BLUE-VIOLET LASER DIODE

DL-6146-301

SANYO

Ver. 1 Feb. 2005

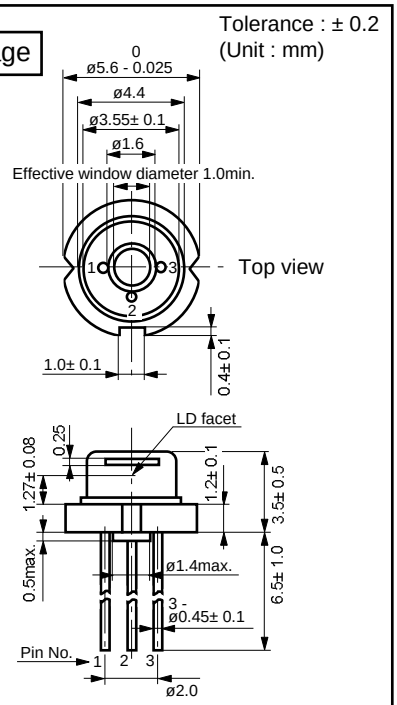
Features

- Short wavelength : 405 nm (Typ.)
- Light Output: 50mW CW at 100mW (pulse)
- Low threshold current : Ith = 40mA (Typ.)
- Package : ø5.6 mm

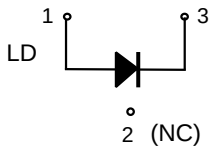
Applications

Next generation DVD
Laser module

Package



Pin Connection



Absolute Maximum Ratings

(Tc=25°C)

Parameter		Symbol	Ratings	Unit
Light Output	CW	Po (CW)	50	mW
	Pulse [1]	Po(pulse)	100	
Reverse Voltage	Laser	VR	2	V
Operating Temperature		Topr	0 to +70	°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	-	40	60	mA
Operating Current		Iop	Po=50mW	-	80	120	mA
Threshold Voltage		Vth	CW	-	4.8	6.0	V
Operating Voltage		Vop	Po=50mW	-	5.6 [4)]	7.0	V
Lasing Wavelength		Lp	Po=50mW	395	405	415	nm
Beam Divergence [3)]	Perpendicular	Qv	Po=50mW	16	20	24	°
	Parallel	Qh	Po=50mW	6	9	14	°
Off Axis Angle	Perpendicular	dQv	Po=50mW	-3	-	3	°
	Parallel	dQh	Po=50mW	-2	-	2	°
Differential Efficiency		SE	Po=50mW	0.8	1.2	-	mW/mA

1) Initial values 2) All the above values are evaluated with Tottori Sanyo's measuring apparatus
3) Full angle at half maximum4) Operating Voltage of this laser is higher than conventional laser(5.6V)

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

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