

PRELIMINARY**MITSUBISHI LASER DIODES
ML9XX25 SERIES**

980nm High Power Laser Diode

**TYPE
NAME****ML9xx25 (1480nm High Power LD)****DESCRIPTION**

ML9xx25 series are InGaAsP high power laser diodes which provide a stable, single transverse mode oscillation with emission wavelength of 1480nm and standard continuous light output of 200mW.

FEATURES

- High Power (CW 200mW)
- 1480nm typical emission wavelength
- High reliability, long operation life
- MQW*- Fabry - Perot Laser

* Multiple Quantum Well

APPLICATION

- Er-doped fiber amplifier

ABSOLUTE MAXIMUM RATINGS

| Symbol | Parameter | Conditions | Ratings | Unit |
|------------------|---------------------|------------|------------|-------|
| P _o | Ligt output power | CW | 220 | mW |
| I _F | Forward current | CW | 800 | mA |
| V _R | Reverse voltage | - | 2 | V |
| T _c | Case temperature | - | + 20 ~ +30 | deg.C |
| T _{stg} | Storage temperature | - | - 40 ~+100 | deg.C |

ELECTRICAL/OPTICAL CHARACTERISTICS (T_c=25deg.C)

| Symbol | Parameter | Test conditions | Min. | Typ. | Max | Unit |
|-----------------|---------------------------------------|------------------|------|------|------|------|
| I _{th} | Threshold current | CW | - | 20 | 40 | mA |
| I _{op} | Operation current | CW,Po=200mW | - | 520 | 650 | mA |
| V _{op} | Operating voltage | CW,Po=200mW | - | 1.5 | 2.0 | V |
| λ _c | Center wavelength | CW,Po=200mW | 1460 | 1475 | 1490 | nm |
| Δλ | Spectral width (RMS , -20dB) | CW,Po=200mW, RMS | - | 3 | 10 | nm |
| θ// | Beam divergence angle (parallel) | CW,Po=200mW | - | 25 | 30 | deg. |
| θ⊥ | Beam divergence angle (perpendicular) | CW,Po=200mW | - | 30 | 35 | deg. |

