NICHIA

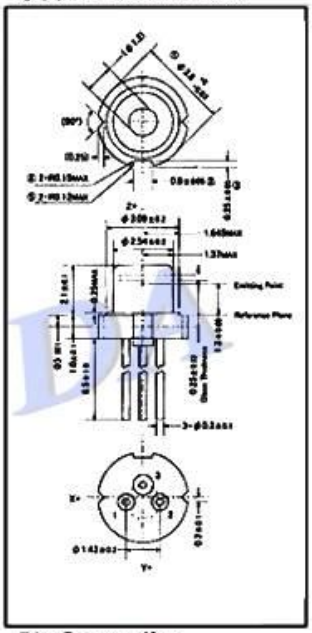
Violet Laser Diode

NDV1342-04

■Features

- Optical Output Power: Pulse 55mW
- Can Type: ϕ3.8 Floating Mounted
- Peak Wavelength: 405nm

Outline Dimension



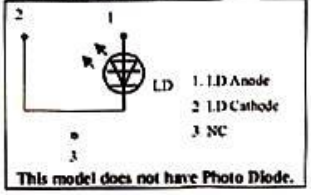
■Absolute Maximum Ratings (Tc=25°C)

Item		Symbol	Absolute Maximum Ratings	Unit
Optical Output Power	CW	Poc	55	mW
LD Reverse Voltage		Vr (LD)	2	V
Storage Temperature		Tstg	-40 ~ 85	°C
Operating Case Temperature		Tc	-10 ~ 80	°C

■Initial Electrical/Optical Characteristics (Tc=25°C)

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

Pin Connection



This model does not have Photo Diode.

* 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 damege 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.

NICHIA CORPORATION ◆ HEADQUARTERS
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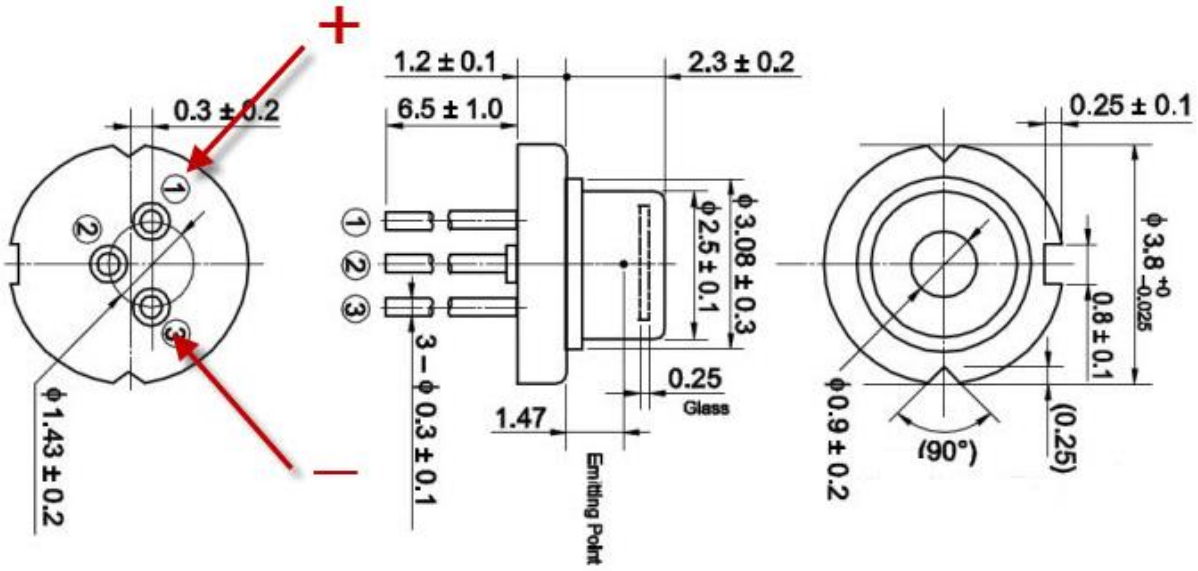
+
0.3 ± 0.2
①
②
③
φ1.43 ± 0.2
1.2 ± 0.1
2.3 ± 0.2
6.5 ± 1.0
φ3.08 ± 0.3
φ2.5 ± 0.1
3 – φ0.3 ± 0.1
0.25
Glass
1.47
Emitting Point
0.25 ± 0.1
φ3.8 +0 −0.025
0.8 ± 0.1
φ0.9 ± 0.2
(90°)
(0.25)