

Feature:

- Water clear lens
- Package in tape and reel
- Side View Ultra bright 1206 LED package
- InGaN technology for IB/IG/IW
- AlInGaP technology for R/AG/Y

Description:

These ultra bright 1206 LEDs have a height profile of 1.0mm. With higher packing density and smaller footprint, these LEDs are ideal for smaller equipment and miniature application.

Application:

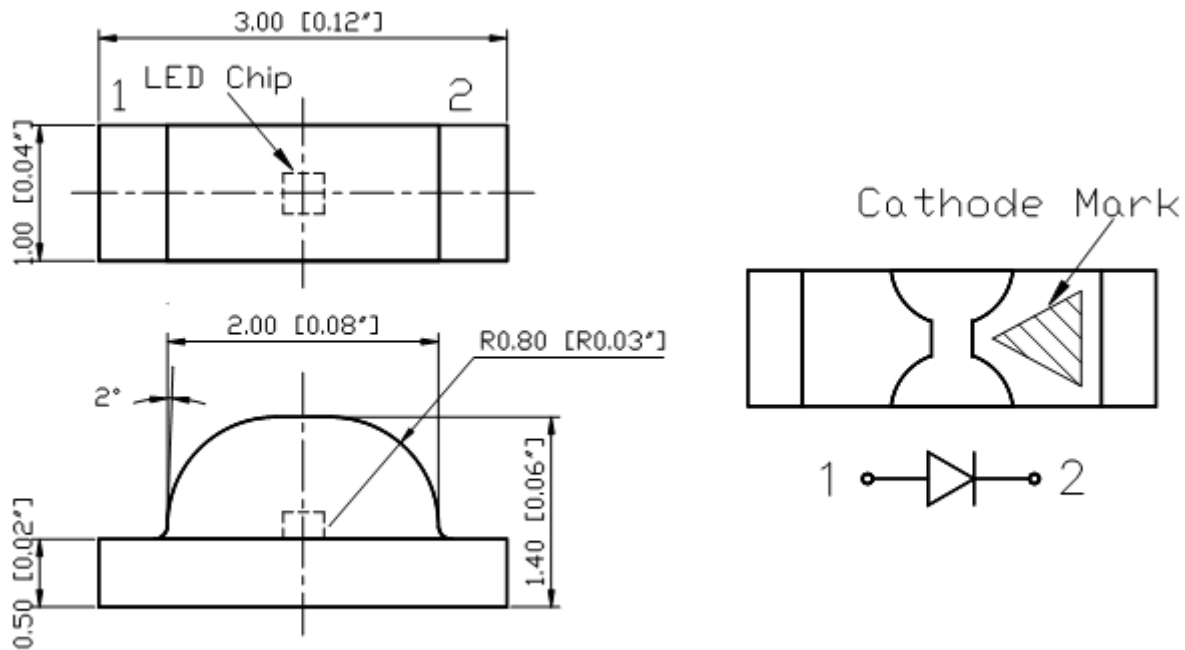
- Status indication
- Back lighting application
- General Use

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.1mm

Electrical / Optical Characteristic (T=25 °C)

Product	Color	I _F (mA)	V _F (V)		λ _D (nm)			I _V (mcd)	
			Typ.	max	Min.	Typ.	Max.	Min.	Typ.
QBLP610-IW	White	20	3.1	3.6	X = 0.30 Y = 0.31	--	--	125	320
QBLP610-IB	Blue	20	3.1	3.6	465	470	475	60	100
QBLP610-IG	True Green	20	3.1	3.6	520	525	530	320	400
QBLP610-R	Red	20	2.0	2.4	625	630	635	22	85
QBLP610-AG	Yellow Green	20	2.0	2.4	564	570	576	25	50
QBLP610-Y	Yellow	20	2.0	2.4	585	590	595	80	170

