

Optical Components

OL495N-80-P20-W90

1490nm Pulsed MQW Laser Diode Coaxial Module with SMF.

1. DESCRIPTION

OL495N-80-P20-W90 is a 1490nm Laser Diode in coaxial package with SMF.

2. FEATURES

- Fiber output: Pf=80mW
- Pulsed MQW FP Laser
- Coaxial package module
- Single mode fiber (SMF)

3. APPLICATION

- OTDRs
- Optical measuring instruments

4. OPTICAL AND ELECTRICAL CHARACTERISTICS

(T_c= 25°C, 10μs pulse width and 1% duty)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Threshold Current	I _{th}	---	---	25	60	mA
Operation Current	I _{op}	Pf=80mW	---	500	640	mA
LD Forward Voltage	V _f		---	2.0	3.0	V
Center Wavelength	λ _c		1470	1490	1510	nm
Spectral Width	σ	Pf=80mW, RMS×1	---	5	10	nm

5. ABSOLUTE MAXIMUM RATING

(T_c= 25°C, unless otherwise specified)

Parameter	Symbol	Rating	Unit
Fiber Output Power	Pf	96*	mW
LD Reverse Voltage	V _{rl}	2.0	V
LD Forward Current	I _{fl}	840*	mA
Operating Temperature	T _{op}	-20 to +60	°C
Storage Temperature	T _{stg}	-40 to +85	°C

*Pulse width≤10μs, duty≤1%.

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

6. CONNECTOR AND FIBER SPECIFICATIONS

Parameter	Specifications	Unit
Type	SMF	---
Mode Field Diameter	10±1	μm
Cladding Diameter	125±2	μm
Jacket Diameter	900	μm
Fiber Length	1000 (Min.) See Fig.1	mm

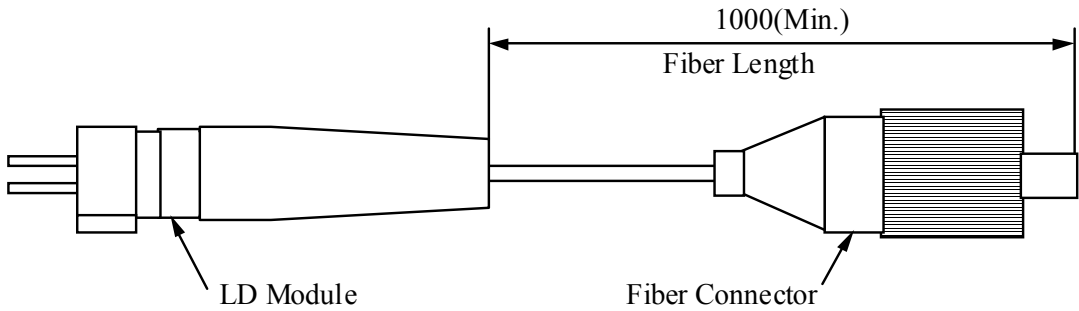


FIG.1

7.ORDERING INFORMATION

OL 4 95 N-80 - P 20-W90 NF SC								
								Wavelength Range
								4: 1.4μm
								Package number
								Device Structure
								N: FP Laser
								Optical Output Power (mW)
								Pulsed
								Wavelength Tolerance
								20: +/-20nm
								Wavelength
								W90: 1490
								Flange Type
								AF:Angled Flange(default)
								NF:No Flange
								Connector Type
								FC:FC Connector(default)
								SC:SC Connector

