

OKI electronic components

OL392N-3, OL397N-3 OL3942N-3, OL3497N-3

1.3 μ m 3 mW Coaxial Module

GENERAL DESCRIPTION

The OL392N-3, OL397N-3, OL3492N-3, and OL3497N-3 are 1.3 μ m, MQW InGaAsP/InP laser-diode coaxial modules with a 3 mW output, pigtailed with single-mode fibers. These modules are optimal light sources for optical subscriber loops and LAN systems.

FEATURES

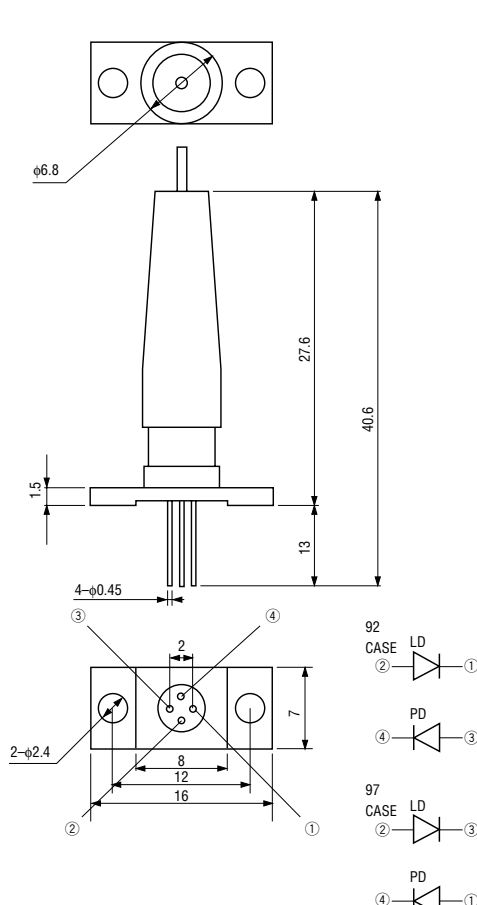
- Single-mode fiber output: Pf=3 mW
- Wide operating temperature range
- Includes monitor photodiode for power control
- Multi-quantum-well (MQW) structure

APPLICATIONS

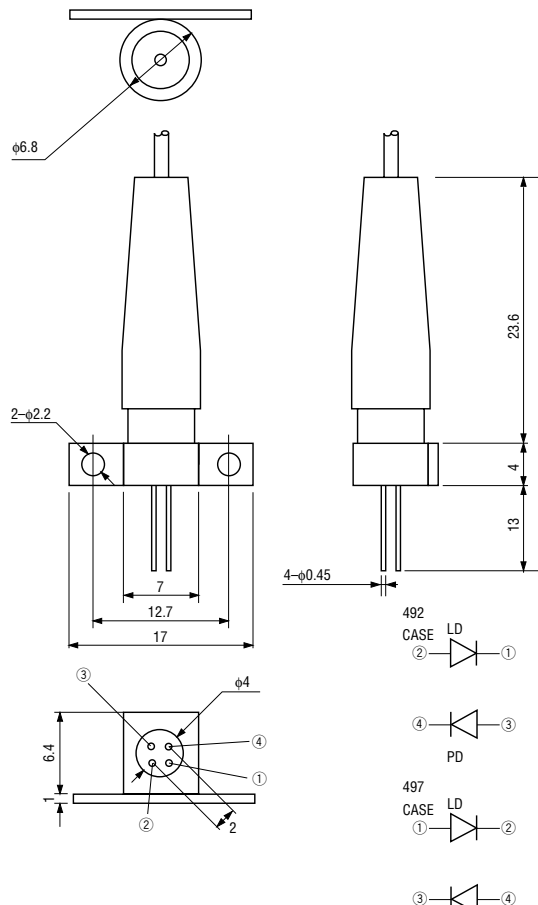
- Subscriber loops
- LAN systems

PACKAGE DIMENSIONS (Unit: mm)

• OL392N-3, OL397N-3



• OL3492N-3, OL3497N-3



ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Test Conditions	Ratings	Unit
Fiber Output	Pf	Ta=25°C	3.5	mW
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}	—	-40 to +85	°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} +40 mA	3	—	—	mW
Center Wavelength	λ _c	Pf=3 mW	1270	1310	1350	nm
Spectral Width	σ	Pf=3 mW, RMS	—	—	5	nm
Rise Time	t _r	I _{bias} =I _{th}	—	—	0.5	ns
Fall Time	t _f	Pf=3 mW, 10% to 90%	—	—	0.5	ns
Forward Voltage	V _F	Pf=3 mW	—	1.1	1.5	V
PD Dark Current	I _{DARK}	V _F (PD)=5V	—	0.5	20	nA
Monitor Current	I _m	V _R (PD)=5 V, Pf=3 mW	75	300	—	μA