

Feature:

- Water clear lens
- Package in tape and reel
- Ultra bright 0603 LED package
- InGaN technology for IB/IG/IW
- AlInGaP technology for R/AG/Y

Description:

These ultra bright 0603 LEDs have a height profile of 0.40mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

Application:

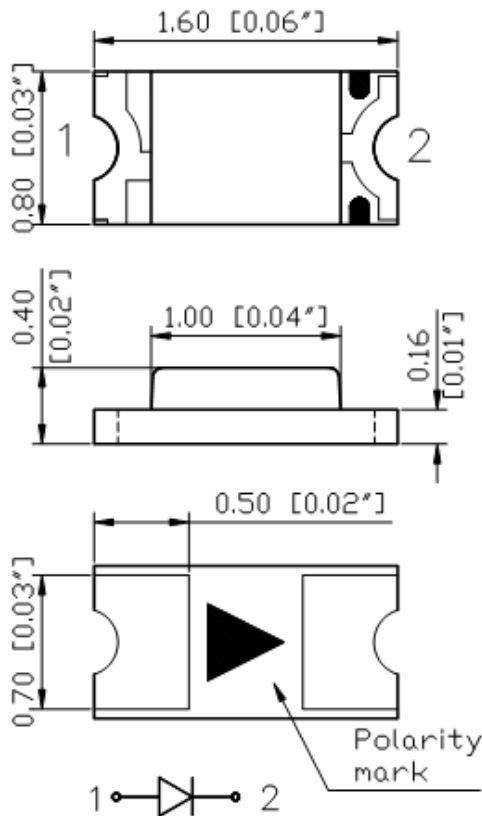
- Status indication
- Back lighting application

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.1mm

Product: QBLP602 series	Date: June 16, 2011	Page 1 of 9
	Version# 2.1	

Electrical / Optical Characteristic

(T=25 °C)

Product	Color	I _F (mA)	V _F (V)		λ _D (nm)			I _V (mcd)	
			Typ.	Max.	Min.	Max.	-	Min.	Typ.
QBLP602-IB	Blue	20	3.3	3.8	465	475	-	40	80
QBLP602-IG	True Green	20	3.3	3.8	515	530	-	160	250
QBLP602-IW	White	20	3.3	3.8	X=0.29 Y=0.3	-	-	320	400
QBLP62-R	Red	20	2.0	2.4	620	630	-	50	80
QBLP602-AG	Yellow Green	20	2.0	2.4	565	575	-	20	32
QBLP602-Y	Yellow	20	2.0	2.4	585	595	-	50	125

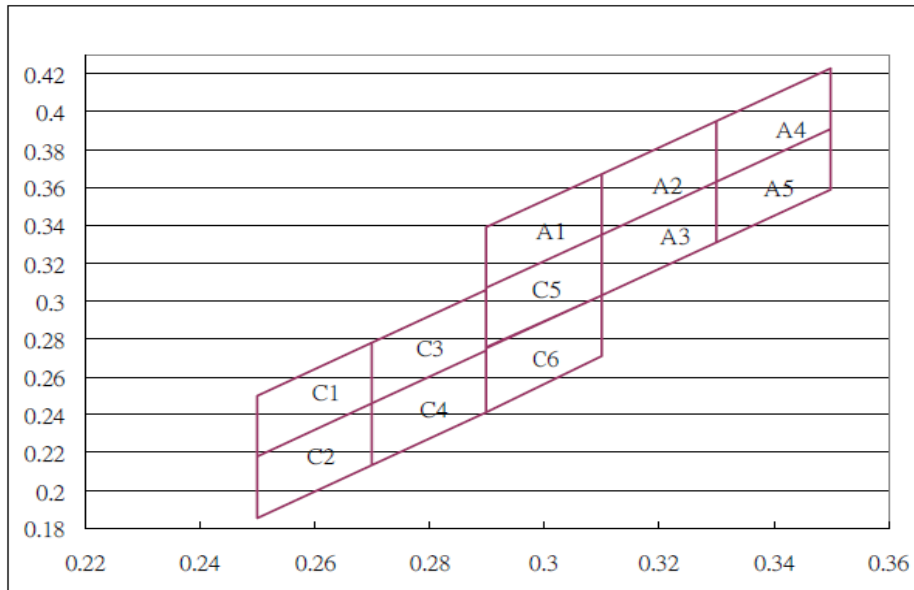
Absolute Maximum Rating

Part #	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
InGaN (IB/IG/IW)	110	25	100	5	-40 ~ +85	-40 ~ +100	260
AlInGaP (R/AG/Y)	75	25	100	5	-40 ~ +85	-40 ~ +100	260

