

Optical Fiber Amplifier Pulsed EDFA OFA-NCx-Series

The LiComm **Pulsed EDFA** series is full-functioning EDFA module with micro control circuit inside. It is designed for a single wavelength and pulsed signal input. The **Pulsed EDFA** series provides very stable output pulse power up to average 200mW and suppressed noise in C-band over wide operating temperature range. The compact size with extremely low power consumption, allows the **Pulsed EDFA** series to be highly suitable for applications of LIDAR, LRF, Fiber Sensor System, and OTDR application.

Features

- Compact size with Circular Shape or Rectangular Shape
- 980nm pump laser module
- Extremely low power consumption over wide operating temperature range
- EDFA module including micro process control circuit
- High average output power up to 200mW
- Low noise figure
- ACC (Automatic Current Control), APC(Automatic Power Control) or AGC (Automatic Gain Control)
- Control & monitoring by R232
- LVTTTL Alarm
- Single + 3.3V power supply

Applications

- LIDAR System
- Range Finder
- Telemetry System
- Fiber Sensor System
- 3D Scanning
- OTDR System

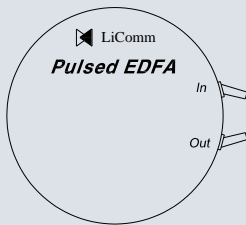
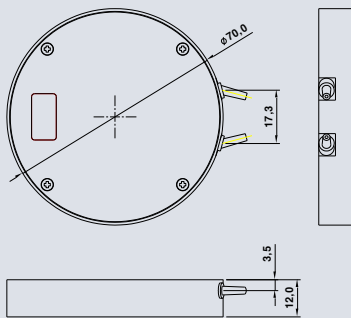


Optical Fiber Amplifier

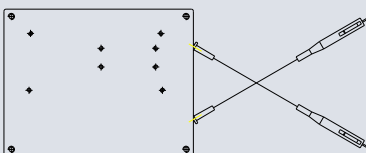
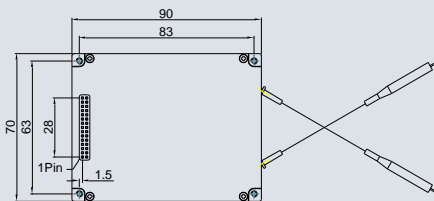
Pulsed EDFA

Mechanical Dimension

OFA-NCx-Series (Diameter x Height
= $\Phi 70$ X 12mm)



(90 X 70 X 15mm)



Optical Characteristics

| Parameter | Specifications | | Unit |
|--|-------------------------|--------------------|---------|
| | $\Phi 70$ x 12mm* | $\Phi 90$ x 15mm** | |
| Operating Wavelength Range (λ) | 1530 ~ 1562 | | nm |
| Input Pulse Width (FWHM) | 0.5 to 200 | | nsec |
| Input Pulse Repetition Rate (FREQ) | 10 to 1M | | Hz |
| Avg. Output Power (P_{Out-CW}) | Max. 30 | Max. 200 | mW |
| Peak Output Power ($P_{Out-Peak}$) | Max. 0.4 | Max. 2.7 | kW |
| Peak Pulse Energy ($E_{Out-Pulse}$) | Max. 2.7 | Max. 18 | μ J |
| Optical Isolation (ISO) | >30 | | dB |
| Return Loss (RL) | >40 | | dB |
| Output Polarization (POL) | Random | | dB |
| Polarization Mode Dispersion (PMD) | <0.3 | | ps |
| Polarization Dependent Gain (PDG) | <0.3 | | dB |
| Output Connector Type | SC or FC/APC (Optional) | | - |

* Correspond to Half-MSA for rectangular Type (70x45x12mm)

** Correspond to MSA for rectangular Type (90x70x15mm)

Electric & Environmental Characteristics

| Parameter | Specifications | Unit |
|-------------------------------------|--|--------------|
| Power Supply Voltage | +3.3 | V |
| Interface | RS232 | - |
| Alarm | LVTTTL | - |
| Operating Case Temperature | -5 ~ 75 | $^{\circ}$ C |
| Storage Temperature | -40 ~ 85 | $^{\circ}$ C |
| Storage Humidity | 5 ~ 90% R.H | - |
| Power Consumption* | 1.2 / 4.0 | W |
| Mechanical Size (Diameter x Height) | $\Phi 70$ X 12** / $\Phi 90$ x 15mm*** | mm |

*At maximum output power, at 25 $^{\circ}$ C

** Correspond to Half-MSA for rectangular Type (70x45x12mm)

*** Correspond to MSA for rectangular Type (90x70x15mm)

Ordering Information

OFA - NCx₁ - xx₂AC

XX₂ : Max. CW Output Power (dBm)
 C: Circular Type, A: MSA, H: Half-MSA

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