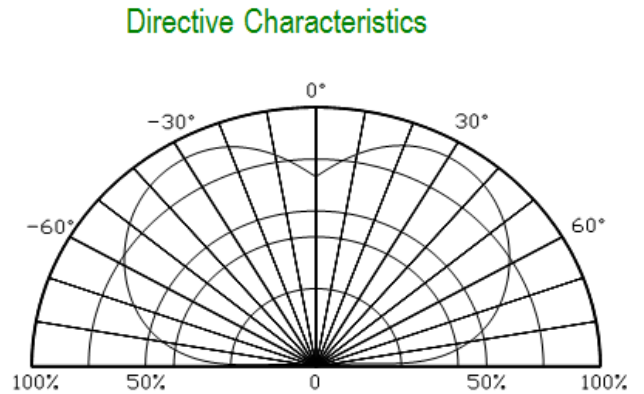
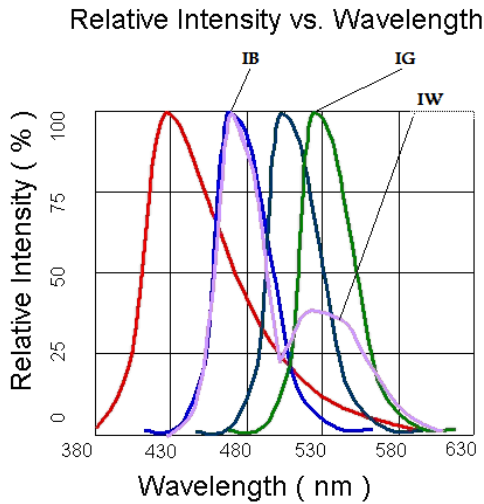
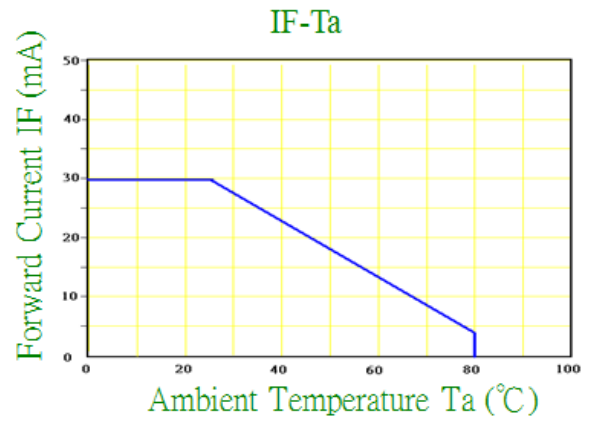
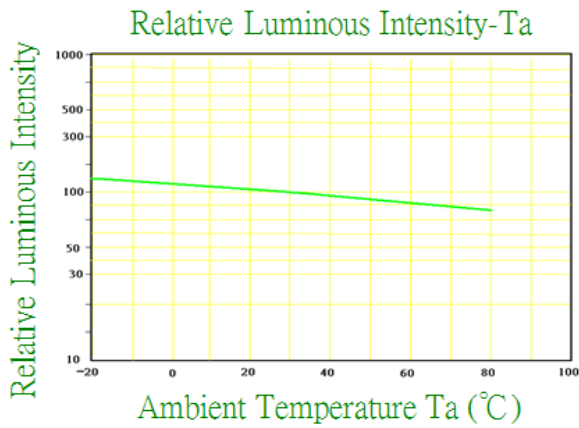
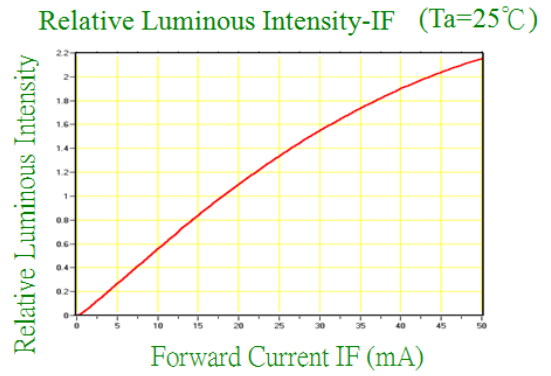
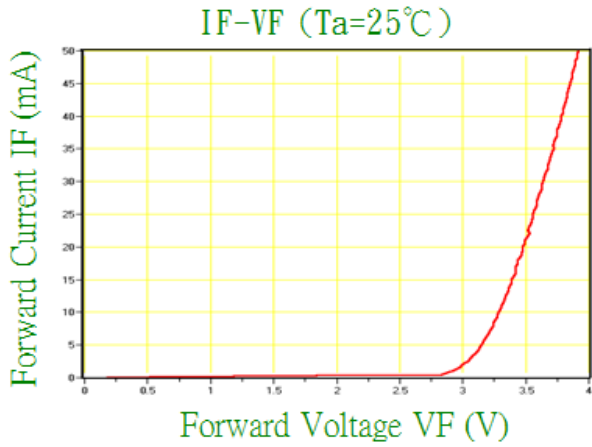
Absolute Maximum Rating

