

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°C (Note 1))

Parameter	Symbol	Value	Unit
Operating current (CW)	Iop	1.4	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 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°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Threshold current	Ith	—	—	0.22	0.30	A
Operating current (CW)	Iop	Po=0.6W	—	1.1	1.39	A
Operating voltage	Vop		—	5.2	6.2	V
Wavelength (Note 4)	λ p		510	520	530	nm
Beam divergence angle(Parallel) (Note 2,3)	θ //		5	13	20	°
Beam divergence angle(Perpendicular) (Note 2,3)	θ ⊥		35	45	55	°
Misalignment angle (Parallel) (Note 3)	Δ θ //		-5	—	5	°
Misalignment angle (Perpendicular) (Note 3)	Δ θ ⊥		-5	—	5	°
Differential efficiency	η d		0.45	0.65	—	W/A

(Note 1) Initial value, Continuous Wave Operation

(Note 2) Full width angle at 1/e<sup>2</sup> 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.