

QT-Brightek Chip LED Series

SMD 0603 Green LED

Part No.: QBLP601-AG1

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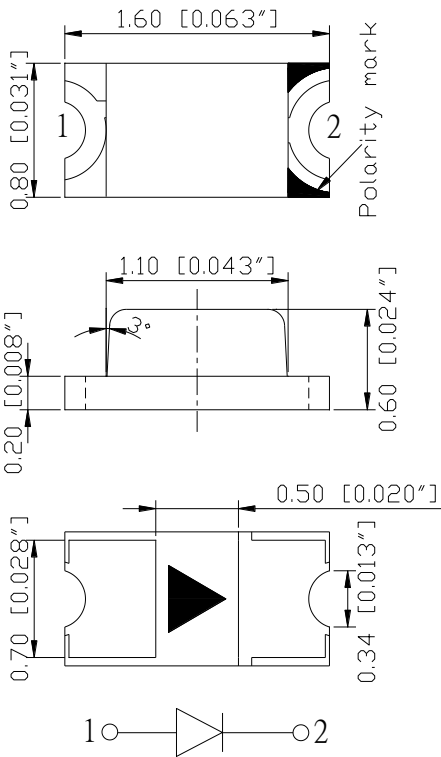
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Introduction

Feature: • Water clear lens • Color: Green • Package in tape and reel • Ultra bright 0603 LED package • AllnGaP technology • Viewing angle: 140 deg typ. • Height profile: 0.6mm	Application: • Status indication • Back lighting application Certification & Compliance: • ISO9001 • RoHS Compliant 
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Dimension:



Units: mm / tolerance = +/-0.1mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)		λ _D (nm)			λ _P (nm)	I _V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Typ.	Min.	Typ.
QBLP601-AG1	Green	20	2.0	2.5	566	570	575	574	32	60

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	75	30	100	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/10 @ 1KHz

