

FOL-DUAL

Dual-Wavelength Fiber Optics Laser Source and Detector Module

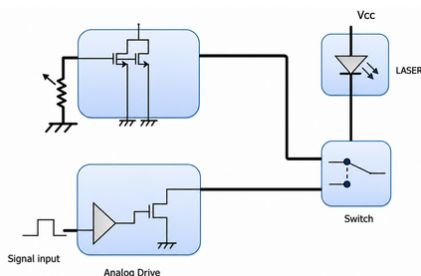


FEATURES

- Provision for Analog input, TTL input and RS-232 input
- Display to indicate forward voltage across and forward current flowing through LASER source
- Voltage and current is varies using intensity control potentiometer
- Built in pulse generator with pulse widths of 30ns and 100ns
- All Connectors are suitable for ST type of connector interface

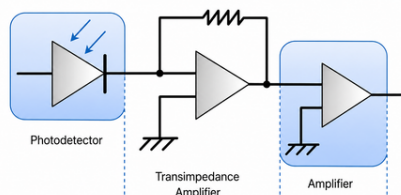
Laser Driver Circuit

Digital and Continuous Wave Driver Circuits



- Two driver modes are available in this system, one for pulse operation and analog transmission, other for continuous wave operation and Digital Transmission
- These are controlled by rotary switch available on front panel.

Photodetector Circuit



- Photodetector produces current in response to optical input.
- This current produced is then converted to voltage and amplified by amplifier.
- This amplified output is measured as electrical output

SPECIFICATIONS

Source - 1

- Type : LASER
- Central Wavelength : 1310nm
- Spectral Width : 2nm
- Output Power : 0.8mW
- Threshold Current : 5mA

Source - 2

- Type : LASER
- Central Wavelength : 1550nm
- Spectral Width : 1nm
- Output Power : 0.9mW
- Threshold Current : 5mA

Detector - 1

- Type : PIN photo diode
- Spectral Bandwidth : 1250nm ~ 1600nm
- Responsivity : 0.8 A /W
- Bandwidth : 1.5 GHz

Detector - 2

- Type : PIN TIA photo diode
- Spectral Bandwidth : 1150 ~ 1600nm
- Sensitivity : -37dbm
- Signal Bandwidth : 155 MHz
- Data Rate : 155 Mbps

Pulse Generator

- Pulse Width : Selectable from 30ns and 100ns
- 30ns Pulse Amplitude : 3V
- 100ns Pulse Amplitude : 4V

Experiments

- I-V Characteristics of LASER
- P-I Characteristics of LASER (FOL-PM is required)
- Digital data transmission
- Analog signal transmission
- PC to PC Communication (full-duplex)