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OKI electronic components

OL6204N-50/AP10, OL6204N-50/BP10

1.6 μm High-Power DIP Module with 9mm Profile

GENERAL DESCRIPTION

The OL6204N-50 series are 1.6 μm high-power modules in compact DIL packages with single mode fiber pigtails. Having high power in pulsed operation, these devices can be used as light sources for optical measurement equipment like OTDR systems.

FEATURES

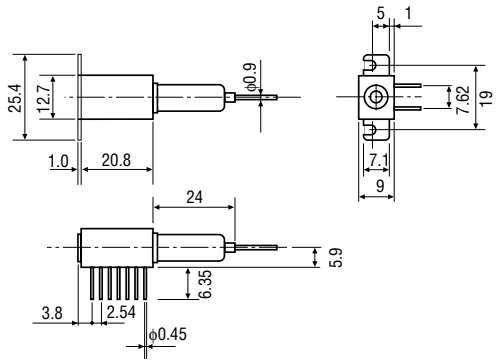
- Optical output power: 50 mW (pulse width 10 μs, duty ratio 1 %)
- Comact package: 14-pin DIP with 9mm high
- Wavelength windows
  OL6204N-50/AP10 for 1.625 μm
  OL6204N-50/BP10 for 1.650 μm

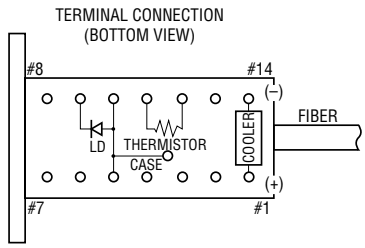
APPLICATIONS

- Optical measuring instruments
- OTDRs

PACKAGE DIMENSIONS (Unit: mm)

• OL6204N-50/AP10, OL6204N-50/BP10





PIN No.	FUNCTION	PIN No.	FUNCTION
1	COOLER ANODE	8	NC
2	NC	9	LD CATHODE
3	NC	10	LD ANODE and
4	NC		CASE GROUND
5	LD ANODE and	11	THERMISTOR
	CASE GROUND	12	THERMISTOR
6	NC	13	NC
7	NC	14	COOLER CATHODE

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Test Conditions	Ratings	Unit
Fiber Output Power	Pf	Ta=25°C	55*	mW
LD Forward Current	I_F (LD)		800*	mA
LD Reverse Voltage	V_R (LD)		2	V
Cooler Current	Ic		1	A
Operating Temperature	T_{opr}	—	–20 to +65	°C
Storage Temperature	T_{stg}	—	–40 to +70	°C

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

OPTICAL AND ELECTRICAL CHARACTERISTICS

(T_{LD}=25°C, 10 μs Pulse Width and 1 % Duty ratio)

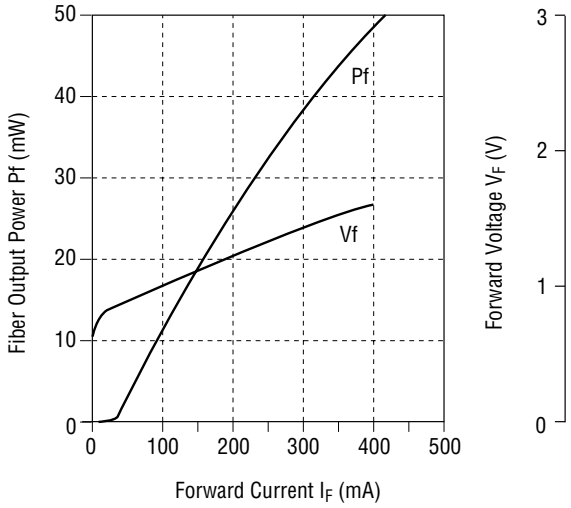
Parameter	Symbol	Test Conditions		Min.	Typ.	Max.	Unit
Threshold Current	Ith	—		—	20	50	mA
Fiber Output Power	Pf	I_F=800 mA		50	—	—	mW
Center Wavelength	λc	Pf=50 mW	OL6204N–50/AP10	1615	1625	1635	nm
			OL6204N–50/BP10	1640	1650	1660	nm
Spectral Width	σ	Pf=50 mW, RMS×1		—	—	10	nm
Forward Voltage	V_F	Pf=50 mW		—	—	3	V
Cooler Capacity	ΔT	Pf=50 mW		40	—	—	°C
Cooler Current	Ic	ΔT=40°C, Pf=50mW		—	—	1	A
Cooler Voltage	Vc	ΔT=40°C, Pf=50mW		—	—	2	V
Thermistor Resistance	Rth	—		—	10	—	kΩ

FIBER PIGTAIL SPECIFICATIONS

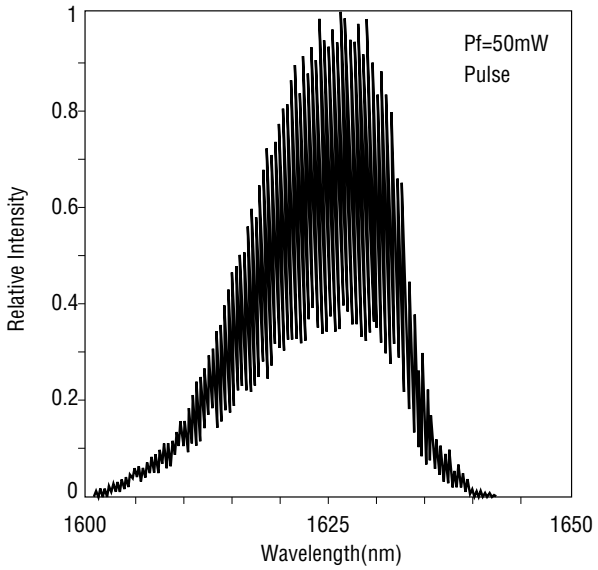
Parameter	Specifications	Unit
Fiber Type	Single-mode	—
Mode Field Diameter	10±1	μm
Cladding Diameter	125±2	μm
Jacket Diameter	900	μm
Length	1 (Min)	m
Connector	FC	—

TYPICAL CHARACTERISTICS

Fiber Output Power vs. Forward Current



Oscillation Spectrum



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