QT-Brightek Chip LED Series

SMD 1205 White LED

Part No.: QBLP655R-IW3-S2897

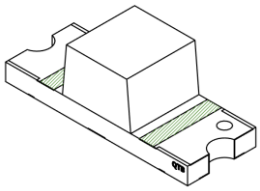
655R: Reverse Mount
3mA
S2897: Ultra High Bright

Table of Contents:

Introduction

Feature:

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



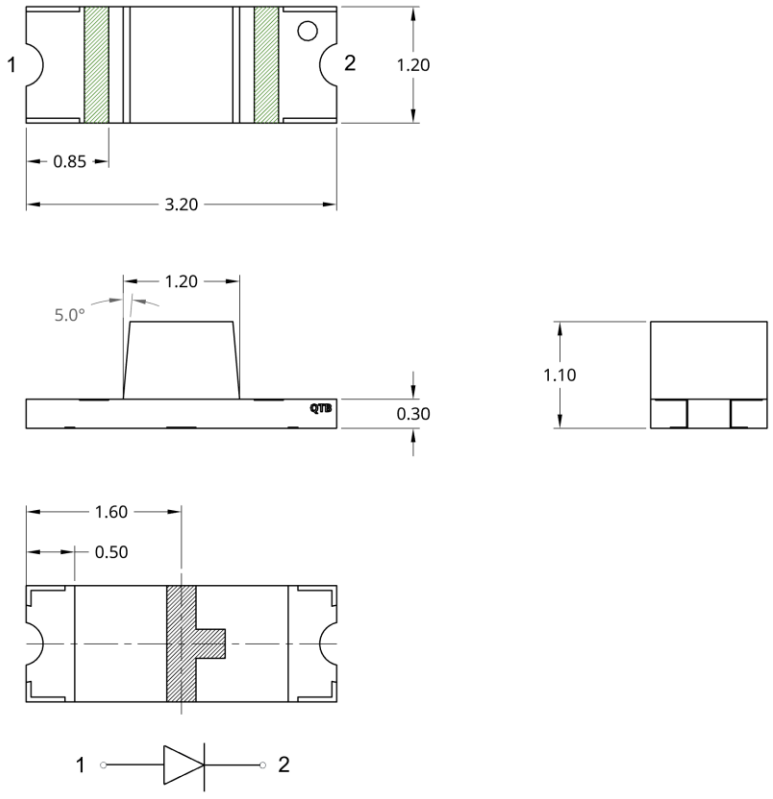
Application:

- 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)		CIE Coordinate	I_V (mcd)	
			Typ.	Max.	Typ.	Min.	Typ.
QBLP655R-IW3-S2897	White	3	2.7	3.0	X=0.298 Y=0.313	80	140

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	90	30	100	5	-40 ~ +80	-40 ~ +85	260

