# **OKI** Electronic Components **OL6204N-100-AP10**

1625 nm/100 mW Laser Diode DIL Module with Single Mode Fiber.

## **GENERAL DESCRIPTION**

OL6204N-100-AP10 is a 1625 nm Laser Diode in a DIL package with single mode fiber.

### FEATURES

- Single-mode fiber output: Pf = 100 mW pulse width 10µs, duty 1%
- Thermo-electric cooler
- Multi-quantum-well (MQW) structure

## APPLICATIONS

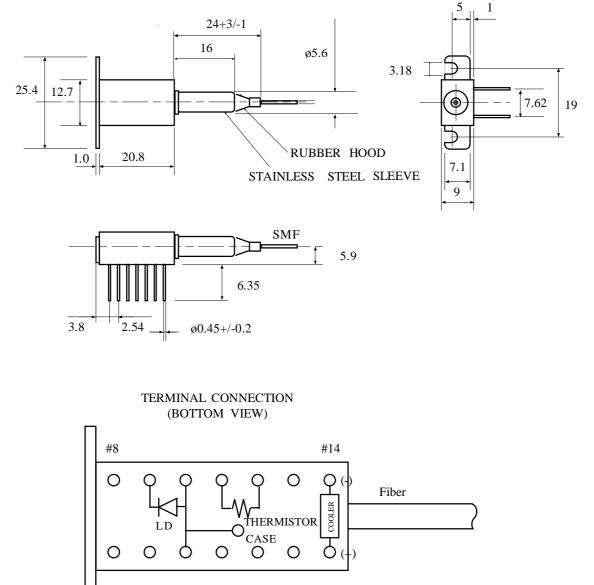
- Optical measuring instruments
- OTDRs

#### **OUTLINE DRAWING**

#7

#### (Unit: mm)

Package No. 204



#### **ABSOLUTE MAXIMUM RATINGS**

		(Ta = 25°C, unless otherwise not		
Parameter	Symbol	Ratings	Unit	
Fiber Output Power	Pf	120	mW	
Laser Diode Forward Current	If (LD)	1000	mA	
Laser Diode Reverse Voltage	Vr (LD)	2	V	
Cooler Current	lc	1.2	А	
Operating Temperature	Topr	-20 to +65	°C	
Storage Temperature	Tstg	-40 to +70	°C	

Pulse width less than 10µs, duty less than 1%

Exceeding these ratings may lead to immediate destruction or permanent deterioration of the device.

## **OPTICAL AND ELECTRICAL CHARACTERISTICS**

		(TLD	= 25°C, F	ulse wid	th 10µs, o	duty 1%)
Parameter	Symbol	Test Conditions	Min.	Тур.	Max.	Unit
Threshold Current	lth	_			75	mA
Operating Current	Іор	Pf = 100 mW	_		800	mA
Operating Voltage	Vop	Pf = 100 mW	_	_	3.0	V
Center Wavelength	λς	Pf = 100 mW	1615	_	1635	nm
RMS Spectral Width	σ	Pf = 100 mW, RMS	_	_	10	nm
Cooler Capacity	ΔΤ	Pf = 100 mW	40	_		°C
Cooler Current	lc	$\Delta T = 40^{\circ}C$ , Pf = 100 mW	_	_	1.0	А
Cooler Voltage	Vc	$\Delta T = 40^{\circ}C$ , Pf = 100 mW	_	_	3.0	V
Thermistor Resistance	Rth	_	9.0	_	11	kΩ

## FIBER PIGTAIL SPECIFICATIONS

Parameter	Specifications	Unit
Туре	SM	_
Mode Field Diameter	9+/-1	μm
Cladding Diameter	125+/-2	μm
Jacket Diameter	900	μm
Length	1 (Min.)	m
Connector	FC/SPC	_

#### NOTICE

- 1. The information contained herein can change without notice owing to product and/or technical improvements. Before using the product, please make sure that the information being referred to is up-to-date.
- 2. The outline of action and examples for application circuits described herein have been chosen as an explanation for the standard action and performance of the product. When planning to use the product, please ensure that the external conditions are reflected in the actual circuit, assembly, and program designs.
- 3. When designing your product, please use our product below the specified maximum ratings and within the specified operating ranges including, but not limited to, operating voltage, power dissipation, and operating temperature.
- 4. Oki assumes no responsibility or liability whatsoever for any failure or unusual or unexpected operation resulting from misuse, neglect, improper installation, repair, alteration or accident, improper handling, or unusual physical or electrical stress including, but not limited to, exposure to parameters beyond the specified maximum ratings or operation outside the specified operating range.
- 5. Neither indemnity against nor license of a third party's industrial and intellectual property right, etc. is granted by us in connection with the use of the product and/or the information and drawings contained herein. No responsibility is assumed by us for any infringement of a third party's right which may result from the use thereof.
- 6. The products listed in this document are intended for use in general electronics equipment for commercial applications (e.g., office automation, communication equipment, measurement equipment, consumer electronics, etc.). These products are not authorized for use in any system or application that requires special or enhanced quality and reliability characteristics nor in any system or application where the failure of such system or application may result in the loss or damage of property, or death or injury to humans. Such applications include, but are not limited to, traffic and automotive equipment, safety devices, aerospace equipment, nuclear power control, medical equipment, and life-support systems.
- 7. Certain products in this document may need government approval before they can be exported to particular countries. The purchaser assumes the responsibility of determining the legality of export of these products and will take appropriate and necessary steps at their own expense for these.
- 8. No part of the contents contained herein may be reprinted or reproduced without our prior permission.

Copyright 2001 Oki Electric Industry Co., Ltd.