

OL5204N-100-P20**1550+/-20nm 100mW Pulsed MQW Laser Diode DIL Module with SMF.****1. DESCRIPTION**

OL5204N-100-P20 is a 1550nm 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 _{th}	---	---	25	60	mA
Operation Current	I _{op}	Po=100mW	---	600	800	mA
LD Forward Voltage	V _f		---	2.0	3.0	V
Center Wavelength	λ _c		1530	1550	1570	nm
Spectral Width	σ	Po=100mW, RMS×1	---	5	10	nm
Cooler Capacity	ΔT	Po=100mW	40	---	---	°C
Cooler Current	I _c	ΔT=40° C,Po=100mW	---	---	1.2	A
Cooler Voltage	V _c		---	2	3	V
Thermistor Resistance	R _{th}	---	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

OL 5 204 N – 100 – P 20 – FC

Wavelength Range

5: 1.5μm

Package number

Device Structure

N: FP Laser

Optical Output Power

Laser in mW

Pulsed

Wavelength Tolerance

20: +/-20nm

Connector

FC: FC/Super PC(default),

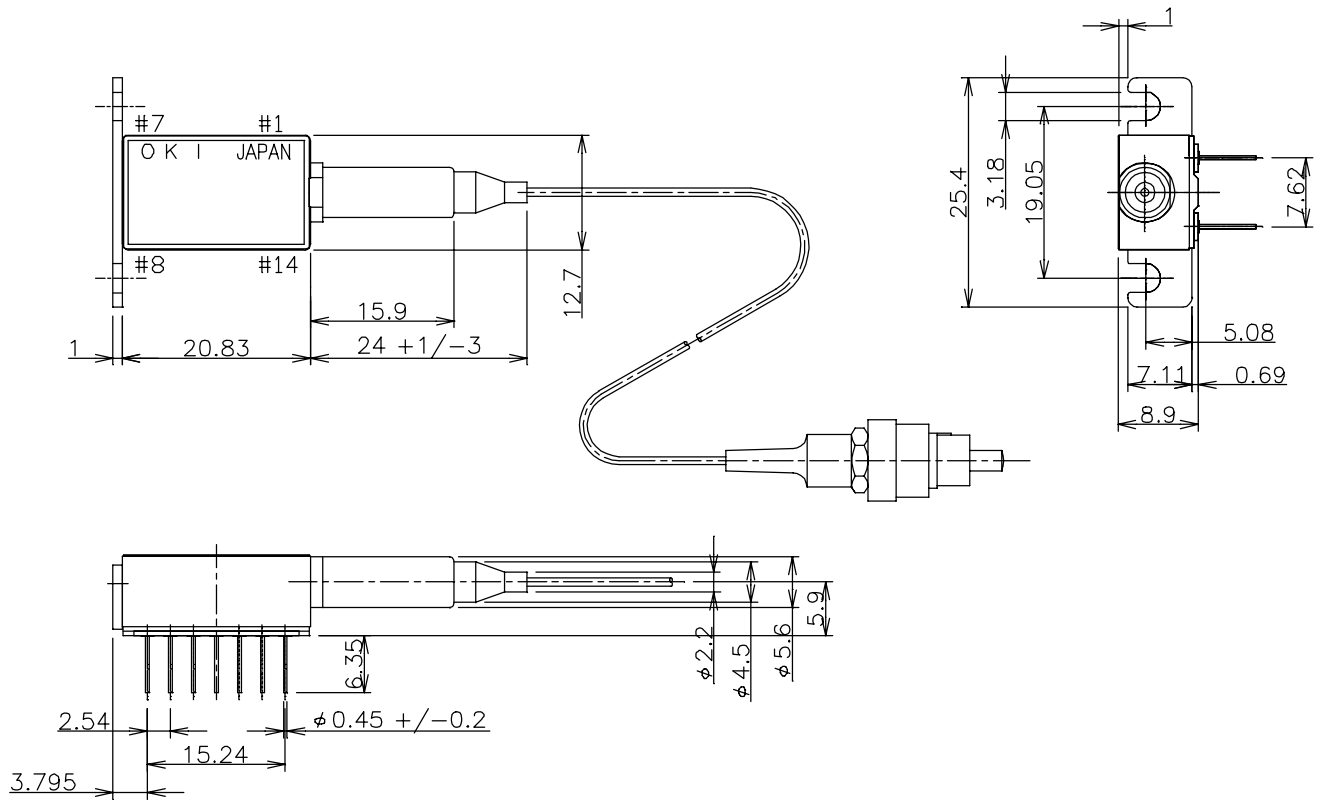
SC: SC/Super PC. LC:LC/Super PC

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



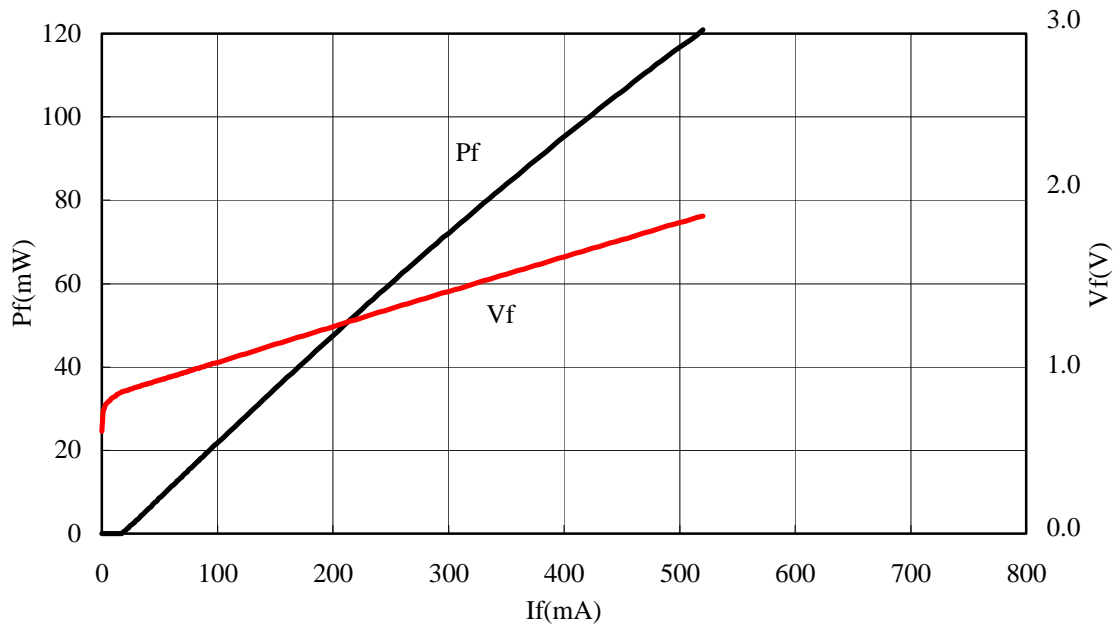
Package Pinout

