



Violet Laser Diode

NDV1342-04

[UTZ-SC0153_1]

■Features

- Optical Output Power: Pulse 55mW
- Can Type: $\phi 3.8$ Floating Mounted
- Peak Wavelength: 405nm

■Absolute Maximum Ratings

(Tc=25°C)

Item		Symbol	Absolute Maximum Ratings	Unit
Optical Output Power	CW	P _{oc}	55	mW
LD Reverse Voltage		V _r (LD)	2	V
Storage Temperature		T _{stg}	-40 ~ 85	°C
Operating Case Temperature		T _c	-10 ~ 80	°C

■Initial Electrical/Optical Characteristics

(Tc=25°C)

Item	Condition	Symbol	Min	Typ.	Max	Unit	
Optical Output Power	CW	P _o	-	-	40	mW	
Peak Wavelength*	P _o =20mW	λ _p	400	405	410	nm	
Threshold Current	CW	I _{th}	-	16	25	mA	
Operating Current	P _o =20mW	I _{op}	-	30	50	mA	
Slope Efficiency	CW	η	0.9	1.3	1.8	W/A	
Operating Voltage	P _o =20mW	V _{op}	-	4.4	5.5	V	
FWHM Beam Divergence*	P _o =20mW	θ _{//}	7.0	9.0	12	deg.	
		θ _⊥	15	19	23	deg.	
Emission Point Accuracy	Angle	P _o =20mW	Δθ _{//}	-2.0	-	2.0	deg.
			Δθ _⊥	-2.5	-	2.5	deg.

* Measuring specifications

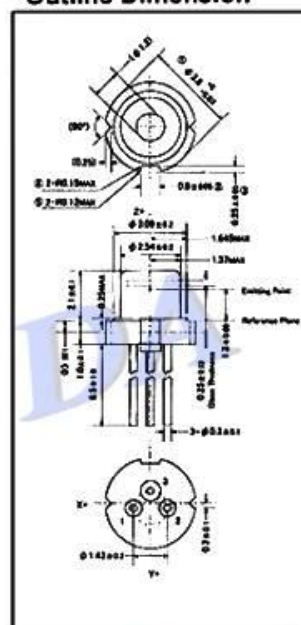
All figures in this specification are measured by Nichia's method and may contain measurement deviations.

The above specifications are for reference purpose only and subjected to change without prior notice.

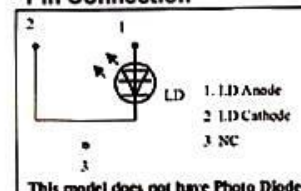
Safety of Laser light

- 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 LDs, 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 LDs are classified in Class 4 of 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 LDs are incorporated and/or integrated.

Outline Dimension



Pin Connection



NICHIA CORPORATION

◆ HEADQUARTERS

491 Oka Kaminaka-cho Anan-shi TOKUSHIMA 774-8601 JAPAN



This product is supplied with 2" (50.8mm) x 1" (25.4mm) size label at the bottom of the package.
NICHIA
LASER DIODES