

■Features

- For External Cavity Laser with Low Reflection Coating on front facet
- Optical Output Power: 45mW
- Can Type: $\phi 5.6$ mm Cathode Ground

■Absolute Maximum Ratings

Item	Symbol	Absolute Maximum Ratings	Unit
Optical Output Power	Po	65	mW
LD Forward Current	If	120	mA
LD Reverse Voltage	Vr (LD)	2	V
Storage Temperature	Tstg	-25 ~ 75	°C
Operating Case Temperature	Tc	10 ~ 55	°C

■Initial Electrical/Optical Characteristics

(Tc=25°C)

Item		Condition	Symbol	Min	Typ.	Max	Unit
Optical Output Power		CW	Po	-	-	45	mW
Peak Wavelength		Po=45mW	λ_p	400	-	410	nm
Threshold Current		CW	Ith	-	50	-	mA
Operating Current		Po=45mW	Iop	-	72	-	mA
Slope Efficiency		CW	η	-	1.8	-	W/A
Operating Voltage		Po=45mW	Vop	4.3	4.8	5.5	V
Beam Divergence *1	Parallel	Po=45mW	$\theta_{//}$	7	-	12	°
	Perpendicular		θ_{\perp}	15	-	23	°
Beam Pointing Accuracy	Parallel	Po=45mW	$\Delta\theta_{//}$	-2.0	-	2.0	°
	Perpendicular		$\Delta\theta_{\perp}$	-2.5	-	2.5	°

*1 Full angle at 50% from peak intensity

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

Diffraction feedback efficiency to the Laser diode must be limited less than 20% under the External cavity configuration.

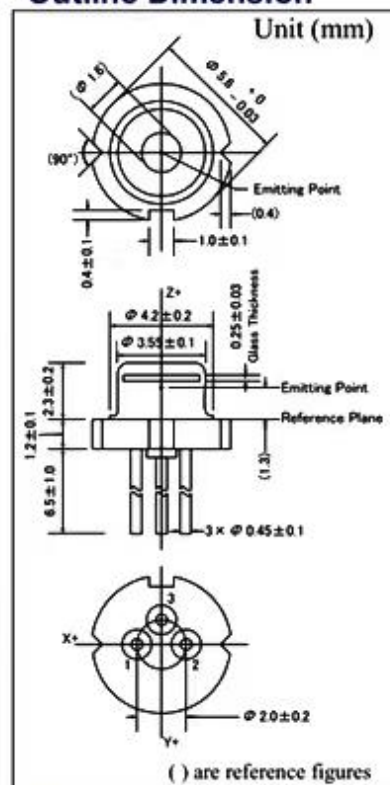
This model is Test Sample for evaluation or design purpose only. Life time is not guaranteed.

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

