

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









#### **Feature:**

- Water clear lens
- Package in tape and reel
- Bright 1206 LED package
- InGaN technology for IB/IG/IW
- AllnGaP technology for R/AG/Y/O

#### **Description:**

This top mount bright 1206 LEDs have a height profile of 1.1mm, which is ideal in any kind of back lighting application. Also, it is a light weight model that is good for miniature products..

#### **Application:**

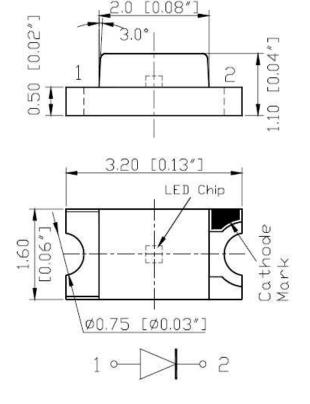
- Automotive dashboard lighting and button lighting
- Telecommunication and storage Back lighting
- Flat panel display back lighting

#### **Certification & Compliance:**

- TS16949
- ISO9001
- RoHS Compliant



#### **Dimension:**



Units: mm / tolerance = +/-0.1mm

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## **Electrical / Optical Characteristic:**

(T=25°C)

Product	Color	I <sub>F</sub> (mA)	$I_{-(m,\Lambda)}$ $V_{F}(V)$		λ(nm)			I <sub>V</sub> (mcd)	
Floduct	Coloi	IF(IIIA)	Typ.	Max.	Min.	Max	Δλ	Min.	Typ.
QBLP650-IB	Blue	20	3.3	3.7	465	475	30	25	45
QBLP650-IG	Green	20	3.3	3.7	520	530	30	250	400
QBLP650-IW	White	20	3.3	3.7	X=0.29 Y=0.30	-	-	160	250
QBLP650-R	Red	20	2.0	2.4	620	630	25	80	110
QBLP650-AG	Yellow Green	20	2.0	2.4	565	575	20	20	45
QBLP650-Y	Yellow	20	2.0	2.4	585	595	20	63	125
QBLP650-O	Orange	20	2.0	2.4	601	611	20	125	180

## **Absolute Maximum Rating:**

Emit Color	P <sub>d</sub> (mW)	$I_{F}(mA)$	I <sub>FP</sub> (mA)*	$V_{R}(V)$	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)	T <sub>SOL</sub> (°C)**
IB/IG/IW	120	30	100	5	-40 ~ +85	-40 ~ +90	260
R/AG/Y/O	75	30	60	5	-40 ~ +85	-40 ~ +90	260

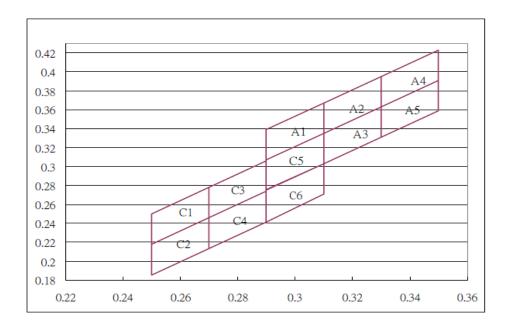
<sup>\*</sup>Duty 1/10 @ 1KHz

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<sup>\*\*</sup> IR Reflow for no more than 10 sec @ 260 °C



