BRIGHTEK
BRIGHTEK (EUROPE) LIMITED
Brighten Up The World With LED!

ISO/TS 16949:2009 | BS EN ISO 14001:2004 | QC 080000 IECQ HSPM

PRODUCT DATASHEET

ATTENTION
OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES

- PTH/THT Lamp
- 5mm Round 8.7t
- Green (572nm)

Release Date: 08 December 2023 Version: A1.2

N0G01L01 (Bulk)
N0G01L01T (Tape)

5mm Round Lamp

5mm Round Lamp

RoHS Compliant

FEATURES:

- **Package:** PTH/THT LED Lamp 5mm Round 8.7t
- **Forward Current:** 20mA
- **Forward Voltage (typ.):** 2.0V
- **Luminous Intensity (typ.):** 800mcd@20mA
- **Colour:** Green
- **Dominant Wavelength (typ.):** 572nm
- **Viewing Angle:** 16°
- **Materials:**
  - Die: AlInGaP
  - Resin: Epoxy (Water Clear)
- **Operating Temperature:** -40~+85°C
- **Storage Temperature:** -40~+100°C
- **Grouping Parameters:**
  - Forward voltage
  - Luminous intensity
  - Dominant wavelength
- **Soldering Methods:** Hand; Soldering Heat (DIP)
- **Packing:** 500pcs/bulk; 2000pcs/tape (Ammo Pack)

APPLICATIONS:

- Indicator
- Signal
- 3C Application

Copyright © 2007-2023 Brightek (Europe) Limited. All rights reserved.
The information in this document is subject to change without notice.

CHARACTERISTICS:

Absolute Maximum Characteristics (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Forward Current	I_F	30	mA
Peak Forward Current Duty 1/10@1KHz	I_{FP}	100	mA
Reverse Current @5V	I_R	10	µA
Reverse Voltage	V_R	5	V
Power Dissipation	PD	85	mW
Electrostatic Discharge	ESD	2000	V
Operating Temperature	T_{OPR}	-40~+85	°C
Storage Temperature	T_{STG}	-40~+100	°C

Electrical & Optical Characteristics (Ta=25°C)

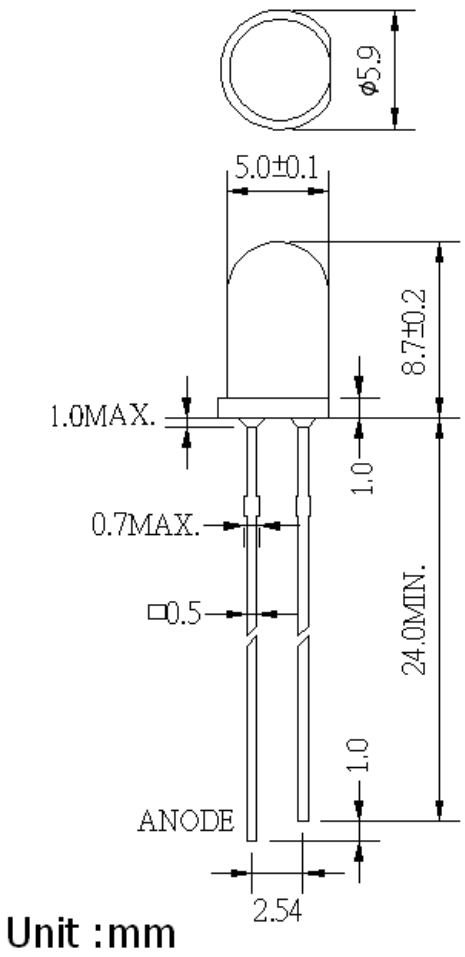
Parameter	Symbol	Values			Unit	Test Condition
		Min.	Typ.	Max.		
Forward Voltage	V_F	1.7	2.0	2.6	V	I_F=20mA
Luminous Intensity	I_V	600	800	1500	mcd	I_F=20mA
Dominant Wavelength	λ_D	568	572	575	nm	I_F=20mA
Peak Wavelength	λ_P	---	570	---	nm	I_F=20mA
Spectral Line Half Bandwidth	$\Delta\lambda$	---	15	---	nm	I_F=20mA
Viewing Angle	$2\theta_{1/2}$	---	16	---	deg	I_F=20mA

1. Luminous intensity (I_V) ±15%, Forward Voltage (V_F) ±0.1V, Viewing angle($2\theta_{1/2}$) ±5%

Copyright © 2007-2023 Brightek (Europe) Limited. All rights reserved.
The information in this document is subject to change without notice.