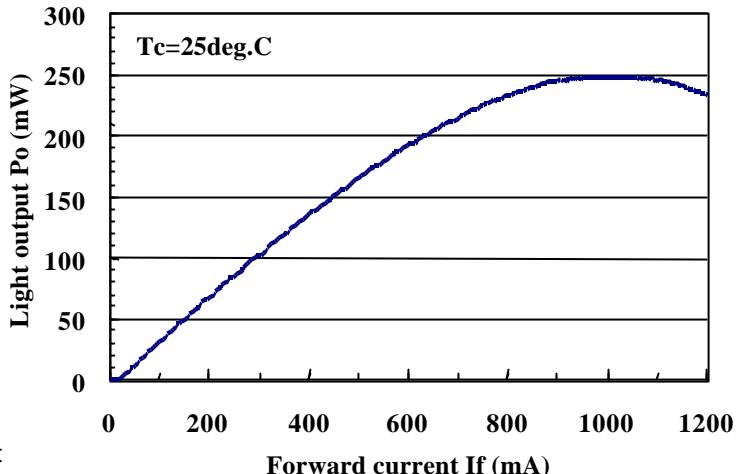
TYPICAL CHARACTERISTICS

Fig.1 Light output vs. forward current

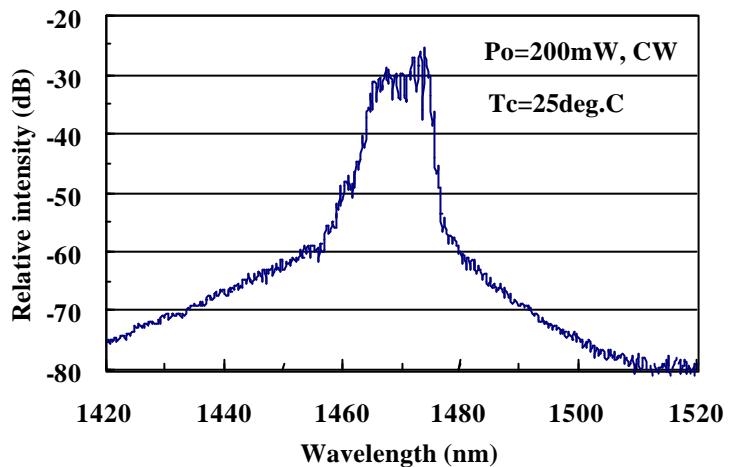


Fig.2 Spectrum

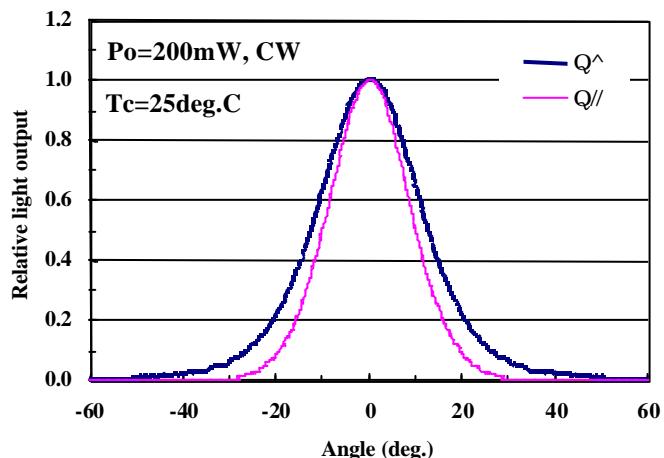


Fig.3 Far field pattern

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PRELIMINARY

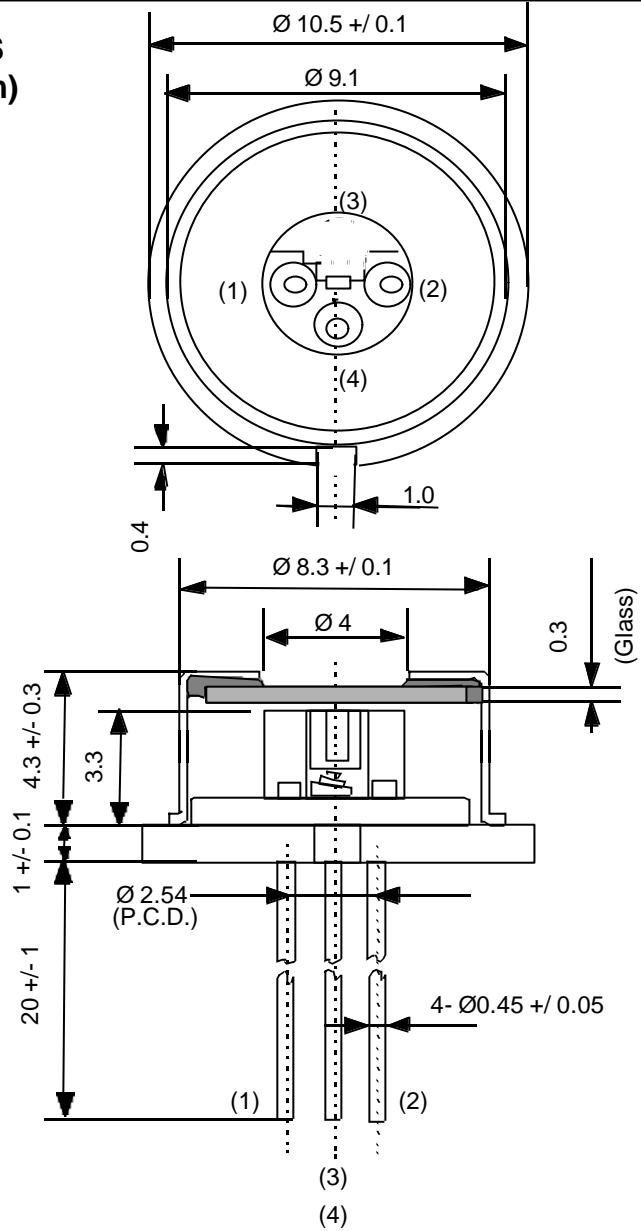
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1480nm High Power Laser Diode

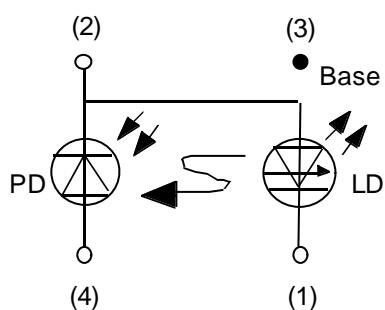
TYPE
NAME

ML961B25S

OUTLINE DRAWINGS
(Dimension in mm)

