PRELIMINARY

Notice:This is not a final specfication.
Some parametric limits are subject to change.

MITSUBISHI LASER DIODES

ML8XX2 SERIES

InGaAs —MQW HIGH POWER LASER DIODES

TYPE NAME ML8XX2

DESCRIPTION

ML8XX2 series are InGaAs high power laser diodes which provides a stable, single transverse mode oscillation with emission wavelength of 980nm and standard continuous light output of 150mW.

FEATURES

- ●High power (CW 150mW)
- ●980nm typical emission wavelength
- ●Stable single transverse mode oscillation
- ●MQW* active layer

*: Multiple Quantum Well

APPLICATION

Optical fiber amplifier

ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Conditions	Ratings	Unit
P_O	Light output power	CW	180	mW
I_F	Forward current	CW	350	mA
T_C	Case temperature	—	+20～+30	℃
T_{stg}	Storage temperature	—	−40～+100	℃

ELECTRICAL/OPTICAL CHARACTERISTICS (T_C = 25℃)

Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
I_{th}	Threshold current	CW	—	20	50	mA
I_{OP}	Operating current	CW,Po = 150mW	—	200	260	mA
V_{OP}	Operating voltage	CW,Po = 150mW	—	2.0	2.5	V
λ_C	Center wavelength	CW,Po = 150mW	970	980	990	nm
$\triangle\lambda$	Spectral width	CW,Po = 150mW,RMS	—	0.3	2	nm
$\theta_{//}$	Beam divergence angle (parallel)	CW,Po = 150mW	5	8	15	deg.
$\theta_{\perp}$	Beam divergence angle (perpendicular)	CW,Po = 150mW	30	35	40	deg.

TYPICAL CHARACTERISTICS

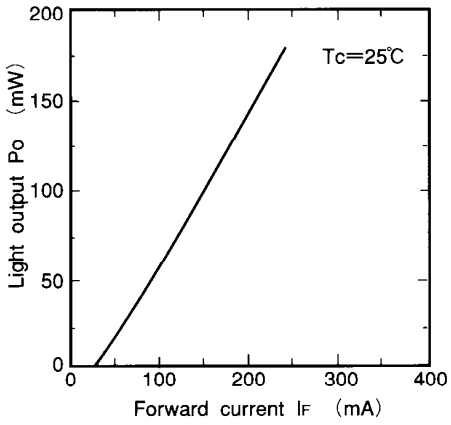


Fig.1 Light output vs. forward current

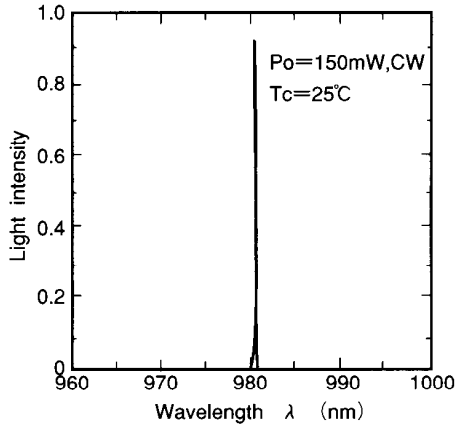
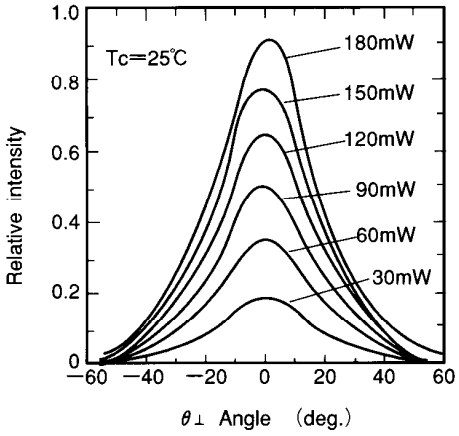


Fig.2 Spectrum



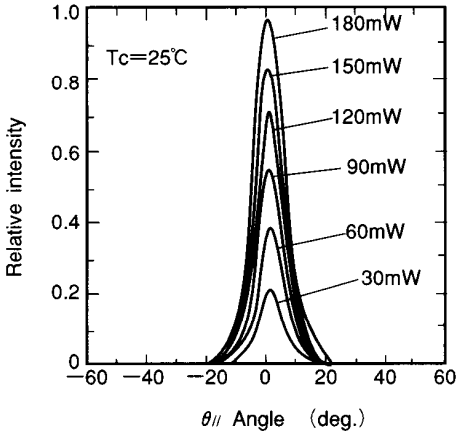


Fig.3 Far field patterns