8. ATTACHED DATA (at 25°C)

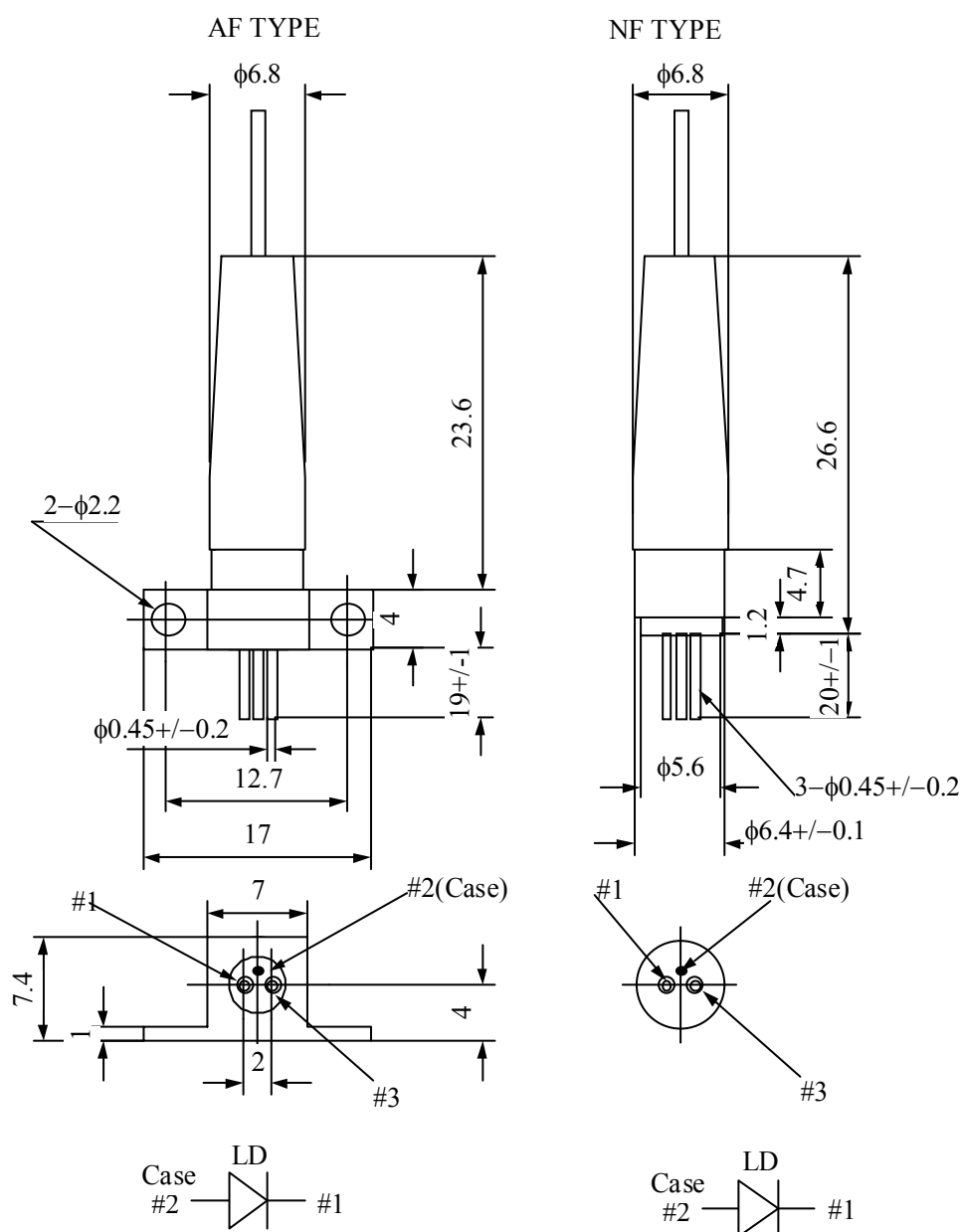
- (1) If-Pf graph (2) spectrum graph at Pf=80mW (3) Threshold current (I_{th})
 (4) operating current (I_{op}) at Pf=80mW (5) Center wavelength (λ_c) at Pf=80mW
 (6) Spectral Width (σ) at Pf=80mW

