

**OL3204N-100-P20****1310+/-20nm 100mW Pulsed MQW Laser Diode DIL Module with SMF.****1. DESCRIPTION**

OL3204N-100-P20 is a 1310nm Laser Diode in DIL package with SMF.

**2. FEATURES**

- Fiber output : Po=100mW
- Pulsed MQW FP Laser
- 14-pin DIL package module
- Single mode fiber(SMF)
- Built-in TEC

**3. APPLICATION**

- OTDRs
- Optical Measuring Instruments

**4.OPTICAL AND ELECTRICAL CHARACTERISTICS**

(TLD= 25°C, 10μs pulse width and 1% duty)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Threshold Current	I <sub>th</sub>	---	---	20	50	mA
Operation Current	I <sub>op</sub>	Po=100mW	---	400	800	mA
LD Forward Voltage	V <sub>f</sub>		---	2.0	3.0	V
Center Wavelength	λ <sub>c</sub>		1290	1310	1330	nm
Spectral Width	σ	Po=100mW, RMS×1	---	5	10	nm
Cooler Capacity	ΔT	Po=100mW	40	---	---	°C
Cooler Current	I <sub>c</sub>	ΔT=40° C,Po=100mW	---	---	1.2	A
Cooler Voltage	V <sub>c</sub>		---	2	3	V
Thermistor Resistance	R <sub>th</sub>	---	9.5	10	10.5	kΩ

**5.ABSOLUTE MAXIMUM RATING**

(Tc = 25°C, unless otherwise specified)

Parameter	Symbol	Rating	Unit
Fiber Output Power	Po	120*	mW
LD Reverse Voltage	VR(LD)	2.0	V
LD Forward Current	IF(LD)	1000*	mA
Cooler Current	Ic	1.2	A
Operating Temperature	Topr	-20 to +65	°C
Storage Temperature	Tstg	-40 to +70	°C

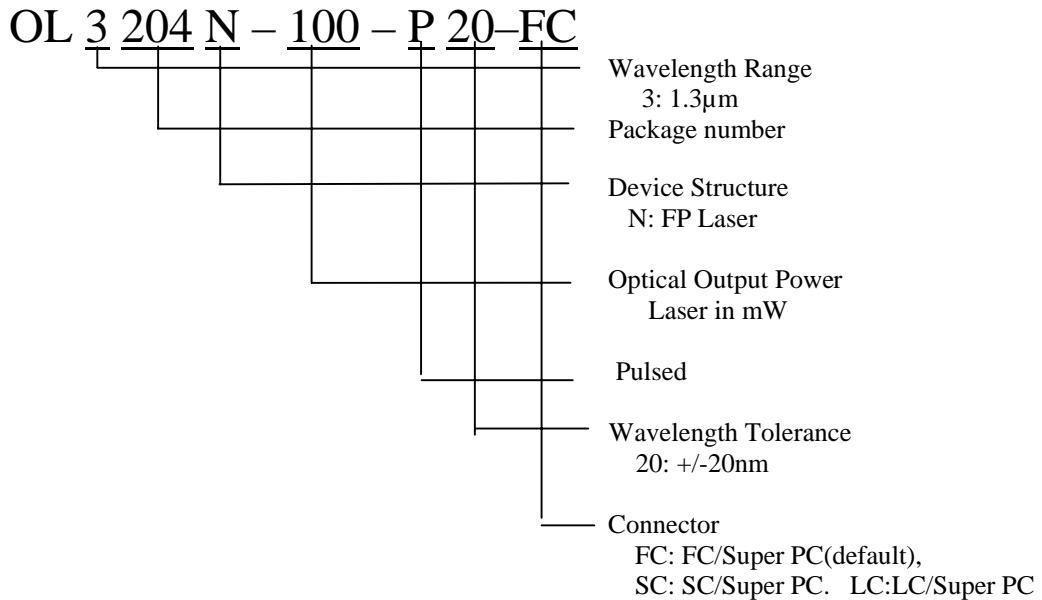
Pulse width ≤ 10μs , duty ≤ 1%

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

**6. CONNECTOR AND FIBER SPECIFICATIONS**

Parameter	Specifications	Unit
Type	SMF	---
Mode Field Diameter	10±1	μm
Cladding Diameter	125±2	μm
Jacket Diameter	900	μm
Length	1 (Min.)	m