*Duty 1/10 @ 10KHz

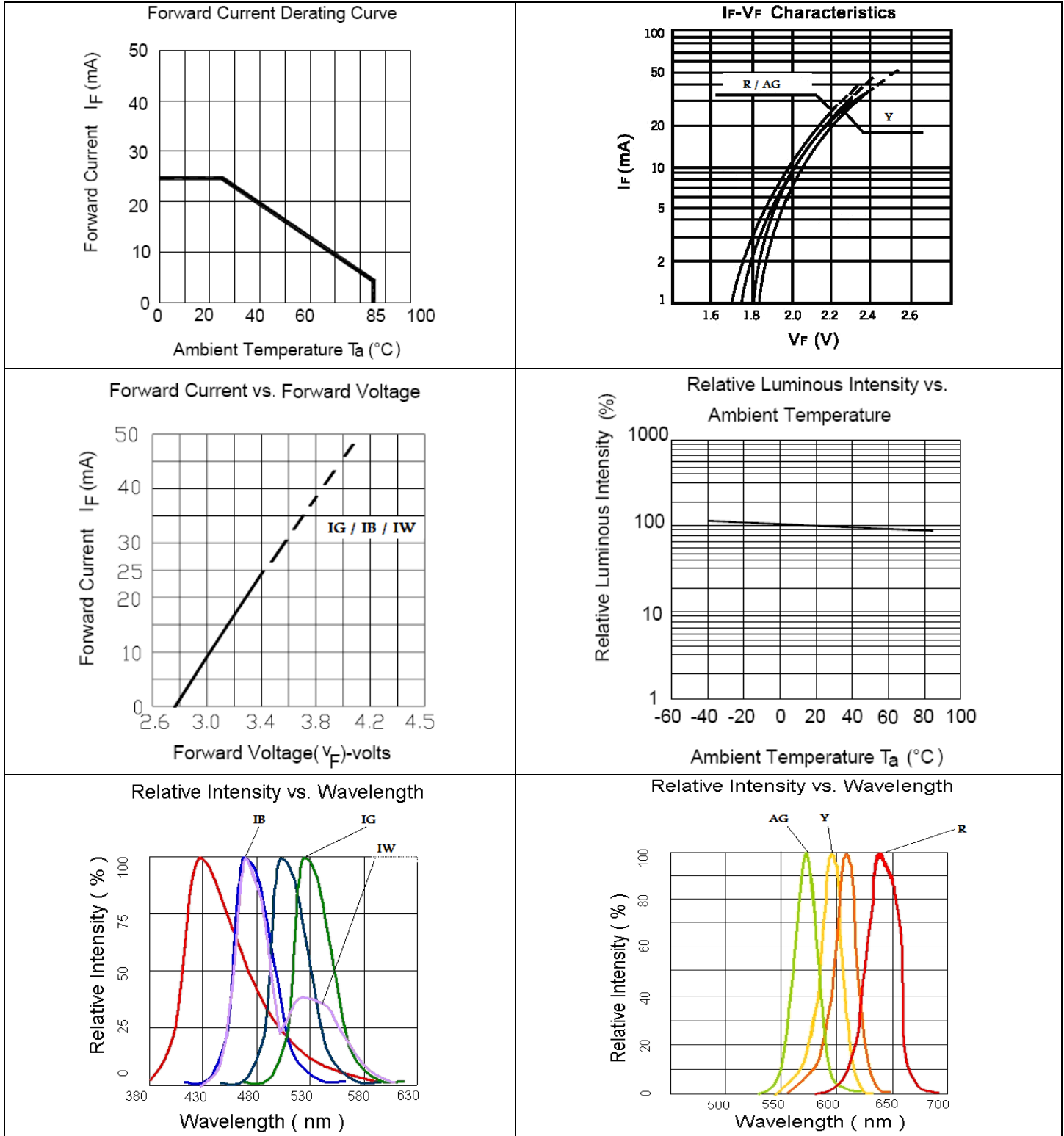
** IR Reflow for no more than 10 sec @ 260 °C

