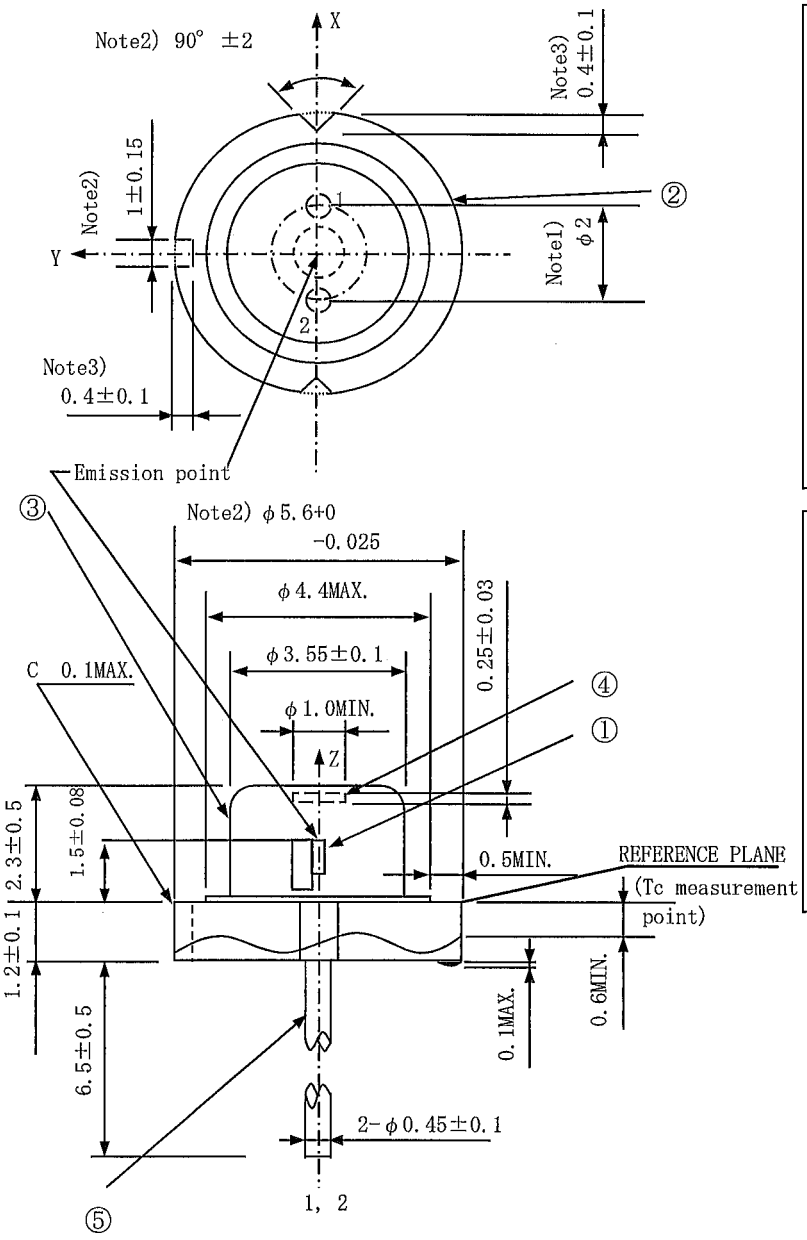
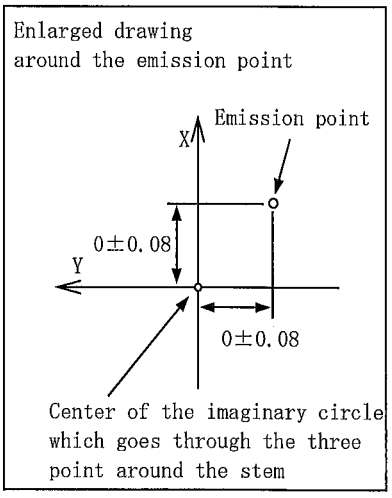
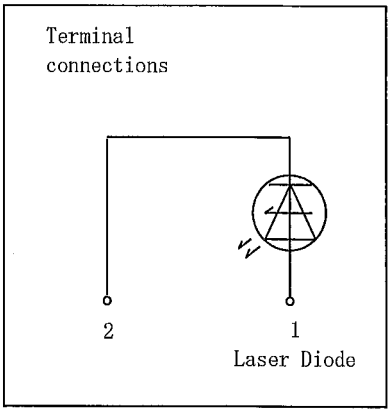
2. Outline dimensions and Terminal connections







Mass of the product :
0.32g (reference value)

Marking
Position : Top or side of a cap
Printed contents : SG01□□□□□
□ : Production lot

Note 1) Dimension of the bottom of leads.

Note 2) These dimensions are valid only in the range of 0 ～ 0.6mm 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	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

3. Ratings and Characteristics

3-1 Absolute Maximum Ratings

(Tc=25℃(Note 1))

Parameter	Symbol	Value	Unit
Operating current (CW)	Iop	850	mA
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 P. 2 drowing.)

(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℃)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Threshold current	Ith	-	-	100	400	mA
Operating current (CW)	Iop	Po=300mW	-	500	840	mA
Operating voltage	Vop		-	5.2	6.3	V
Wavelength (Note 4)	λp		510	520	530	nm
Beam divergence angle(Parallel) (Note 2, 3)	$\theta //$		3	7	11	°
Beam divergence angle(Perpendicular) (Note 2, 3)	$\theta \perp$		17	23	29	°
Misalignment angle (Parallel) (Note 3)	$\Delta \theta //$		-5	-	5	°
Misalignment angle (Perpendicular) (Note 3)	$\Delta \theta \perp$		-5	-	5	°
Differential efficiency	ηd		0.45	0.75	-	W/A

(Note 1) Initial value, Continuous Wave Operation

(Note 2) Angle of 50% peak intensity (Full angle at half-maximum)

(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.