Under development	●
New product	

GH04C06W9G

Blue Laser Diode

Blue Laser Diode

■ Features

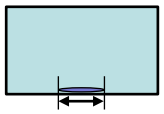
(1) Wavelength : 435 nm(Typ.)

(2) Optical power output : CW 6W (Tc=25℃)

(3) Oscillation transverse mode : TE(Multi mode)

(4) Φ9mm CAN package

※1 Aperture size



45μm

■ Applications

(1) Display

(2) Other applications

■ Absolute Maximum Ratings(Tc=25℃(Note 1))

Parameter	Symbol	Value	Unit
Forward current (CW)	If	3.7	A
Reverse voltage	Vrl	2	V
Operating temperature (Case temperature)	Top(c)	0 ～ +60	℃
Storage temperature	Tstg	-40 ～ +85	℃
Soldering temperature (Note 2)	Tsld	350	℃

(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)

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■ Specifications

CW, Tc=25℃

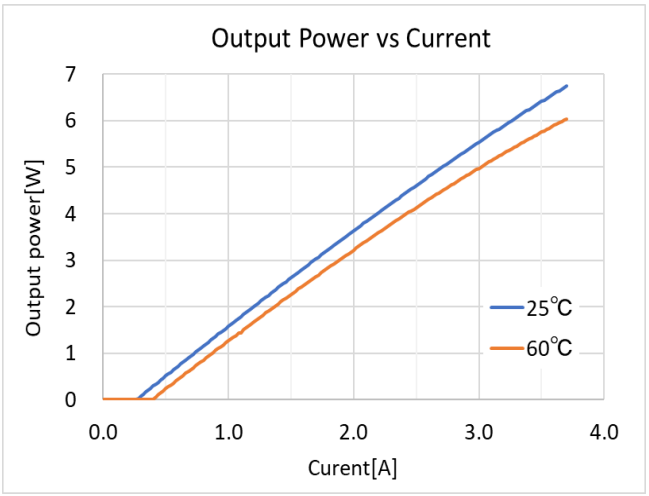
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Threshold current	Ith	-	-	0.3	T.B.D.	A
Operating current	Iop	Po=6W	-	3.2	T.B.D.	A
Operating voltage	Vop		-	4.2	T.B.D.	V
Wavelength(Note 4)	λp		425	435	445	nm
Beam divergence Angle(Parallel)(Note 2,3)	θ //		-	9	-	°
Beam divergence Angle(Perpendicular)(Note 2,3)	θ⊥		T.B.D.	46	T.B.D.	°
Differential efficiency	ηd		T.B.D.	2.0	-	W/A

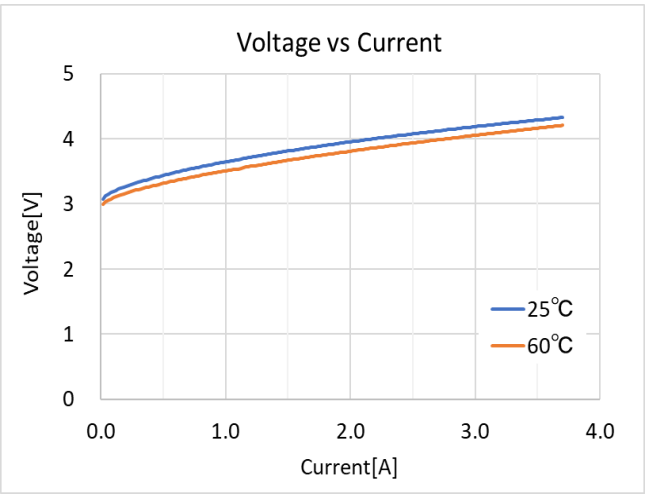
(Note 1) Initial value, Continuous Wave Operation

(Note 2) Full width angle at $1/e^2$ 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.





