

1310 nm FP 1.25G Laser Diode Module With Pigtail Connection and SC/PC

Data Sheet

OLD2334-A5-SC

Features

- Uncooled
- Type A laser
- Low threshold current
- Output power: 0.5mW
- Data Rate: 1.25 Gbps
- 1310nm Fabry-Perot laser diode
- InGaAs monitor PIN photodiode
- Single mode fiber pigtailed with SC/PC connector
- Operating Temperature: -40~ +85° C

Applications

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

Description

The OLD2334-A5-SC is a hermetically sealed InGaAsP/ InP Fabry-Perot laser diode module in a small coaxial type package, including a high speed InGaAs PIN monitor photodiode and single mode fiber pigtail connection.

The laser diode is designed for use in data communications systems and telecommunications systems over single mode 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	T _{stg}	-40 to +85	°C
Operating Case Temperature	T _{op}	-40 to +85	°C
Peak Optical Output Power	P _o	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	S _{temp}	260	°C
Soldering Time	S _{time}	10	sec

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

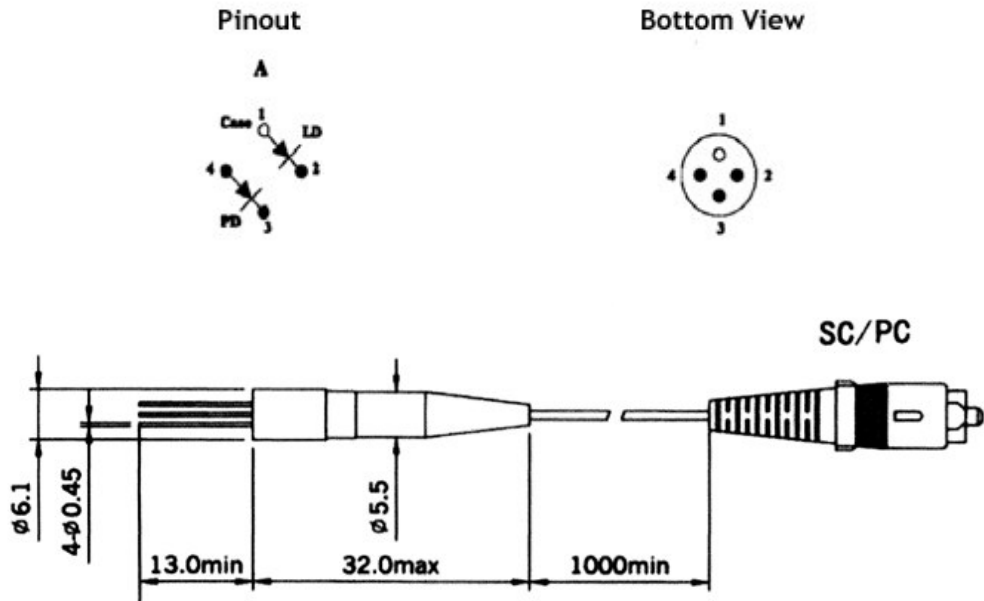
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Threshold Current	I _{th}	CW	-	10	15	mA
Operating Voltage	V _{op}	Pf	-	1.2	1.5	V
Fiber Output Power	Pf	CW, I _f =I _{th} +20mA	0.5	-	-	mW
Central Wavelength	λ _c	CW, Pf	1290	1310	1330	nm
Spectral Width, RMS	Δλ	CW, Pf	-	-	2.5	nm
Rise Time	T _r	I _b =I _{th} , 20%-80%	-	-	0.3	ns
Fall Time	T _f	I _b =I _{th} , 20%-80%	-	-	0.3	ns
Tracking Error	Pf/Pf	APC, -40 to +85°C	-	-	±1.0	dB

Photodiode Parameters (T_c=25°C unless otherwise noted)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Monitor Current	I _m	Pop, V _{rp} =5V	100	-	1000	μA
Monitor Dark Current	I _d	V _{rp} =5V	-	-	100	nA
Monitor Capacitance	C	V _{rp} =5V, f=1MHz	-	6	15	pF

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

©2005 Optocom Corporation. All rights reserved. Information in this document is believed to be accurate and reliable and is subject to change without notice. Optocom Corporation will not be held liable for technical or editorial errors or omissions contained herein. Reproduction in whole or in part is prohibited without prior written consent of the copyright owner and no responsibility will be assumed by Optocom Corporation for any infringements of third parties. All other brand or product names mentioned are the trademarks or registered trademarks owned by their respective companies or organizations.