

**Feature:**

- Diffused lens
- Package in tape and reel
- Ultra bright PLCC6 RGB LED
- Direct Drive
- InGaN technology for IB/IG
- AlInGaP technology for R
- 120 degree viewing angle
- Black Face
- Water resistance IPX5

**Description:**

This ultra bright PLCC6 RGB LEDs have a height profile of 2.60mm. Combination of high brightness output and direct drive capability, these LEDs are ideal for architecture lighting, status indication, and color mixing applications.

**Application:**

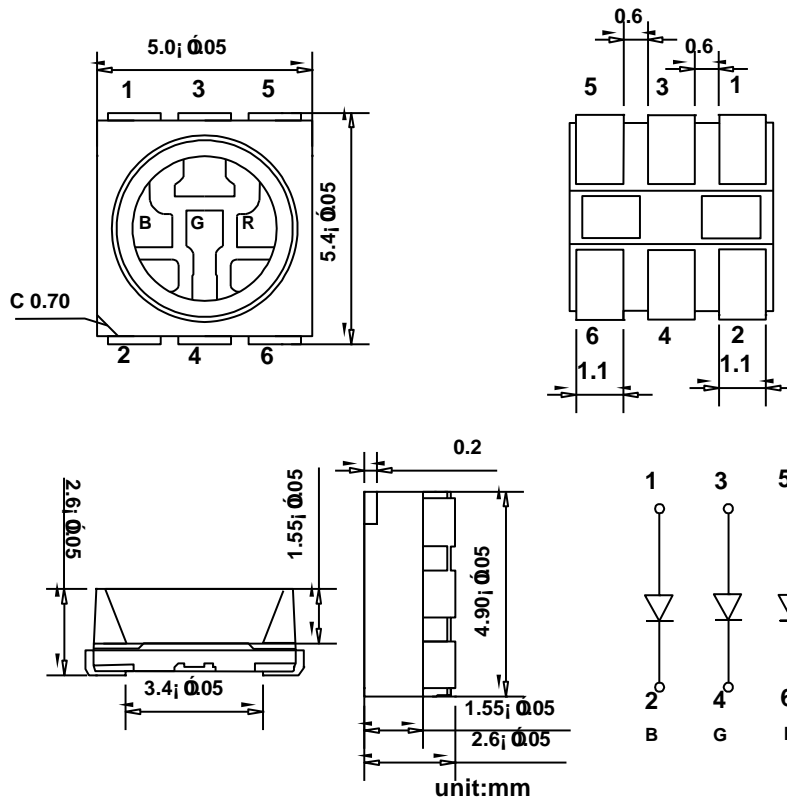
- Status indication
- Back lighting application
- Architecture lighting

**Certification & Compliance:**

- TS16949
- ISO9001
- IEC60529
- RoHS Compliant



**Dimension:**



Units: mm / tolerance = +/-0.1mm

**Electrical / Optical Characteristic** (T=25 °C)

Product	Color	I <sub>F</sub> (mA)	V <sub>F</sub> (V)		λ <sub>D</sub> (nm)			I <sub>V</sub> <sup>*</sup> (mcd)	
			Typ.	max	min	Typ.	max	min	Typ.
QTLP679-RGB3	Red	20	1.9	2.6	621	---	636	340.0	530.0
	True Green	20	3.2	3.8	520	---	535	900.0	1300.0
	Blue	20	3.2	3.8	461	---	476	210.0	280.0

