

High Performance Laser Diode Series

# Indigo in TO-5.6 CAN Package

## KLC420FS01WW

### Overview

Nuvoton Technology Corporation Japan provides a series of indigo laser diode. The laser diode which emits 420nm laser light, is assembled in a conventional TO-5.6 CAN package. Unique compound semiconductor process technology and low optical loss structure can realize high output power and high reliability lasers which are suitable for industrial use.

### Features

- Wavelength: 420 nm (typ.)
- High Output Power, Multiple Transverse Mode
- Emitter Size: 15um x 1um
- Conventional TO-5.6 Package , 3pin

### Applications

- Laser Direct Imaging
- Material Processing
- Analysis, Measurement
- Display
- Other Industrial Use

### Absolute Maximum Ratings

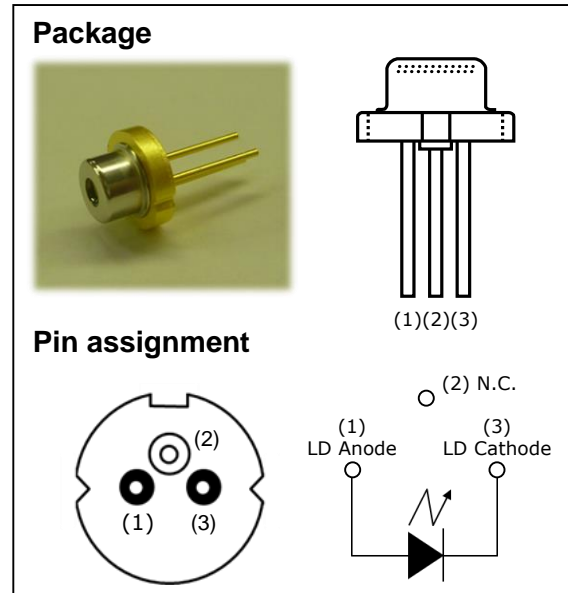
Item	Symbol	Value	Unit	Condition
Output power	Po	2.0	W	CW
Operating case temperature	Tc	+20 to +30	°C	CW
Storage temperature	Tstg	-40 to +85	°C	-

### Electrical and Optical Characteristics

Tc=25°C, CW

Item	Symbol	Min.	Typ.	Max.	Unit	Condition	
Threshold current	Ith	-	120	200	mA	-	
Operating current	Iop	700	900	1100	mA	1.7W	
Operating voltage	Vop	-	4.5	5.2	V	1.7W	
Wavelength	$\lambda$	415	420	425	nm	1.7W	
Beam divergence	Parallel <sup>1)</sup>	$\theta_h$	8	14	20	deg	1.7W
	Perpendicular <sup>1)</sup>	$\theta_v$	36	42	48	deg	1.7W

Note) 1) Full width at 1/e<sup>2</sup> of the peak intensity.



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