BLUE-VIOLET LASER DIODE

DL-5146-251

Tentative

Ver.1 Jan. 2005

Features

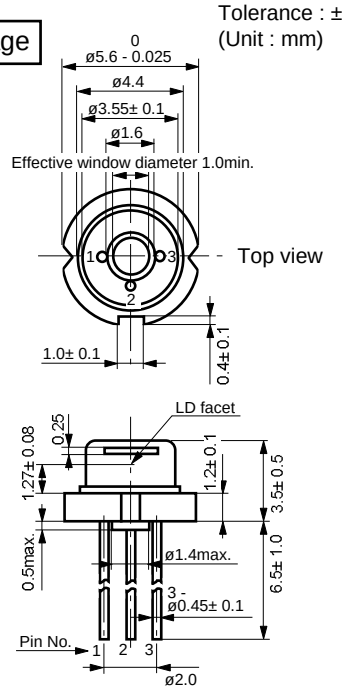
- Short wavelength : 405 nm (Typ.)
- Light Output: 35mW CW at 35mW (pulse)
- Low threshold current : Ith = 50 mA (Typ.)
- Package : ø5.6 mm

Applications

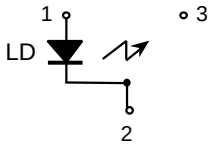
Next generation DVD
Laser module

Package

Tolerance : ± 0.2
(Unit : mm)



Pin Connection



Absolute Maximum Ratings

(Tc=25°C)

Parameter		Symbol	Ratings	Unit
Light Output	CW	Po (CW)	35	mW
	Pulse	Po(pulse)	50	
Reverse Voltage	Laser	VR	2	V
Operating Temperature		Topr	0 to +60	°C
Storage Temperature		Tstg	-40 to +85	°C

1) Pulse Width 0.1µs, Duty 50%

Electrical and Optical Characteristics 1) 2)

(Tc=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith	CW	-	35	70	mA
Operating Current		Iop	Po=35mW	-	70	100	mA
Operating Voltage		Vop	Po=35mW	-	5.5	6.5	V
Lasing Wavelength		Lp	Po=35mW	395	405	415	nm
Beam Divergence 3)	Perpendicular	Qv	Po=35mW	16	20	28	°
	Parallel	Qh	Po=35mW	6	9	14	°
Off Axis Angle	Perpendicular	dQv	-	-3	-	3	°
	Parallel	dQh	-	-2	-	2	°
Differential Efficiency		SE	-	0.6	1.0	-	mW/mA

1) Initial values 2) All the above values are evaluated with Tottori Sanyo's measuring apparatus
3) Full angle at half maximum

Note : The above product specification are subject to change without notice.

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