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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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QT-Brightek High Power Series

4W High Power UV LED

Part No.: QBHP5050E-UVXXXBK

XXX: UV Wavelength
B: 125° Viewing Angle
K: Single chip

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Introduction

Feature:

- 4W High Power UV LED
- Packed in tape and reel
- ESD rating: 8KV (HBM)
- Viewing Angle: 125° typ.

Description:

This 4W high power UV LED has compact size of 5.0 x 5.0mm. It is ideal for both indoor and outdoor lighting

Application:

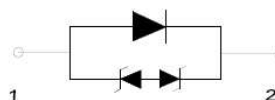
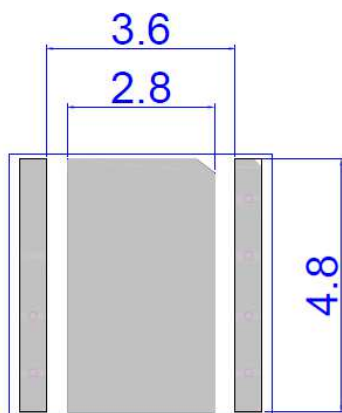
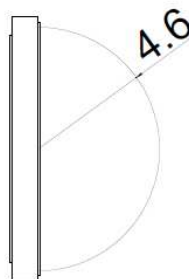
- UV curing
- UV marking
- Purification
- Inspection
- Sterilization and Disinfection

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimensions:



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 °C)

Part Number	Color	I _F (mA)	V _F (V)			λ _p (nm)			P _o (mW)		
			Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.
QBHP5050E-UV385BK	UV	1500	3.4	3.7	4.6	380	385	390	2000	3000	4000
QBHP5050E-UV395BK	UV	1500	3.4	3.7	4.6	390	395	400	2000	3000	4000

Absolute Maximum Rating

Material	P _d (W)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SO L} (°C)
InGaN	7.5	2000	2500	5	-40 to +80	-40 to +100	260

*Duty 1/10 @ 10ms Pulse Width

Forward Voltage V_F @ I_F=1500mA

Bin	Min.	Max.	Unit
A1	3.4	3.8	V
A2	3.8	4.2	
A3	4.2	5.6	

Radiometric Power P_o for UV385K & UV395K @ I_F=1500mA

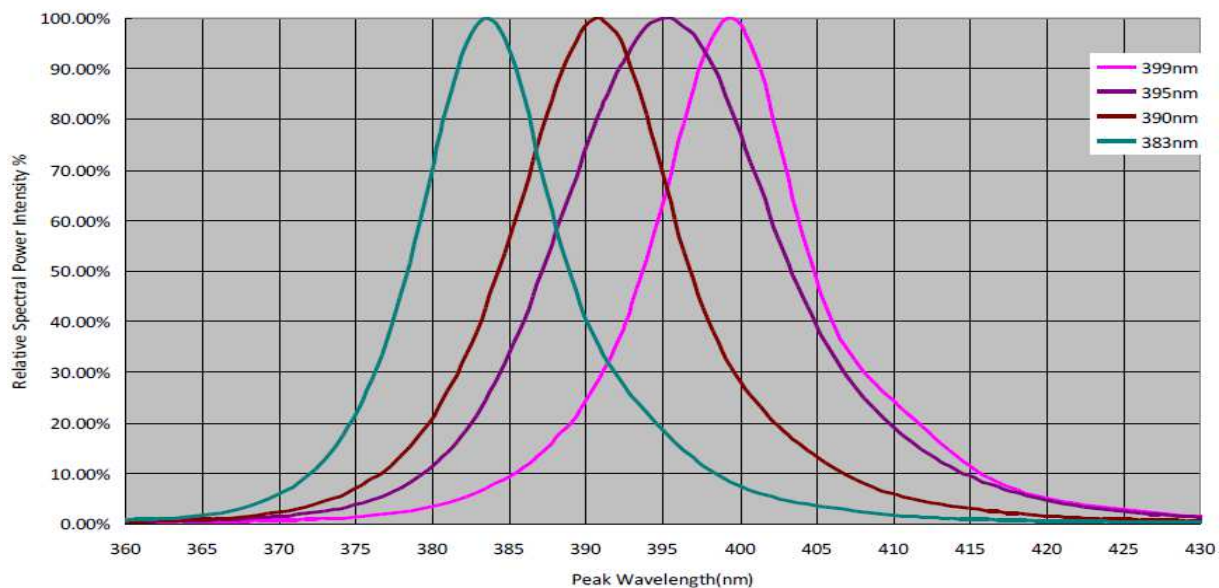
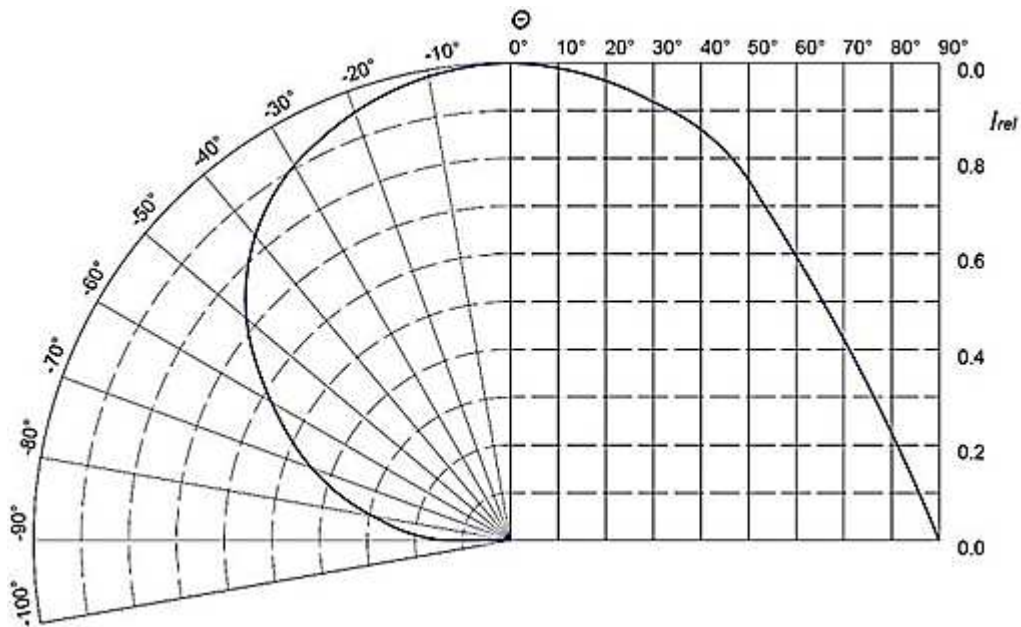
Bin	Min.	Max.	Unit
P30	2500	3000	mW
P35	3000	3500	
P40	3500	4000	
P45	4000	4500	