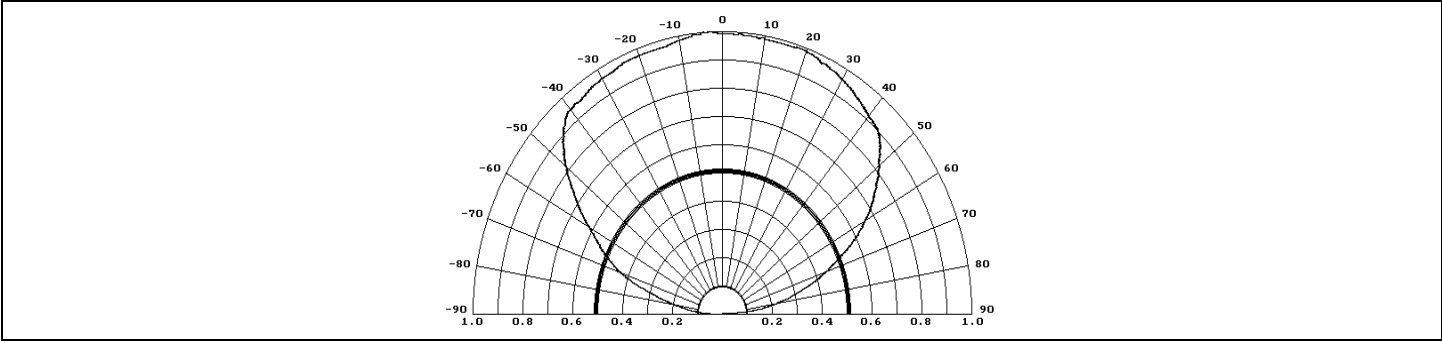
CIE Chromaticity Diagram



A1	X	0.29	0.29	0.31	0.31	0.29
	Y	0.339	0.307	0.335	0.367	0.339
A2	X	0.31	0.31	0.33	0.33	0.31
	Y	0.367	0.335	0.363	0.395	0.367
A3	X	0.31	0.31	0.33	0.33	0.31
	Y	0.335	0.303	0.331	0.363	0.335
C5	X	0.29	0.29	0.31	0.31	0.29
	Y	0.307	0.275	0.303	0.335	0.307
A4	X	0.33	0.33	0.35	0.35	0.33
	Y	0.395	0.363	0.391	0.423	0.395
A5	X	0.33	0.33	0.35	0.35	0.33
	Y	0.363	0.331	0.359	0.391	0.363
C1	X	0.27	0.25	0.25	0.27	0.27
	Y	0.278	0.25	0.218	0.246	0.278
C2	X	0.27	0.25	0.25	0.27	0.27
	Y	0.246	0.218	0.185	0.213	0.246
C3	X	0.29	0.27	0.27	0.29	0.29
	Y	0.306	0.278	0.246	0.274	0.306
C4	X	0.29	0.27	0.27	0.29	0.29
	Y	0.274	0.246	0.213	0.241	0.274
C6	X	0.31	0.29	0.29	0.31	0.31
	Y	0.303	0.2756	0.241	0.271	0.303

Characteristic Curves:

