

Preliminary

Ultra Compact Femtosecond Fiber Laser

Femtosecond Mode-locked Pulsed Laser

PFL-200 Series

The PFL-200 ultra-compact femtosecond fiber laser is a polarization maintaining pulsed laser incorporating proprietary carbon-nanotube mode-locker.

The laser is highly stable with a all-polarization-maintaining configuration to provide a typical pulse width of 400fs.

This laser module has a compact design with a package size of merely 90x70x15mm. All driver electronics are integrated within the module and only a low power 5V d.c. supply is required for easy operation.

PFL-200 is the most compact femtosecond pulsed laser source in the industry for various embedded applications that requires high performance and affordable pulsed laser.



Key Features

- Ultra compact module size : 90x70x15mm
- Femtosecond pulsewidth : 400fs typical
- Low repetition rate drift: <1kHz/degC
- Polarization maintained output

Typical Performance

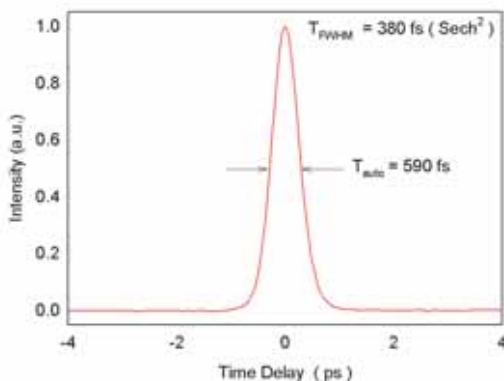


Fig. 1 Pulse autocorrelation waveform.

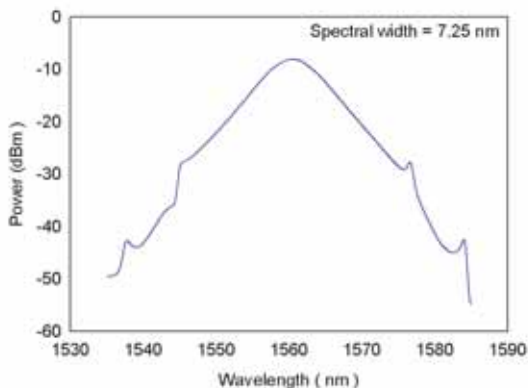


Fig. 2 Pulse spectrum.

Specifications

Parameter	Specification			
	Min.	Typ.	Max.	Unit
Average Power ¹	5	10		mW
Wavelength	1555	1560	1565	nm
Spectral width		7		nm
Pulse width		400	600	fs
Repetition rate		60		MHz
Timing jitter ¹			0.15	ps
Polarization extinction ratio	17			dB
Optical output	SC/SPC			
Power supply	DC 5V, 1A			
Power consumption	5W			
Operating Temperature	+15 to +35			
Humidity (non-condensing)	< 80% RH			
Dimensions (W x D x H)	90 x 70 x 15 mm			
Weight	< 300 g			

Note: The specifications are subjected to change without prior notice. Please contact Alnair Labs for more details.

1. Repetition rate at 60MHz.

