

INFRARED LASER DIODE

DL-8031-031A

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

($T_c=25^\circ\text{C}$)

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)}

($T_c=25^\circ\text{C}$)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		I_{th}	CW	-	50	70	mA
Operating Current		I_{op}	Po=150mW	-	180	220	mA
Operating Voltage		Vop	Po=150mW	-	2.0	2.4	V
Lasing Wavelength *		Lp	Po=150mW	805	808	811	nm
Beam ³⁾ Divergence	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.

