
OL692L, OL6492L

1.625 μ m Coaxial DFB Laser Module

GENERAL DESCRIPTION

The OL692L and OL6492L are MQW-DFB laser diode coaxial modules with optical isolator and single-mode fiber pigtails. These modules are optimal light sources for WDM supervisory channel in SDH system with optical in-line amplifier.

FEATURES

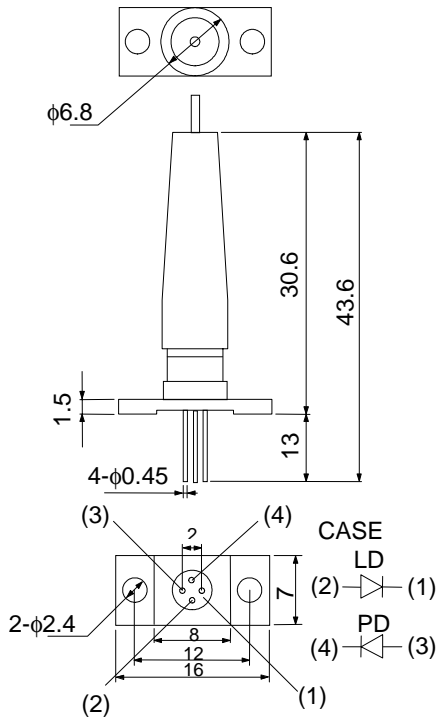
- Single-mode fiber output: $P_f = 2$ mW
- Side mode suppression ratio: 30 dB
- Includes monitor PD for power control
- Built-in optical isolator
- Wide operation temperature range
- Multi-quantum-well (MQW) structure

APPLICATIONS

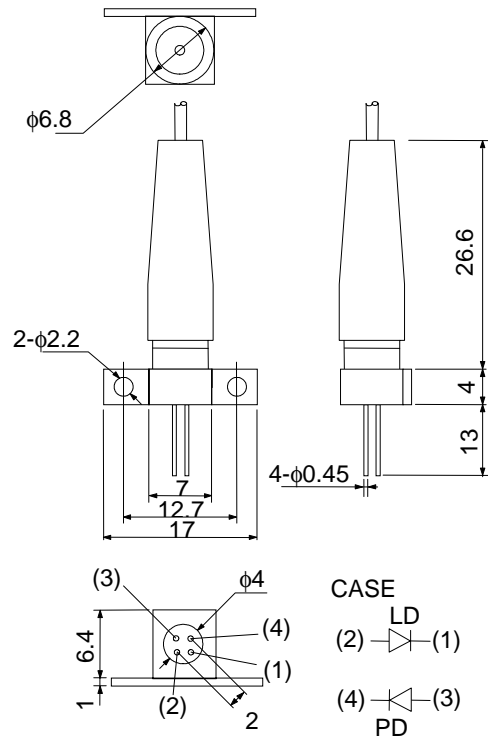
- WDM supervisory channel in SDH system with optical in-line amplifier

PACKAGE DIMENSIONS

OL692L



OL6492L



(Unit: mm)

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Condition	Rating	Unit
Fiber Output	Pf	Ta = 25°C	2.5	mW
LD Forward Current	I _F (LD)		150	mA
PD Reverse Voltage	V _R (PD)		20	V
PD Forward Current	I _F (PD)		10	mA
Operating Temperature	T _{opr}	—	0 to +65	°C
Storage Temperature	T _{stg}	—	-40 to +85	°C
Soldering (Max. 10sec)	T _{sld}	—	260	°C

Exceeding these ratings may lead to immediate destruction or permanent deterioration of the device.

OPTICAL AND ELECTRICAL CHARACTERISTICS

(Ta = 25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	I _{th}	—	—	—	35	mA
Fiber Output Power	Pf	CW	2	—	—	mW
Operating Current	I _{op}	Pf = 2 mW	—	—	120	mA
Side Mode Suppression Ratio	SMSR	Pf = 2 mW	30	—	—	dB
Rise Time	t _r	I _{bias} = 1th	—	—	0.5	ns
Fall Time	t _f	Pf = 2 mW, 10% to 90%	—	—	0.5	ns
Forward Voltage	V _F	Pf = 2 mW	—	—	2.0	V
PD Dark Current	I _{DARK}	V _R (PD) = 5 V	—	—	1	μA
Monitor Current	I _m	V _R (PD) = 5 V, Pf = 2 mW	70	—	—	μA

Peak Wavelength

(Ta = 0 to 65°C)

Mode	Symbol	Condition	Min.	Max.	Unit
OL692L, OL6492L	λ _p	Pf = 2 mW	1620	1640	nm

Fiber Pigtail Specifications

Parameter	Specifications	Unit
Type	SM	---
Mode Field Diameter	9+/-1	μm
Cladding Diameter	125+/-2	μm
Jacket Diameter	900	μm
Length	1 (Min.)	m
Connector	FC/SPC	---

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