Tolerance of measurement of forward voltage: ±0.1V

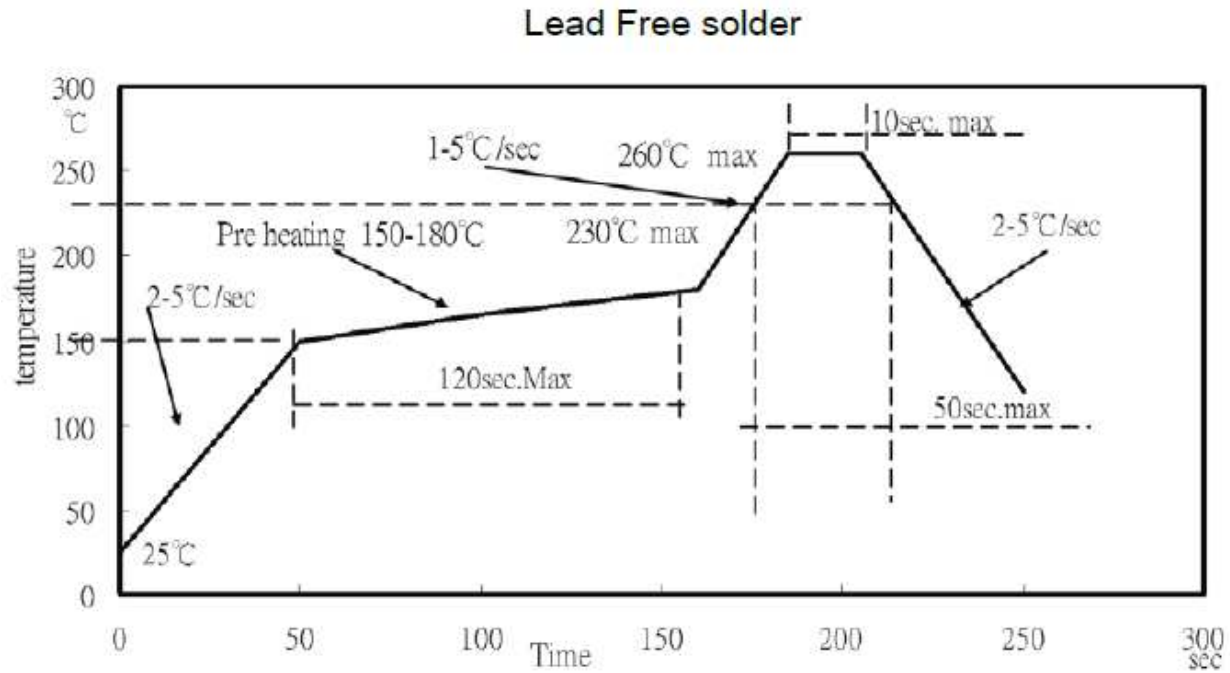
Tolerance of measurement of Radiometric Power: ±15%

