QDLASER

# QLD1051-6410

Preliminary

1064 nm DFB laser coaxial package with pigtail

C00069-01 March 2012

## 1. DESCRIPTION

The QLD1051-6410 is a 1064-nm distributed feedback (DFB) laser suitable for CW and pulsed seed source for fiber lasers and sensing applications. The laser is assembled into a coaxial package with standard single mode fiber pigtail.

## 2. FEATURES

- Single longitudinal mode operation at 1064 nm
- Coaxial package with fiber pigtail

## 3. APPLICATION

- Seeder for fiber lasers
- Sensing

## 4. ABSOLUTE MAXIMUM RATING

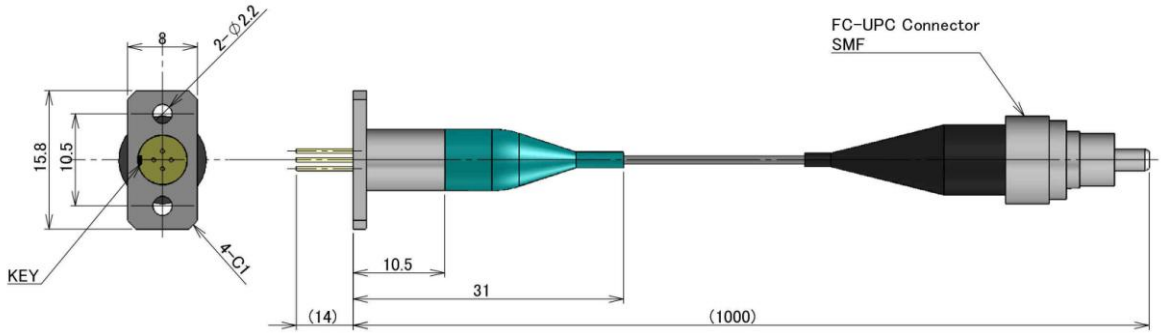
| PARAMETER | SYMBOL | RATING | UNIT |
|---|---|---|---|
| Optical Output power | $P_f$ | 30 | mW |
| LD Forward Current | $I_F$ | 150 | mA |
| LD Reverse Voltage | $V_{RLD}$ | 2 | V |
| Operation Temperature | $T_c$ | 10 to 50 | °C |
| Storage Temperature | $T_{stg}$ | -40 to 85 | °C |
| Lead Soldering Temperature (5 s) | $T_{sld}$ | 230 | °C |

## 5. OPTICAL AND ELECTRICAL CHARACTERISTICS

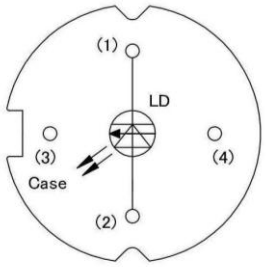
($T_{LD}$ = 25°C, unless otherwise specified)

| PARAMETER | SYMBOL | TEST CONDITION | MIN | TYP | MAX | UNIT |
|---|---|---|---|---|---|---|
| Peak Wavelength | $\lambda_p$ | CW, $P_f$ =10 mW | 1062 | 1064 | 1066 | nm |
| Fiber Output Power | $P_f$ | CW | 10 | - | - | mW |
| Threshold Current | $I_{th}$ | CW | - | 15 | - | mA |
| Operation Current | $I_{op}$ | CW, $P_f$ =10 mW | - | 40 | 100 | mA |
| Operation Voltage | $V_{op}$ | CW, $P_f$ =10 mW | - | 1.2 | 2.0 | V |
| Sidemode Suppression Ratio | SMSR | CW, $P_f$ =10 mW | - | 40 | - | dB |
| Pulse width | PW | - | - | TBD | - | nsec |
| Pulsed peak power | $P_{pf}$ | 5 nsec, 100kHz | - | TBD | - | mW |

## 6. OUTLINE DRAWING AND PIN CONFIGURATION




All dimentions in milimeters




BOTTOM VIEW

## 7. NOTICE

- Safety Information

This product is classified as Class 3B laser product, and complies with 21 CFR Part 1040.10.
Please do not take a look at laser lighting in operations since laser devices may cause troubles to human eyes.
Please do not eat, burn, break and make chemical process of the products since they contain GaAs material.

- Handling products

Semiconductor lasers are easily damaged by external stress such as excess temperature and ESD.
Please pay attention to handling products, and use within range of maximum ratings.
QD Laser takes no responsibility for any failure or unusual operation resulting from improper handlig, or unusual physical or electrical stress.

- RoHS

This product conforms to RoHS compliance related EU Directive 2002/95/EC.

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