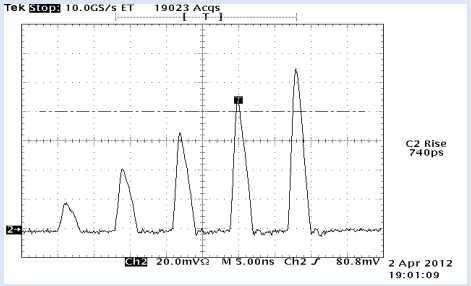
Optical Linear Transmitter Assembly

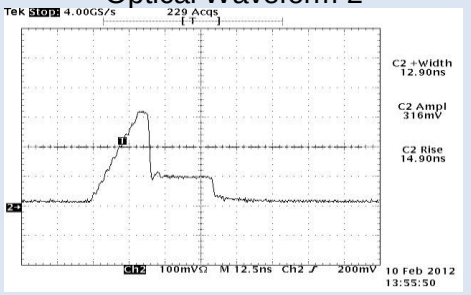
Features

- Optical linear transmitter that includes:
  - Linear broad-band current driver
  - Integrated laser diode
  - Efficient TEC controller
  - Comprehensive monitoring
- Compatible with AWG-2500 modules
- RF input: differential (100 ohm) or SE (50 ohm)
- Supports arbitrary waveforms or pulse signals
- Four bandwidth settings
- Peak optical power up to 1W; Peak current up to 2A
- DC bias control
- Wide selection of laser diodes including: 1550nm, 1064nm or per request
- Temperature control for fine wavelength tuning
- Fiber output (FC/PC or FC/APC)
- Test jig is available for quick module evaluation

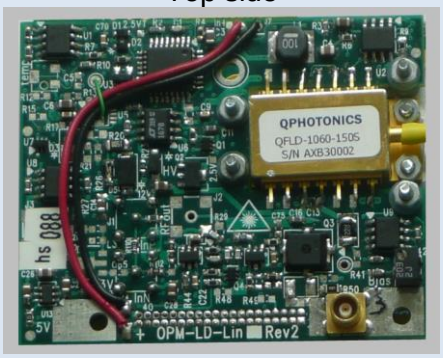
Optical Waveform 1



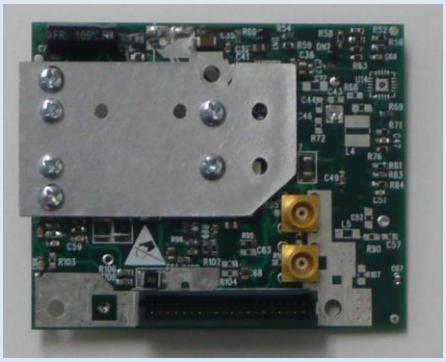
Optical Waveform 2



Top side



Bottom side



Description

The OPM-LD-lin series was designed for systems where optical linear transmitter is required. The OPM-LD-lin offers a combination of wide bandwidth, excellent linearity and high peak power capability. It operates in frequencies of DC up to hundreds of MHz (depending on the selected version).
The OPM-LD-lin coupled with an arbitrary waveform generator (AWG) forms an optical AWG.
A wide selection of laser diodes is offered for the OPM-LD-lin. This includes wavelengths in the visible and the IR, including 1064nm and 1550nm.
The optical output is provided either through a connector; Typically FC/PC or FC/APC.
For applications that require better wavelength stability the laser's temperature is controlled. This also allows the user to tune the wavelength precisely. The RF input of the OEM version can be used either in a 100 ohm differential form or a single ended 50 ohm.

See further technical and application information in "Application note for OPM-LD-Lin Linear E_O modules"

Ordering codes:

OPM-LD-Lin-HS: High speed version with Tr< 1ns and peak current of 500mA
OPM-LD-Lin-HC: High current version with Tr<2ns and peak current of 2A.

Product applications

- Seed Laser for Fiber Lasers
- Optical arbitrary waveform or pulse generator in broad bandwidth systems