

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

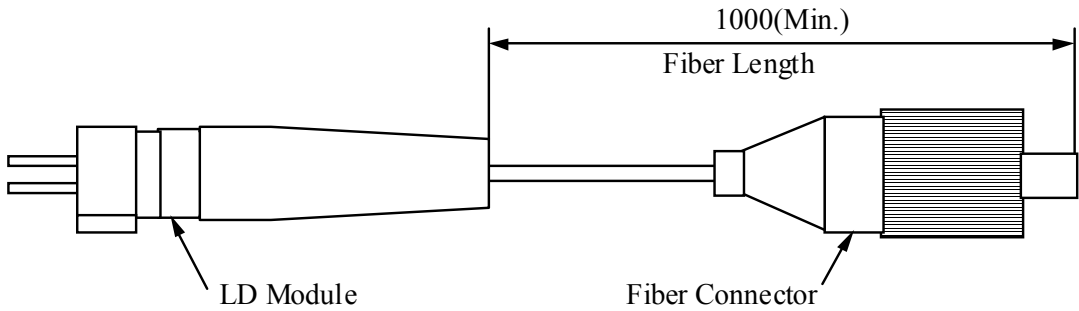


FIG.1

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)

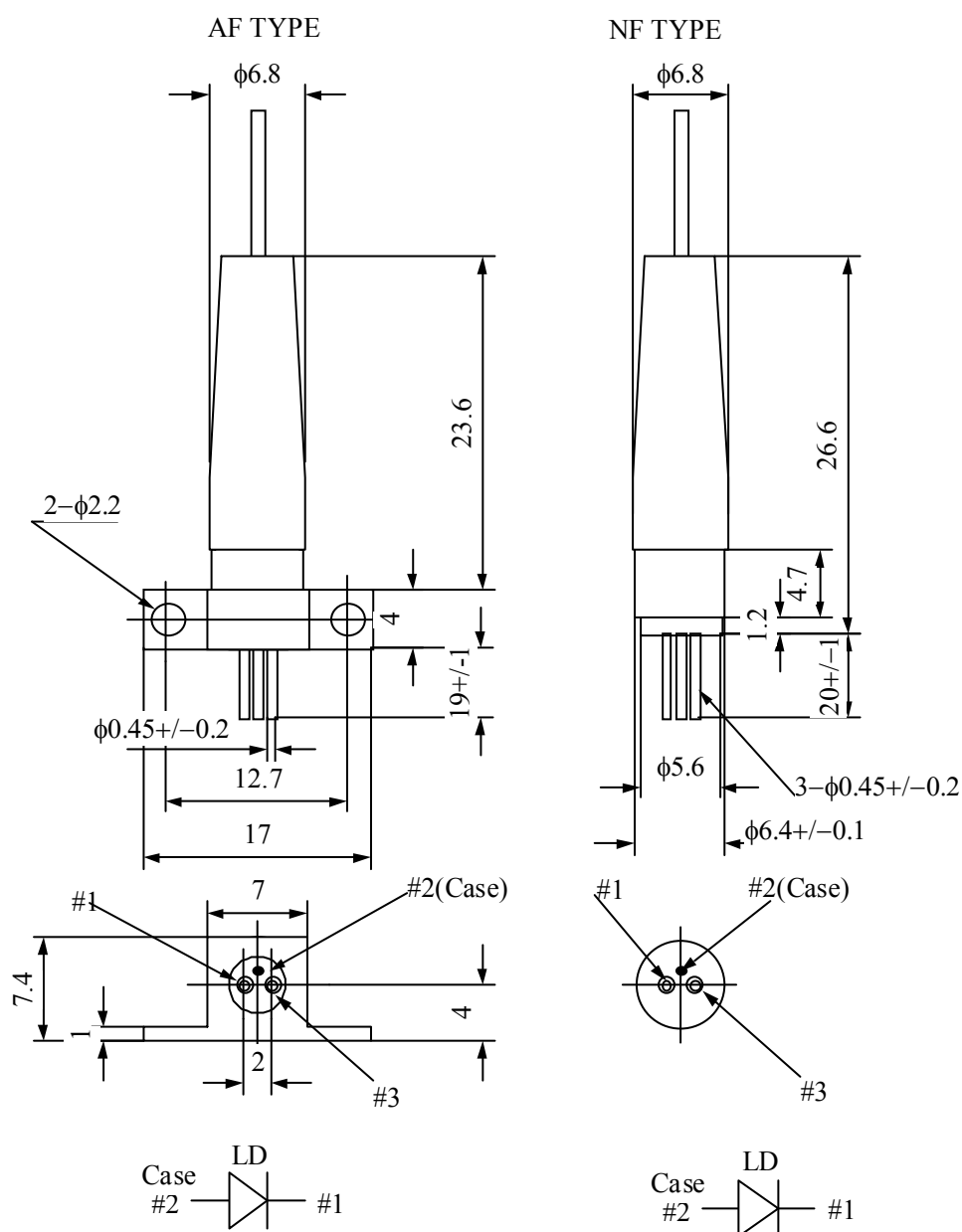
- (1) If-Pf graph (2) spectrum graph at Pf=80mW (3) Threshold current (Ith)
 (4) operating current (Iop) at Pf=80mW (5) Center wavelength (λ_c) at Pf=80mW
 (6) Spectral Width (σ) at Pf=80mW

