

OKI electronic components

OL6204N-50/AP, OL6204N-50/BP

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

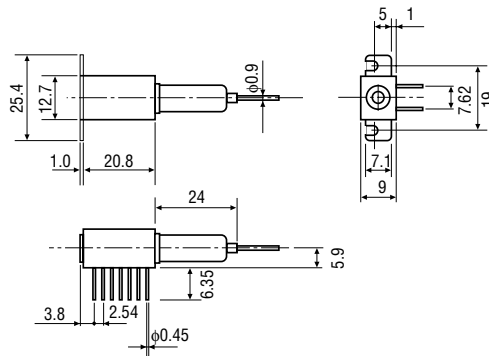
- Optical output power: 50 mW (pulse width 10 μs , duty ratio 1 %)
- Compact package: 14-pin DIP with 9mm high
- Wavelength windows
 - OL6204N-50/AP for 1.625 μm
 - OL6204N-50/BP for 1.650 μm

APPLICATIONS

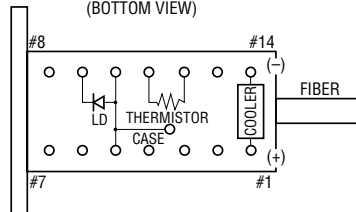
- Optical measuring instruments
- OTDRs

PACKAGE DIMENSIONS (Unit: mm)

- OL6204N-50/AP, OL6204N-50/BP



TERMINAL CONNECTION
(BOTTOM VIEW)



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	I _c		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)

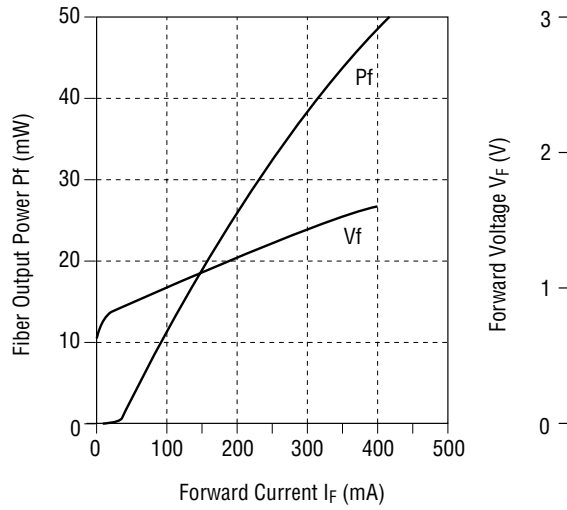
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit	
Threshold Current	I _{th}	—	—	20	50	mA	
Fiber Output Power	Pf	I _F =800 mA	50	—	—	mW	
Center Wavelength	λ _c	Pf=50 mW	OL6204N-50/AP	1615	1625	1635	nm
			OL6204N-50/BP	1640	1650	1660	nm
Spectral Width	σ	Pf=50 mW, RMS×1	—	—	10	nm	
Forward Voltage	V _F	Pf=50 mW	—	—	3	V	
Cooler Capacity	ΔT	Pf=50 mW	40	—	—	°C	
Cooler Current	I _c	ΔT=40°C, Pf=50mW	—	—	1	A	
Cooler Voltage	V _c	ΔT=40°C, Pf=50mW	—	—	2	V	
Thermistor Resistance	R _{th}	—	—	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

