

MITSUBISHI LASER DIODES
ML9XX8 SERIES

InGaAsP — MQW HIGH POWER LASER DIODES

TYPE
NAME

ML961B8S

DESCRIPTION

ML9XX8 series are InGaAsP high power laser diodes which provides a stable, single transverse mode oscillation with emission wavelength of 1480nm and standard continuous light output of 150mW.

ML9XX8 are hermetically sealed devices having the photodiode for optical output monitoring and have high - performance, high reliability and long - life characteristics.

FEATURES

- High power (CW 150mW)
- 1480nm typical emission wavelength
- Stable single transverse mode oscillation
- Have monitoring photodiode
- High reliability, long operation life
- MQW* active layer
- * : Multiple Quantum Well

APPLICATION

Optical fiber amplifier

ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Conditions	Ratings	Unit
P _o	Light output power	CW	150	mW
I _F	Forward current	CW	1000	mA
V _{RL}	Reverse Voltage (Laser diode)	—	2	V
V _{RD}	Reverse Voltage (Photodiode)	—	20	V
I _{FD}	Forward current (Photodiode)	—	2	mA
T _C	Case temperature	—	+20~+30	°C
T _{stg}	Storage temperature	—	-40~+100	°C

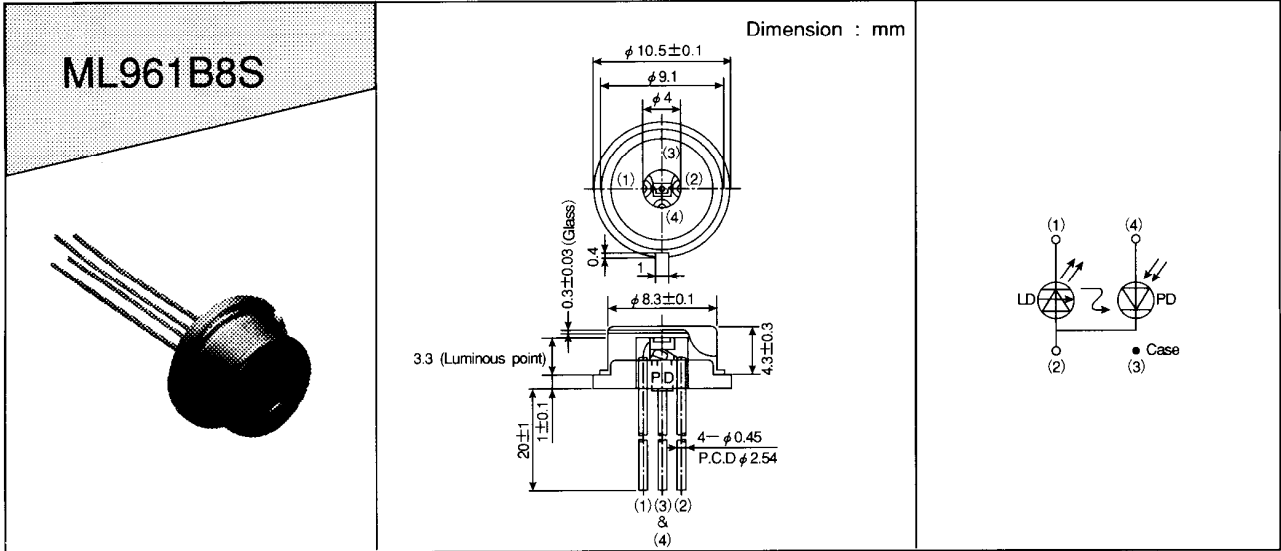
ELECTRICAL/OPTICAL CHARACTERISTICS (T_c = 25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
I _{th}	Threshold current	CW	—	30	100	mA
I _{OP}	Operating current	CW, P _o = 100mW	—	350	500	mA
V _{OP}	Operating voltage	CW, P _o = 100mW	—	1.5	2.0	V
λ _c	Center wavelength	CW, P _o = 100mW	1460	1480	1490	nm
Δλ	Spectral width	CW, P _o = 100mW, RMS	—	3	—	nm
θ _∥	Beam divergence angle (parallel)	CW, P _o = 100mW	—	25	—	deg.
θ _⊥	Beam divergence angle (perpendicular)	CW, P _o = 100mW	—	30	—	deg.
I _m	Monitoring output current (Photodiode)	CW, P _o = 100mW, V _{RD} = 1V	0.1	1	—	mA

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OUTLINE DRAWINGS



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TYPICAL CHARACTERISTICS

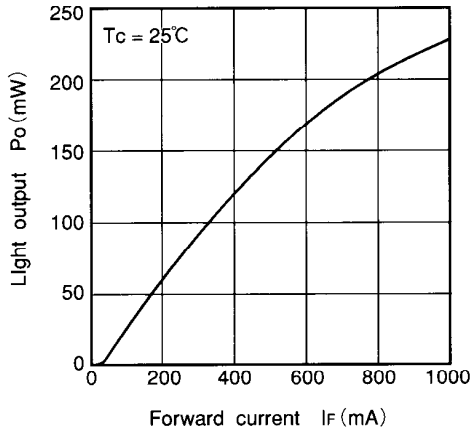


Fig.1 Light output vs. forward current

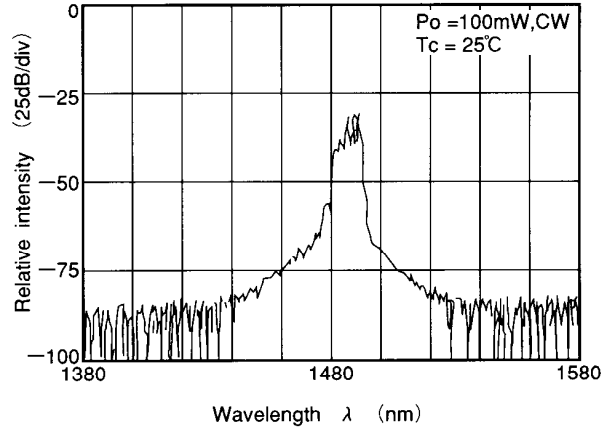


Fig.2 Spectrum

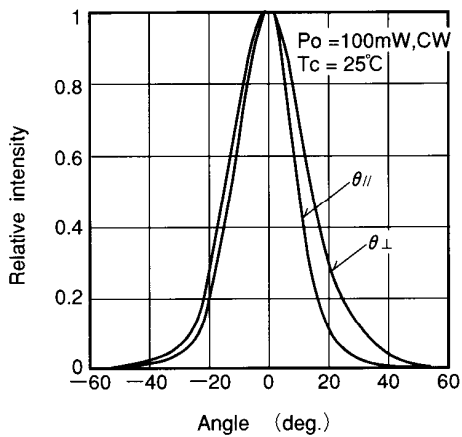


Fig.3 Far field patterns