

Under development	●
New product	

4G20085

Blue Laser Diode

Blue Laser Diode

■ Features

- (1) Wavelength : 435 nm(Typ.)
- (2) Optical power output : CW 5W (Tc=25°C)
- (3) Aperture size : 45μm
- (4) Oscillation transverse mode : Multi mode
- (5) Φ9mm CAN package

■ Applications

- (1) Display
- (2) other application

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

Parameter	Symbol	Value	Unit	
Forward current (CW)	If	0°C ≤ Tc ≤ 35°C	3.5	A
		35°C < Tc ≤ 60°C	2.8	A
Reverse voltage	Vrl	2	V	
Operating temperature (Case temperature)	Top(c)	0 ~ +60	°C	
Storage temperature	Tstg	-40 ~ +85	°C	
Soldering temperature (Note 2)	Tsld	350	°C	

(Note 1) Tc : Case temperature (Tc measurement point is refer to P3 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: ≤ 3s)

(Notice)

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·Specifications are subject to change without notice for improvement.

As of November 2020

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Blue Laser Diode

- Specifications
CW, Tc=25°C

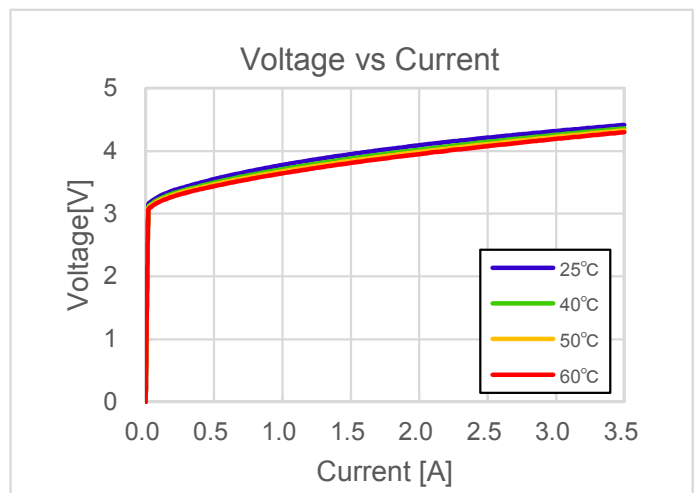
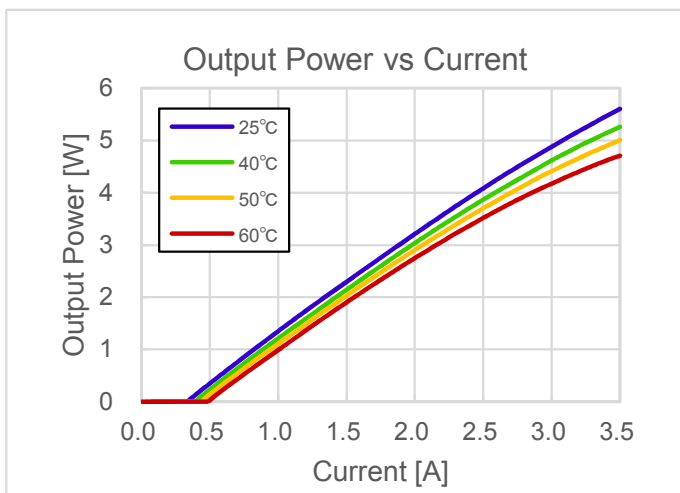
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Threshold current	I _{th}	-	-	0.35	-	A
Operating power	I _{op}	P _o =5W	-	3.1	-	A
Operating voltage	V _{op}		-	4.4	-	V
Wavelength(Note 4)	λ _p		425	435	445	nm
Half Intensity Angle(Parallel)(Note 2,3)	θ _{//}		-	10	-	°
Half Intensity Angle(Perpendicular)(Note 2,3)	θ _⊥		-	48	-	°
Misalignment angle (Parallel) (Note 3)	Δθ _{//}		-	-	-	°
Misalignment angle (Perpendicular)(Note 3)	Δθ _⊥		-	-	-	°
Differential efficiency	η _d		-	1.8	-	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 Corp. property.



