

QT-Brighttek PLCC-4 Series

PLCC-4 Yellow LED

Part No.: QBLP677-Y

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	Version# 1.0	

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Introduction

Feature:

- Water Clear lens
- Ultra bright PLCC4 Yellow LED
- Straight line chip mount technology
- AlInGaP technology for Yellow
- 120 degree viewing angle

Description:

This PLCC4 Yellow LEDs have a height profile of 1.90mm. Combination of high brightness output and robust package, this LED is ideal for architecture lighting, status indication, and color mixing applications.

Application:

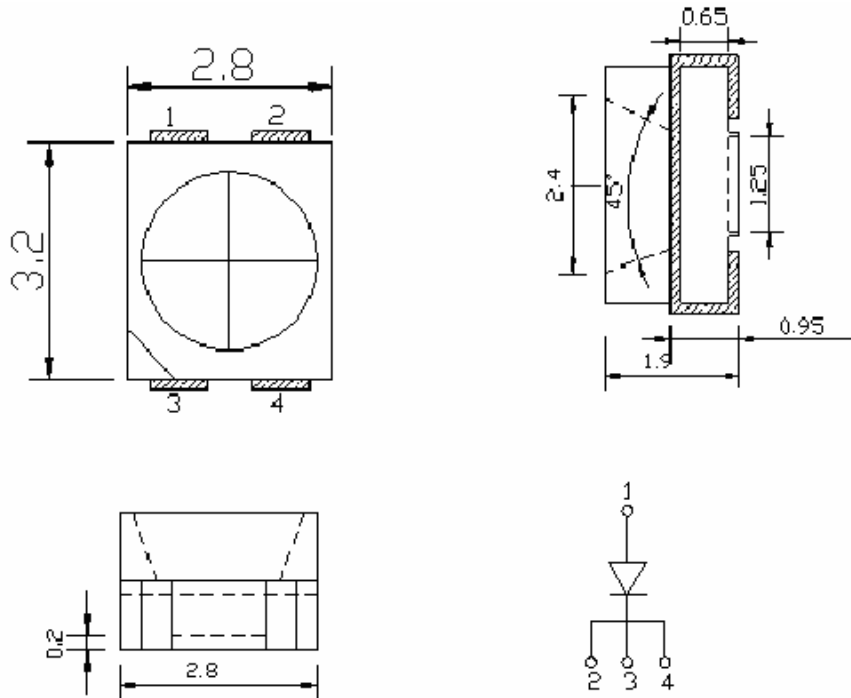
- Status indication
- Industrial equipment backlighting
- Architecture lighting

Certification & Compliance:

- TS16949
- 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)			I _V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBLP677-Y	Yellow	20	2.0	2.4	582	588	594	600	780

Absolute Maximum Rating

Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
AllnGaP	120	50	100	5	-40 ~ +100	-40 ~ + 100	260