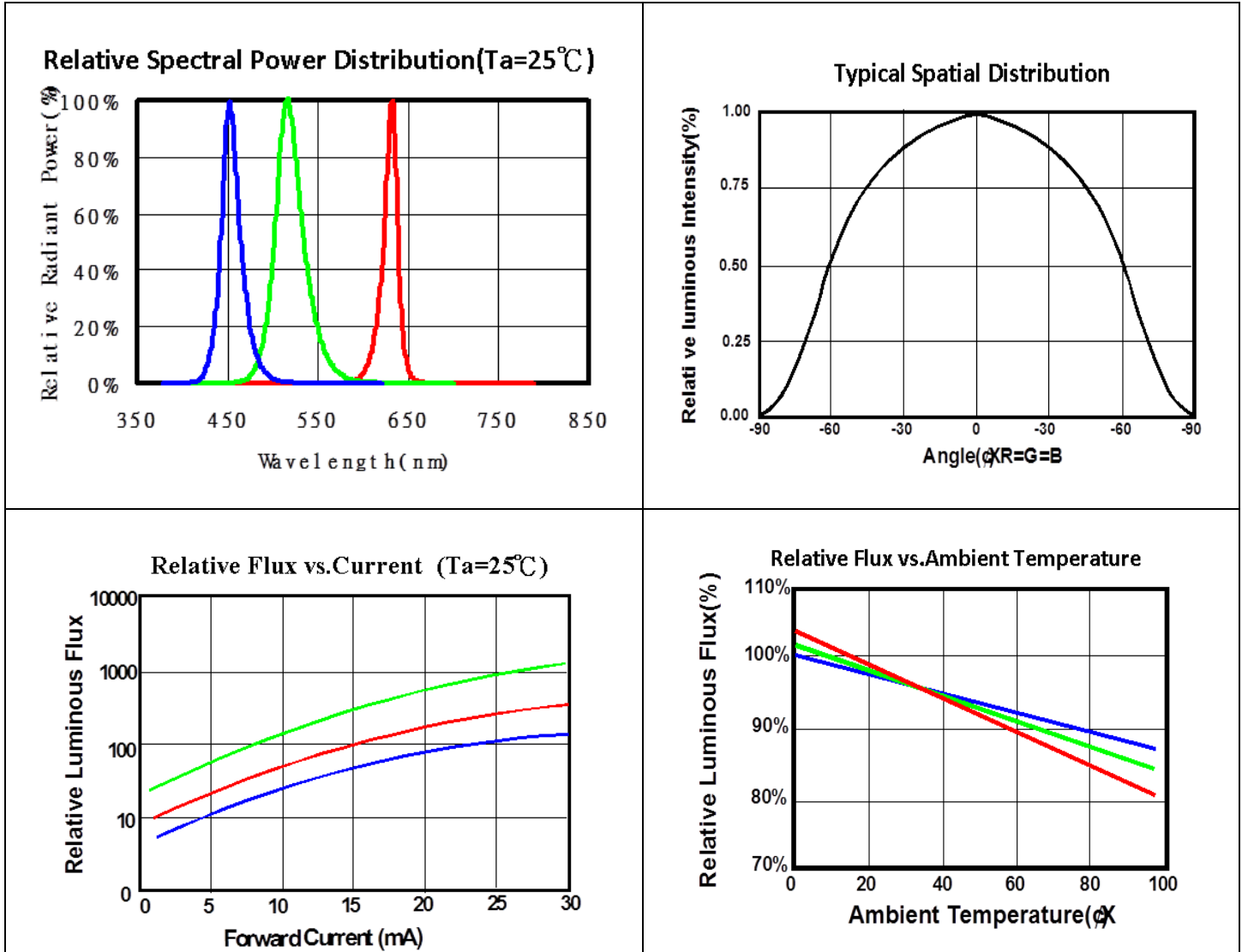
**Absolute Maximum Rating**

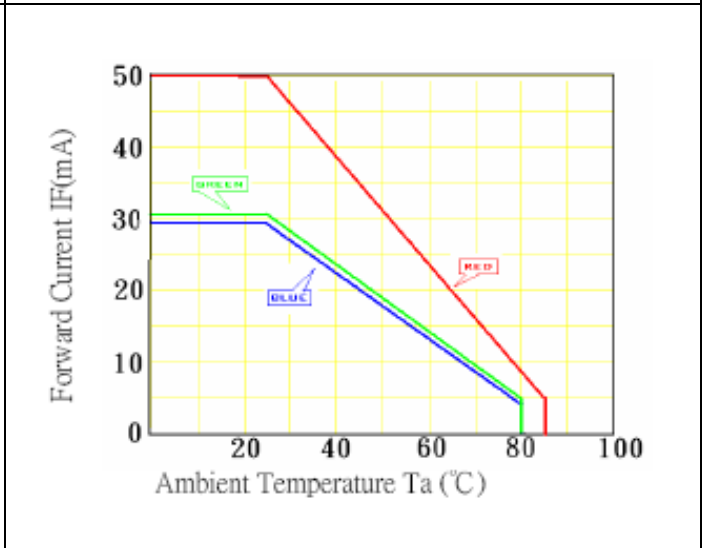
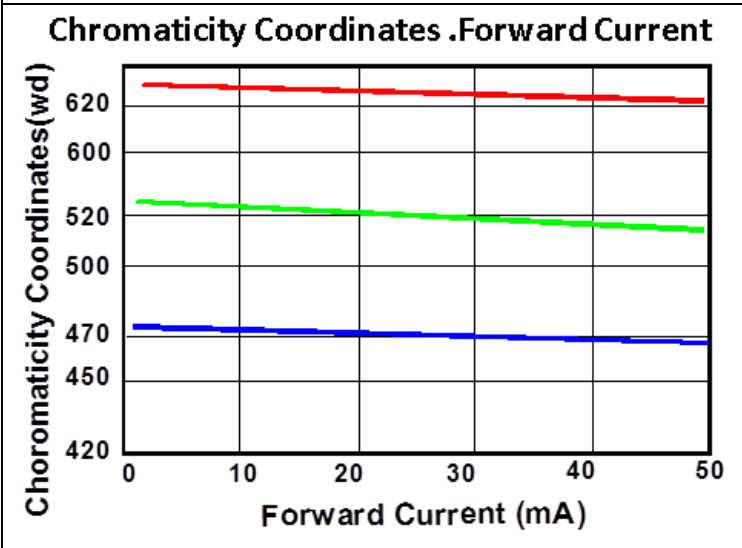
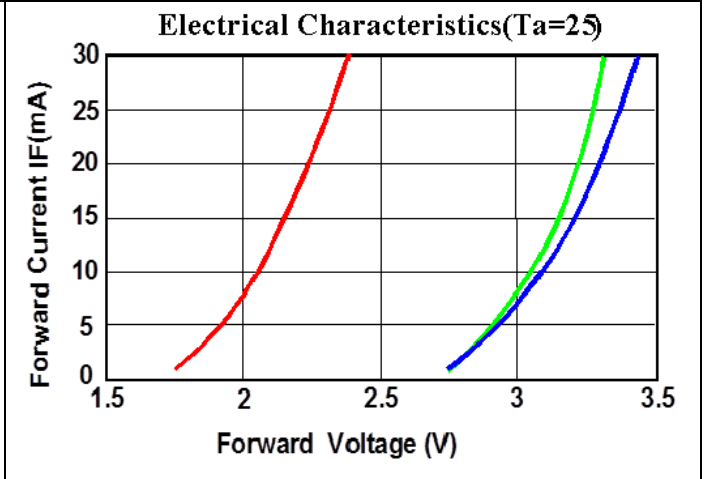
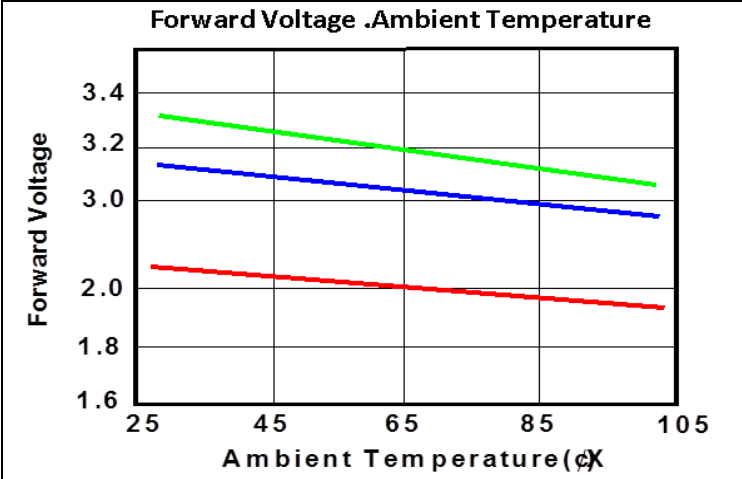
Part #	P <sub>d</sub> (mW)	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)*	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)	T <sub>SOL</sub> (°C)**
InGaN ( IB/IG )	110	25	90	5	-40 - 80	-40 - 90	260
AlInGaP ( R )	120	50	60	5	-40 - 80	-40 - 90	260

