

GH05C01D9G(GH0DA10528)

Green Laser Diode

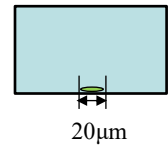
Green Laser Diode

■ Features

- (1) Wavelength : 525 nm(Typ.)
- (2) Optical power output : CW 1.3W (Tc=25°C)
- (3) Oscillation transverse mode : Multi mode
- (4) Φ9mm CAN package



※1 Aperture size



■ Applications

- (1) Display
- (2) Other application

■ Absolute Maximum Ratings(Tc=25°C(Note 1))

Parameter .	Symbol	Value	Unit
Forward current (CW)	If	1.7	A
Reverse voltage	Vrl	2.0	V
Operating temperature (Case temperature)	Top(c)	0 ~ +60	°C
Storage temperature	Tstg	0 ~ +85	°C
Soldering temperature (Note 2)	Tsld	350	°C

(Note 1) Tc : Case temperature (Tc measurement point is refer to P.3 drawing.)

(Note 2) Soldering temperature means soldering iron tip temperature while soldering.

Soldering position is 1.6mm apart from bottom edge of the case.(Immersion time: ≤ 3 s)

(Notice)

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As of April 2025

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■ Specifications
CW, Tc=25°C

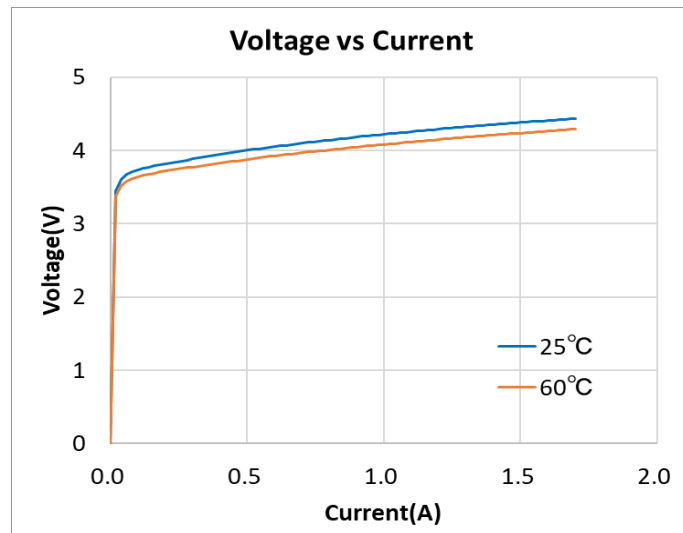
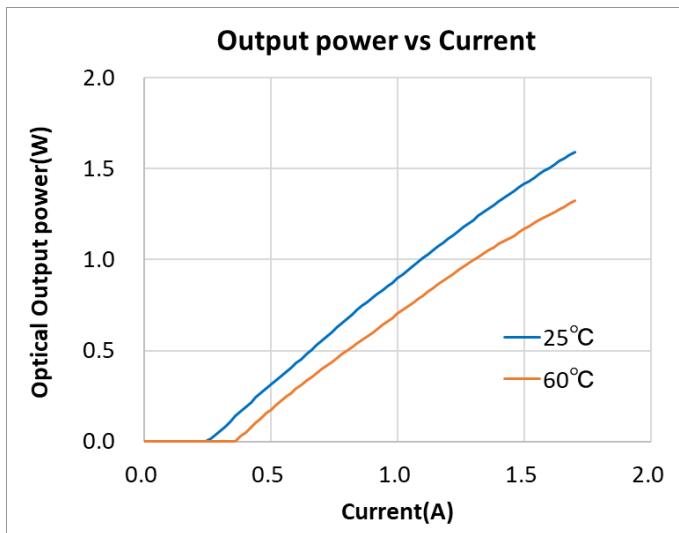
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Threshold current	I _{th}	-	-	0.25	-	A
Operating power	I _{op}	P _o =1.3W	-	1.4	1.7	A
Operating voltage	V _{op}		-	4.3	-	V
Wavelength(Note 4)	λ _p		515	525	535	nm
Half Intensity Angle(Parallel)(Note 2,3)	θ _{//}		-	8	-	°
Half Intensity Angle(Perpendicular)(Note 2,3)	θ _⊥		-	42	-	°
Misalignment angle (Parallel) (Note 3)	Δθ _{//}		-5	-	5	°
Misalignment angle (Perpendicular)(Note 3)	Δθ _⊥		-5	-	5	°
Differential efficiency	η _d		-	1.1	-	W/A

(Note 1) Initial value, Continuous Wave Operation

(Note 2) Full width angle at 1/e² of peak intensity

(Note 3) Parallel to the junction plane(X-Z plane).
Perpendicular to the junction plane(Y-Z plane)

(Note 4) It is based on method for measurement of light spectrum analyzer Q8344A made by Advantest Corp. of Sharp Fukuyama Laser Co. Ltd.