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

Forward Voltage V_F @ I_F=20mA

Bin	Min.	Max.	Unit
b	1.6	1.9	V
c	1.9	2.2	
d	2.2	2.5	

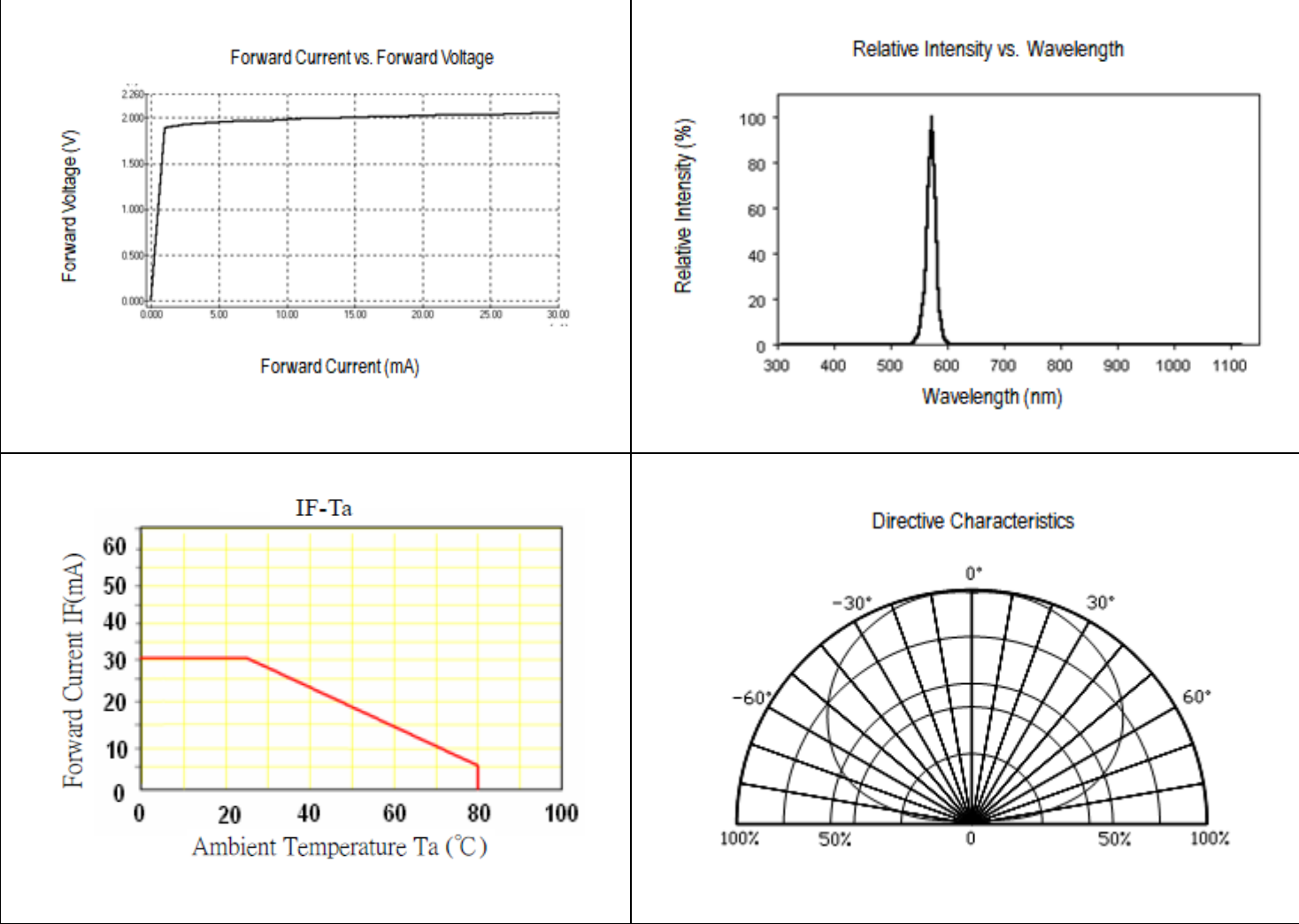
Luminous Intensity I_V @ I_F=20mA

Bin	Min.	Max.	Unit
E	32	40	mcd
F	40	50	
G	50	63	
H	63	80	

Dominant Wavelength λ_D @ I_F=20mA

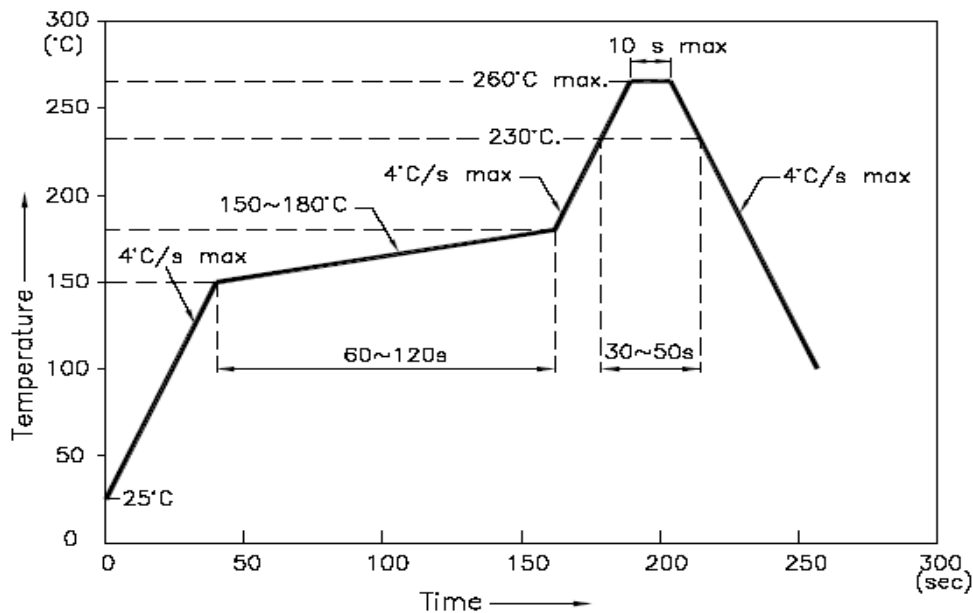
Bin	Min.	Max.	Unit
H	566	569	nm
I	569	572	
J	572	575	