9. OUTLINE DRAWING

All dimensions in millimeters

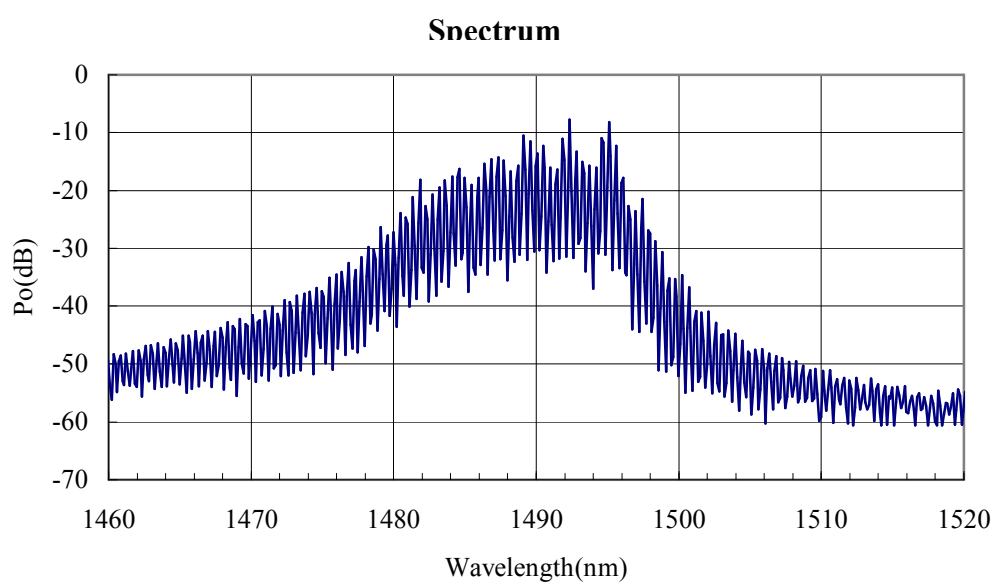
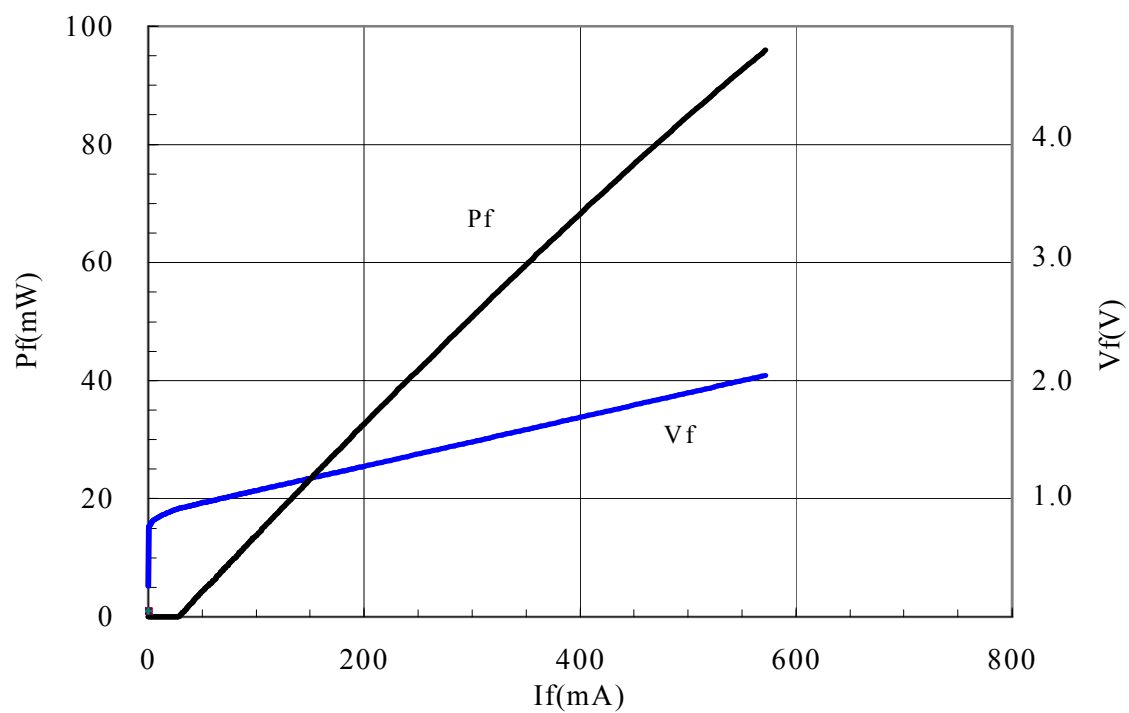
Tolerances unless noted +/-0.5

Package No. 95 (Unit: mm)

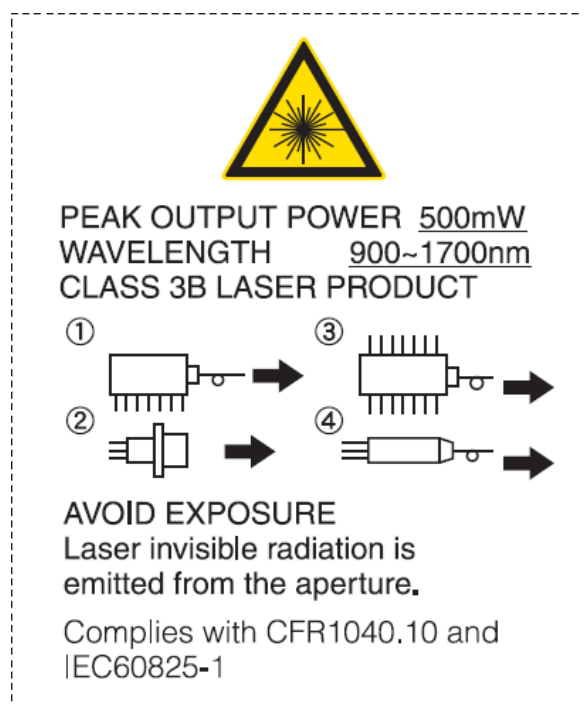


10. Typical Characteristics

Electrical and Optical Characteristics



11. SAFETY INFORMATION ON THIS PRODUCT



Warning Laser Beam	A laser beam is emitted from this laser diode during operation. The invisible or visible laser beam, directly or indirectly, may cause injury to the eye or loss of eyesight. Do not look directly into the laser beam. Avoid exposure to the laser beam, any reflected or collimated beam.
Caution GaAs Product	The product contains gallium arsenide, GaAs. GaAs vapor and powder are hazardous to human health if inhaled, ingested or swallowed. Do not destroy or burn the product. Do not crush or chemically dissolve the product. Do not put the product in the mouth. Observe related laws and company regulations when discarding this product. The product should be excluded from general industrial waste or household garbage.
Caution Optical Fiber	A glass-fiber is attached on the product. Handle with care. When the fiber is broken or damaged, handle carefully to avoid injury from the damaged part or fragments.

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