*Duty 1/10 @ 10KHz

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

Forward Voltage V_F @ I_F=20mA

Bin	Min.	Max.	Unit
C	1.9	2.0	V
D	2.0	2.1	
E	2.1	2.2	
F	2.2	2.3	
G	2.3	2.4	

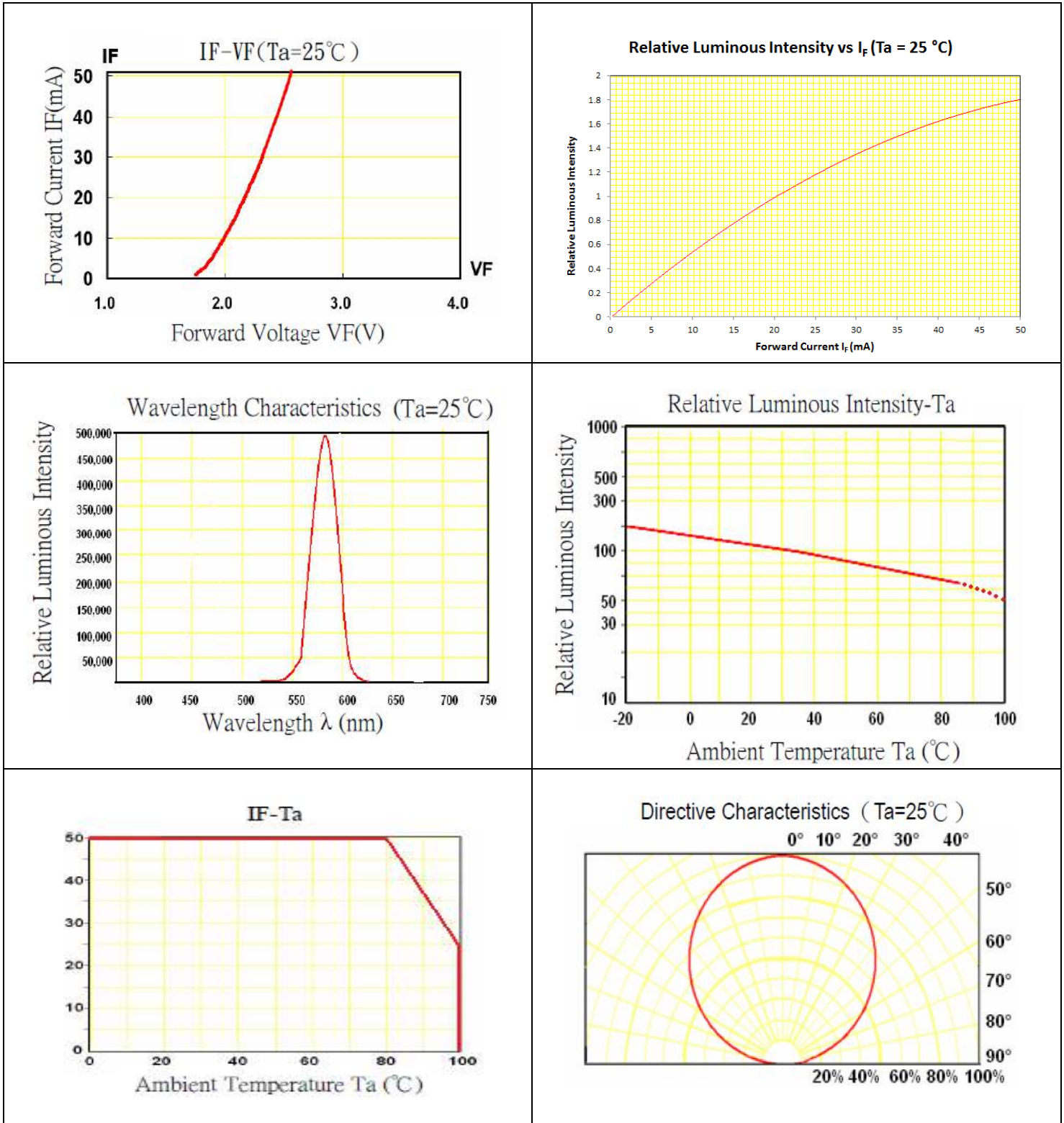
Luminous Intensity I_V @ I_F=20mA

Bin	Min.	Max.	Unit
13	600	780	mcd
14	780	1000	
15	1000	1300	

Dominant Wavelength λ_D @ I_F=20mA

Bin	Min.	Max.	Unit
B	582	585	nm
C	585	588	
D	588	591	
E	591	594	

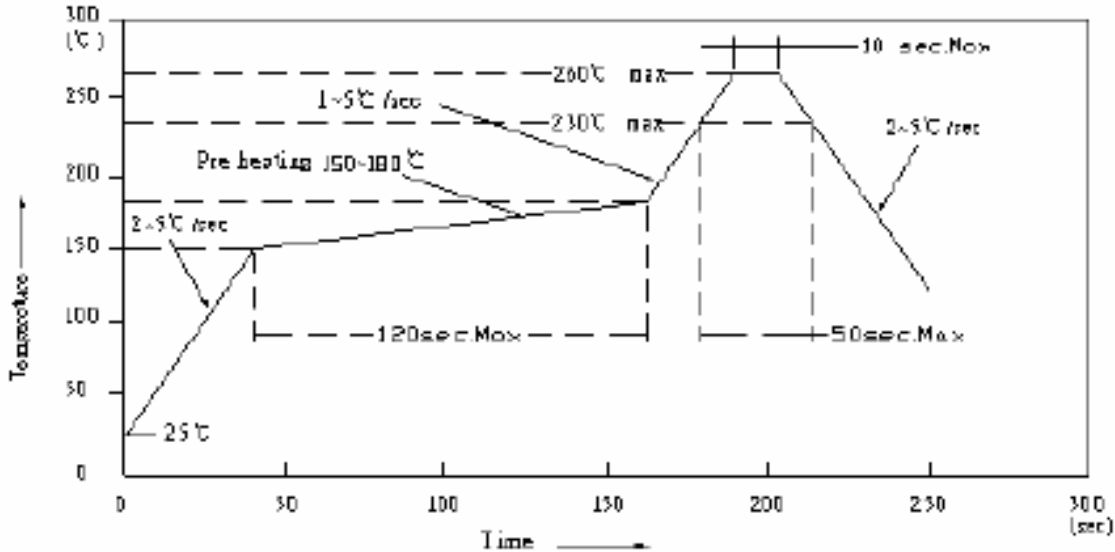
Characteristic Curves



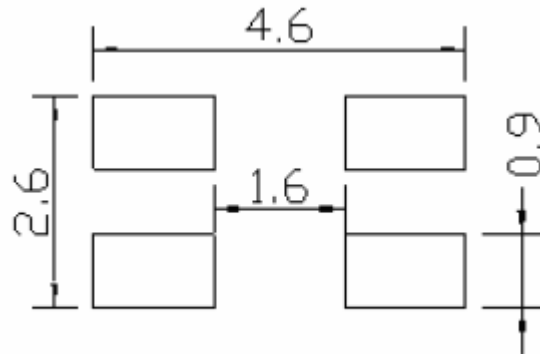
Solder Profile & Footprint

- 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):

**IR Reflow Soldering Profile
Lead Free Solder**



Proposed Solder Footprint

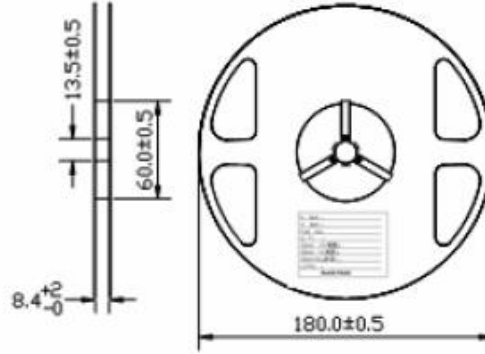


Units: mm

tolerance: +/- 0.1mm

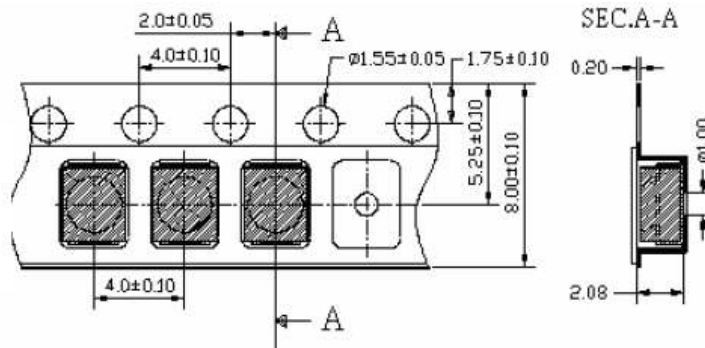