**7.ORDERING INFORMATION**

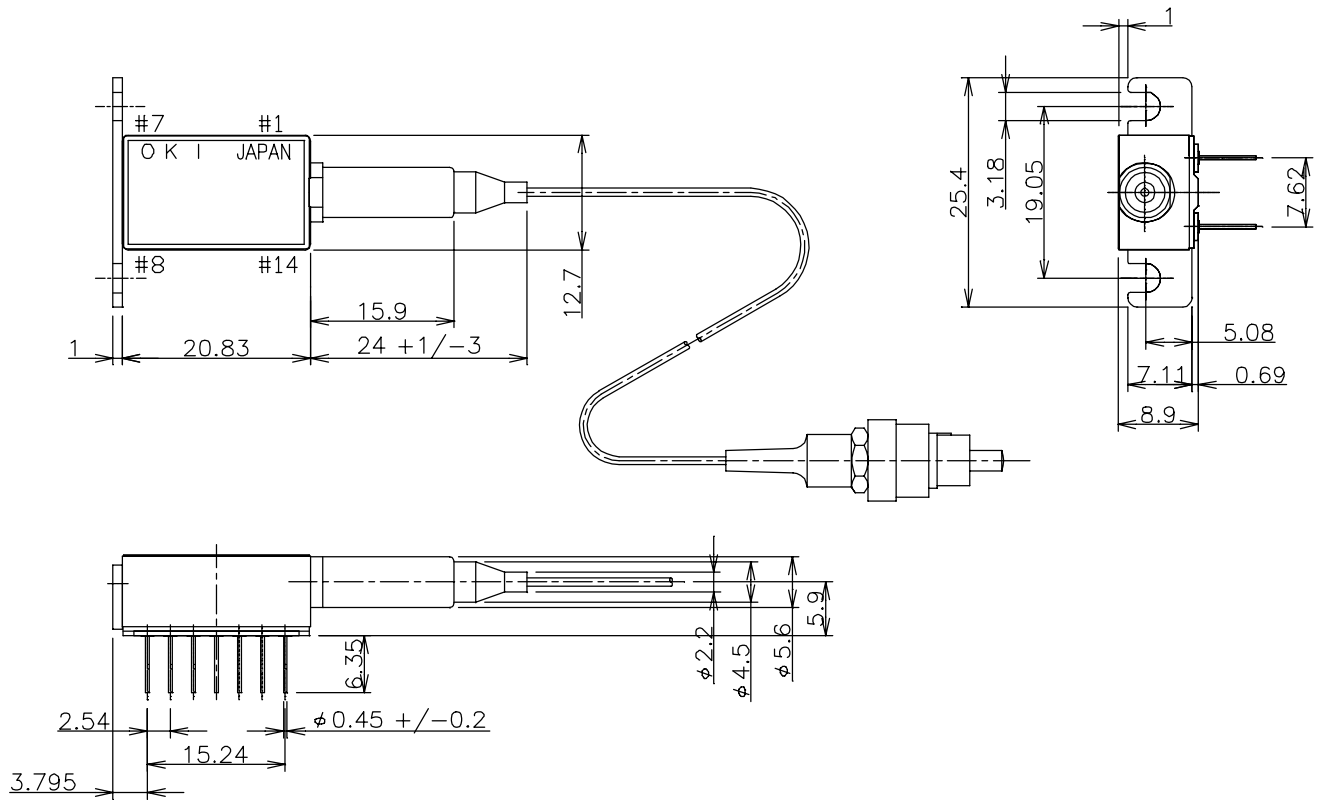


**8.ATTACHED DATA (at 25°C )**

- (1) If-Po graph (2) Spectrum graph at Po=100mW
- (3) Threshold current ( Ith) (4) Operating current (Iop) at Po=100mW
- (5) Center wavelength(λc) at Po=100mW (6) Spectral Width(σ) at Po=100mW

9.OUTLINE DRAWING

All dimensions in millimeters  
 Tolerances unless noted +/-0.5  
 Package Type 204



