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.

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QT-Brightek Chip LED Series

SMD 1205 Bi-Color LED

Part No.: QBLP655-RAG

R: Red
AG: Yellow Green

Table of Contents:

Introduction

Feature:

- Clear lens
- Package in tape and reel
- Ultra bright 1205 package
- AlInGaP technology for R/ AG
- Viewing angle: 140 degrees
- Top Mountable

Description:

These ultra-bright 655 LEDs have a height profile of 1.10mm. With a combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

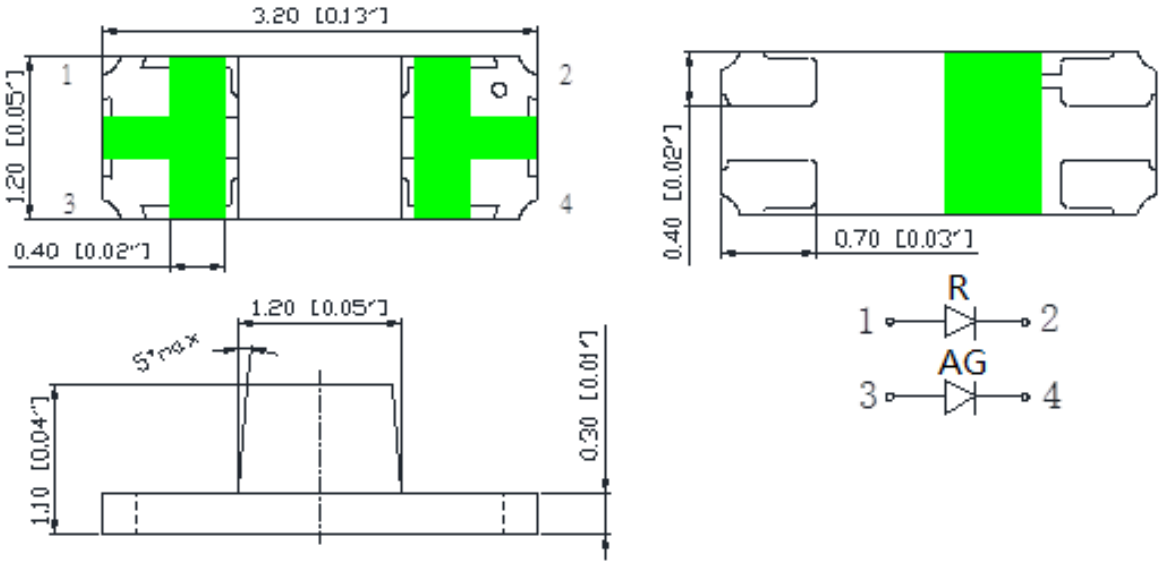
Application:

- Status indication
- Back lighting application

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant

Dimension:



Units: mm / tolerance = +/-0.1mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I_F (mA)	V_F (V)		λ_D (nm)			I_V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBLP655-RAG	Red	20	2.0	2.5	615	623	630	50	90
	Yellow Green	20	2.0	2.5	565	571	576	20	33

Absolute Maximum Rating

Material	P_d (mW)	I_F (mA)	I_{FP} (mA)*	V_R (V)	T_{OP} (°C)	T_{ST} (°C)	T_{SOL} (°C)**
AlInGaP (R/AG/Y/O)	75	30	125	5	-40 ~ +85	-40 ~ +100	260

*Duty 1/8 @ 1kHz
**IR Reflow for no more than 10 sec @ 260 °C

Forward Voltage V_F for AlInGaP @ I_F=20mA

Bin	Min.	Max.	Unit
□	1.7	2.5	V

Luminous Intensity I_V @ I_F=20mA

Bin	Min.	Max.	Unit
C	20	25	mcd
D	25	32	
E	32	40	
F	40	50	
G	50	63	
H	63	80	
I	80	100	
J	100	125	
K	125	160	

