

High Performance Laser Diode Series

Violet in TO-9 CAN Package

KLC432FL01WW

■ Overview

Nuvoton Technology Corporation Japan provides a series of violet laser diode. The laser diode which emits 402nm laser light, is assembled in a conventional TO-9 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: 402 nm (typ.)
- High Output Power, Multiple Transverse Mode
- Emitter Size: 30um x 1um
- Extended Operating Temperature (0 to +50 degrees C)
- Conventional TO-9 Package , 2pin

■ Applications

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

■ Absolute Maximum Ratings

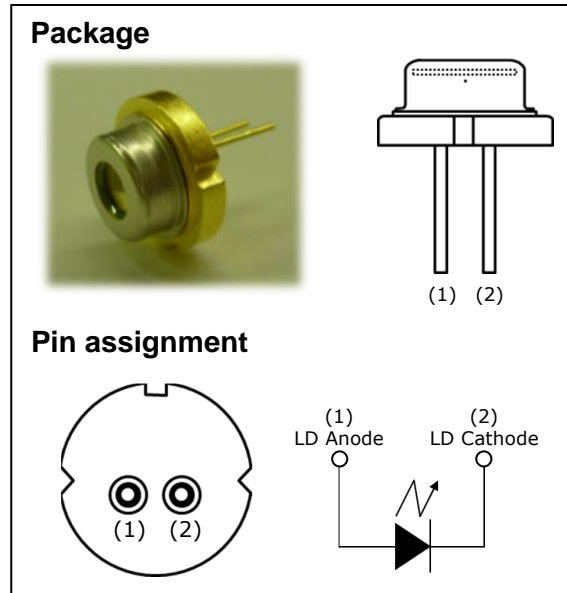
| Item | Symbol | Value | Unit | Condition |
|----------------------------|--------|------------|------|-----------|
| Output power | Po | 3.3 | W | CW |
| Operating case temperature | Tc | 0 to +50 | °C | CW |
| Storage temperature | Tstg | -40 to +85 | °C | - |

■ Electrical and Optical Characteristics

Tc=25°C, CW

| Item | Symbol | Min. | Typ. | Max. | Unit | Condition | |
|-------------------|-----------------------------|------------|------|------|------|-----------|------|
| Threshold current | Ith | - | 0.43 | 0.53 | A | - | |
| Operating current | Iop | 1.6 | 1.8 | 2.2 | A | 3.0W | |
| Operating voltage | Vop | - | 4.7 | 5.5 | V | 3.0W | |
| Wavelength | λ | 395 | 402 | 405 | nm | 3.0W | |
| Beam divergence | Parallel ¹⁾ | θ_h | 8 | 13 | 20 | deg | 3.0W |
| | Perpendicular ¹⁾ | θ_v | 36 | 41 | 46 | deg | 3.0W |

Note) 1) Full width at 1/e² of the peak intensity.



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