Characteristic Curves

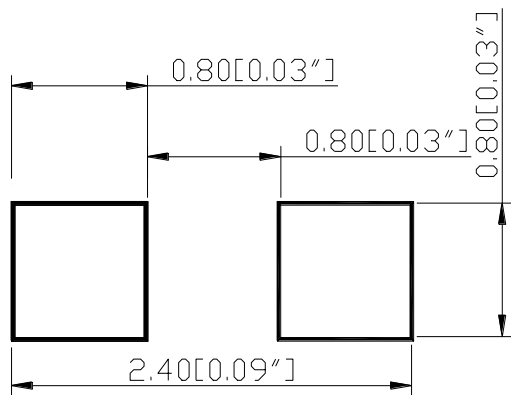


Solder Profile & Footprint

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



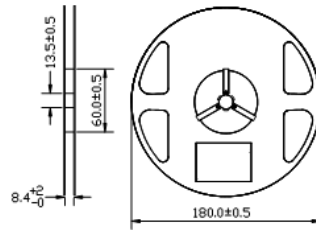
Recommended Pad Layout



Units: mm

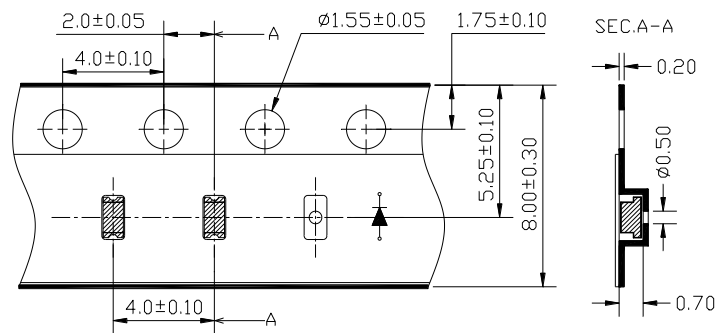
Packing

Reel Dimension:



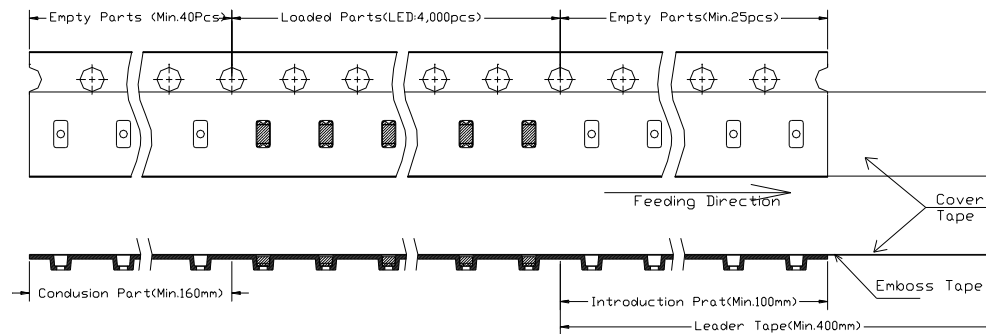
Unit: mm

Tape Dimension:

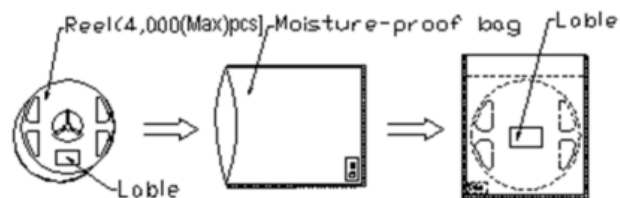


Unit: mm

Arrangement of Tape:



Packaging Specifications:





Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP601-AG1	Iv=60mcd typ. @ I _F =20mA / Color=566 to 575nm	4,000 units

Product: QBLP601-AG1	Date: January 27, 2025	Page 8 of 9
	Version# 1.1	



Revision History

Description:	Revision #	Revision Date
New Release of QBLP601-AG1	V1.0	02/25/2021
Update typical Iv value, add peak wavelength	V1.1	01/27/2025

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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.