Dominant Wavelength λ_D for Yellow Green @ I_F=20mA

Bin	Min.	Max.	Unit
h	565	568	nm
i	568	572	
j	572	576	

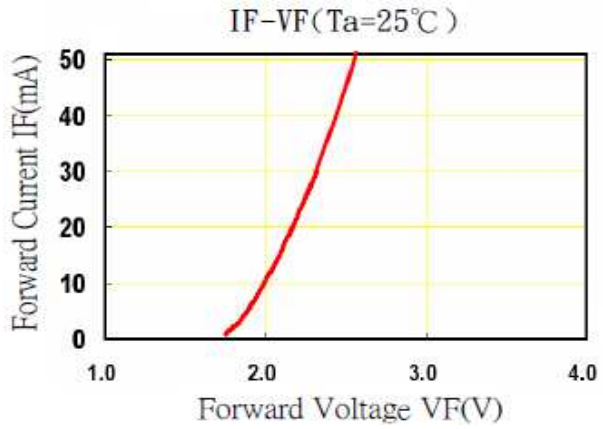
Dominant Wavelength λ_D for Red @ I_F=20mA

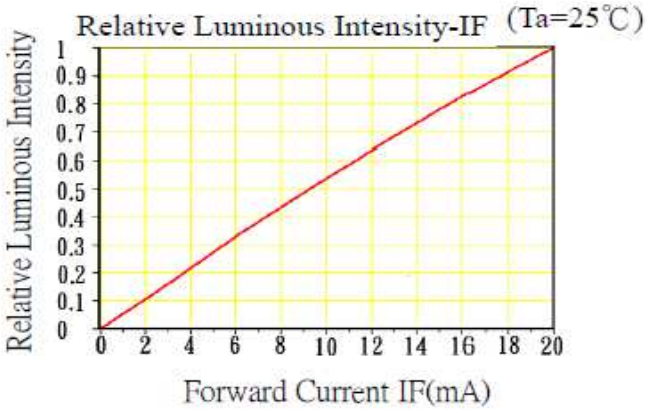
Bin	Min.	Max.	Unit
s	615	620	nm
t	620	625	
u	625	630	

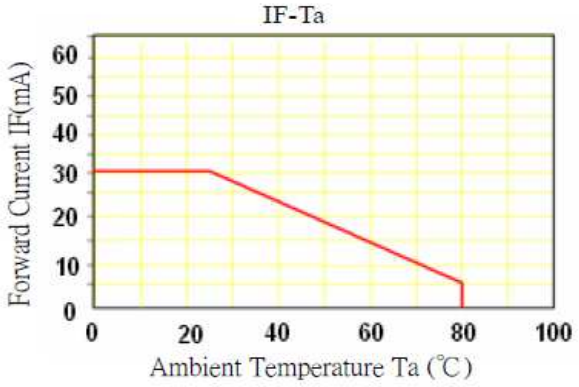
Note:
Tolerance of measurement of forward voltage: ±0.1V
Tolerance of measurement of luminous intensity: ±15%
Tolerance of measurement of dominant wavelength: ±2nm

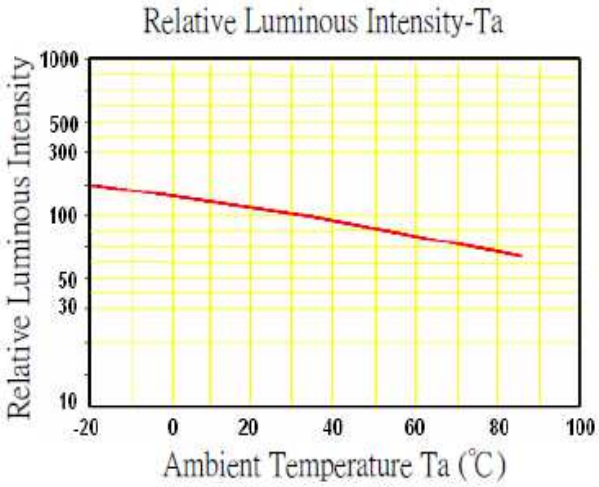
Characteristic Curves

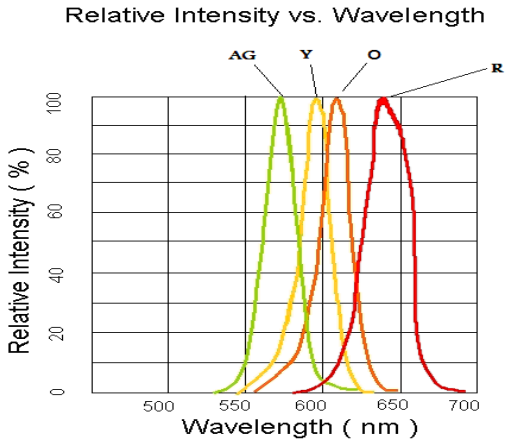
AlInGaP (R/ AG)

