

QT-Brightek Chip LED Series

SMD 1208 Red LED

Part No.: QBLP653-R5

5: 5mA

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	Version# 1.0	

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Introduction

Feature:

- Water clear lens
- Package in tap and reel
- Bright 1208 LED package
- AllnGaP technology
- Viewing angle: 15 deg typ.

Description:

This bright 1208 LED has a height profile of 2.5mm. With narrow viewing angle, LED produces high bright light output.

Application:

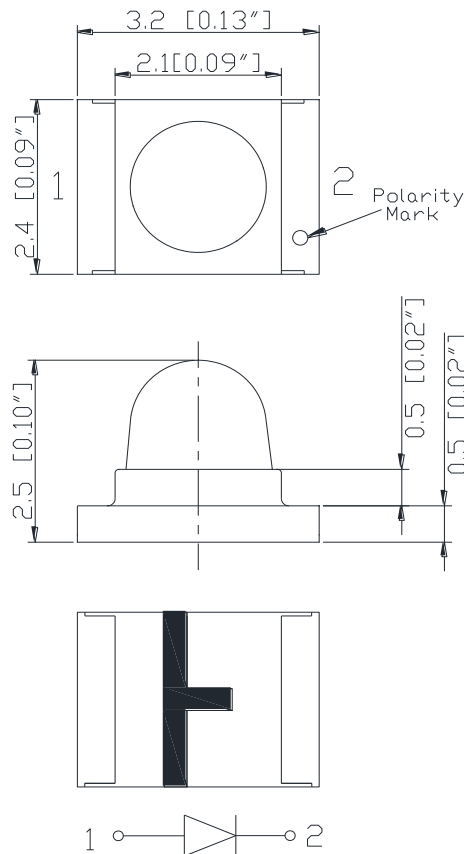
- Status indication
- Back lighting application

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.15mm

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.
QBLP653-R5	Red	5	1.8	2.3	615	621	630	400	700

Absolute Maximum Rating

Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SO L} (°C)**
AllnGaP	69	30	125	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/8 @ 1KHz

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

Forward Voltage V_F @ I_F=5mA

Bin	Min.	Max.	Unit
□	1.7	2.3	V

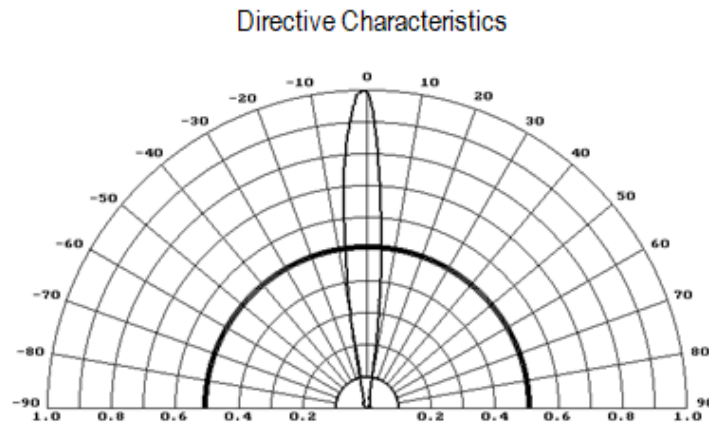
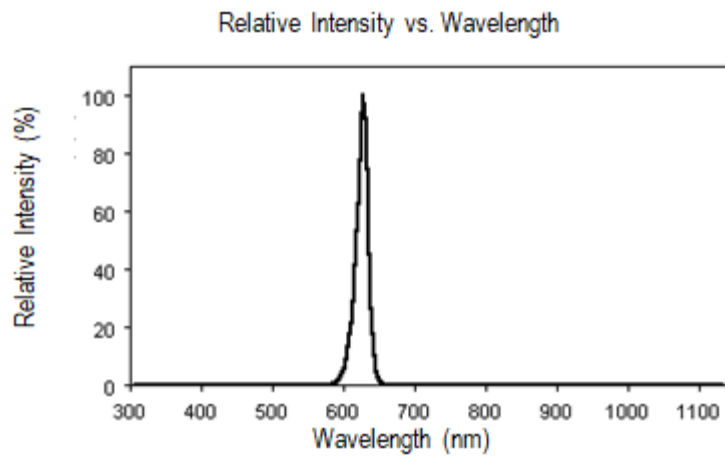
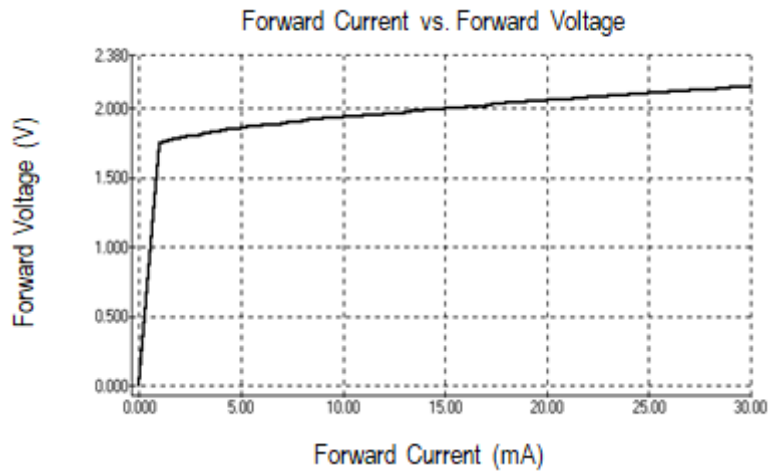
Luminous Intensity I_V @ I_F=5mA