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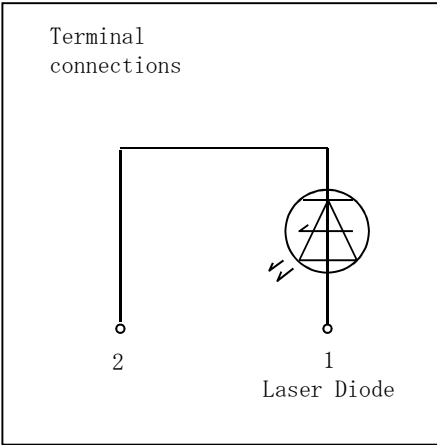
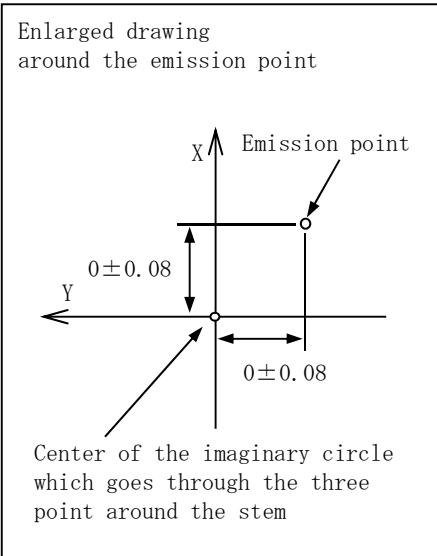
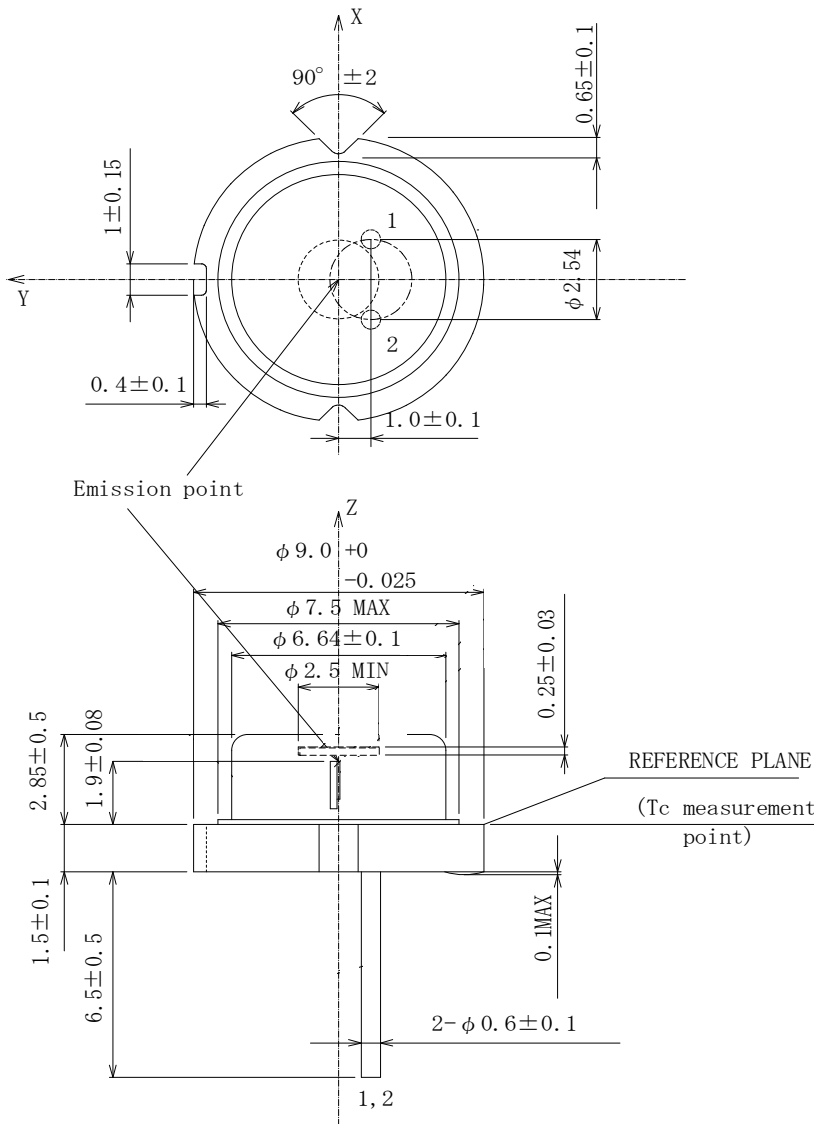
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■ Outline Dimensions

(Unit:mm)



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