

Feature:

- Water clear lens
- Package in tape and reel
- Ultra bright 0606 LED package
- AlInGaP technology for Red
- InGaN technology for Blue

Description:

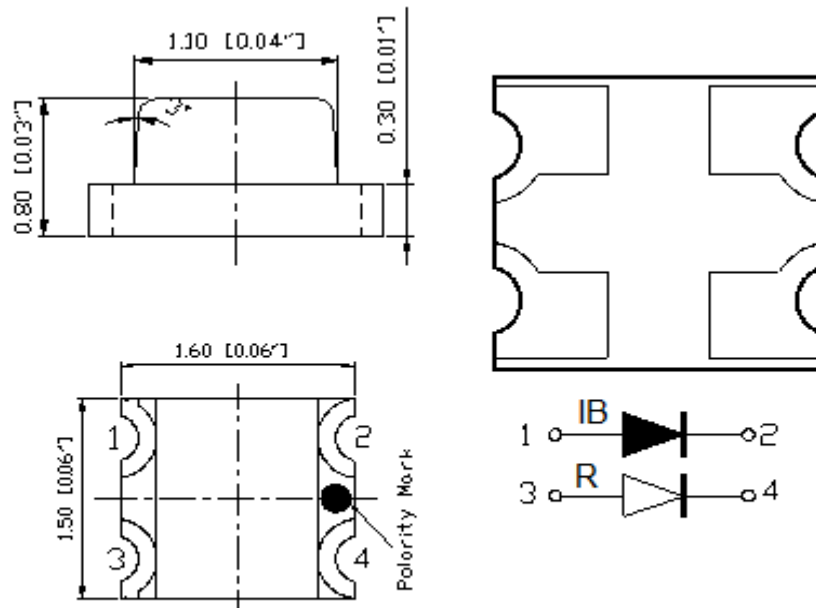
These ultra bright 0606 RIB LEDs have a height profile of 0.80mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting, status indication, and color mixing applications.

Application:

- Status indication
- Back lighting application

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.
QBLP600-RIB	Blue	20	3.1	3.7	465	470	475	80	110
	Red	20	2.0	2.5	630	640	650	40	55

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	111	30	125	5	-40 ~ +80	-40 ~ +85	260
AlInGaP	75	30	125	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/10 @ 10KHz

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

Forward Voltage V_F for AlInGaP (Red) @ I_F=20mA

Bin	Min.	Max.	Unit
□	1.7	2.5	V

Forward Voltage V_F for InGaN (Blue) @ I_F=20mA

Bin	Min.	Max.	Unit
f	2.8	3.1	V
g	3.1	3.4	
h	3.4	3.7	

Luminous Intensity I_v @ $I_F=20\text{mA}$

Bin	Min.	Max.	Unit
F	40	50	mcd
G	50	63	
H	63	80	
I	80	100	
J	100	125	
K	125	160	
L	160	200	