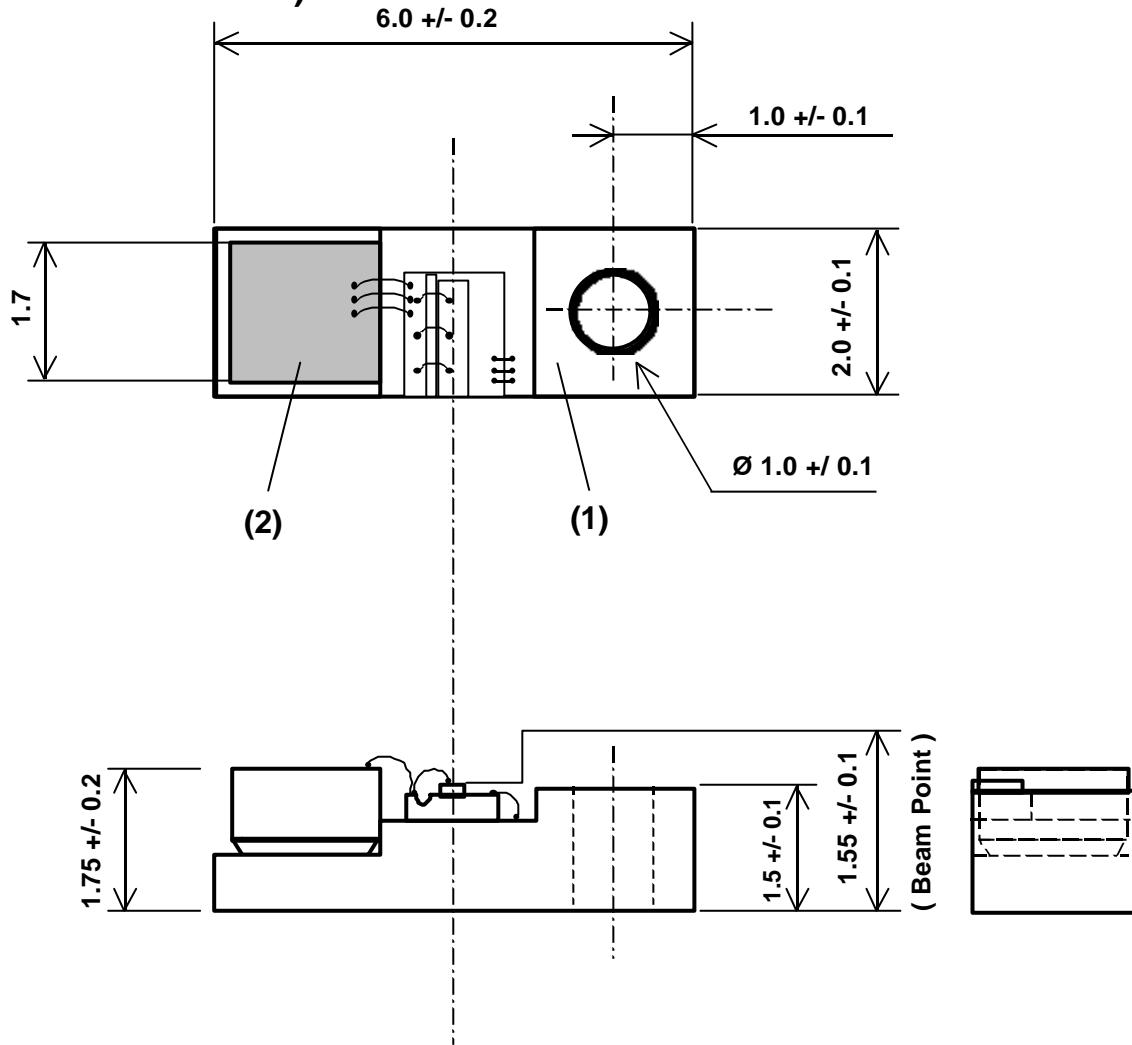


LEAD CONNECTION



PRELIMINARY**ML9XX25 SERIES**

1480nm High Power Laser Diode

TYPE
NAME**ML99225****OUTLINE DRAWINGS**
(Dimension in mm)**LEAD CONNECTION**