Bin	Min.	Max.	Unit
P	400	500	mcd
Q	500	630	
R	630	800	
S	800	1000	
T	1000	1250	

Dominant Wavelength λ_D @ I_F=5mA

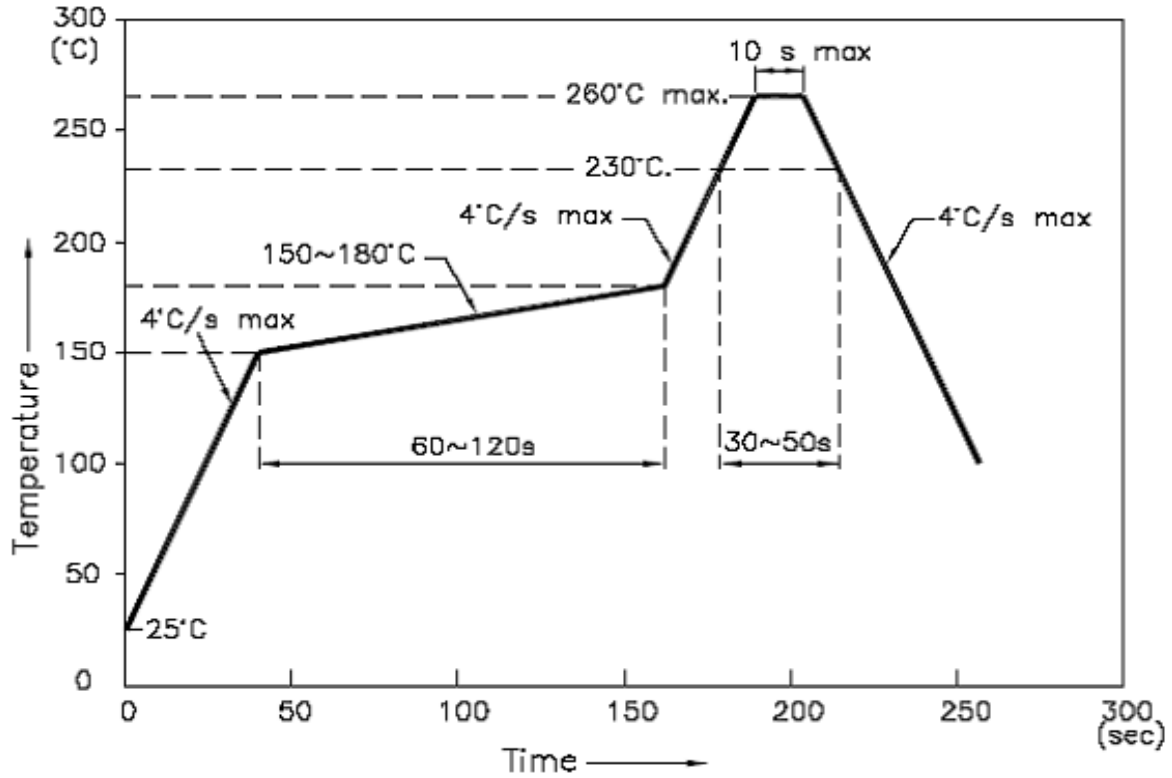
Bin	Min.	Max.	Unit
s	615	620	nm
t	620	625	
u	625	630	

