

INFRARED LASER DIODE

DL-8031-031B

SANYO

Ver.1 Mar. 2003

Features

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

Applications

- Solid state laser pumping

Absolute Maximum Ratings

(T_c=25°C)

Parameter		Symbol	Ratings	Unit
Light Output	CW	P _o	160	mW
Reverse Voltage	Laser	V _R	2	V
	PD		30	
Operating Temperature		T _{opr}	-10 to +50	°C
Storage Temperature		T _{stg}	-40 to +85	°C

Electrical and Optical Characteristics ^{1) 2)}

(T_c=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		I _{th}	CW	-	50	70	mA
Operating Current		I _{op}	P _o =150mW	-	180	220	mA
Operating Voltage		V _{op}	P _o =150mW	-	2.0	2.4	V
Lasing Wavelength *		L _p	P _o =150mW	803	808	813	nm
Beam ³⁾ Divergence	Perpendicular	Q _v	P _o =150mW	12	16	20	°
	Parallel	Q _h	P _o =150mW	6	8	10	°
Off Axis Angle	Perpendicular	dQ _v	-	-	-	± 3	°
	Parallel	dQ _h	-	-	-	± 3	°
Differential Efficiency		dP _o /dI _{op}	-	0.8	1.1	-	mW/mA
Monitoring Output Current		I _m	P _o =150mW	0.2	0.4	0.6	mA
Astigmatism		A _s	P _o =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.