9. OUTLINE DRAWING

All dimensions in millimeters

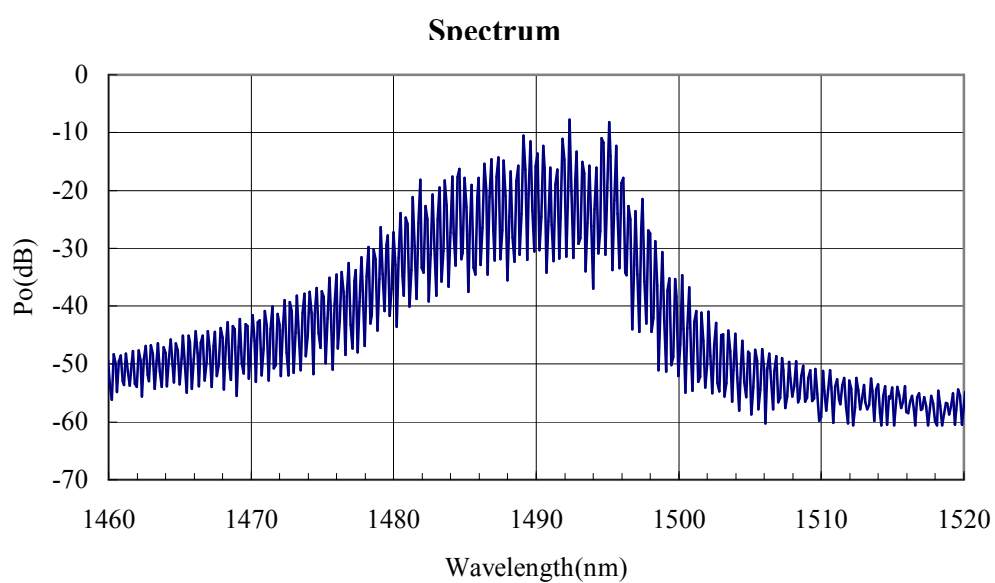
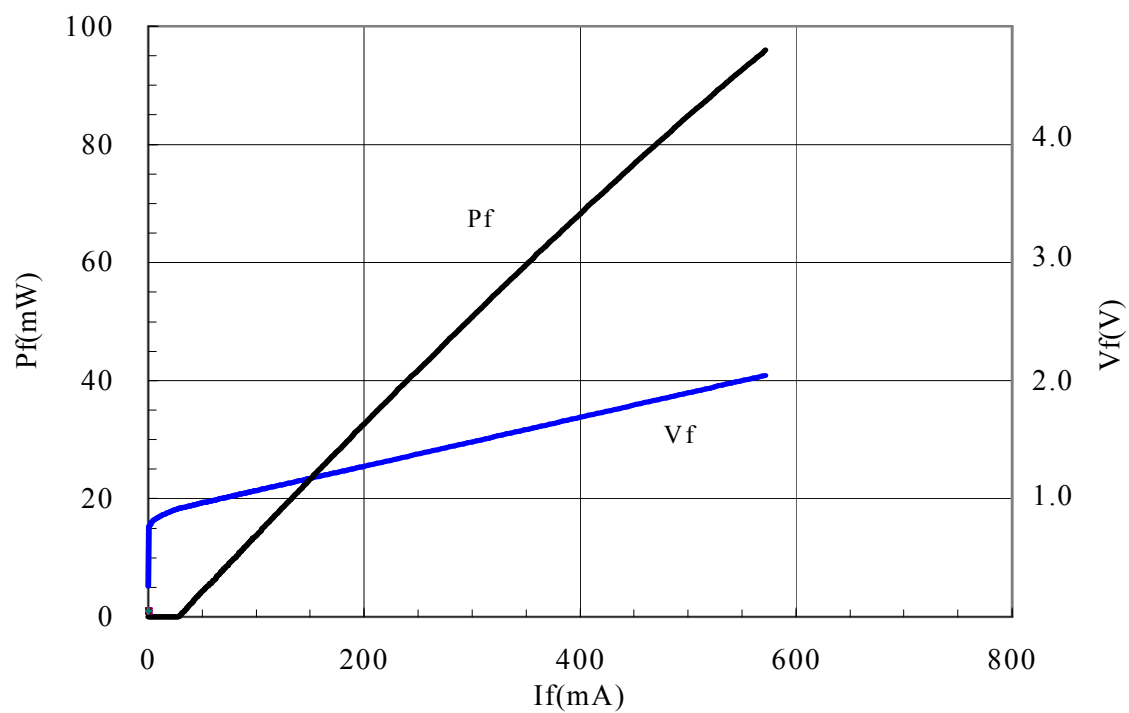
Tolerances unless noted ± 0.5

Package No. 95 (Unit: mm)

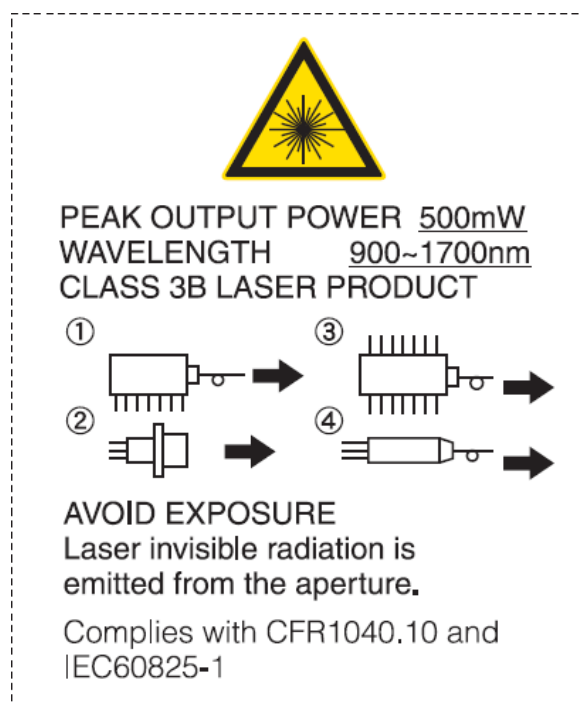


10. Typical Characteristics

Electrical and Optical Characteristics



11. SAFETY INFORMATION ON THIS PRODUCT



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

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