

OKI LASER PRODUCTS

OL6205N-1-A10 MQW Laser Diode Uncooled Dil Module (1625 nm +/-10 nm, 1 mW)

October 1999



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Oki Semiconductor

OL6205N-1-A10 Laser Diode Module

1625-nm, Uncooled Dil Module for Single-Mode Fiber

INTRODUCTION

Oki Semiconductor's OL6205N-1-A10 surface mount laser diode module features a 1625-nm, 1-mW laser diode in a 14-pin Dil package with single-mode fiber. The OL6205N-1-A10 is uncooled and has a fiber output power of 1 mW and is equipped with a monitor photodiode.

FEATURES

- 1625-nm MQW FP Laser
- Single-mode fiber
- Uncooled operation
- 1-mW fiber output power
- Includes photodiode for power monitoring
- 14-pin Dil package

APPLICATION

- WDM systems
- · Service Channel
- Cross connect systems
- Fiber-optic light source
- Telemetry systems
- Hand held instrumentation

ELECTRICAL CHARACTERISTICS

Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Ratings	Units
Fiber Output Power	Po	2	mW
Laser diode reverse voltage	V _{R(LD)}	2	V
Photo diode reverse voltage	V _{R(PD)}	20	V
Photo diode forward current	I _{F(PD)}	10	mA
Operating Temperature	Topr	-20 to +65	°C
Storage Temperature	Tstg	-40 to +85	°C

Exceeding these maximum ratings could cause immediate damage or permanent deterioration of the device.

Optical and Electrical Characteristics (Ta=25°C)

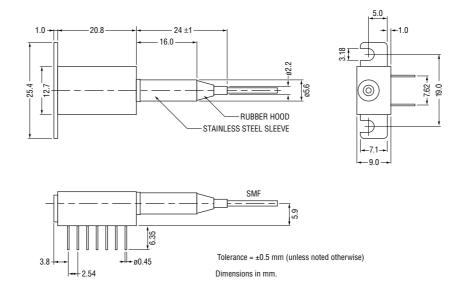
Parameter	Symbol	Test Conditions	Min.	Тур.	Max.	Units
Threshold current	Ith	CW		25	40	mA
Laser diode operating current	I _{F(LD)}	Pf=1 mW, CW		40	60	mA
Laser diode operating voltage	V _{F(LD)}	Pf=1 mW, CW		1.5	2.5	V
Center wavelength	λ _C	Pf=1 mW, CW	1615	1625	1635	nm
RMS Spectral width	σ	Pf=1 mW, CW, RMS		3	5	nm
Monitor current	lm	Pf=1 mW, CW, V _{R(PD)} =5 V	50			μΑ
Photodiode dark current	I _{DARK}	V _{R(PD)} =5 V			1	μΑ
Photdiode capacitance	C _T	V _{R(PD)} =5 V, f=1 MHz		15		pF
Rise time	τ_{r}	I _{BIAS} =Ith			1	ns
Fall time	τ_{f}	Pf=1 mW, 10-90%			1	ns
Thermistor resistance	R _{th}			10		kΩ

Fiber Pigtail Specifications

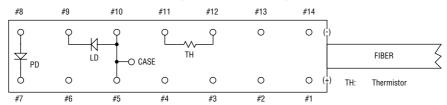
Parameter	Specifications	Units
Туре	SM	
Mode field diameter	9 +/- 1	μm
Cladding diameter	125 +/- 2	μm
Jacket diameter	900	μm
Length	1 (minimum)	m
Connector	FC/PC	-

PACKAGE DIMENSIONS

(Units: mm)







Pin Configuration

Pin Mo.	Description	Pin No.	Description
01	NC	08	PD Anode
02	NC	09	LD Cathode
03	NC	10	LD Anode, Case Ground, and internal connect to pin 5
04	NC	11	Thermistor
05	LD Anode, Case Ground, and internal connect to pin 10	12	Thermistor
06	NC	13	NC
07	PD Cathode	14	NC

■ OL6205N-1-A10 Laser Diode Module ■	
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Notes:

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Please make sure before using the product that the information you are referring to is up-to-date.

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Northwest Area

785 N. Mary Avenue Sunnyvale, CA 94086 Tel: 408/720-8940 Fax: 408/720-8965

North Central Area

300 Park Blvd. Suite 365 Itasca, IL 60143 Tel: 630/250-1313 Fax: 630/250-1414

Northeast Area

138 River Road Shattuck Office Center Andover, MA 01810 Tel: 978/688-8687 Fax: 978/688-8896

Southwest Area

2302 Martin Street Suite 250 Irvine, CA 92715 Tel: 979/752-1843 Fax: 979/752-2423

Southeast Area

1590 Adamson Parkway Suite 220 Morrow, GA 30260 Tel: 770/960-9660 Fax: 770/960-9682

Oki Web Site:

http://www.okisemi.com

For Oki Literature:

Call toll free 1-800-OKI-6388 (6 a.m. to 5 p.m. Pacific Time)

Oki Stock No: 320146-001



Corporate Headquarters

785 N. Mary Avenue Sunnyvale, CA 94086-2909 Tel: 408/720-1900

Fax: 408/720-1918