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-

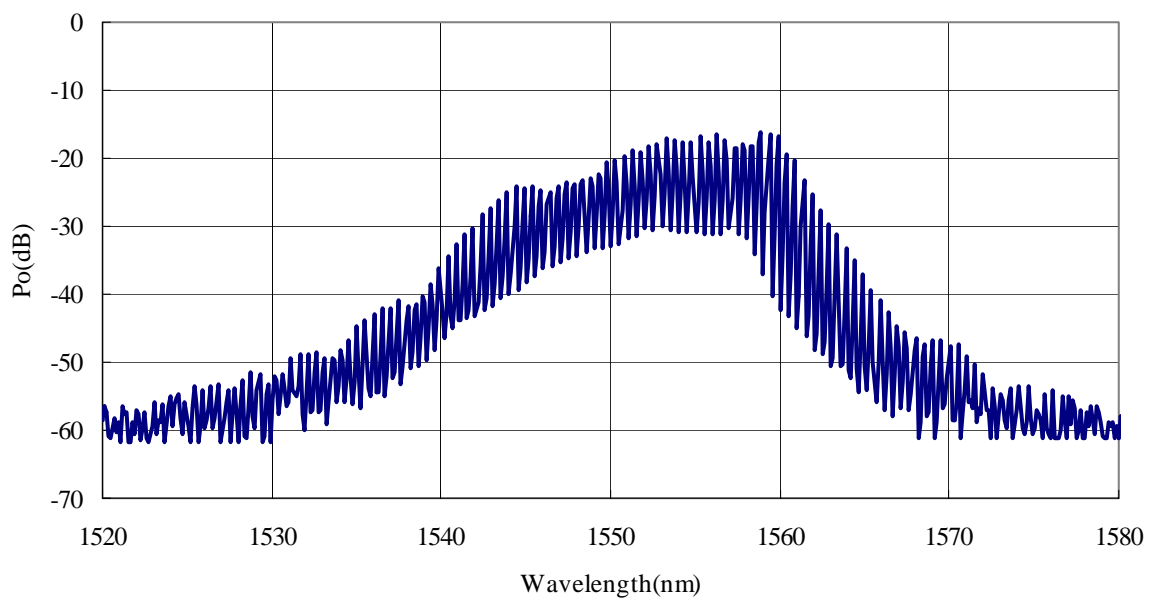
10 .Typical characteristics

Test Sample:OL5204N-100-P20

Optical and Electrical Characteristics



Spectrum Graph



For LD
SAFETY INFORMATION ON THIS PRODUCT



<p>Warning</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.</p> <p>Do not look directly into the laser beam.</p> <p>Avoid exposure to the laser beam, any reflected or collimated beam.</p>
<p>Caution</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.</p> <p>Do not destroy or burn the product.</p> <p>Do not crush or chemically dissolve the product.</p> <p>Do not put the product in the mouth.</p> <p>Observe related laws and company regulations when discarding this product. The product should be excluded from general industrial waste or household garbage.</p>
<p>Caution</p> <p>Optical Fiber</p>	<p>A glass-fiber is attached on the product. Handle with care.</p> <p>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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