# **CIE Chromaticity Table:**

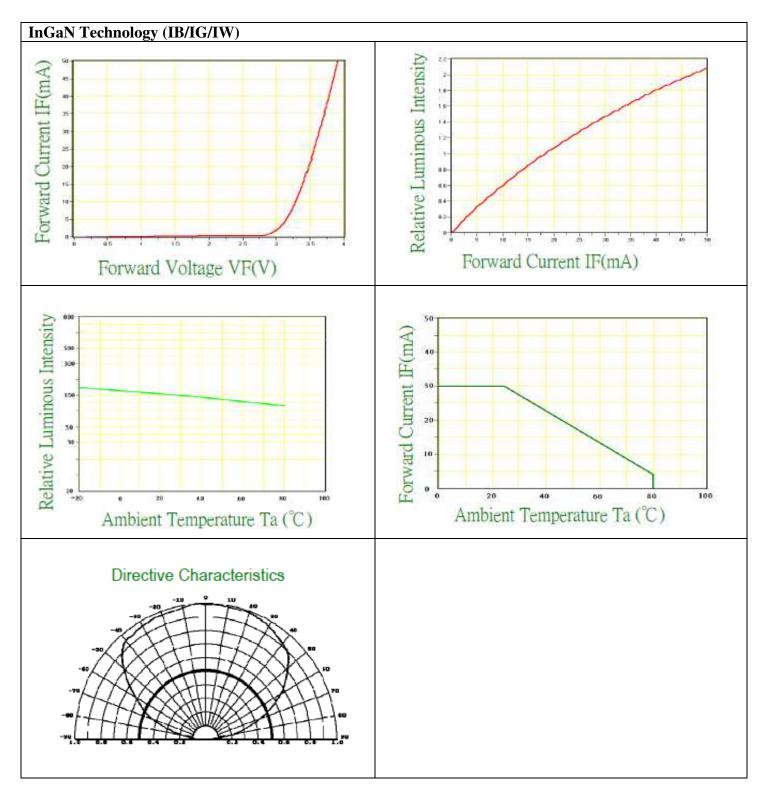


A1	X	0.29	0.29	0.31	0.31	0.29
AI	Y	0.339	0.307	0.335	0.367	0.339
A2	X	0.31	0.31	0.33	0.33	0.31
AZ	Y	0.367	0.335	0.363	0.395	0.367
А3	X	0.31	0.31	0.33	0.33	0.31
AS	Y	0.335	0.303	0.331	0.363	0.335
C5	X	0.29	0.29	0.31	0.31	0.29
CS	Y	0.307	0.275	0.303	0.335	0.307
A4	X	0.33	0.33	0.35	0.35	0.33
A4	Y	0.395	0.363	0.391	0.423	0.395
A5	X	0.33	0.33	0.35	0.35	0.33
AS	Y	0.363	0.331	0.359	0.391	0.363
C1	X	0.27	0.25	0.25	0.27	0.27
CI	Y	0.278	0.25	0.218	0.246	0.278
C2	X	0.27	0.25	0.25	0.27	0.27
C2	Y	0.246	0.218	0.185	0.213	0.246
СЗ	X	0.29	0.27	0.27	0.29	0.29
CS	Y	0.306	0.278	0.246	0.274	0.306
C4	X	0.29	0.27	0.27	0.29	0.29
C4	Y	0.274	0.246	0.213	0.241	0.274
C6	X	0.31	0.29	0.29	0.31	0.31
Co	Y	0.303	0.2756	0.241	0.271	0.303

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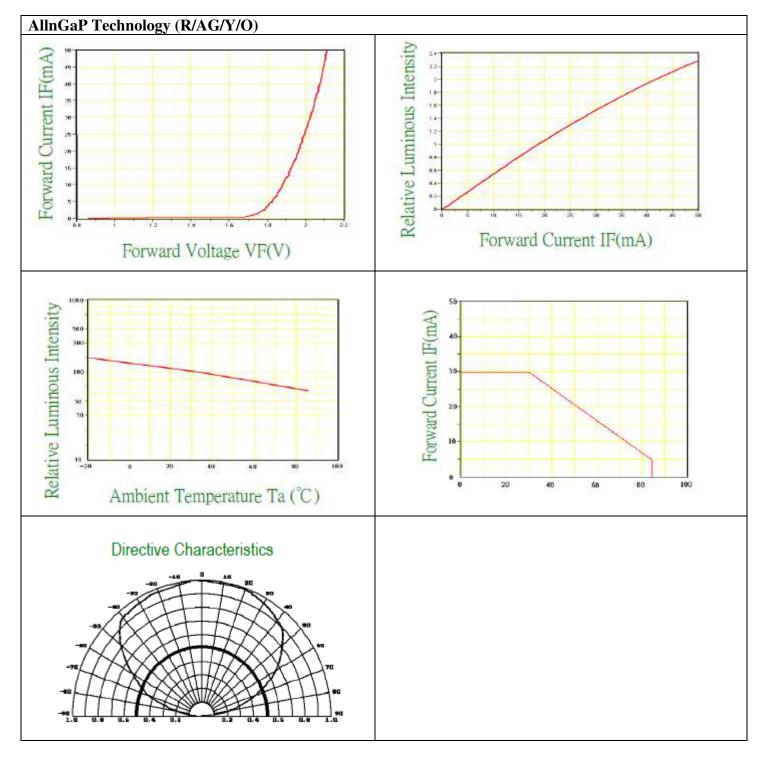