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

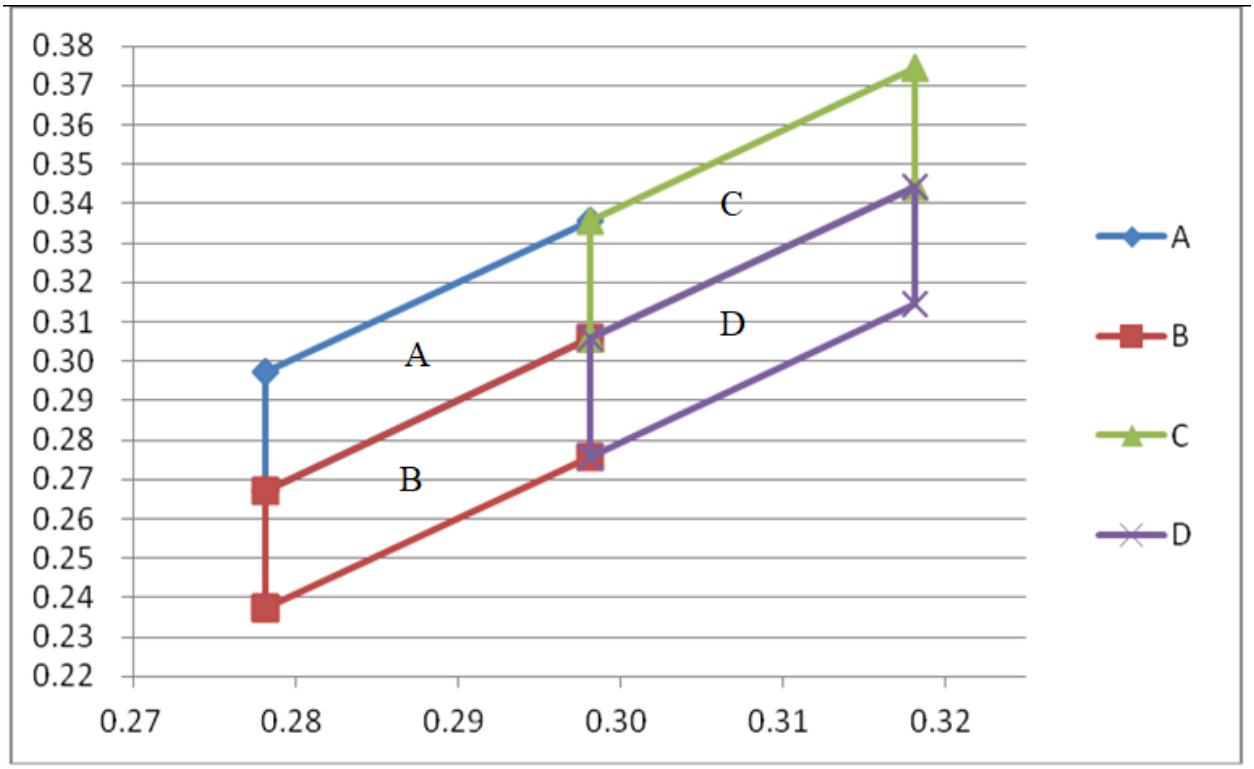
Forward Voltage V_F @ I_F=3mA

Bin	Min.	Max.	Unit
A	2.6	2.8	V
B	2.8	3.0	

Luminous Intensity I_V @ I_F=3mA

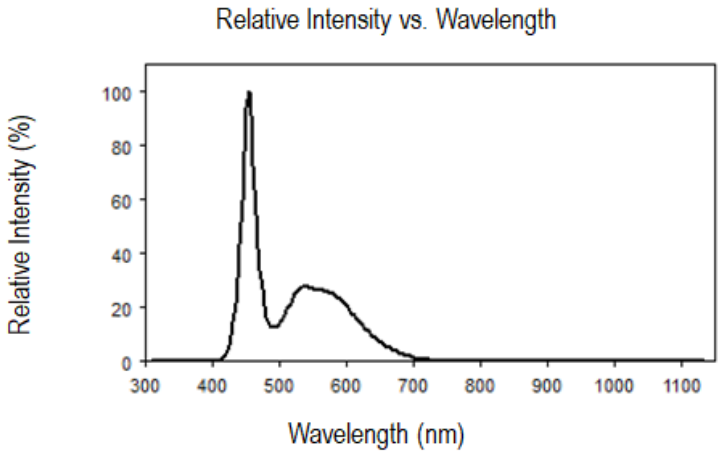
Bin	Min.	Max.	Unit
I	80	100	mcd
J	100	125	
K	125	160	
L	160	200	
M	200	250	

