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# OL3204N-150-P20

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1310 nm/150 mW Laser Diode DIL Module with Single Mode Fiber.

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## GENERAL DESCRIPTION

OL3204N-150-P20 is a 1310 nm Laser Diode in a DIL package with single mode fiber.

## FEATURES

- Single-mode fiber output:  $P_f = 150$  mW  
pulse width 10 $\mu$ s, duty 1%
- Thermo-electric cooler
- Multi-quantum-well (MQW) structure

## APPLICATIONS

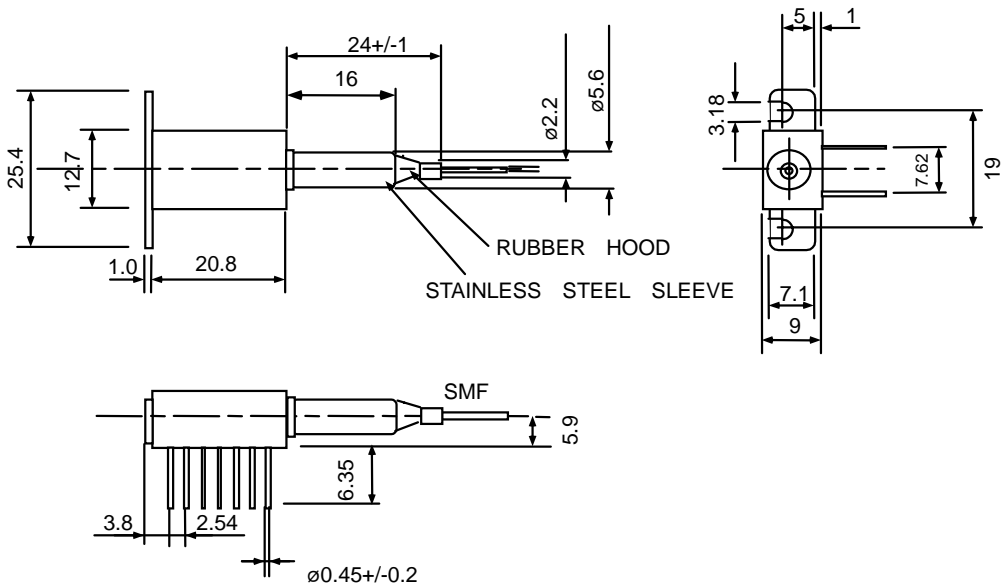
- Optical measuring instruments
- OTDRs

**OUTLINE DRAWING**

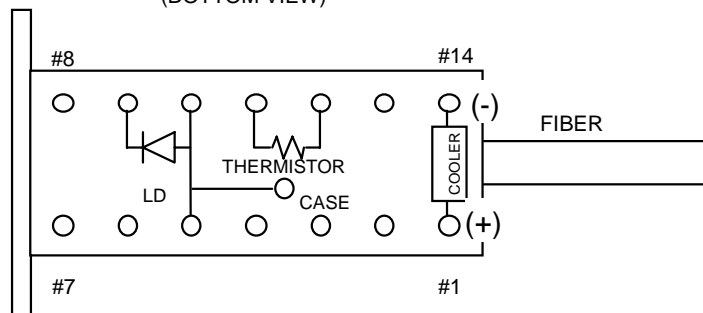
**All dimensions in millimeters  
Package No. (Unit: mm)**

Package No.  
204

Tolerances Unless Noted +/-0.5



TERMINAL CONNECTION  
(BOTTOM VIEW)



**ABSOLUTE MAXIMUM RATINGS**

(Ta = 25°C, unless otherwise noted)

Parameter	Symbol	Ratings	Unit
Fiber Output Power	Pf	180	mW
Laser Diode Forward Current	If (LD)	1000	mA
Laser Diode Reverse Voltage	Vr (LD)	2	V
Cooler Current	Ic	1.2	A
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, Pulse width 10μs, duty 1%)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Threshold Current	Ith	—	—	—	70	mA
Operating Current	Iop	Pf = 150 mW	—	—	800	mA
Operating Voltage	Vop	Pf = 150 mW	—	—	4	V
Center Wavelength	λc	Pf = 150 mW	1290	—	1330	nm
RMS Spectral Width	σ	Pf = 150 mW, RMS	—	—	15	nm
Cooler Capacity	ΔT	Pf = 150 mW	40	—	—	°C
Cooler Current	Ic	ΔT = 40°C, Pf = 150 mW	—	—	1.2	A
Cooler Voltage	Vc	ΔT = 40°C, Pf = 150 mW	—	—	3.0	V
Thermistor Resistance	Rth	—	9.0	—	11	kΩ

**FIBER PIGTAIL SPECIFICATIONS**

Parameter	Specifications	Unit
Type	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.
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