\*Duty 1/10 @ 10KHz

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

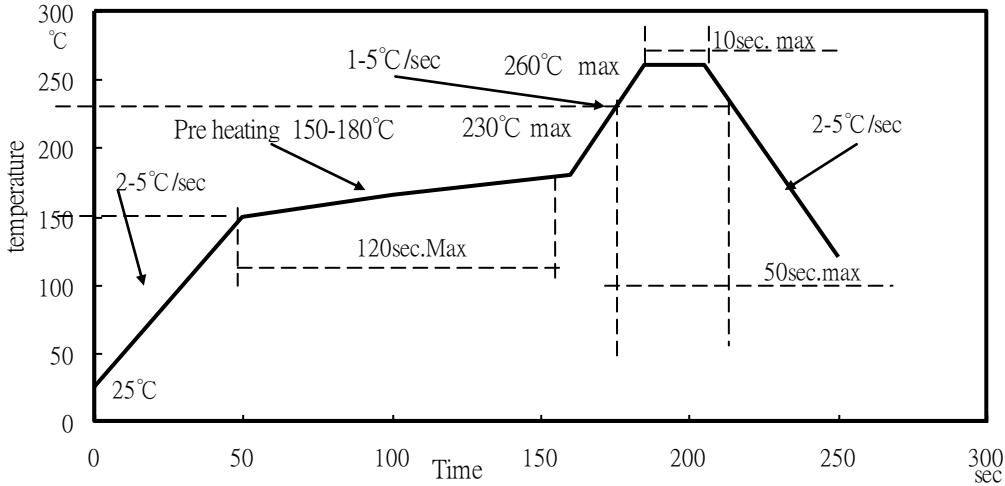
**Characteristic Curves:**



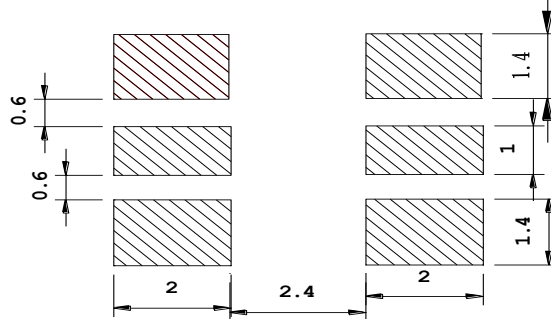


### Solder Profile & Footprint:

- Recommended tin glue 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):



#### RECOMMEND PADLAYOUT



( Proposed Solder footprint )