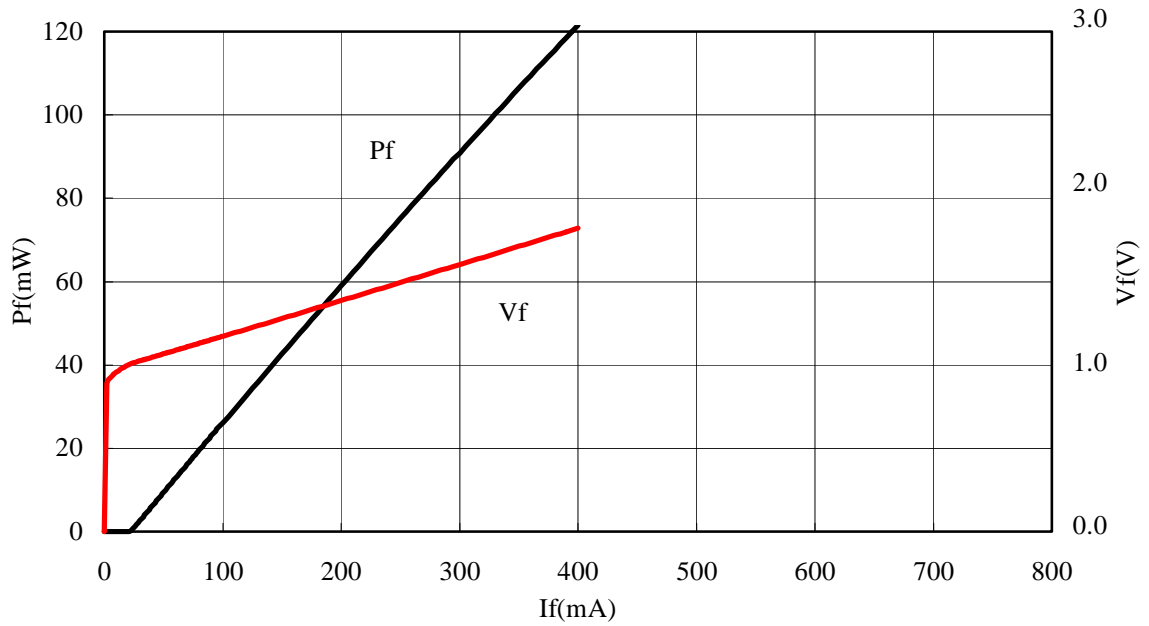
Package Pinout

Pin No.	Function	Pin No.	Function
1	TEC+	8	NC
2	NC	9	LD Cathode
3	NC	10	GND
4	NC	11	Thermistor
5	LD Anode(GND)	12	Thermistor
6	NC	13	NC
7	NC	14	TEC-

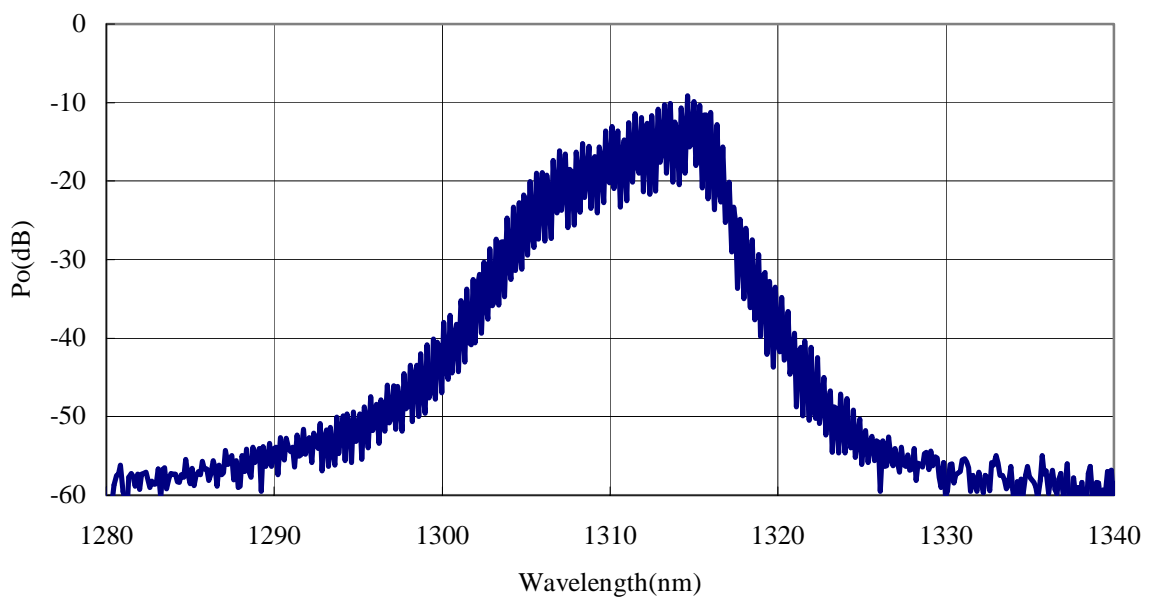
### 10 .Typical characteristics

Test Sample:OL3204N-100-P20

#### Optical and Electrical Characteristics



#### Spectrum Graph



**For LD**

**SAFETY INFORMATION ON THIS PRODUCT**



<p><b>Warning</b></p> <p>Laser Beam</p>	<p>A laser beam is emitted from this laser diode during operation. The invisible or visible laser beam, directly or indirectly, may cause injury to the eye or loss of eyesight. Do not look directly into the laser beam. Avoid exposure to the laser beam, any reflected or collimated beam.</p>
<p><b>Caution</b></p> <p>GaAs Product</p>	<p>The product contains gallium arsenide, GaAs. GaAs vapor and powder are hazardous to human health if inhaled, ingested or swallowed. Do not destroy or burn the product. Do not crush or chemically dissolve the product. Do not put the product in the mouth. Observe related laws and company regulations when discarding this product. The product should be excluded from general industrial waste or household garbage.</p>
<p><b>Caution</b></p> <p>Optical Fiber</p>	<p>A glass-fiber is attached on the product. Handle with care. When the fiber is broken or damaged, handle carefully to avoid injury from the damaged part or fragments.</p>

**OKI Electronics Components**

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