Part #	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
InGaN (IW/IB/IG)	108	30	100	5	-40 ~ +85	-40 ~ +100	260
AllnGaP (R/AG/Y)	75	30	100	5	-40 ~ +85	-40 ~ +100	260

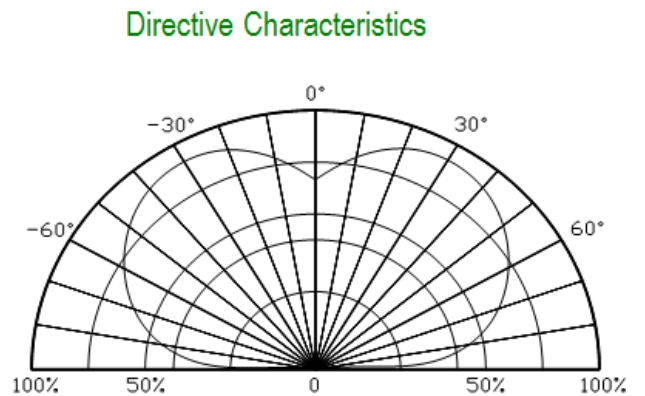
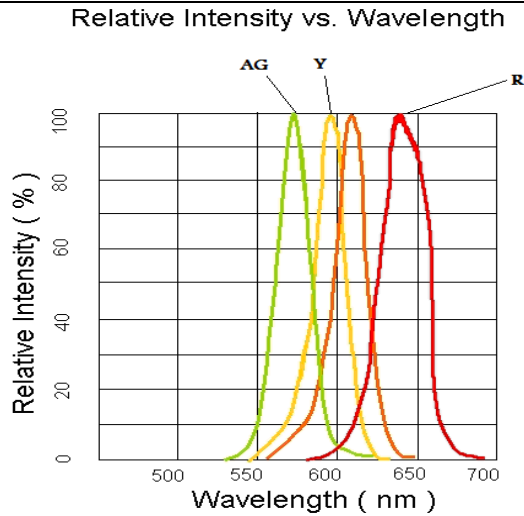
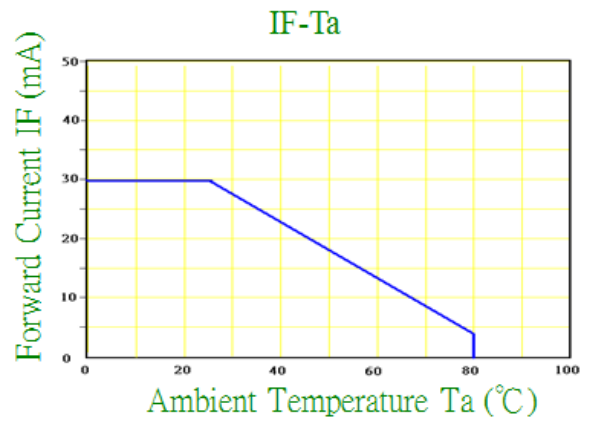
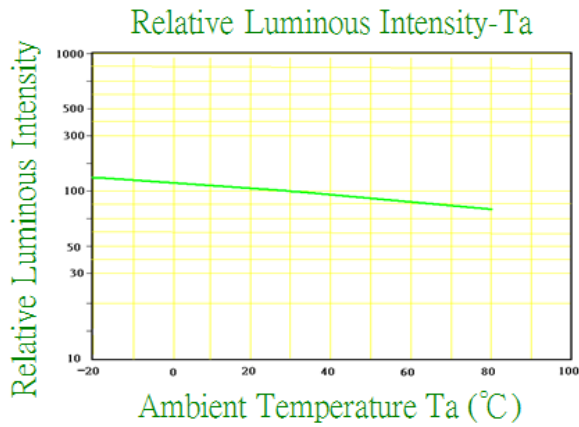
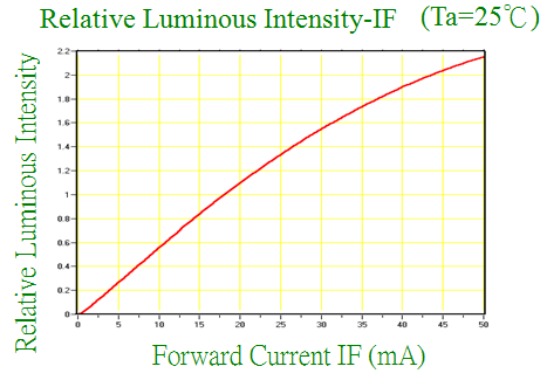
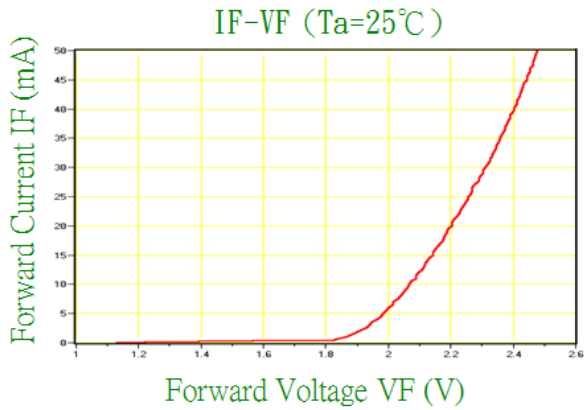
*Duty 1/10 @ 10KHz

