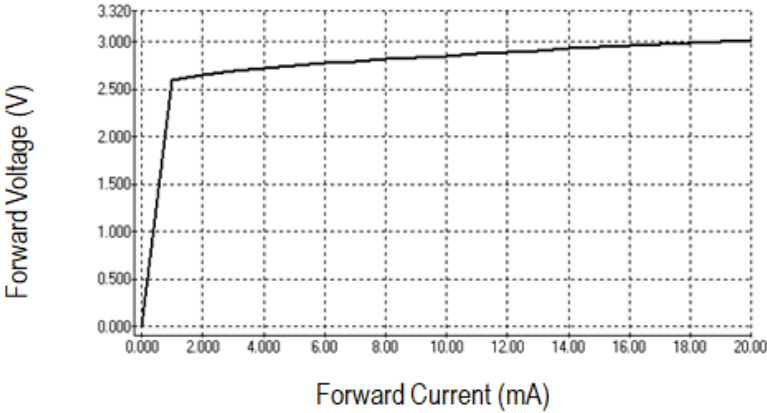
Rank	Chromaticity Coordinates					
A	X	0.278	0.278	0.298	0.298	
	Y	0.267	0.297	0.336	0.306	
B	X	0.278	0.278	0.298	0.298	
	Y	0.237	0.267	0.306	0.276	
C	X	0.298	0.298	0.318	0.318	
	Y	0.306	0.336	0.374	0.344	
D	X	0.298	0.298	0.318	0.318	
	Y	0.276	0.306	0.344	0.314	

Characteristic Curves

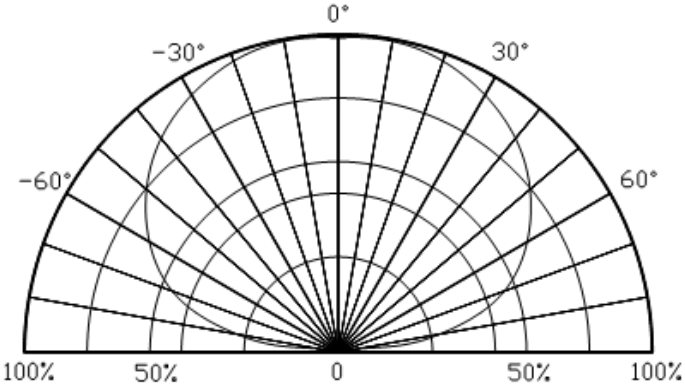
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