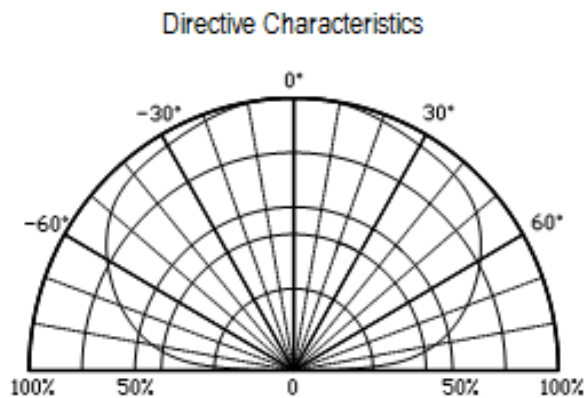
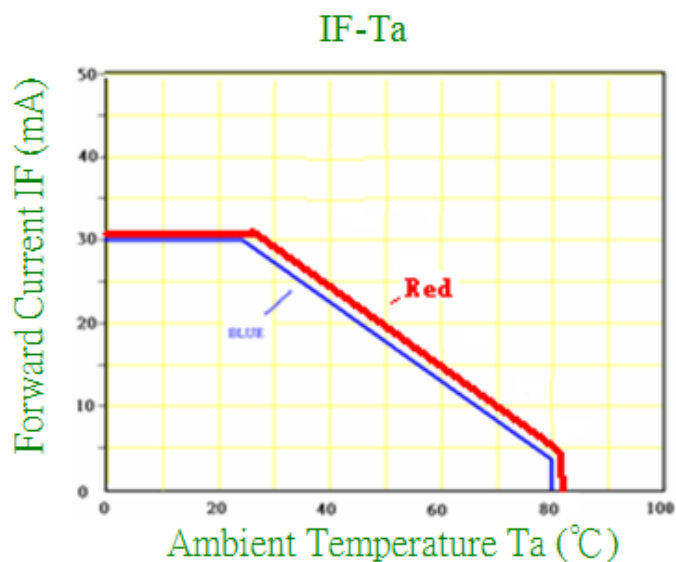
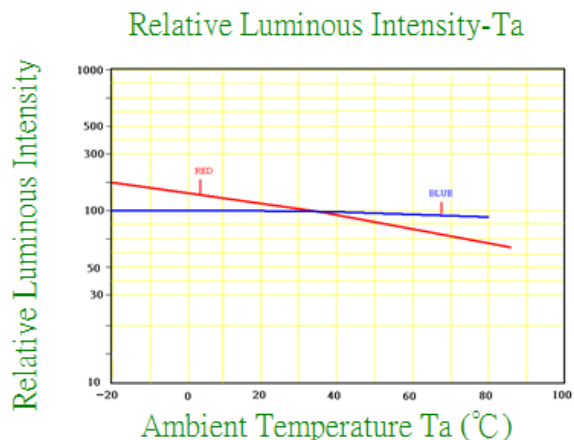
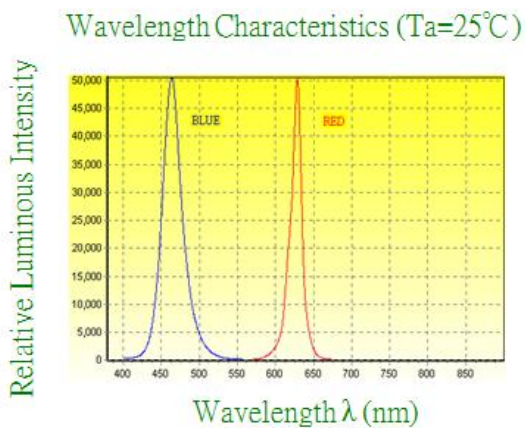
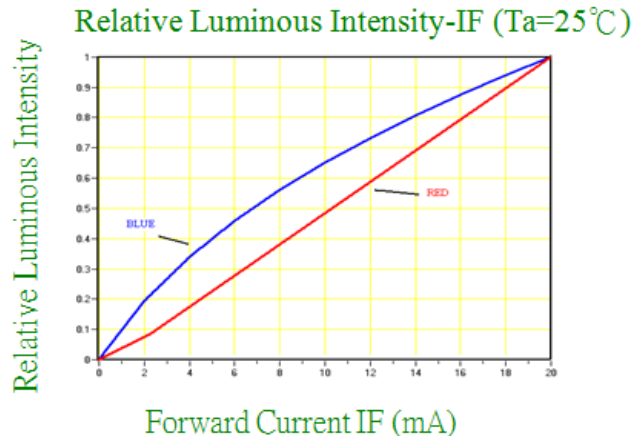
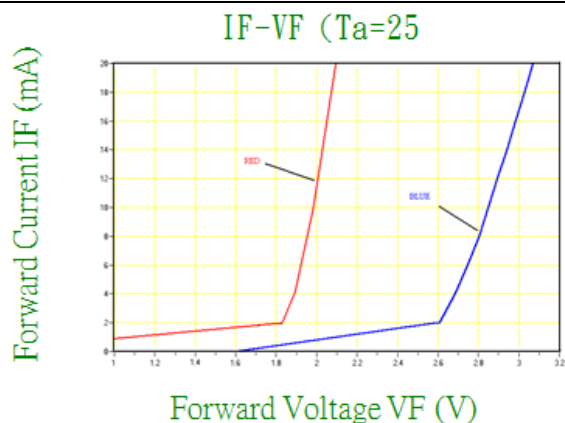
Dominant Wavelength λ_D for InGaN (Blue) @ $I_F=20\text{mA}$