OUTLINE DIMENSION:

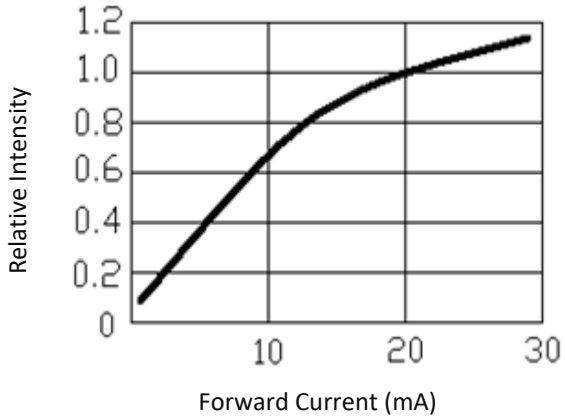
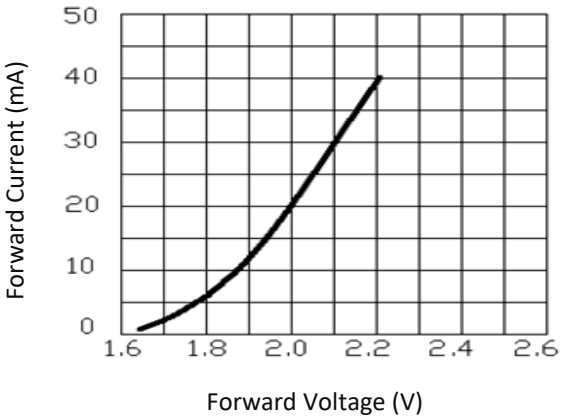
Package Dimension:

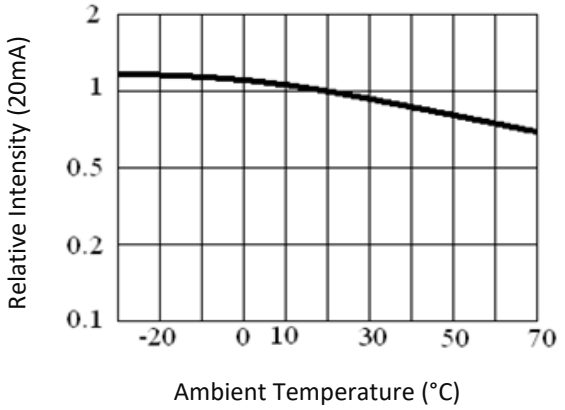
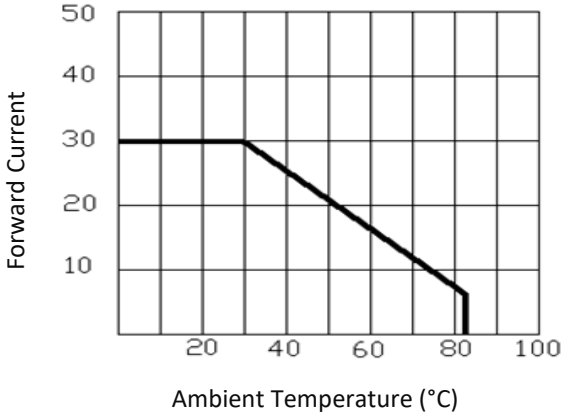


1. All dimensions are in millimetre (mm).
2. Tolerance ±0.2mm, unless otherwise noted.

Copyright © 2007-2023 Brightek (Europe) Limited. All rights reserved.
The information in this document is subject to change without notice.

ELECTRO-OPTICAL CHARACTERISTICS:

Relative Intensity v.s. Forward Current	Forward Current v.s. Forward Voltage
	

Relative Intensity v.s. Temperature	Forward Current v.s. Temperature
	

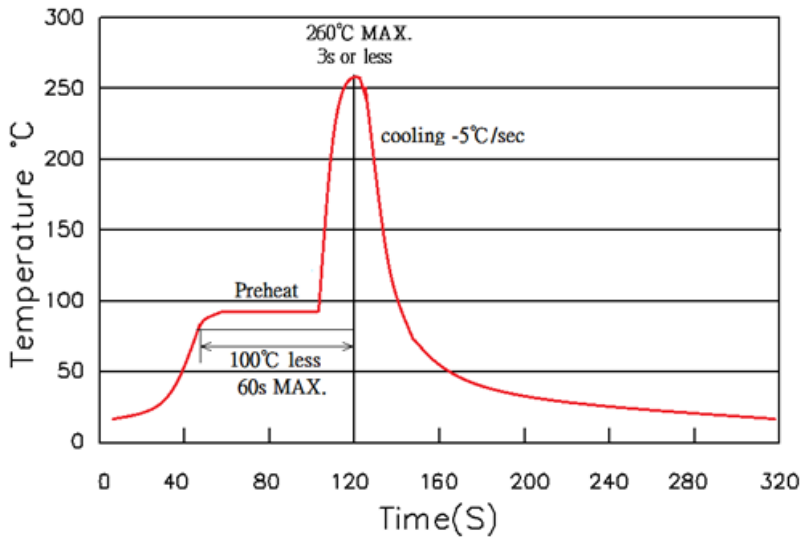
Copyright © 2007-2023 Brightek (Europe) Limited. All rights reserved.
The information in this document is subject to change without notice.