As of April 2024

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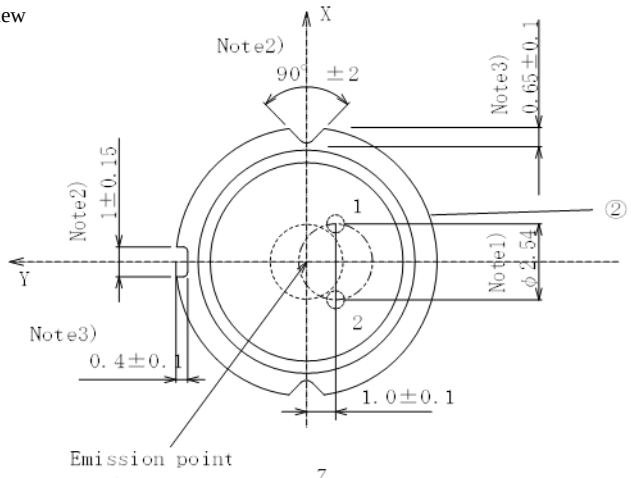
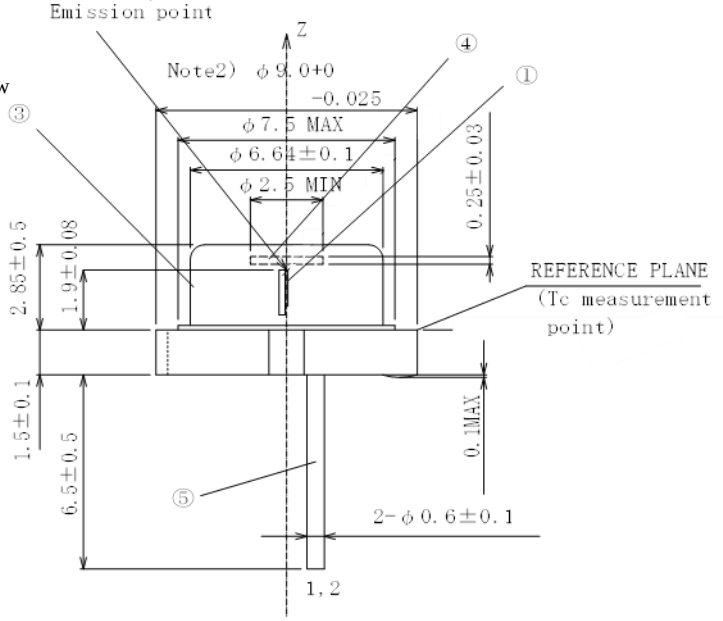
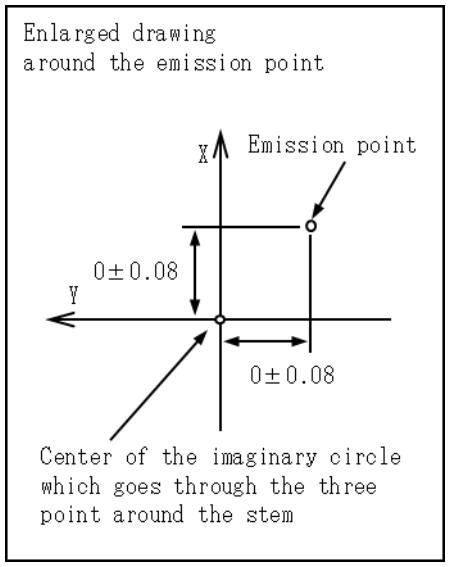
■ Outline Dimensions （Unit：mm）

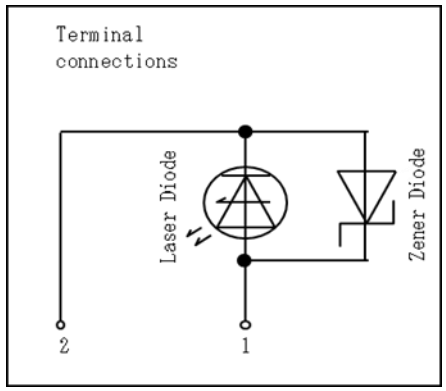
Top view



Side view







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.

No.	Component	Material	Finish
①	Laser Diode Chip	InAlGaN	-
②	Stem	Fe, Cu	Gold-plated
③	Cap	45 alloy	Nickel＋Pd plated
④	Window glass	Borosilicated glass	-
⑤	Lead pins	Kovar	Gold-plated

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GH04C06W9G

Blue Laser Diode

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(5) installation problem.
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(8) special environment (factory, coastal areas, hotspring area, etc.)
(9) phenomenon which cannot be foreseen based on the practical technologies at the time of shipment.
(10) the factors not included in the product specification sheet.

4. Please contact and consult with a Sharp sales representative for any questions about Sharp product.

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