



**BRIGHTTEK**  
**BRIGHTTEK (EUROPE) LIMITED**

*Brighten up The World With LED!*



ISO 9001:2009



BSI  
 ISO 14001:2004



QC 800000 IECQ HSP98

## PRODUCT DATASHEET



- ▶ TO-Can TO-46
- ▶ 4.7mm Round 3.6t
- ▶ UV (365~370nm)

**N0Q61T37**



Release Date: 12 September 2023 Version: A1.0



TO-Can Series

### TO-Can Series



#### FEATURES:

- **Package:** TO-Can TO-46 Package Top View
- **Forward Current:** 50~150mA
- **Forward Voltage (typ.):** 3.7V
- **Radiant Power (typ.):** 20mW@50mA
- **Colour:** Ultraviolet (UV)
- **Peak Wavelength:** 365~370nm
- **Viewing Angle:** 120°
- **Operating Temperature:** -10~+100°C
- **Storage Temperature:** -40~+100°C

#### APPLICATIONS:

- Disinfection
- Sterilization
- Bio-Analysis
- Detection
- Sensor Light
- Fluorescent Spectroscopy

**CHARACTERISTICS:**

## Absolute Maximum Characteristics (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Maximum Forward Current	I <sub>MAX</sub>	150	mA
Peak Forward Current (D=0.01s, Duty 1/10)	I <sub>FP</sub>	200	mA
Junction Temperature	T <sub>J</sub>	125	°C
Reverse Current	I <sub>R</sub>	10	μA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	T <sub>OPT</sub>	-10~+100	°C
Storage Temperature	T <sub>STG</sub>	-40~+100	°C

## Electrical &amp; Optical Characteristics (Ta=25°C)

Parameter	Symbol	Values			Unit	Test Condition
		Min.	Typ.	Max.		
Forward Voltage	V <sub>F</sub>	3.5	---	4.0	V	I <sub>F</sub> =50mA
Radiant Power	P <sub>O</sub>	5	---	35	mW	I <sub>F</sub> =50mA
Wavelength	W <sub>P</sub>	365	---	370	nm	I <sub>F</sub> =50mA
Viewing Angle	2θ <sub>1/2</sub>	---	120	---	deg	I <sub>F</sub> =50mA

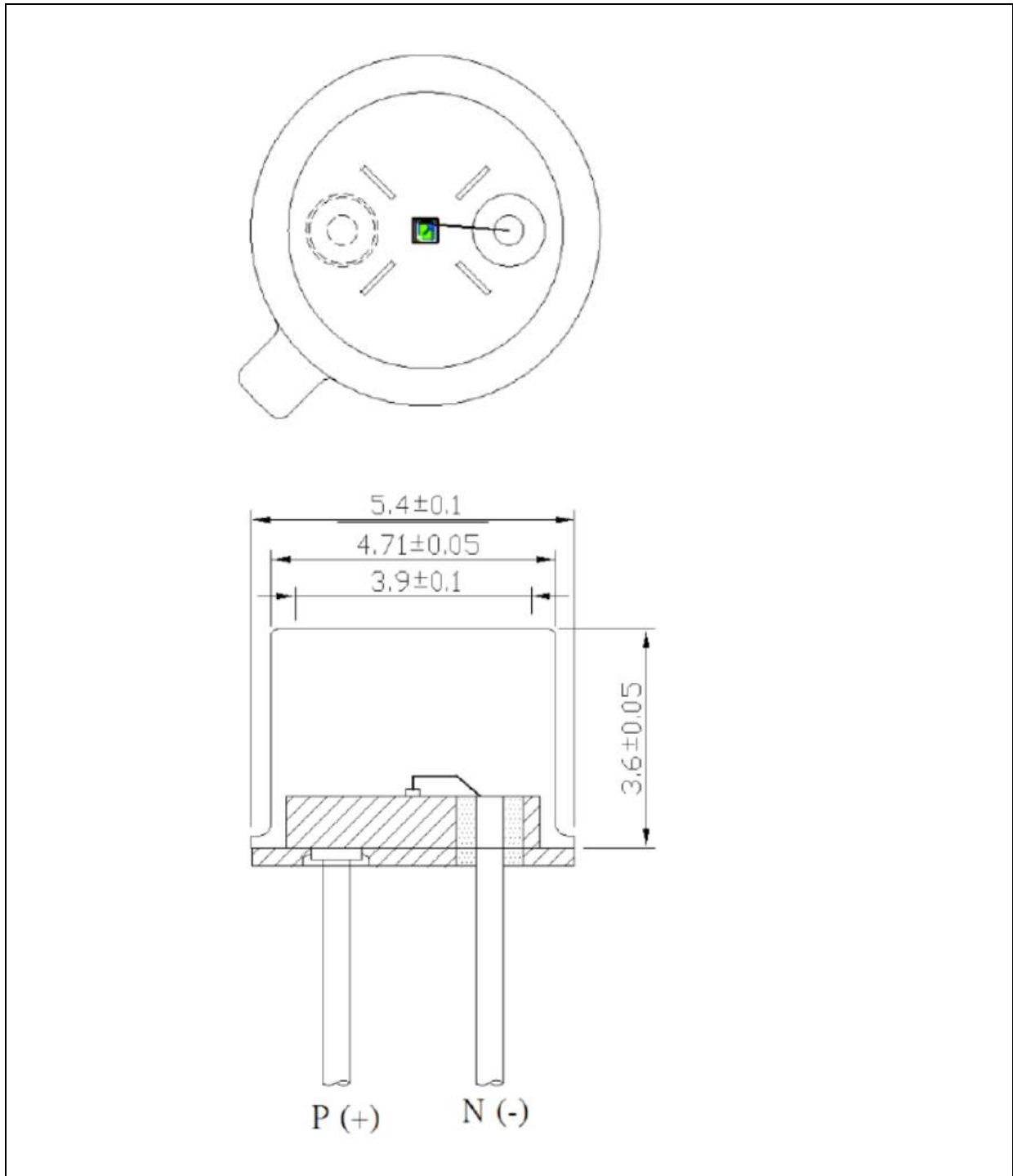
1. Radiant Power (P<sub>O</sub>) ±10%, Forward Voltage (V<sub>F</sub>) ±0.2V, Viewing angle(2θ<sub>1/2</sub>) ±10°, Wavelength (nm) ±2nm



