

OKI electronic components

OL5492N-03

1.55 μm Low-Power Laser Coaxial Module

GENERAL DESCRIPTION

The OL5492N-03 is a low-power MQW coaxial laser module with a single-mode fiber pigtail. This module is a suitable light source for subscriber loops and optical LAN systems.

FEATURES

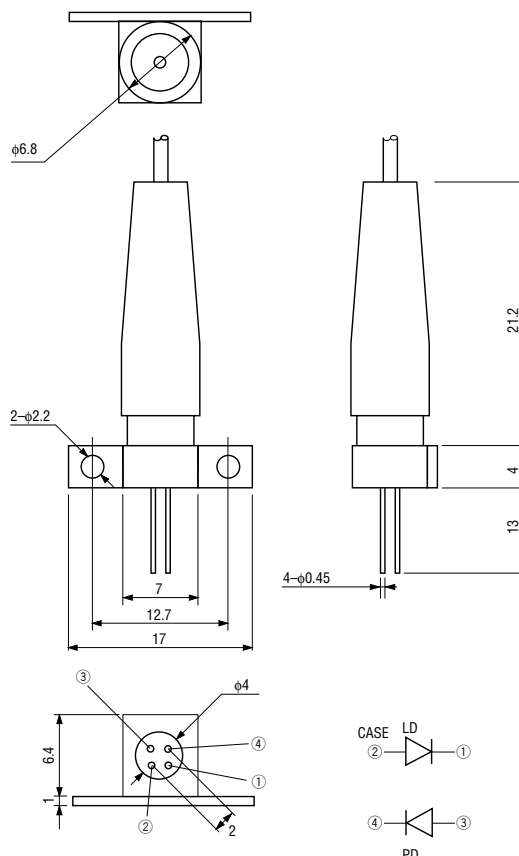
- Single-mode fiber output: $P_f=300 \mu\text{W}$
- Includes monitor photodiode for power control
- Wide operating temperature
- Multi-quantum-well (MQW) structure

APPLICATIONS

- Subscriber loops
- LAN systems

PACKAGE DIMENSIONS (Unit: mm)

- OL5492N-03



ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Test Conditions	Ratings	Unit
Fiber Output	Pf	Ta=25°C	500	μW
LD Reverse Voltage	V _R (LD)		2	V
PD Reverse Voltage	V _R (PD)		20	V
PD Forward Current	I _F (PD)		10	mA
Operating Temperature	T _{opr}	—	-20 to +65	°C
Storage Temperature	T _{stg}	—	-40 to +85	°C

OPTICAL AND ELECTRICAL CHARACTERISTICS

(Ta=25°C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Threshold Current	I _{th}	—	—	10	25	mA
Fiber Output Power	Pf	I _F =I _{th} +30 mA	300	—	—	μW
Center Wavelength	λ _c	Pf=300 μW	1520	1550	1580	nm
Spectral Width	σ	Pf=300 μW, RMS	—	—	5	nm
Rise Time	t _r	I _{bias} =I _{th}	—	—	0.5	ns
Fall Time	t _f	Pf=300 μW, 10% to 90%	—	—	0.5	ns
Forward Voltage	V _F	Pf=300 μW	—	1.1	1.5	V
PD Dark Current	I _{DARK}	V _F (PD)=5 V	—	0.5	20	nA
Monitor Current	I _m	V _R (PD)=5 V, Pf=300 μW	50	—	—	μA

TYPICAL CHARACTERISTICS

Fiber Output Power vs. Forward Current

