INFRARED LASER DIODE

DL-LS2031 Tentative

SANYO

Ver.2 Jan. 2003

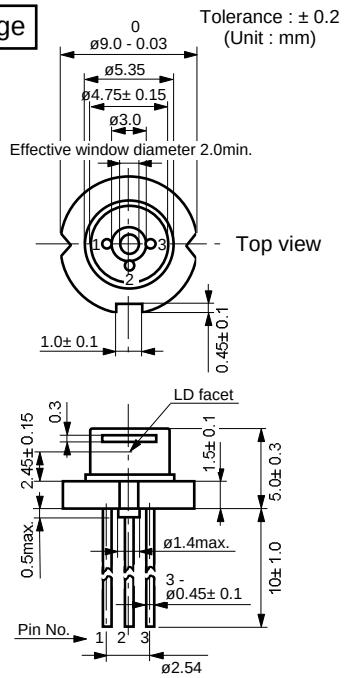
Features

- Lasing wavelength : 808 nm (Typ.)
- Single longitudinal mode
- High output power : 150 mW at 50°C
- Low threshold current : Ith = 50 mA (Typ.)
- Fundamental transverse mode

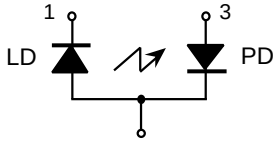
Applications

- Solid state laser pumping

Package



Pin Connection



Absolute Maximum Ratings

(Tc=25°C)

Parameter		Symbol	Ratings	Unit
Light Output	CW	Po	160	mW
Reverse Voltage	Laser	VR	2	V
	PD		30	
Operating Temperature		Topr	-10 to +50	°C
Storage Temperature		Tstg	-40 to +85	°C

Electrical and Optical Characteristics 1) 2)

(Tc=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith	CW	-	50	70	mA
Operating Current		Iop	Po=150mW	-	180	220	mA
Operating Voltage		Vop	Po=150mW	-	2.0	2.4	V
Lasing Wavelength *		Lp	Po=150mW	798	808	818	nm
Beam Divergence 3)	Perpendicular	Qv	Po=150mW	12	16	20	°
	Parallel	Qh	Po=150mW	6	8	10	°
Off Axis Angle	Perpendicular	dQv	-	-	-	± 3	°
	Parallel	dQh	-	-	-	± 3	°
Differential Efficiency		dPo/dIop	-	0.8	1.1	-	mW/mA
Monitoring Output Current		Im	Po=150mW	0.2	0.4	0.6	mA
Astigmatism		As	Po=150mW	-	3	-	µm

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.

Tottori SANYO Electric Co., Ltd. LED Division
5-318, Tachikawa, Tottori 680-8634 Japan TEL : +81-857-21-2137 FAX : +81-857-21-2161

* Lasing Wavelength Selection Classification

Type	Lasing Wavelength (nm)
DL-LS2031A	808 ± 3
DL-LS2031B	808 ± 5
DL-LS2031C	808 ± 10