#### **Characteristic Curves:**



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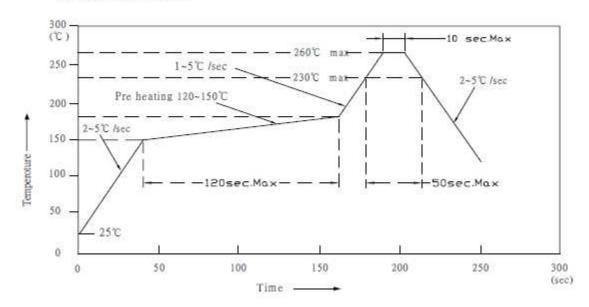


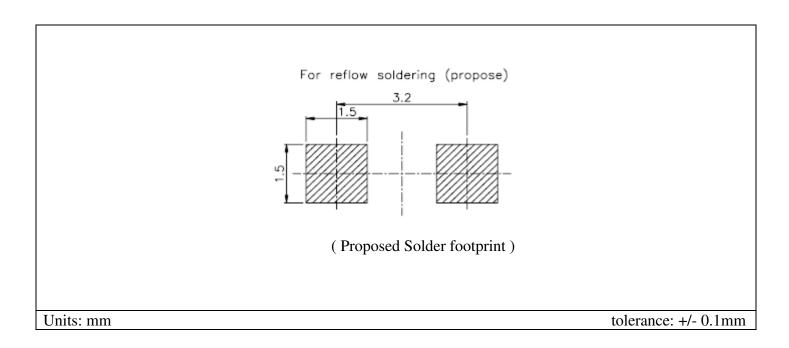
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### **Solder Profile & Footprint:**

### IR Reflow Soldering Profile Lead Free Solder



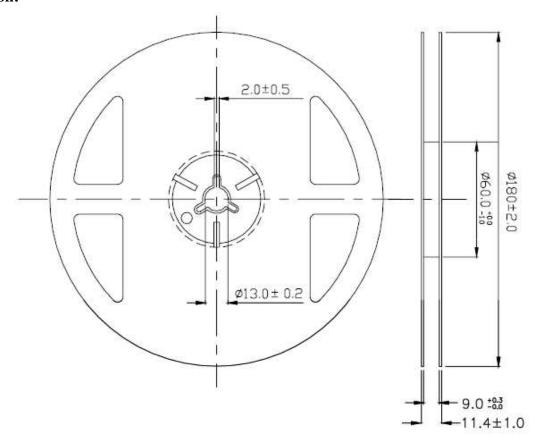


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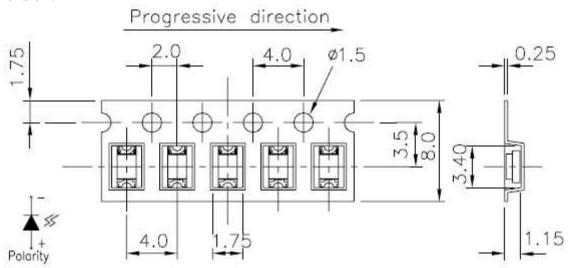


## Packing method:

#### **Reel Dimension:**



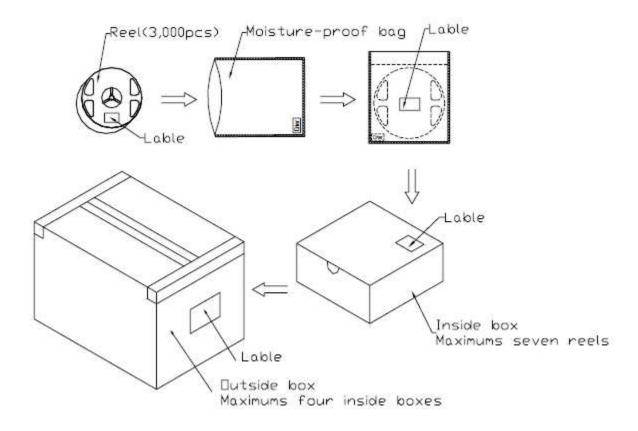
### **Tape Dimension:**



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### Labeling:



### **Revision History**

Description:	Revision #	Revision Date
New Release of QBLP650_series	V1.0	09/20/2010
Update Information	V1.1	03/20/2011
Update brightness and CCT range	V2.1	05/06/2011
Update Brightness	V2.2	06/15/2011

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