

# OKI electronic components

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

### 1.3 $\mu\text{m}$ 3 mW Coaxial Module

#### GENERAL DESCRIPTION

The OL392N-3, OL397N-3, OL3492N-3, and OL3497N-3 are 1.3 $\mu\text{m}$ , 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

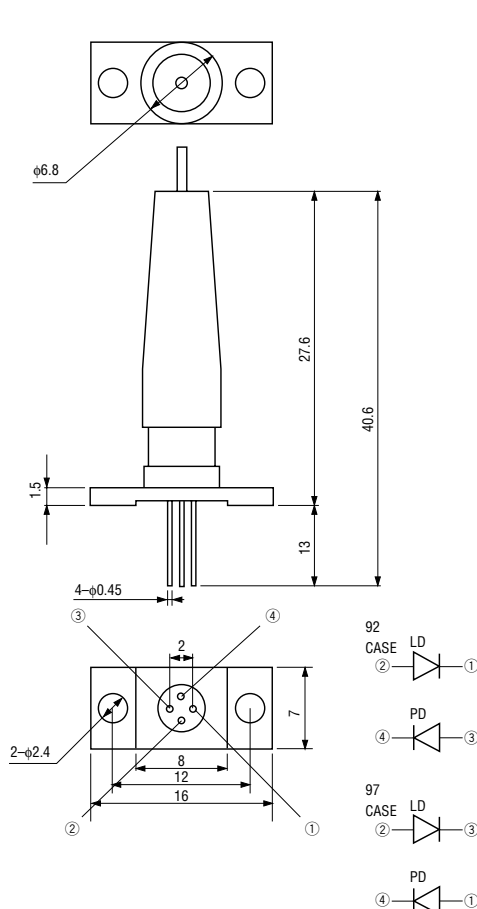
- Single-mode fiber output:  $P_f=3$  mW
- Wide operating temperature range
- Includes monitor photodiode for power control
- Multi-quantum-well (MQW) structure

#### APPLICATIONS

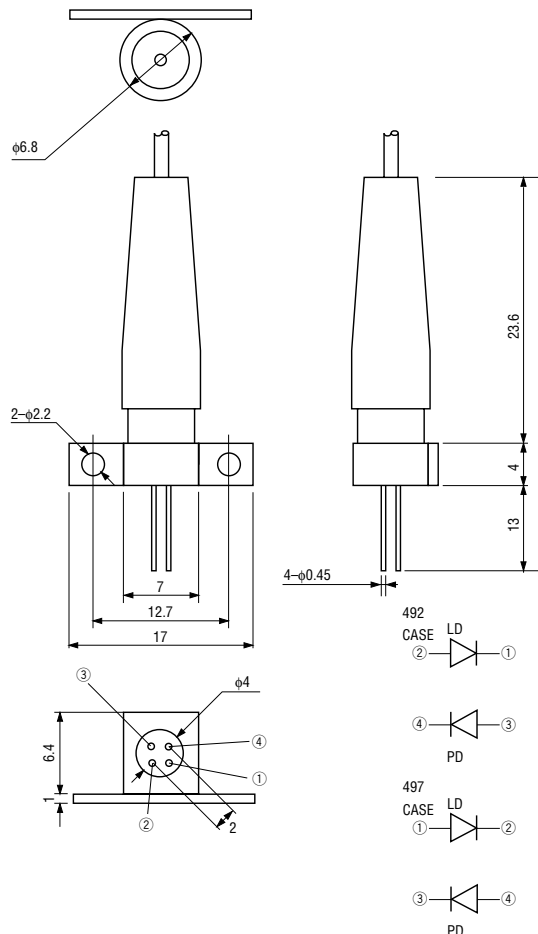
- Subscriber loops
- LAN systems

#### 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 <sub>R</sub> (LD)		2	V
PD Reverse Voltage	V <sub>R</sub> (PD)		20	V
PD Forward Current	I <sub>F</sub> (PD)		10	mA
Operating Temperature	T <sub>opr</sub>	—	-40 to +85	°C
Storage Temperature	T <sub>stg</sub>	—	-40 to +85	°C

**OPTICAL AND ELECTRICAL CHARACTERISTICS**

(Ta=25°C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Threshold Current	I <sub>th</sub>	—	—	10	25	mA
Fiber Output Power	Pf	I <sub>F</sub> =I <sub>th</sub> +40 mA	3	—	—	mW
Center Wavelength	λ <sub>c</sub>	Pf=3 mW	1270	1310	1350	nm
Spectral Width	σ	Pf=3 mW, RMS	—	—	5	nm
Rise Time	t <sub>r</sub>	I <sub>bias</sub> =I <sub>th</sub>	—	—	0.5	ns
Fall Time	t <sub>f</sub>	Pf=3 mW, 10% to 90%	—	—	0.5	ns
Forward Voltage	V <sub>F</sub>	Pf=3 mW	—	1.1	1.5	V
PD Dark Current	I <sub>DARK</sub>	V <sub>F</sub> (PD)=5V	—	0.5	20	nA
Monitor Current	I <sub>m</sub>	V <sub>R</sub> (PD)=5 V, Pf=3 mW	75	300	—	μA