

High power laser diode series

Compact High-Power Violet Laser Diode (402nm,1.7W)

KLC435FS01WW

Overview

KLC435FS01WW is a compact high-power violet laser diode at 402 nm, delivering a high output power of 1.7 W. Featuring a TO-56 CAN package, it offers exceptional power and reliability, making it ideal for industrial applications. This product serves as an alternative light source for the h-line (402 nm) of mercury lamps.

Features

- Transverse mode: Multi mode
- Wavelength: 402 nm (typ.)
- Package type: TO-56 CAN package
- Rated optical output power: 1.7W*
- Operating case temperature (Tc) : 0 ~ +30 degrees C*
- Emitter size: 20μm x 1μm

*If the operating case temperature is 40 degrees C, optical output power is permitted up to 1.3W.

Applications

- Laser Direct Imaging
- Material processing
- Analysis, Measurement
- Display
- Other industrial use

Absolute Maximum Ratings

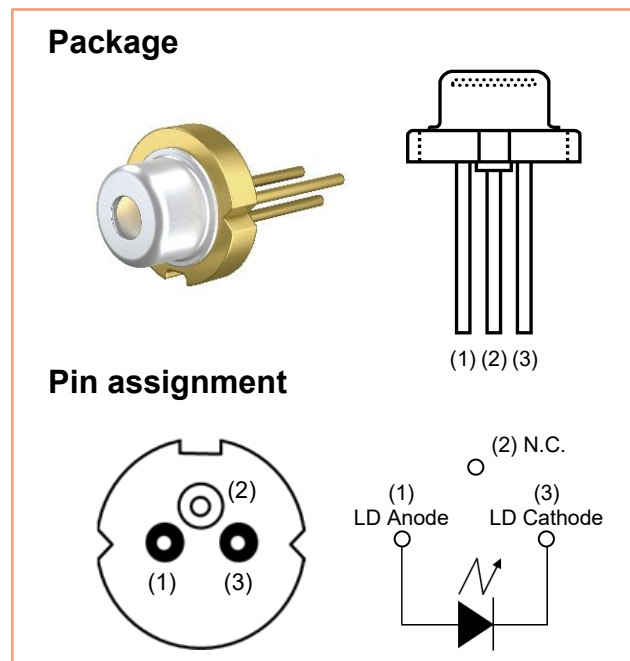
Item	Symbol	Value	Unit	Condition
Output power	Po	1.9	W	CW
Operating case temperature	Tc	0 to +30	°C	CW
Storage temperature	Tstg	-40 to +85	°C	-

Electrical and Optical Characteristics

Tc=25°C, CW

Item		Symbol	Min.	Typ.	Max.	Unit	Condition
Threshold current		Ith	-	195	285	mA	-
Operating current		Iop	900	1,020	1,200	mA	1.7W
Operating voltage		Vop	-	4.3	5.1	V	1.7W
Wavelength		λ	395	402	405	nm	1.7W
Beam divergence	Parallel ¹⁾	θh	8	14	20	deg	1.7W
	Perpendicular ¹⁾	θv	42	47	52	deg	1.7W

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



The products and product specifications described in this document are subject to change without notice for modification and/or improvement. At the final stage of your design, purchasing, or use of the products, therefore, ask for the most up-to-date Product Standards in advance to make sure that the latest specifications satisfy your requirements.

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<https://www.nuvoton.co.jp/en/>