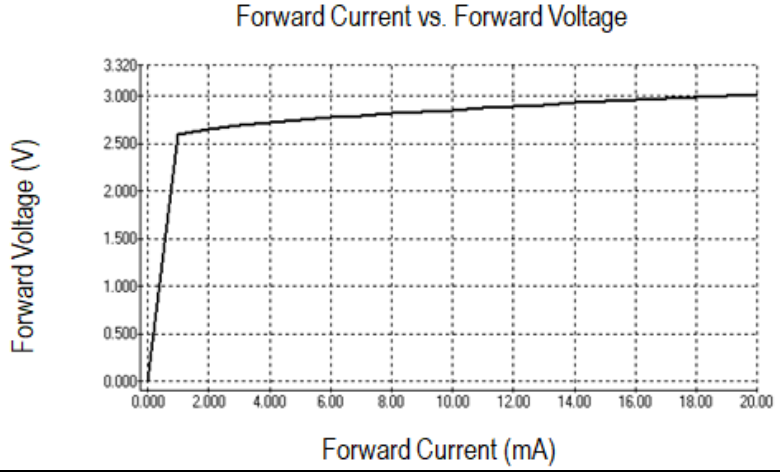
Chromaticity Coordinates

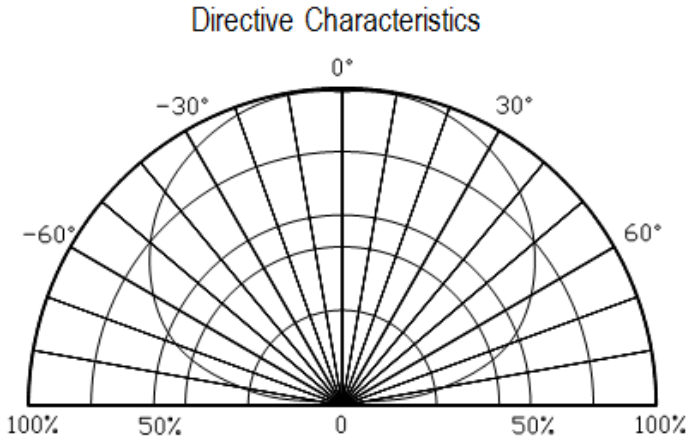


Rank	Chromaticity Coordinates				
A	X	0.278	0.278	0.298	0.298
	Y	0.267	0.297	0.336	0.306
B	X	0.278	0.278	0.298	0.298
	Y	0.237	0.267	0.306	0.276
C	X	0.298	0.298	0.318	0.318
	Y	0.306	0.336	0.374	0.344
D	X	0.298	0.298	0.318	0.318
	Y	0.276	0.306	0.344	0.314