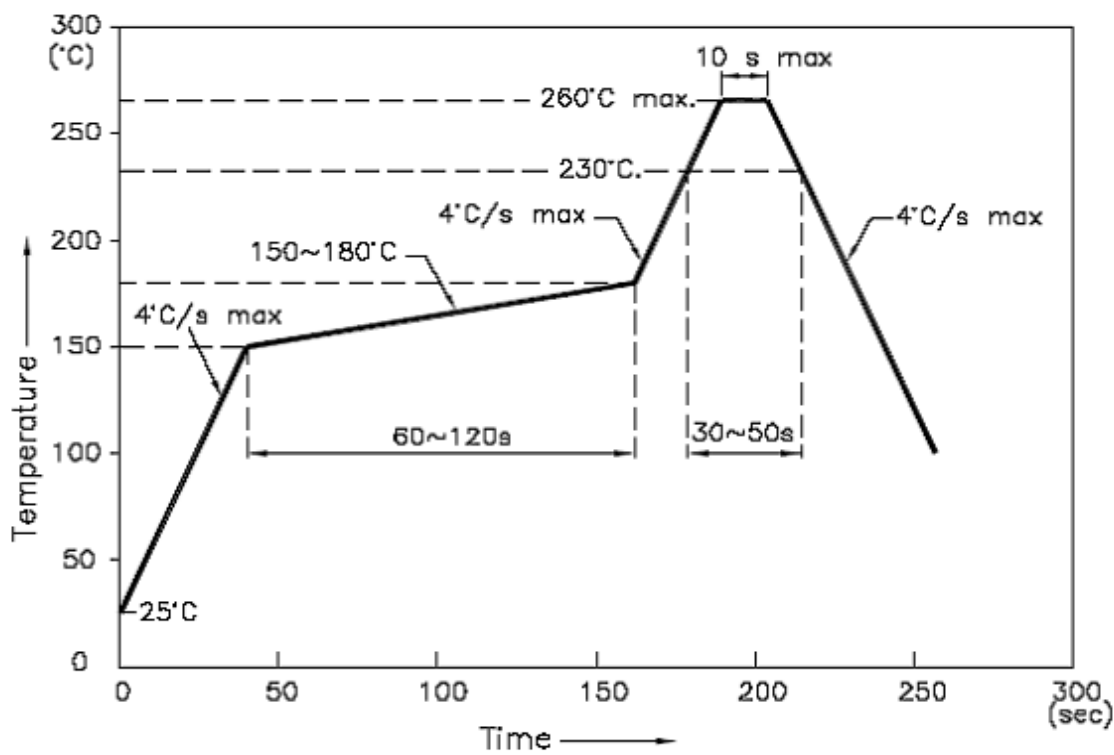


Directive Characteristics

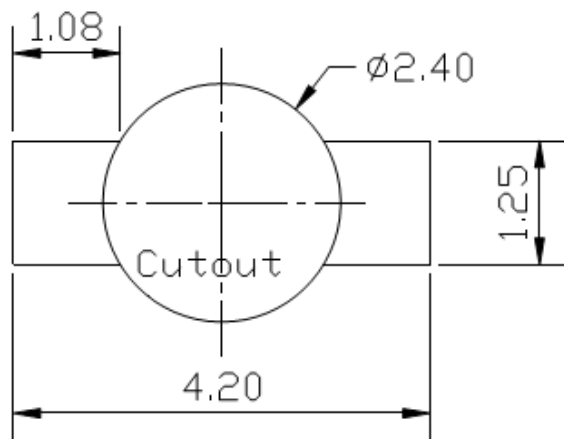


Solder Profile & Footprint

- 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):



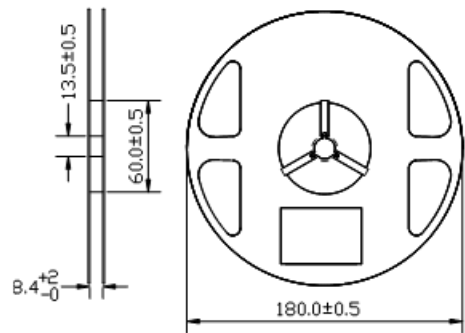
Recommended Pad Layout



Units: mm

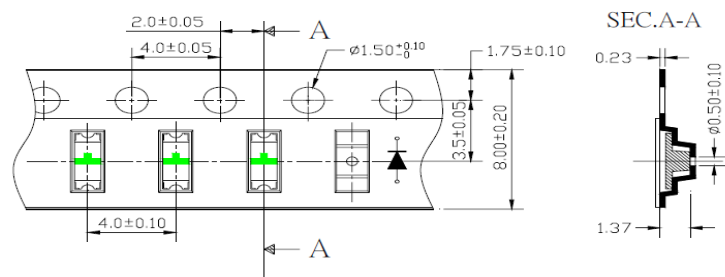
Packing

Reel Dimension:



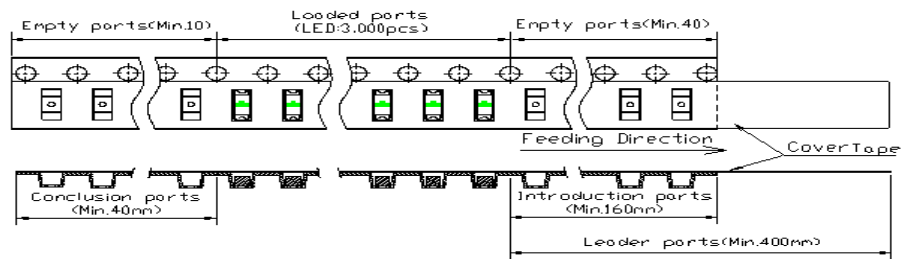
Unit: mm

Tape Dimension:

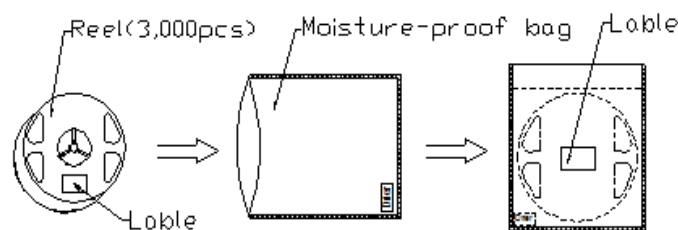


Unit: mm

Arrangement of Tape:



Packaging Specification:





Revision History

Description:	Revision #	Revision Date
New Release of QBLP655R-IWA-S2897	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.