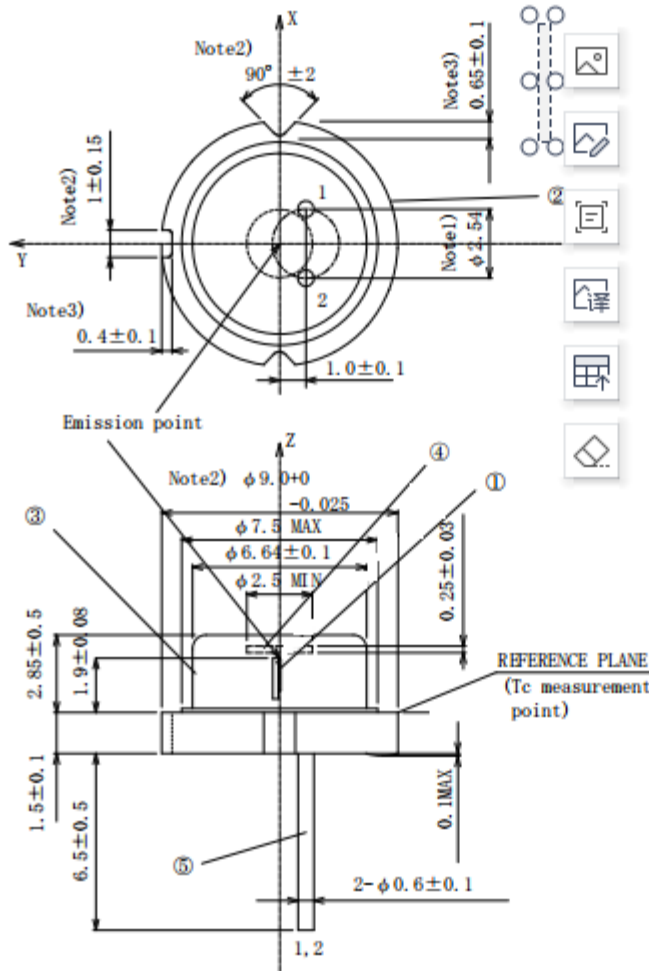
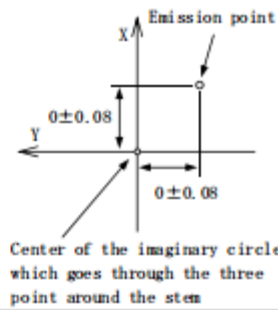


2. Outline dimensions and Terminal connections

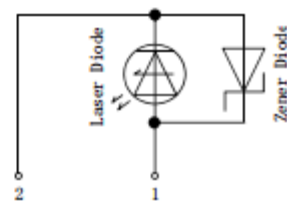


Enlarged drawing around the emission point



Center of the imaginary circle which goes through the three points around the stem

Terminal connections



Mass of the product :
1.14g (reference value)

Note 1) Dimension of the bottom of leads.

Note 2) These dimensions are valid only in the range of $0 \sim 0.75\text{mm}$ 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.

GENERAL TOLERANCES ± 0.2

UNIT:mm

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

3. Ratings and Characteristics

3-1 Absolute Maximum Ratings

(Tc=25°C (Note 1))

Parameter	Symbol	Value	Unit
Operating current (CW)	I _{op}	3.8	A
		3	A
Reverse voltage	V _{r1}	2	V
Operating temperature (Case temperature)	T _{op} (c)	0 ~ +60	°C
Storage temperature	T _{stg}	-40 ~ +85	°C
Soldering temperature (Note 2)	T _{sld}	350	°C

(Note 1) T_c : Case temperature (T_c measurement point is refer to P.2 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)

3-2 Electro-optical Characteristics (Note 1)

(Tc=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Threshold current	I _{th}	-	-	0.35	0.45	A
Operating current (CW)	I _{op}	P _O =5W	-	3.35	3.79	A
Operating voltage	V _{op}		3.8	4.4	5.0	V
Wavelength (Note 4)	λ _p		425	435	445	nm
Beam divergence angle (Parallel) (Note 2, 3)	θ _∥		4	9	15	°
Beam divergence angle (Perpendicular) (Note 2, 3)	θ _⊥		43	49	55	°
Misalignment angle (Parallel) (Note 3)	Δθ _∥		-5	-	5	°
Misalignment angle (Perpendicular) (Note 3)	Δθ _⊥		-5	-	5	°
Differential efficiency	η _d		1.1	1.6	-	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

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