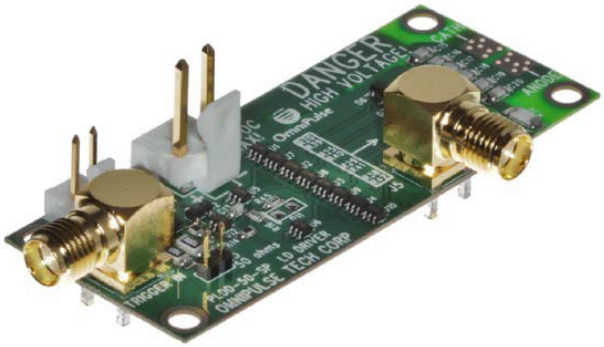
Analog Modules, Inc.

a HEICO company

MODEL PLDD-50-SP
LASER DIODE DRIVER

SHORT PULSE LASER DIODE DRIVER

- **20 to 50A (see on next page)**
- **<5ns pulsewidth**
- **<2.5ns rise time**
- **<4.0ns fall time**
- **di/dt = 20A/ns**
- **Ultra lightweight and compact**
- **12 volt input**



The PLDD-50-SP is a compact all solid-state, pulsed current source designed to drive single or multichip laser diodes. The unit features a peak current of 50A. The pulse repetition frequency can be varied from single shot to 15kHz at maximum current. Higher repetition frequency is possible at lower current, see graph on next page.

The current monitor output may be viewed with an oscilloscope (>200MHz recommended) allowing the user a real time view of the load current.

Mounting holes are supplied which accept the most common laser diode packages (5.6 mm, 9 mm, TO-18, TO-5 and TO-52). This allows the light to exit normal to the driver; however, edge mounting of these laser diodes can also be accommodated.

Two power supplies are required: +12 to +28VDC at 10mA and a +350VDC (max) at 6mA (average current depends on rep rate).

Output Current

25 to 50A, adjustment by varying high voltage input from +250 to +350 V (+375 V is the absolute maximum)	
Pulse Rise Time	<2.5ns*
Pulse Fall Time	<4.0ns*
Pulse Width	<5ns*
Pulse Recurrence Frequency Range	See Graph
Compliance Voltage	350V (nom.) same as HV input**
Propagation delay	10ns (typical)

Input Trigger	SMA, +5V CMOS, rising edge Hi-Z or 50Ω jumper selectable
Current Monitor	SMA, 50Ω, 1.00V/100A
Input Power	+12 to +28VDC at 10mA +250 to +350V at 6mA (proportional to pulse frequency)
Dimensions	0.74”x1.30”x2.74”

*With output shorted
**Proportional to pulse frequency (HV supply only)
Specifications subject to change without notice.

APPLICATIONS:

Use for rangefinding, remote sensing, research, and other defense and security applications

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Current Monitor Output
(Shorted Load)