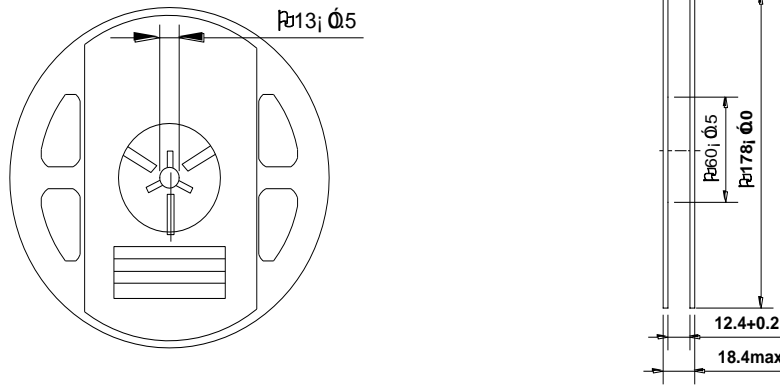
Units: mm

tolerance: +/- 0.1mm

Product: QBLP679-RGB3	Date: April 4, 2011	Page 5 of 8
	Version# 2.0	

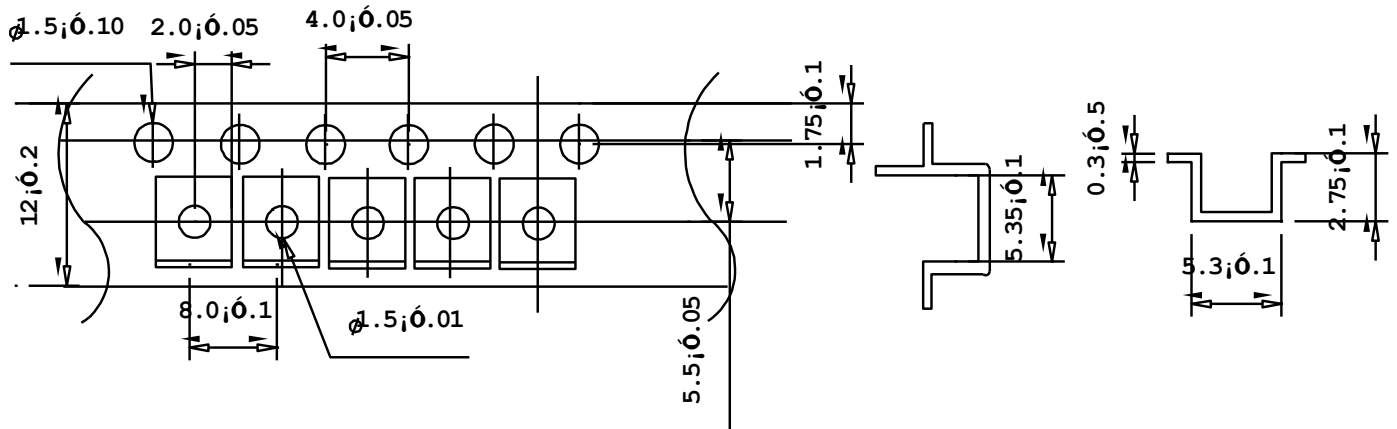
**Packing:**

**Reel Dimension:**



Note: 01.The tolerance unless mentioned is  $\pm 0.1$ mm.  
 02.The measured unit is "mm".

**Tape Dimension:**

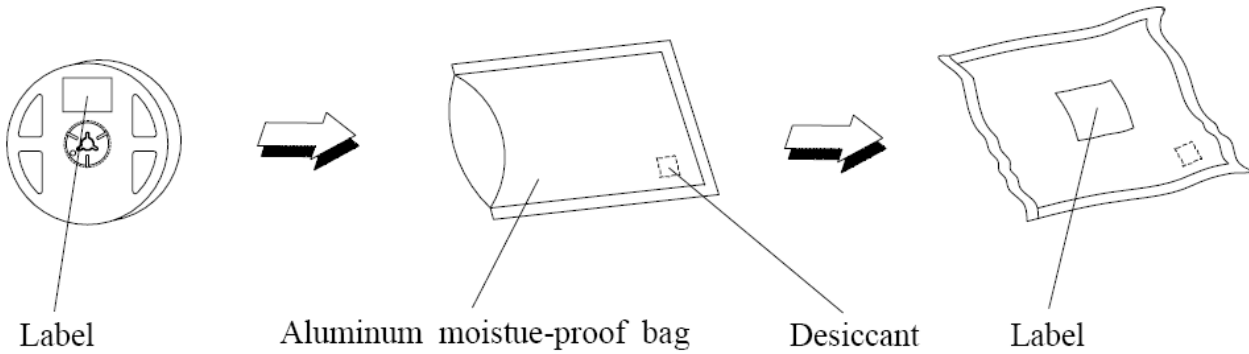


**Labeling:**



Part No: \_\_\_\_\_  
 Customer P/N: \_\_\_\_\_  
 Item: \_\_\_\_\_  
 Q'ty: \_\_\_\_\_  
 Vf: \_\_\_\_\_  
 Iv: \_\_\_\_\_  
 WI: \_\_\_\_\_  
 Date: \_\_\_\_\_

**Made in China**



**Ordering Information:**

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP679-RGB3	QBLP679-RGB3	Standard Spec	500 units

**Revision History:**

Description:	Revision #	Revision Date
New Release of QBLP679-RGB3	V1.0	01/31/2011
Information/chart updates	V1.1	02/08/2011
Add Water Resistance Rating IPX5	V2.0	04/04/2011