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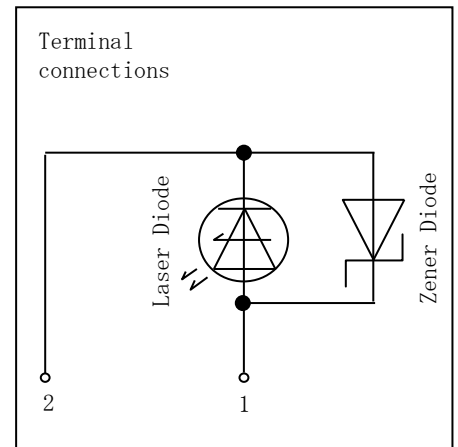
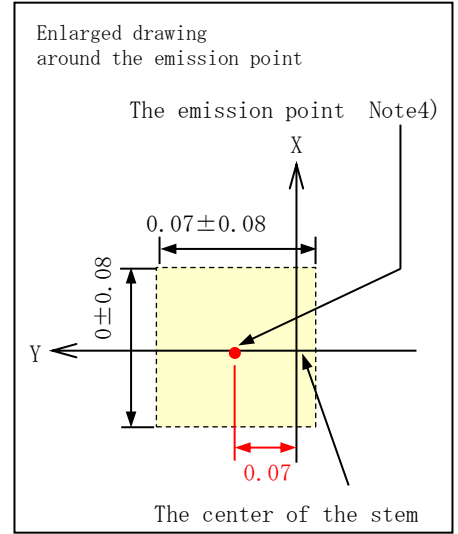
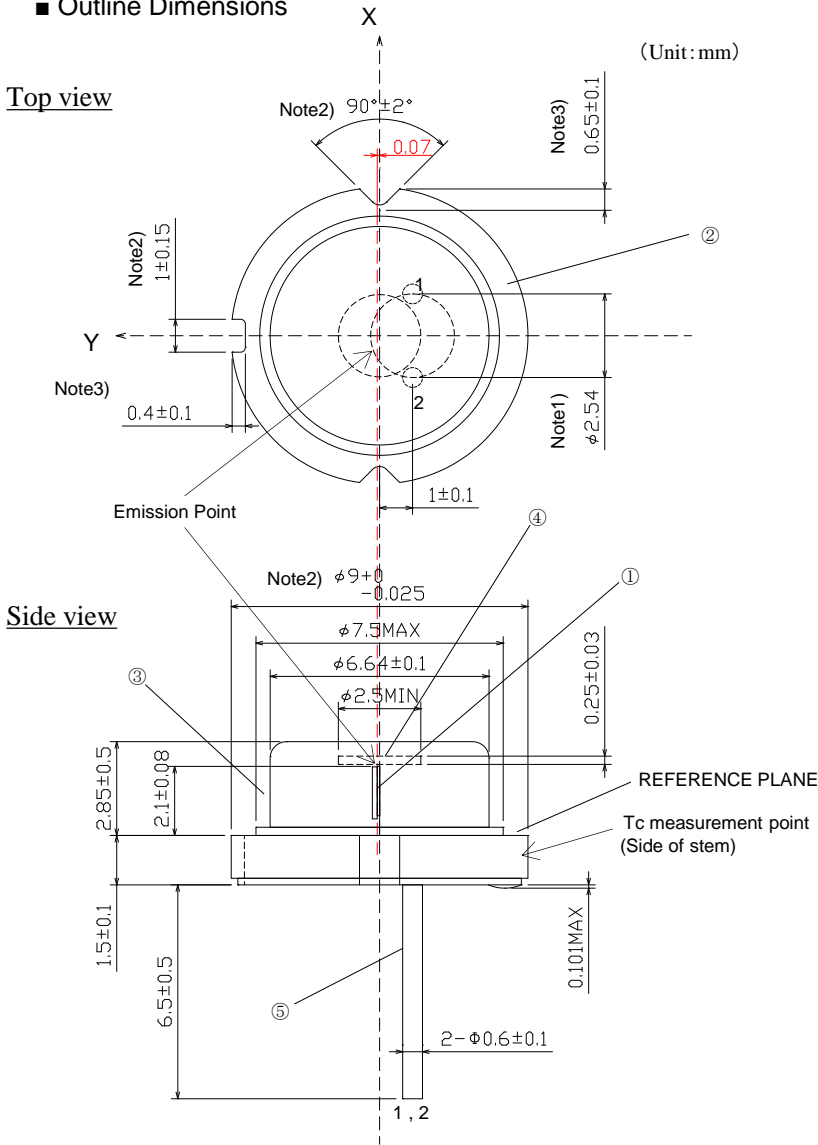
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■ Outline Dimensions



Note 1) Dimension of the bottom of leads.

Note 2) These dimensions are valid only in the range of 0 ~ 0.75mm below from the reference plane.

Note 3) These dimensions are defined from the imaginary circle which goes through the three points around the stem to the bottom of cut off parts.

Note 4) The emission point in the X and Y directions is within a range of ± 0.08 mm from the center of the stem.

No.	Component	Material	Finish
①	Laser Diode Chip	InAlGaN	-
②	Stem	Fe+Cu	Gold-plated
③	Cap	Fe/Ni	Nickel+Pd plated or Nickel
④	Window glass	Borosilicated glass	-
⑤	Lead pins	Kovar	Gold-plated

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