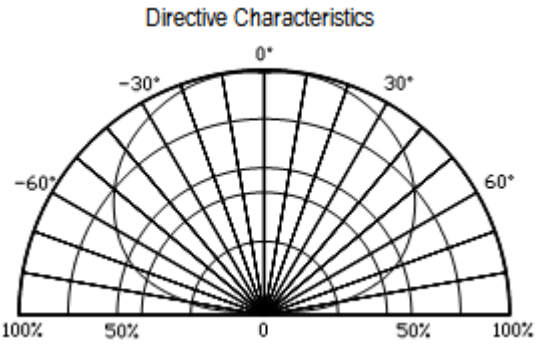






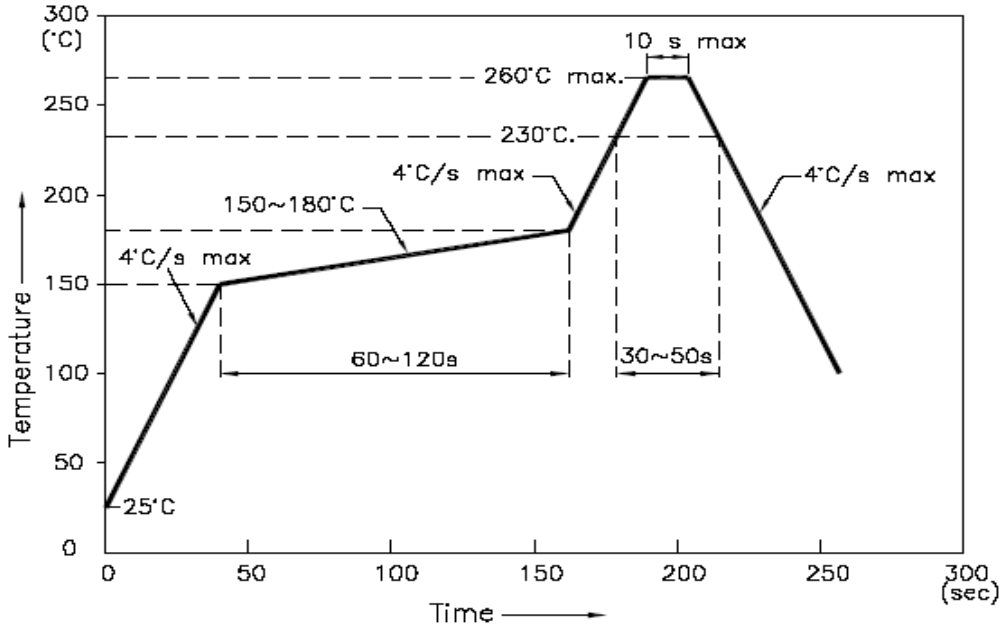




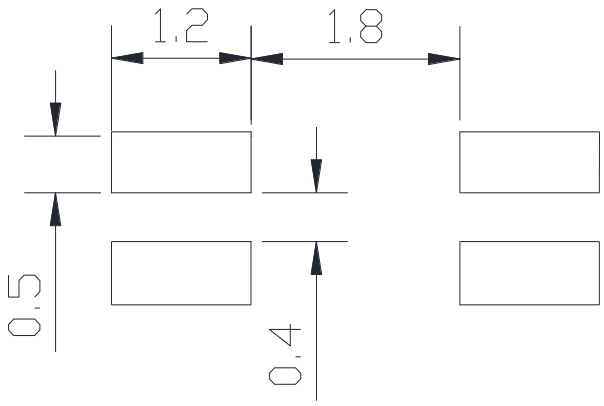


Solder Profile & Footprint

-The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



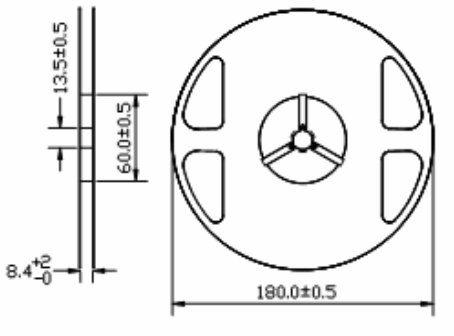
Recommended Pad Layout



Units: mm	tolerance: +/- 0.1mm

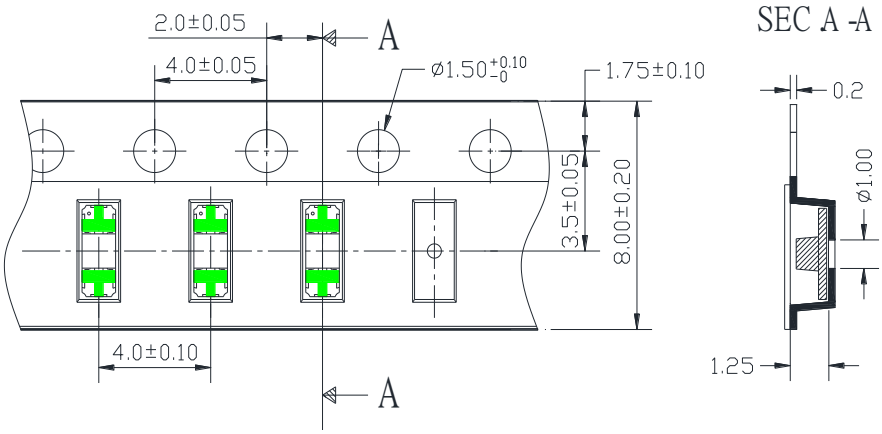
Packing

Reel Dimension:



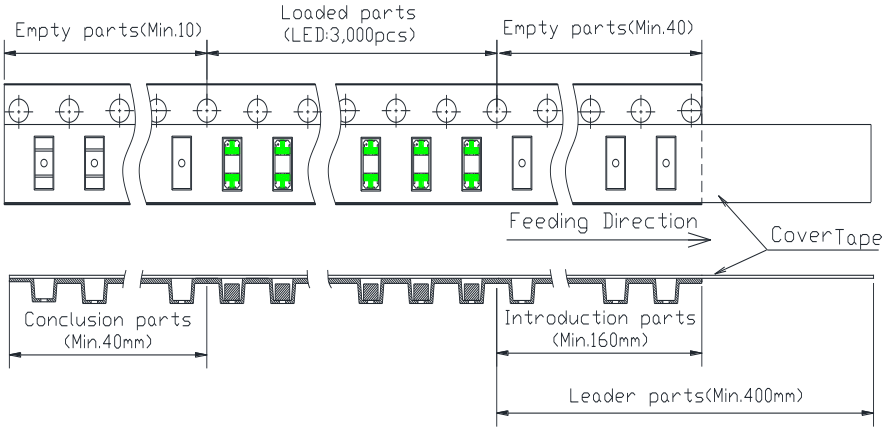
Unit: mm

Tape Dimension:

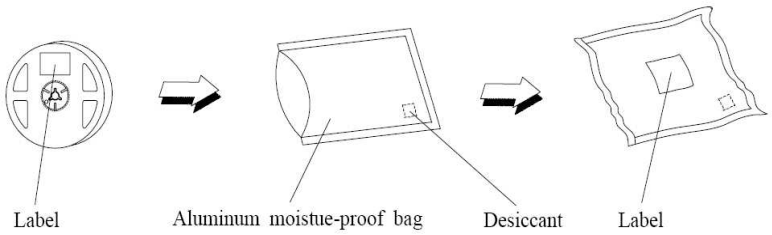


Unit: mm

Arrangement of Tape:



Packaging Specifications:



Labeling

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP655-RAG	QBLP655-RAG	Iv=90mcd typ. @ 20mA / λ_D=615-630nm Iv=33mcd typ. @ 20mA / λ_D=565-576nm	3,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP655-RAG	V1.0	6/28/2011
Update Format	V1.1	08/23/2012
Amend spec	V1.2	06/23/2017

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2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.