

1310 nm FP 1.25G Laser Diode With SC Receptacle

Data Sheet

OLD2332-C5-SRE

Features

- Uncooled
- Type C laser
- Low threshold current
- Power Output: 0.2 mW
- 1310nm InGaAsP/ InP Fabry-Perot laser diode
- High speed InGaAs monitor PIN photodiode
- Packaged in SC Receptacle with TO-56
- Anti-reflection with fiber stub
- Operating Temperature: -40 ~ +85° C

Applications

- Digital Signal Transmission
- Telecommunications (Local loop, interoffice and intraoffice)
- Data Communications
- SONET OC-3, OC-12, OC-24/SDH STM-1, STM-4, STM-8

Description

The OLD2332-C5-SRE is a hermetically sealed InGaAsP/ InP Fabry-Perot laser diode module in a small receptacle type package, including a high speed InGaAs PIN monitor photodiode and packaged in SC receptacle with fiber stub.

The laser diode is designed for use in data communications systems and telecommunications systems over singlemode fiber, and can operate in temperatures of -40° C to +85° C. The laser diode module transmits emission power to the monitor photodiode in the rear, which ensures highly stable emission at a wavelength of 1310 nm.

Safety

Radiation emitted by laser diode devices can be dangerous to the eyes. Avoid direct or scattered radiation exposure to the eyes or skin. Device contains gallium arsenide (GaAs) which can be hazardous to your health. Please embrace all customary precautions and discretion while handling this device. Observe governmental laws and regulations when discarding this device.

Performance Specifications

Absolute Maximum Ratings

Stresses in excess of the absolute maximum ratings can cause damage to the optical device. Operations of the optical device are suggested to remain within the recommended operating conditions. Exposure to the absolute maximum ratings for extended periods can adversely affect device reliability.

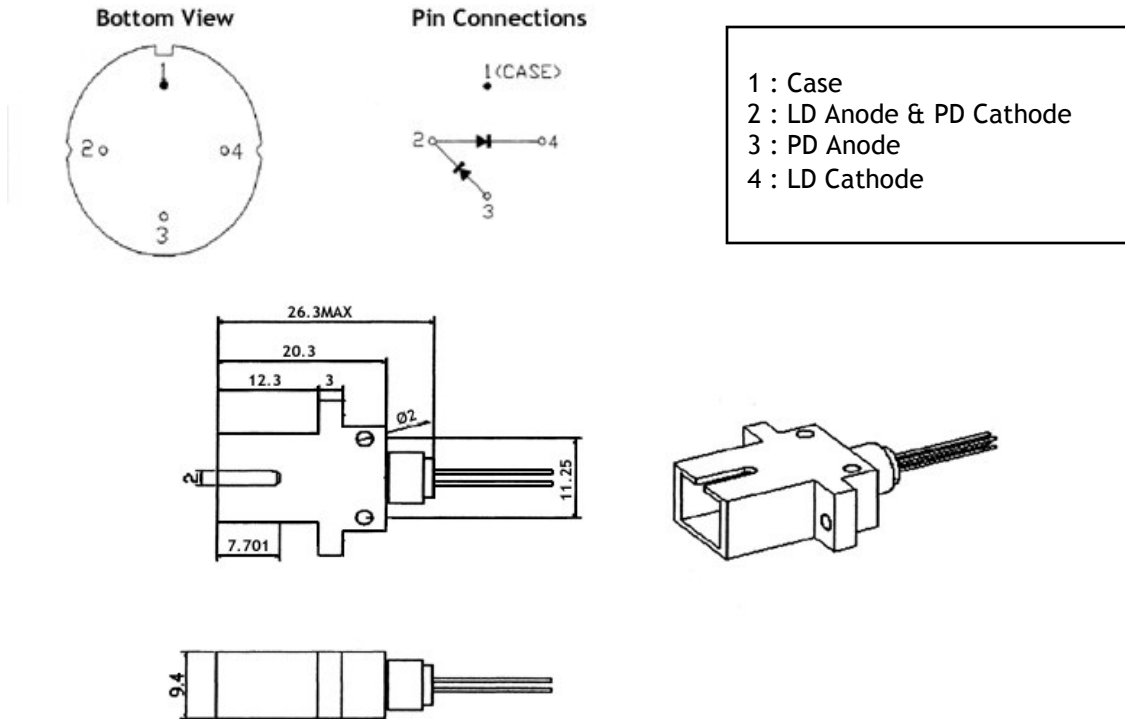
| Parameter | Symbol | Value | Unit |
|----------------------------|------------------|------------|------|
| Storage Temperature | Tstg | -40 to +85 | °C |
| Operating Case Temperature | Top | -40 to +85 | °C |
| Peak Optical Output Power | Po | 2 | mW |
| Forward Current (LD) | I _{FLD} | 150 | mA |
| Reverse Voltage (LD) | V _{RLD} | 2 | V |
| Reverse Current (PD) | I _{RPD} | 2 | mA |
| Reverse Voltage (PD) | V _{RPD} | 15 | V |
| Soldering Temperature | Stemp | 260 | °C |
| Soldering Time | Stime | 10 | sec |

Electrical and Optical Characteristics (T_C=25°C unless otherwise noted)

| Parameter | Symbol | Condition | Min | Typ | Max | Unit |
|----------------------|-----------------|---|------|------|------|------|
| Threshold Current | I _{th} | CW | - | 10 | 15 | mA |
| | | CW, T _C =-40~85°C | - | 25 | 30 | |
| Operating Voltage | V _{op} | CW, Pop, T _C =-40~85°C | - | 1.1 | 1.5 | V |
| Operating Current | I _{op} | Pop=0.2mW | - | 18 | 30 | mA |
| Peak Wavelength | λ _p | CW, Pop, T _C =-40~85°C | 1263 | - | 1360 | nm |
| Spectral Width | Δλ | CW, Pop, T _C =-40~85°C | - | 1.0 | 2.5 | nm |
| Rise Time | T _r | I _b =I _{th} , 20%-80% | - | 0.15 | 0.3 | ns |
| Fall Time | T _f | I _b =I _{th} , 20%-80% | - | 0.15 | 0.3 | ns |
| Monitor Current | I _m | Pop, V _{rp} =5V | 100 | - | 400 | μA |
| Monitor Dark Current | I _d | V _{rp} =5V | - | 0.1 | 10 | nA |
| | | V _{rp} =5V, T _C =-40~85°C | - | - | 500 | |
| Monitor Capacitance | C | V _{rp} =5V, f=1MHZ | - | 6 | 20 | pF |
| Tracking Error | - | APC, -40 to +85°C | - | ±0.7 | ±1.5 | dB |

Package Outline Diagram

Dimensions for the device package are given in millimeters.



Additional Information

Contact

For additional information, product specifications, or information about Optocom:

Internet: <http://www.optocom.com>
Email: sales@optocom.com
Tel: +1 978 988 8711
Fax: +1 978 988 8722

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