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## OUTLINE DIMENSION:

Package Dimension:

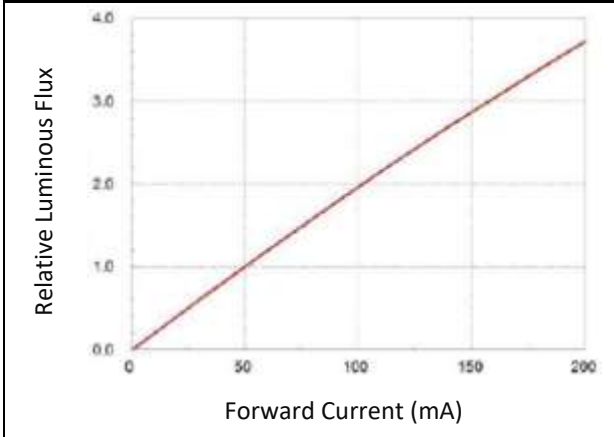


1. All dimensions are in millimetre (mm).
2. Tolerance  $\pm 0.13$ mm, unless otherwise noted.

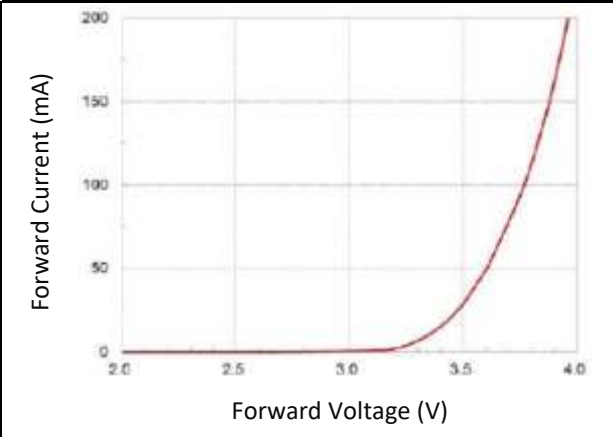


### ELECTRO-OPTICAL CHARACTERISTICS:

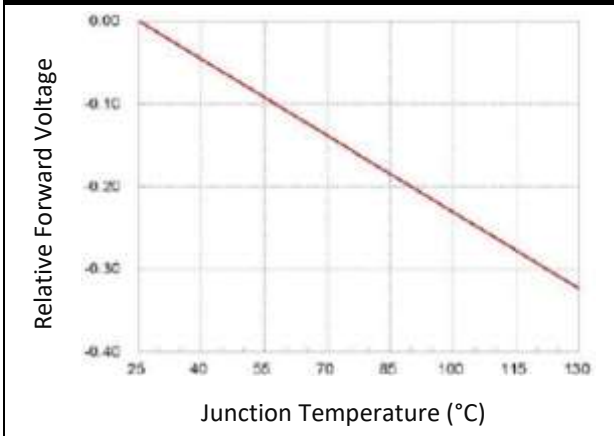
Relative Luminous Flux v.s. Forward Current