Characteristic Curves

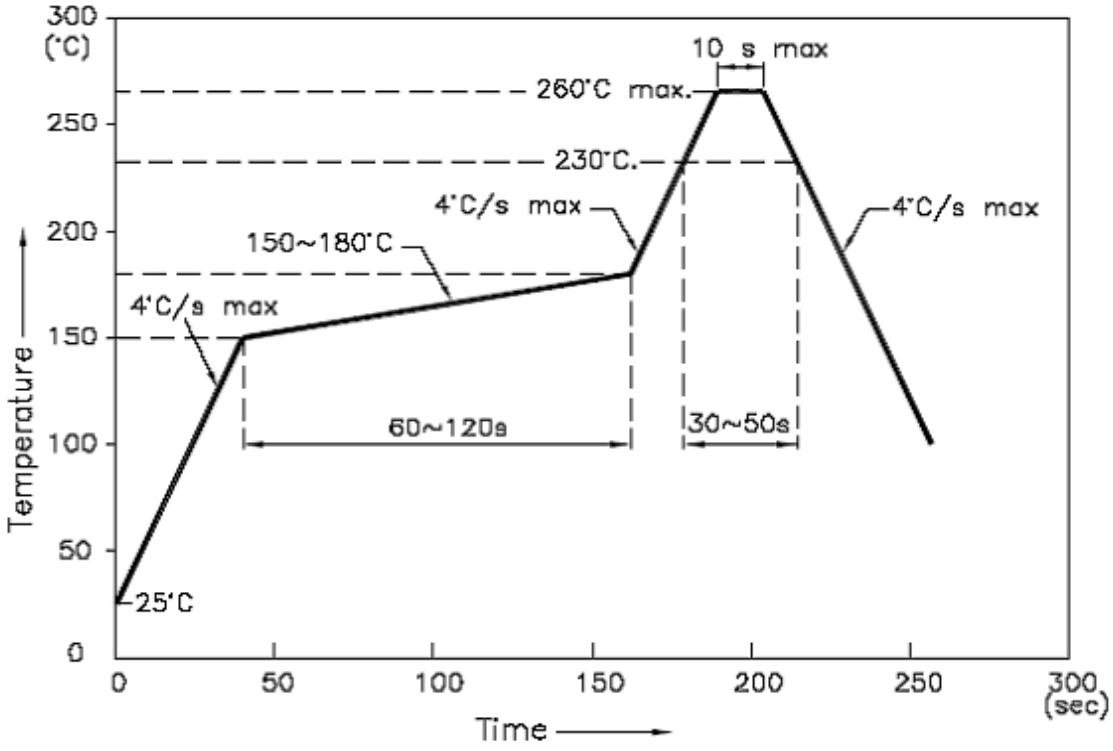




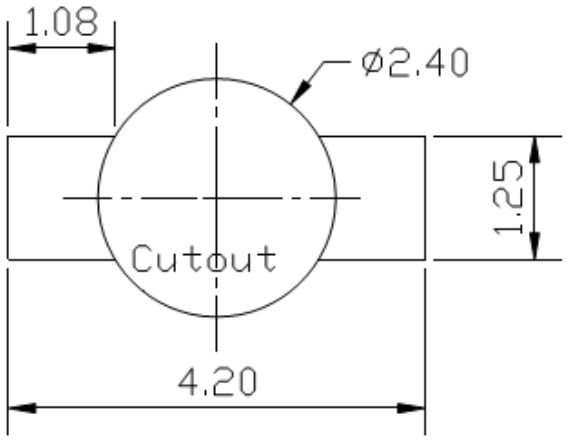


Solder Profile & Footprint

-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):



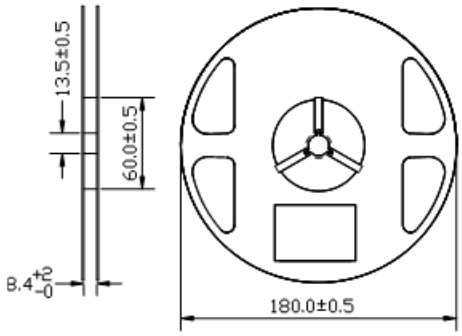
Recommended Pad Layout



Units: mm

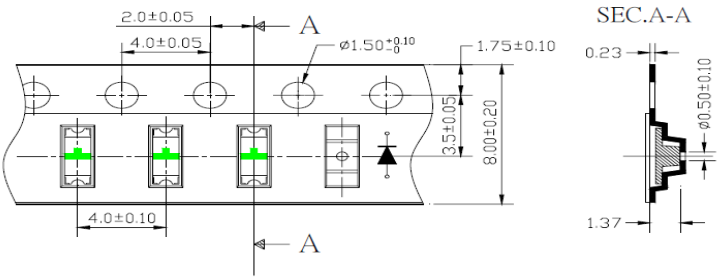
Packing

Reel Dimension:



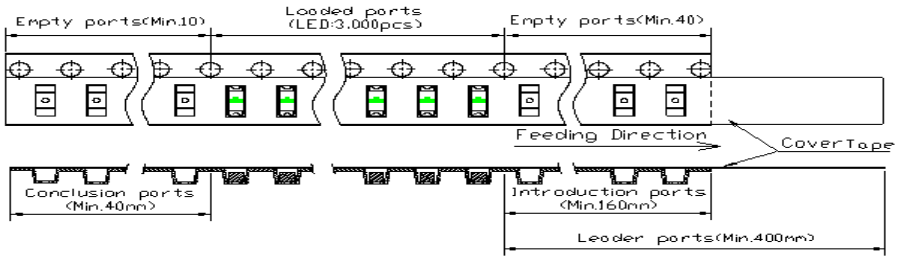
Unit: mm

Tape Dimension:

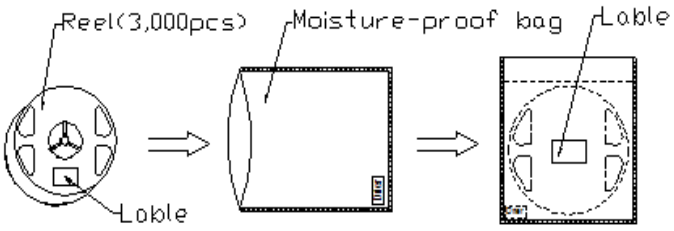


Unit: mm

Arrangement of Tape:



Packaging Specification:



Labeling

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP655R-IW3-S2897	Iv=140mcd typ. / CIE Coordinate: (X=0.298, Y=0.313) typ. @ I_F=3mA	3,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP655R-IW3-S2897	V1.0	03/12/2026

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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.