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

Characteristic Curves(IF/IB/IG):

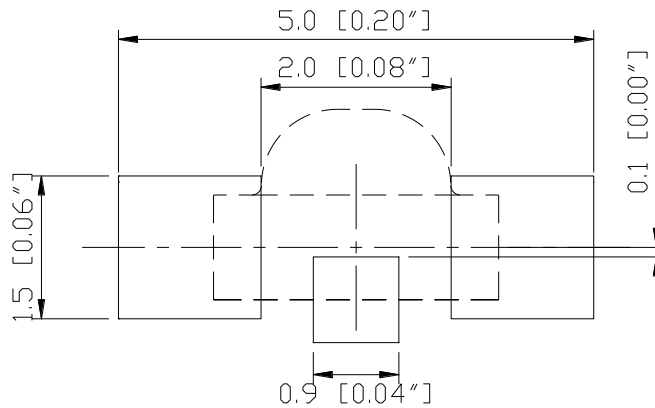
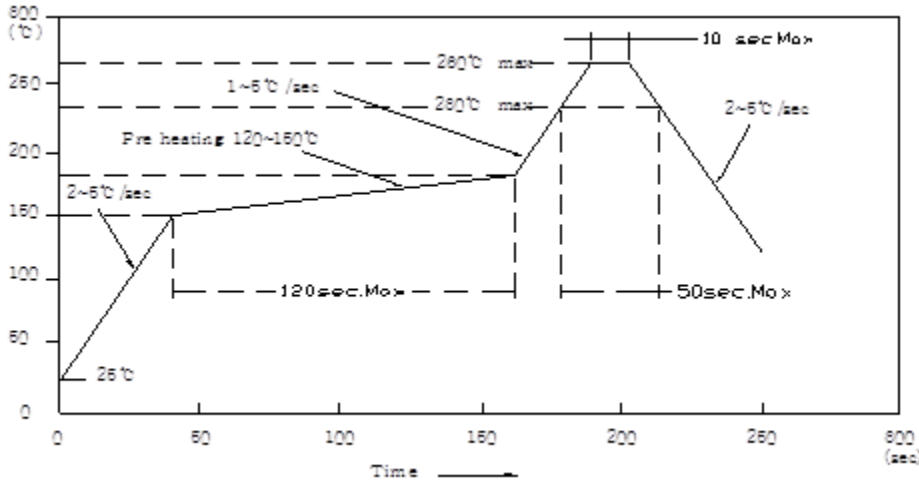


Characteristic Curves(R/AG/Y):



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):