Packing

Reel Dimension:



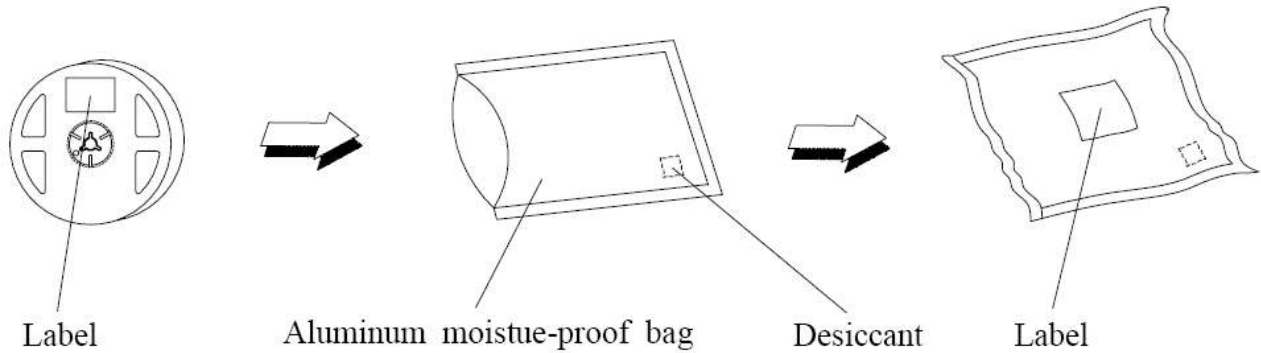
Unit: mm

Tape Dimension:



Unit: mm

Packaging Specification:



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Labeling

Part No: _____
 Customer P/N: _____
 Item: _____
 Q'ty: _____
 Vf: _____
 Iv: _____
 VI: _____
 Date: _____

Made in China**Ordering Information**

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP677-Y	QBLP677-Y-1888	Iv=1000mcd Typ. @ I _F =20mA / Color: 582~594nm	2,000 units

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Revision History

Description:	Revision #	Revision Date
New Release of QBLP677-Y	V1.0	03/28/2014

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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.

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