

## High Extinction Nanosecond Pulse Source

Pilot Photonics' nanosecond pulse source is based on a single mode laser with an integrated pulse carver. It offers a high temporal extinction ratio optical pulses with no pulse pedestals, ideal for applications such as time of flight LIDAR. The device can be provided as in a TO-Can, TOSA, or in a high-speed butterfly package, with reference design for integration into customer electronics.

### Features

- High pulse to pulse uniformity and stability
- Wavelength in the C-band
- Peak power > 6 mW
- High temporal extinction ratio > 27 dB
- Selectable repetition rate
- TO-Can, TOSA, or butterfly packaged with integrated TEC, thermistor and isolator

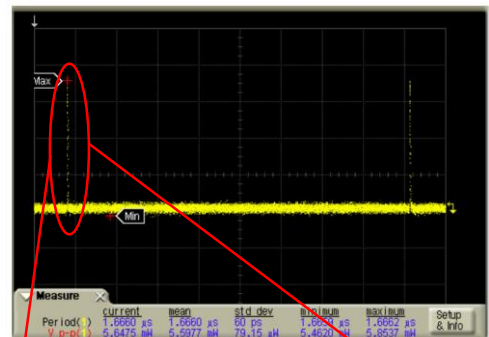
### Applications

- Time of flight LIDAR
- Fiber amplifier seed laser
- Optical time domain reflectometry
- Time resolved spectroscopy

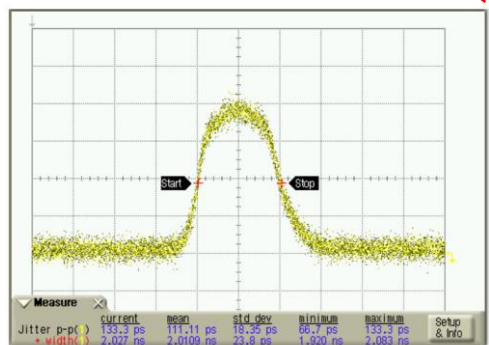
### Typical Specifications

|                         |                            |
|-------------------------|----------------------------|
| Wavelength Availability | C-band (1535 – 1565 nm)    |
| Peak Power              | min. 6 mW                  |
| Pulse Width (FWHM)*     | 2 ns /others on request    |
| Repetition Rate         | 600 kHz /others on request |
| Jitter                  | 135 ps                     |
| Temporal Extinction     | min. 27 dB                 |
| Spectral Width          | 0.09 nm (20 dB)            |

\*Custom specs on request



Time (200 ns/div)  
Typical Pulse Train



Time (1 ns/div)  
Typical Pulse Shape

Coming Soon – OEM module