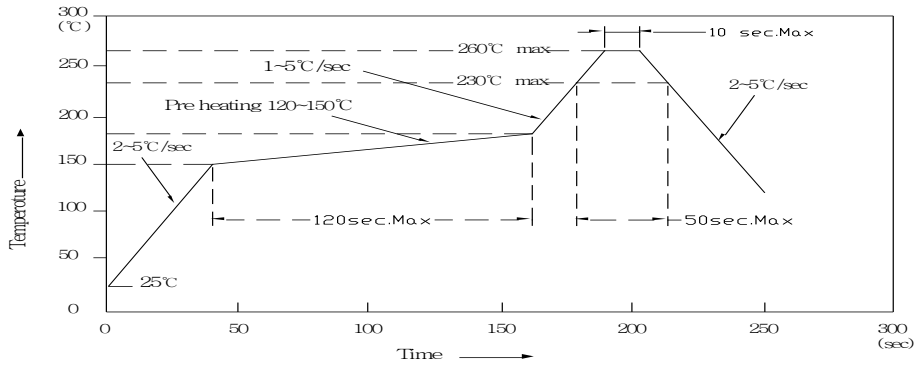




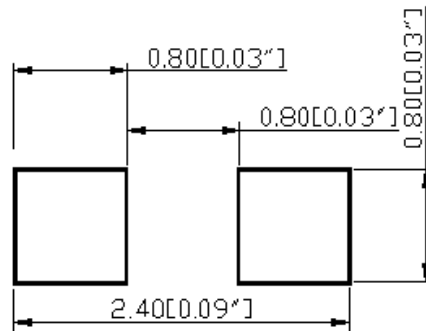
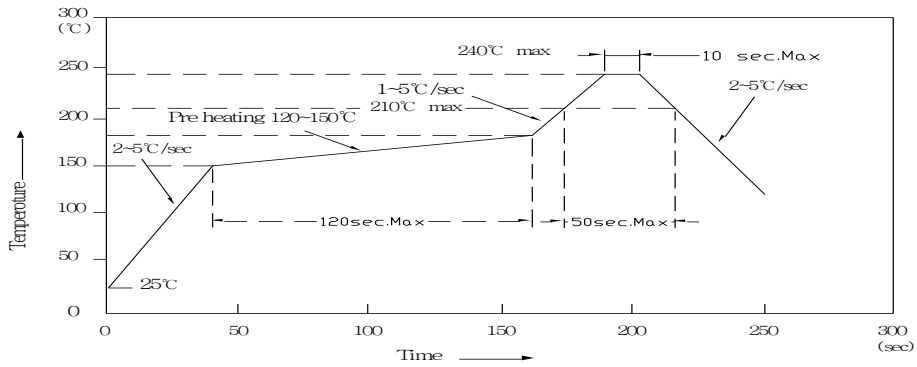
Product: QBLP602 series	Date: June 16, 2011	Page 5 of 9
	Version# 2.1	

Solder Profile & Footprint:

**IR Reflow Soldering Profile
Lead Free Solder**



**IR Reflow Soldering Profile
Lead Solder**



(Proposed Solder footprint)