Bin	Min.	Max.	Unit
G	465	467.5	nm
H	467.5	470	
I	470	472.5	
J	472.5	475	

Dominant Wavelength λ_D for AlInGaP (Red) @ $I_F=20\text{mA}$

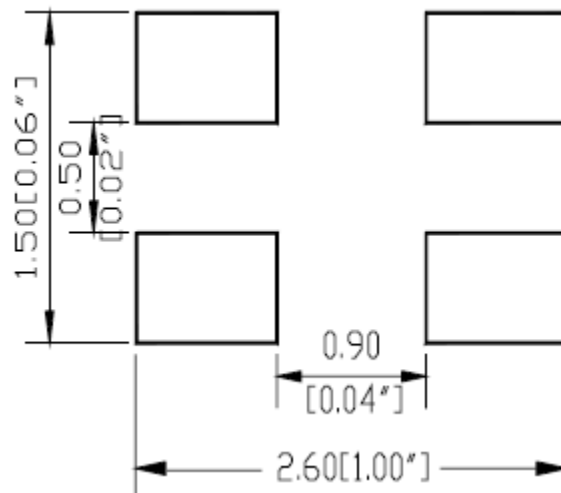
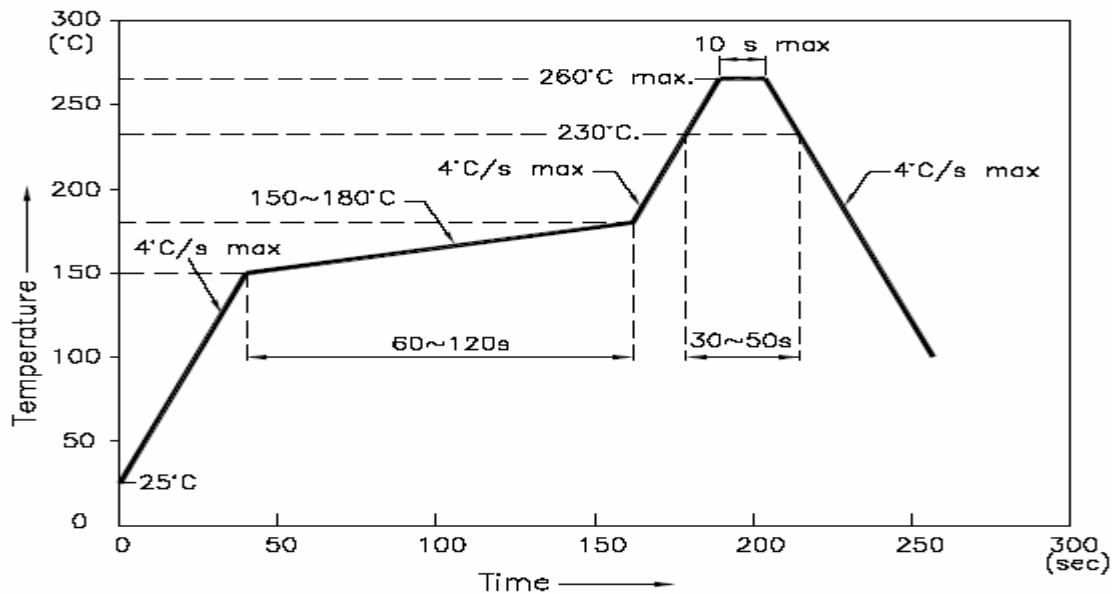
Bin	Min.	Max.	Unit
v	630	635	nm
w	635	650	

