

## LD Receptacle Module (Blue Laser Type)

# NUB206E

Engineering Sample

### Specifications

- Operating Current: 1.2A
- Ferrule Type: SC

### Absolute Maximum Ratings

Item	Symbol	Absolute Maximum Ratings	Unit
Forward Current	If	1.7	A
Allowable Reverse Current	Ir (LD)	85	mA
Storage Temperature	Tstg	-40 ~ 85	°C
Operating Case Temperature	Tc	15 ~ 35	°C

### Initial Electrical/Optical Characteristics \*

(Tc=25°C)

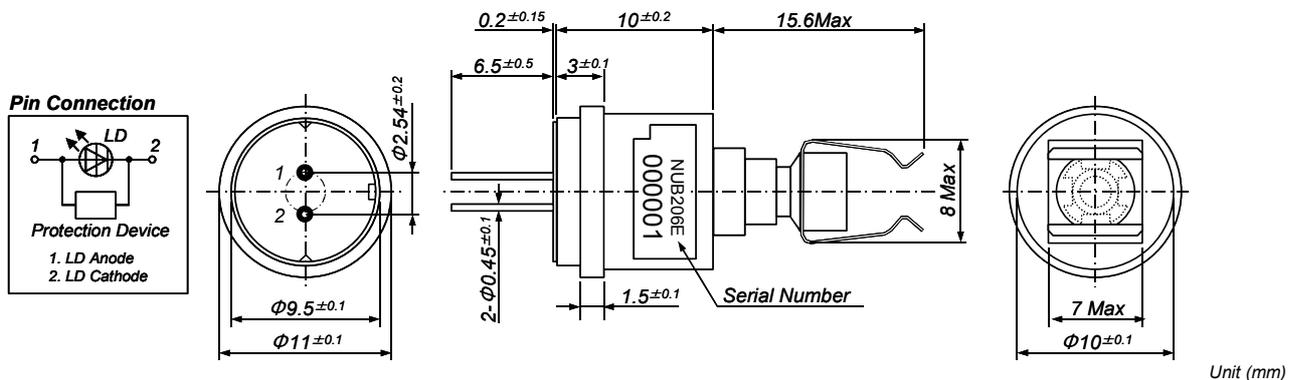
Item	Symbol	Test Condition	Min	Typ.	Max	Unit
Forward Current	If	CW	-	-	1.2	A
Optical Fiber Output Power	Po	If=1.2A	1.3	-	-	W
Dominant Wavelength	$\lambda_d$	If=1.2A	445	-	450	nm
Threshold Current	Ith	CW	-	140	220	mA
Slope Efficiency	$\eta$	CW	0.6	1.3	2.0	W/A
Operating Voltage	Vop	If=1.2A	-	5.0	6.0	V
Beam Divergence Full Angle (1/e <sup>2</sup> )	$\theta$	If=1.2A	-	13	19	deg.

\* Core Diameter=40 $\mu$ m, NA=0.20, Fiber Length=1.0m



All figures in this specification are measured by Nichia's method and may contain measurement deviations. The above specifications are for reference purpose only and subjected to change without prior notice.

### Outline Dimension



## NICHIA CORPORATION

<http://www.nichia.co.jp>

### ◆ HEADQUARTERS

491 Oka, Kaminaka-Cho, Anan-Shi, TOKUSHIMA 774-8601, JAPAN  
PHONE: +81-884-22-2311 FAX: +81-884-21-0148

### ◆ CONTACT

TOKYO SALES OFFICE  
13F Tamachi Center Building 34-7, Shiba 5-Chome, Minato-ku, TOKYO 108-0014, JAPAN  
PHONE: +81-3-3456-3108 FAX: +81-3-5440-7330

## ■Cautions

### (1) Safety of Laser light

- **Laser light can damage the human eyes and skin.** Do not expose the eye or skin to any laser light directly and/or through optical lens. When handling the LD Receptacle Modules, wear appropriate safety glasses to prevent laser light, even any reflections from entering to the eye. Focused laser beam through optical instruments will increase the chance of eye hazard.
- These LD Receptacle Modules are classified in **Class 4 of the IEC60825-1 and 21 CFR Part 1040.10 Safety Standards.** It is absolutely necessary to take overall safety measures against User's modules, equipment and systems into which Nichia LD Receptacle Modules are incorporated and/or integrated.



### (2) Operating method

- The LD Receptacle Module shall change its forward voltage requirement and optical output power according to temperature change. Also, the LD Receptacle Module will require more operation current to maintain same output power as it degrades.
- Confirm that electrical spike current generated by switching on and off does not exceed the maximum operating current level specified herein above as absolute max rating. Also, employ appropriate countermeasures to reduce chattering and/or overshooting in the Circuit.
- ACC (Auto Current Control) mode is recommended for the Product operation. Also, please be careful for the overshooting in order to avoid excessive optical output power as the laser operation is started.

### (3) Static Electricity

- Static electricity or electrical surges will reduce and degrade the reliability of the LD Receptacle Modules. It is recommended to use a wrist strap or anti-electrostatic glove when handling the Product.

### (4) Absolute Maximum Rating

- Active layer of LD Receptacle Modules shall have high current density and generate high electric field during its operation. In order to prevent excessive damage, the LD Receptacle Module must be operated strictly below Absolute Max Rating.

### (5) Others

- Nichia LD Receptacle Modules described in this brochure are intended to be used for ordinary electronic equipment (such as office equipment, communications equipment, measurement instruments and household appliances). Consult Nichia's sales staff in advance for information on the applications in which exceptional quality and reliability are required, particularly when the failure or malfunction of the LD Receptacle Modules may directly jeopardize life or health (such as for airplanes, aerospace, submersible repeaters, nuclear reactor control systems, automobiles, traffic control equipment, life support systems and safety devices).
- Nichia prohibit Purchaser from reverse engineering, disassembling, or taking any other steps to derive the structure or design of the LD Receptacle Module.
- The appearance and specifications of the product may be modified for improvement without notice. The formal specifications must be exchanged and signed by both parties before large volume purchase begins.