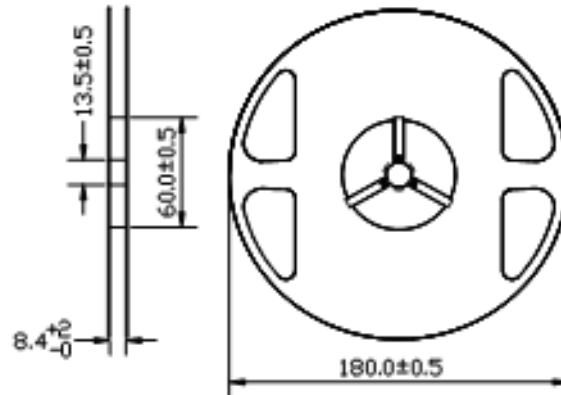
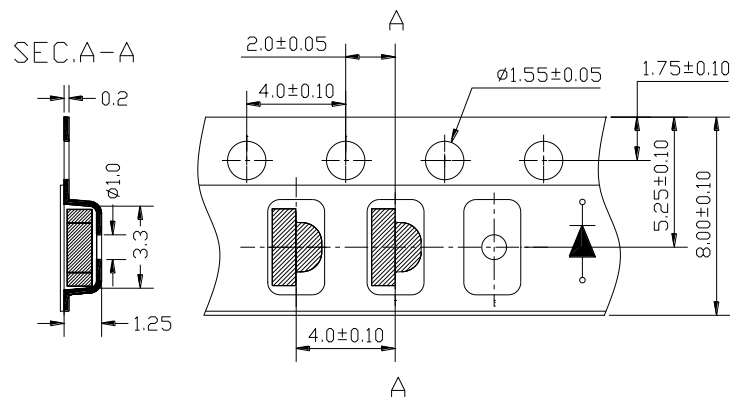


(Proposed Solder footprint)

Units: mm

tolerance: +/- 0.1mm

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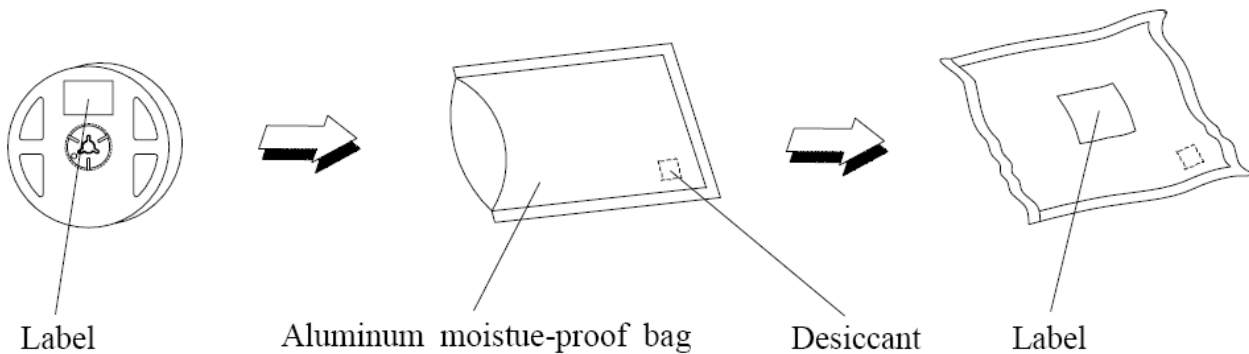
**Packing:
Reel Dimension:****Tape Dimension:**

Units: mm / tolerance = +/-0.1mm

Product: QBL610_series	Date: June 25, 2011	Page 6 of 8
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Labeling:

QT-Brightek
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
QBLP610-IW	QBLP610-IW	Iv = 320mcd typ. / (X = 0.30, Y = 0.31)	3,000 units
QBLP610-IB	QBLP610-IB	Iv = 100 mcd typ. / Color = 470nm	3,000 units
QBLP610-IG	QBLP610-IG	Iv = 400 mcd typ. / Color = 525nm	3,000 units
QBLP610-R	QBLP610-R	Iv = 85 mcd typ. / Color = 630nm	3,000 units
QBLP610-AG	QBLP610-AG	Iv = 50 mcd typ. / Color = 575nm	3,000 units
QBLP610-Y	QBLP610-Y	Iv = 170 mcd typ. / Color = 590nm	3,000 units

Revision History:

Description:	Revision #	Revision Date
New Release of QBLP610 _series	V1.0	02/02/2011
Information Updates	V2.0	03/02/2011
Amend Dimension/ label/ Brightness	V2.1	05/04/2011
Add white color specification	V2.2	06/25/2011