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):

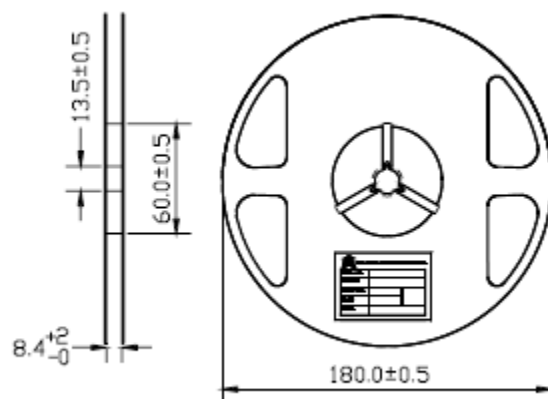


Units: mm

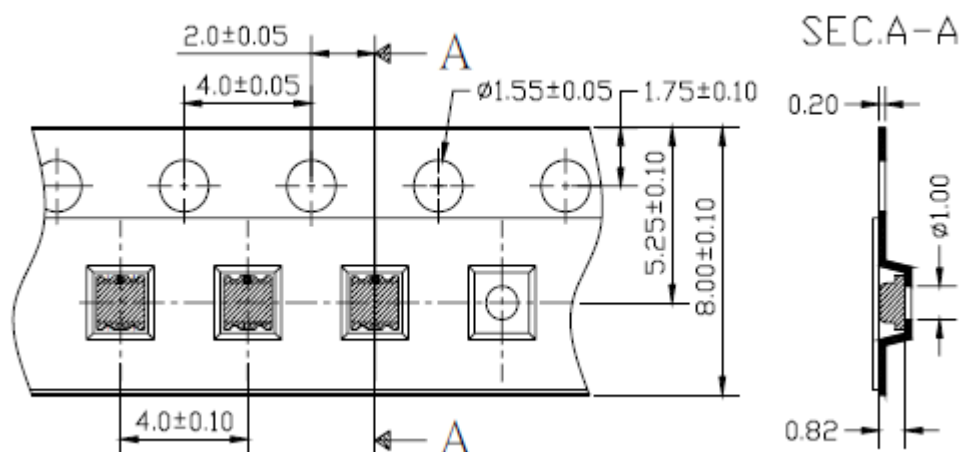
tolerance: +/- 0.1mm

Packing:

Reel Dimension:



Tape Dimension:

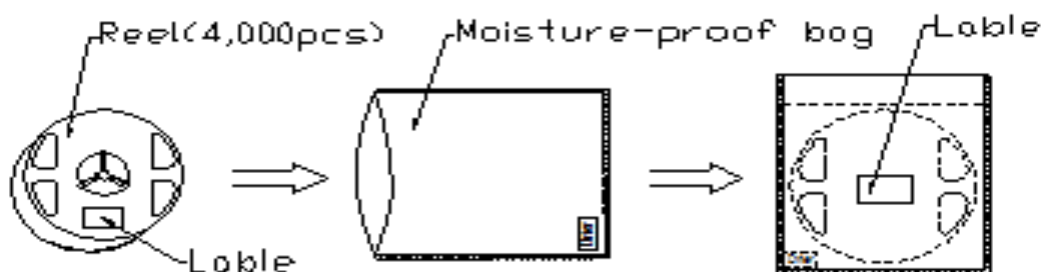


(Unit in mm)

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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
QBLP600-RIB	QBLP600-RIB	Standard Spec	4,000 units

Revision History:

Description:	Revision #	Revision Date
New Release of QBLP600-RIB	V1.0	06/25/2011
Update Spec	V1.1	12/09/2011