Tolerance of measurement of Peak wavelength: ±2nm

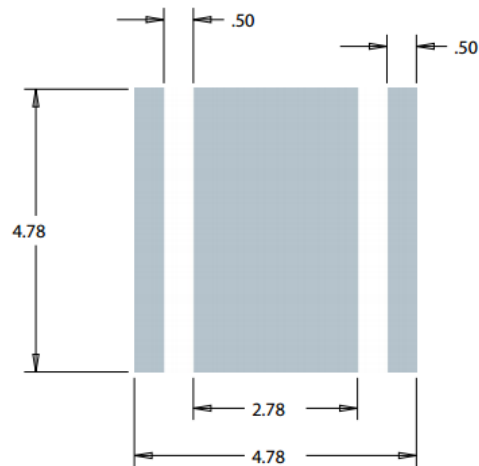
Characteristic Curves



IR Reflow Soldering Profile



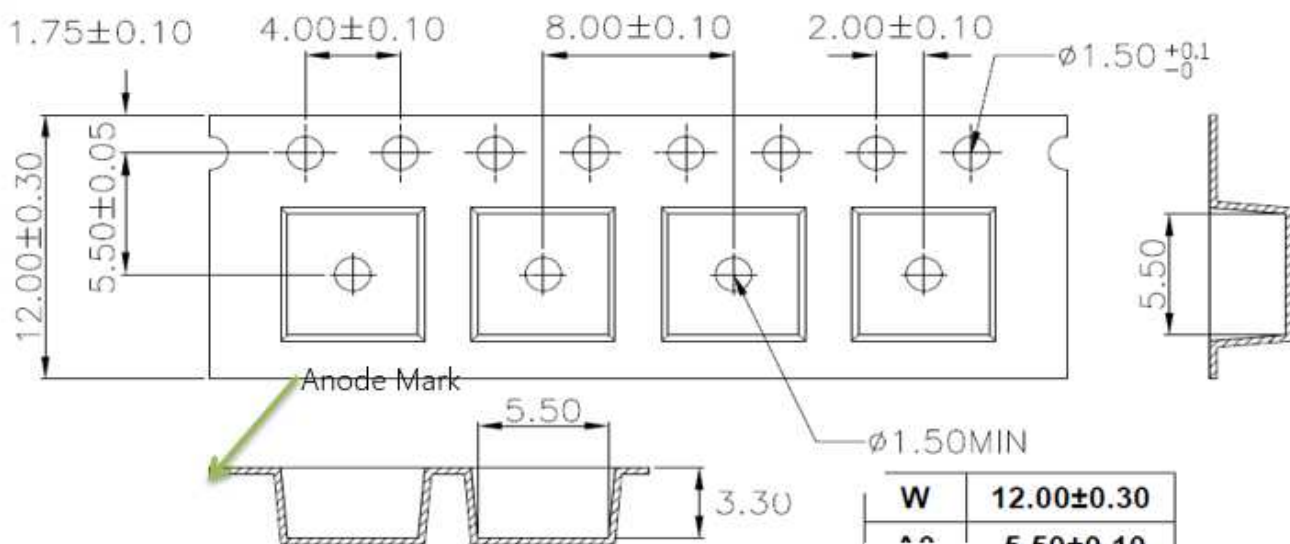
Recommended Soldering Pad:



Tolerance is ± 0.13 mm unless other specified.

Packing

Tape and Reel:



1. 10 sprocket hole pitch cumulative tolerance ± 0.20 .
2. Carrier camber is within 1 mm in 250 mm.
3. Material : Black Conductive Polystyrene Alloy.
4. All dimensions meet EIA-481-D requirements.
5. Thickness : 0.30 ± 0.05 mm.

W	12.00±0.30
H	5.50±0.10
D	5.50±0.10
H ₂	3.30±0.10

User Feed Direction



Unit: mm

Labeling



Part No: _____
 Customer P/N: _____
 Item: _____
 Q'ty: _____
 Vf: _____
 Iv: _____
 WI: _____
 Date: _____

Made in Taiwan

Caution

	<h1 style="margin: 0;">CAUTION</h1>
	<ul style="list-style-type: none"> • This UV LED during operation radiates intense UV light. • Do not look directly into the UV light during operation of the device. This can be harmful to the eyes even for brief period due to the intense UV light. • If viewing the UV light is necessary, please use UV filtered glasses to avoid damage by the UV light. • If the UV LED in your product might be viewed directly, please affix a caution label to your product to that effect. <p style="text-align: center;">Avoid direct eye exposure to UV light Keep out of reach of children</p>

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBHP5050E-UV385BK	QBHP5050E-UV385BK	Po=3000mW typ. @ I _F =1500mA, λ _p =380nm to 390nm	500 units
QBHP5050E-UV395BK	QBHP5050E-UV395BK	Po=3000mW typ. @ I _F =1500mA, λ _p =390nm to 400nm	500 units

Revision History

Description:	Revision #	Revision Date
New Release of QBHP5050E-UVXXXBK	V1.0	02/26/2016



Disclaimer

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1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
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.