Characteristic Curves

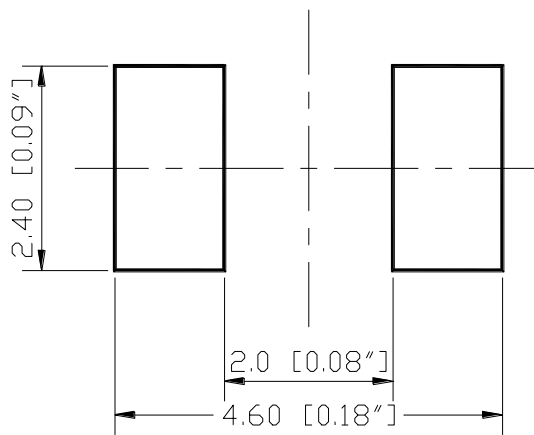


Solder Profile & Footprint

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



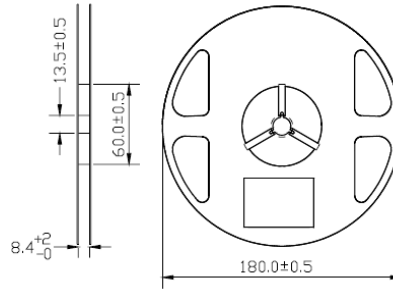
Recommended Pad Layout



Units: mm

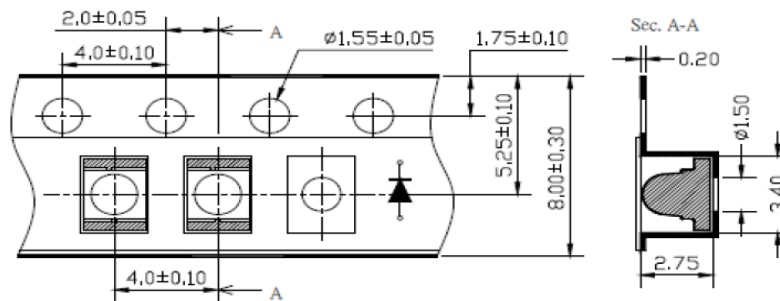
Packing

Reel Dimension:



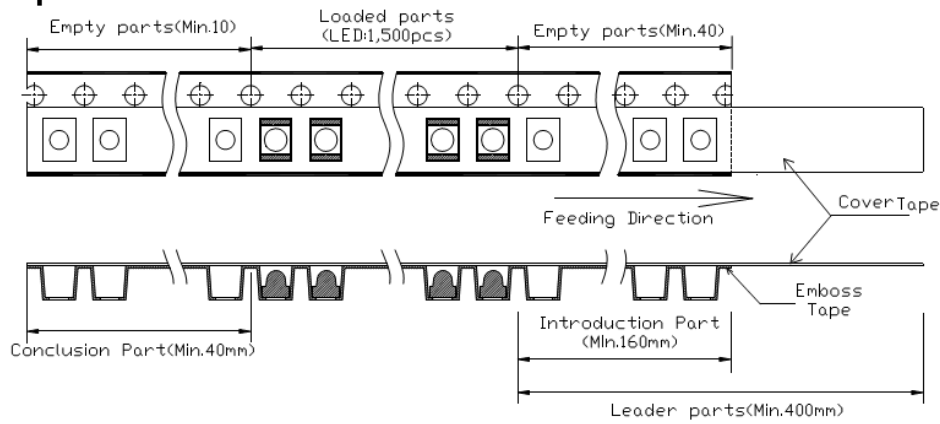
Unit: mm

Tape Dimension:

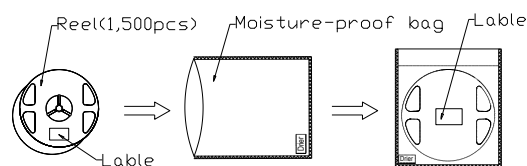


Unit: mm

Arrangement of Tape:



Packaging Specification:



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Labeling



Part No: _____

Customer P/N: _____

Item: _____

Q'ty: _____

Vf: _____

Iv: _____

VI: _____

Date: _____

Made in China

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP653-R5	QBLP653-R5	Iv=700mcd typ. / Color = 615nm to 630nm @ 5mA	1,500 units

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Revision History

Description:	Revision #	Revision Date
New Release of QBLP653-R5	V1.0	03/07/2023



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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.