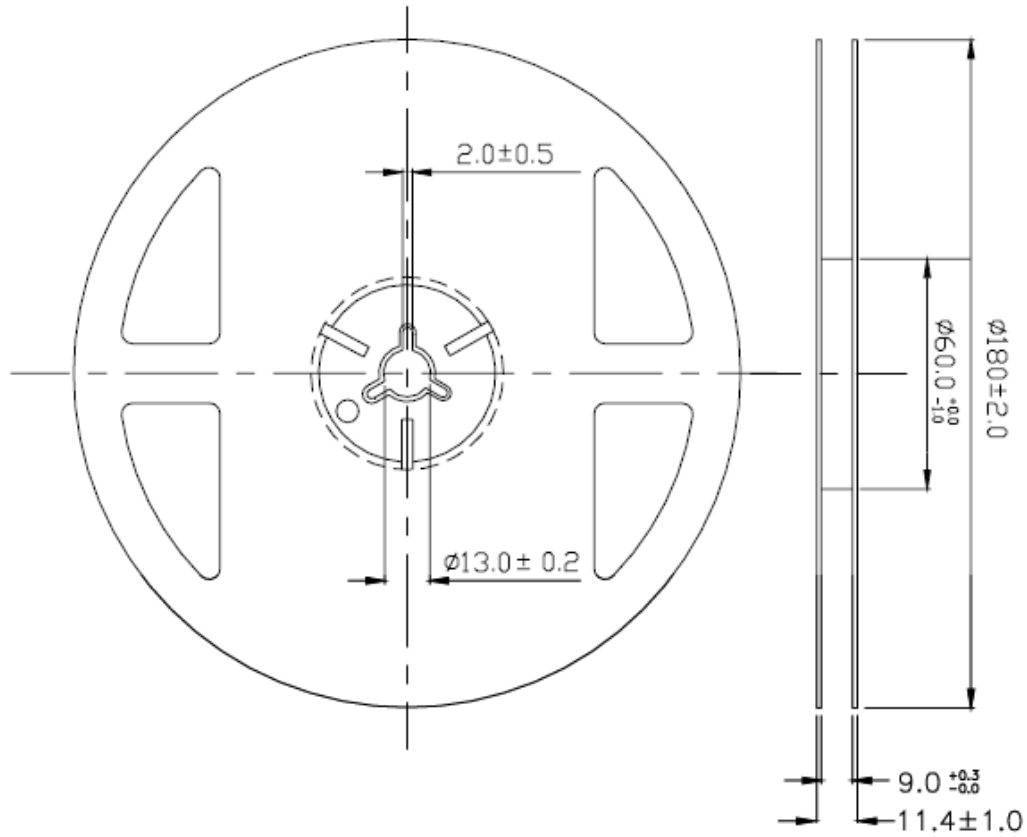
Units: mm

tolerance: +/- 0.1mm

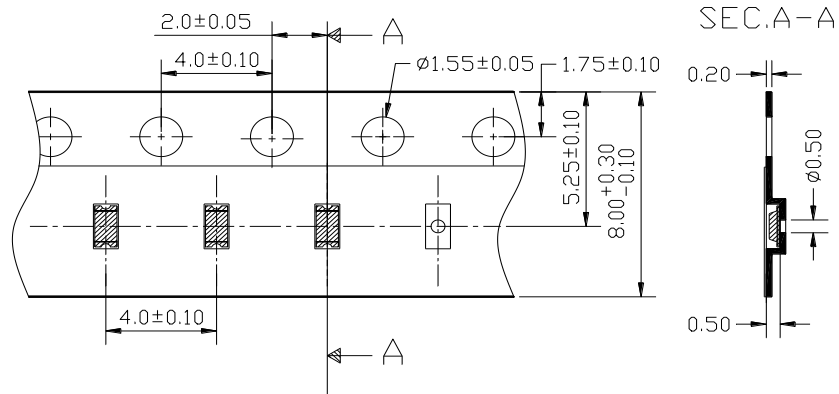
Product: QBLP602 series	Date: June 16, 2011	Page 6 of 9
	Version# 2.1	

Packaging Specification:

Reel Dimension:



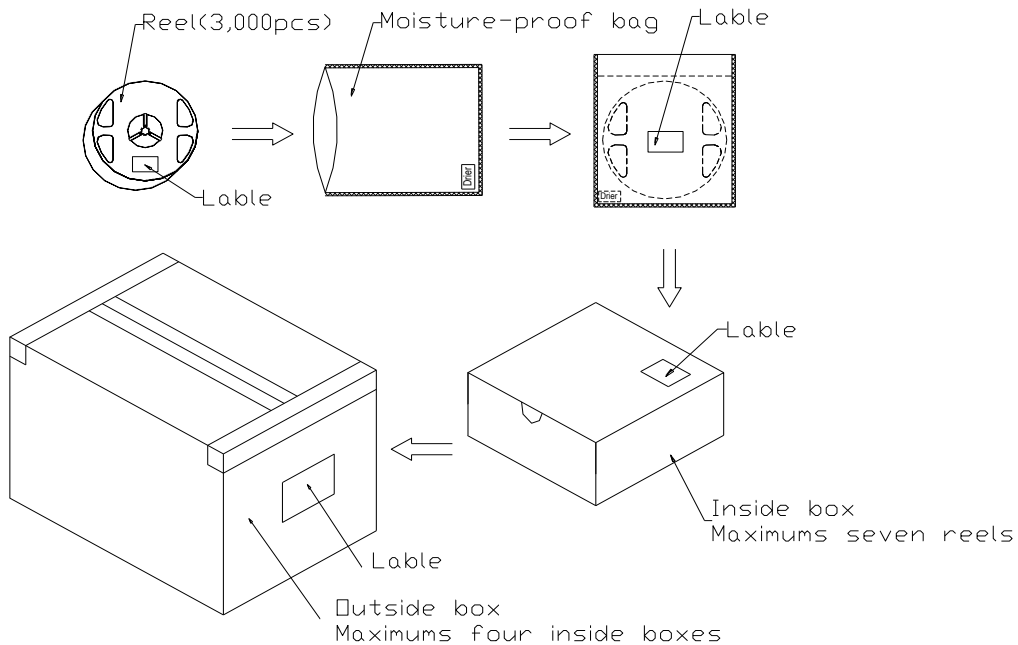
Tape Dimension:



Labeling:

	QT-Brighttek	
		
Part No: _____		
Customer P/N: _____		
Item: _____		
Q'ty: _____		
Vf: _____		
Iv: _____		
WI: _____		
Date: _____		
Made in China		

Packing Method:



Product: QBLP602 series	Date: June 16, 2011	Page 8 of 9
	Version# 2.1	

Revision History:

Description:	Revision #	Revision Date
New Release of QBLP602_series	V1.0	9/20/2010
Update brightness range and CIE chromaticity	V2.0	4/28/2011
Update Brightness	V2.1	6/16/2011