RECOMMENDED SOLDERING PROFILE:

Hand Solder (Solder Iron):

- Temperature at tip of iron: 350°C Max. (25W Max.).
- Soldering Time: 3 seconds ± 1 sec.

Soldering Heat (DIP):



Note:

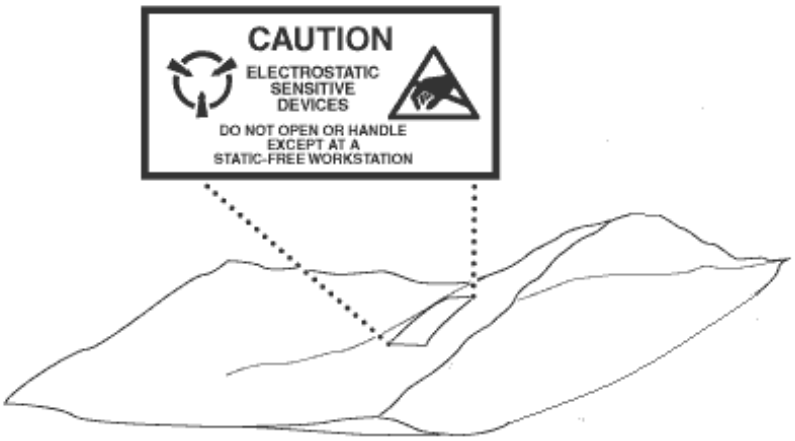
1. Maximum reflow soldering: 1 time.
2. Before, during, and after soldering, should not apply stress on the components and PCB board.

Copyright © 2007-2023 Brightek (Europe) Limited. All rights reserved.
The information in this document is subject to change without notice.

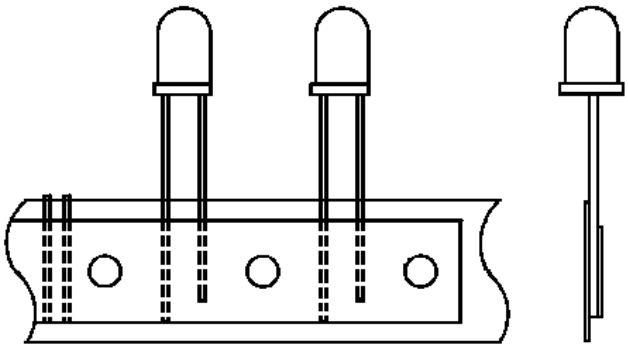
PACKING SPECIFICATION:

Reel Dimension:

1000pcs/Bulk



2000pcs/Taping



Copyright © 2007-2023 Brightek (Europe) Limited. All rights reserved.
The information in this document is subject to change without notice.

PRECAUTIONS OF USE:

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 year. Otherwise, they should be kept in a damp-proof box with descanting agent <10% R.H. and apply baking before use.

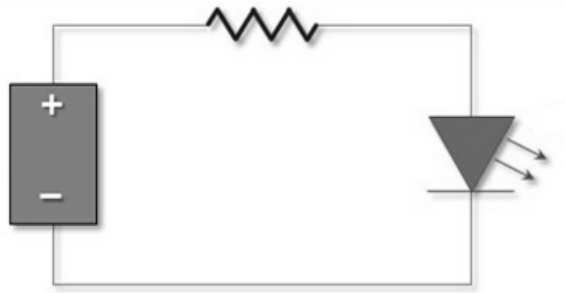
Baking:

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±5°C x 24hrs 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 handing 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.

Copyright © 2007-2023 Brightek (Europe) Limited. All rights reserved.
The information in this document is subject to change without notice.

REVISION RECORD:

Version	Date	Summary of Revision
A1.0	17/02/2023	Datasheet set-up.
A1.1	18/03/2023	Update product picture.
A1.2	08/12/2023	Revise storage condition.

Copyright © 2007-2023 Brightek (Europe) Limited. All rights reserved.
The information in this document is subject to change without notice.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for MGT Brightek ***manufacturer:***

Other Similar products are found below :

AA36F AA40F-5 AB30S AB37S AB38S AB42S AB45S AB47S N0A17L37 N0A18S20BS N0A19S81SV N0A40S05 N0A51S59 N0B04S85 N0B09S01 N0B09S80Z N0B10S41 N0B18S27BF N0B19S82SV N0B24S30 N0B40S09Z N0B47L85 N0B63L21 N0F00L30 N0F01L14 N0F64L49 N0G09S03 N0G10S37 N0G10S57 N0G10S97(R)SV N0G20S39 N0G33L43 N0G34L22 N0G35L70 N0G37L06Z N0G40S08Z N0G49L27PC N0G49L28 N0G49S82 N0G51S32BS N0G51S61-2MA N0G57S89 N0G64L32 N0G64L59 N0G64L64 N0M45S36IC N0M48S05 N0M50S15IC N0M50S18IC N0M50S26