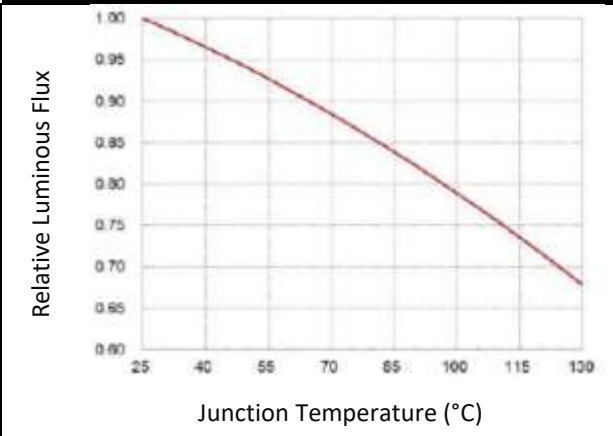
Forward Current v.s. Forward Voltage



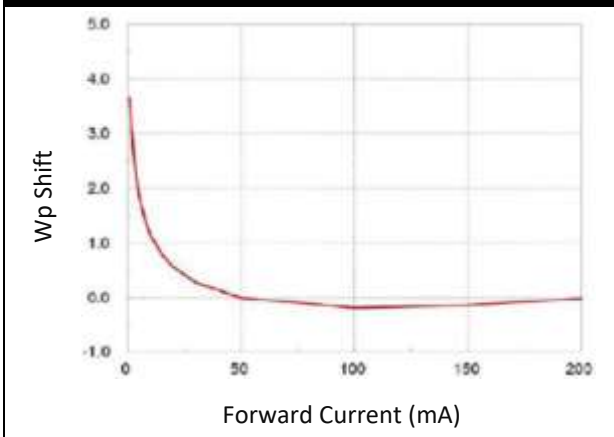
Relative Voltage v.s. Temperature



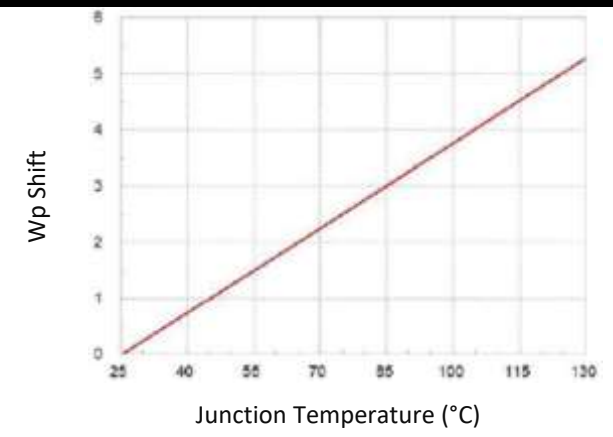
Relative Flux v.s. Temperature



Wavelength Shift v.s. Forward Current



Wavelength Shift v.s. Forward Current





## PRECAUTIONS OF USE:

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### Storage:

It is recommended to store the products in the following conditions:

- Humidity: 60% R.H. Max.
- Temperature: 5°C~30°C (41°F ~86°F).

Shelf life in sealed bag: 12 months at 5°C~30°C and <60% R.H.

Once the package is opened, the products should be used within a week. Otherwise, they should be kept in a damp-proof box with desiccating agent <10% R.H. and apply baking before use.

### Baking:

It is recommended to bake the LED before soldering if the pack has been unsealed for longer than 24hrs. The suggested baking conditions are as followings:

- 60±3°C x 12hrs and <5%RH, taped / reel package.

It's normal to see slight color fading of carrier (light yellow) after baking in process.

### Testing Circuit:



Must apply resistor(s) for protection (over current proof).

### Cleaning:

Use alcohol-based cleaning solvents such as isopropyl alcohol to clean the LED carrier / package. Avoid putting any stress force directly on to the LED lens.

### ESD (Electrostatic Discharge):

Static Electricity or power surge will damage the LED. Use of a conductive wrist band or anti-electrosatic glove is recommended when handling the LED all time. All devices, equipment, machinery, work tables, and storage racks must be properly grounded.

In the events of manual working in process, make sure the devices are well protected from ESD at any time.



**REVISION RECORD:**

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Version	Date	Summary of Revision
A1.0	11/11/2019	Datasheet set-up.
A1.1	12/09/2023	New datasheet format.