

## Drivers for Laser, Gain Chip and SOA

OEM Solutions for Light Source, Fiber Laser and Amplifier

Model CL531 laser driver is ideal for driving 14-pin butterfly or DIL packaged Laser, gain chip, or SOA for use as instrument laser source, pump laser, or power booster. The driver includes an on-board TEC controller for temperature stabilized operation of the driven laser. The driver circuitry operates from a single 5V power source. All other required voltages are generated on board by high efficiency switching power supplies.

The CL531 is specially designed to set the performance of driven devices at their most suitable parameters for their operations. The control of the laser can be at constant-current mode or at constant-output-power mode if the laser has internal build-in optical monitor. The maximum settable output current is 1500 mA. The maximum TEC current is 1800 mA. The CL531 has very stable output current that is suitable for use in stringent stability requirements.

We design and manufacture custom LD drivers to the specs of your choice. Driving mode, drive current and control interface can all be customized to fit your needs.



### Features:

- Both constant-power drive mode and constant-current drive mode
- Drive current up to 1500mA
- TEC drive current up to 2000mA
- Extremely stable output current
- 3.94" x 1.73" compact economical OEM module

### Applications:

- Fiber laser and amplifier
- YDFA and EDFA
- SOA
- Testing Instrument

### Technical Data

Parameter	Specification
<b>Current Control</b>	
Current Control	Trim Potentiometers (15 Turn)
Control Range of Laser Current	0 to $\pm 1500$ mA
Compliance Voltage	>4 V
Setting Accuracy (Full Scale)	$\pm 2\%$ , Typical $\pm 0.1\%$
Noise	<2 $\mu$ A
Drift (30 min)	<20 $\mu$ A
Temperature Coefficient	<50 ppm/ $^{\circ}$ C
<b>Power Control</b>	
Control Range by monitor PD	5 $\mu$ A to 1500 mA
Accuracy (full scale)	$\pm 2\%$ , Typical $\pm 0.1\%$
Monitor PD Reverse Bias Voltage	0 V or 5 V
<b>Current Limit</b>	
Setting Range	0 to >1500 mA
Setting Accuracy	$\pm 2\%$ , Typical $\pm 0.1\%$
<b>TEC Control</b>	
Control Range of TEC Current	0 to $\pm 1800$ mA
Compliance Voltage	0 to 4.2 V
Temperature Drift (30 min)	<0.5 mK/ $^{\circ}$ C
<b>General Data</b>	
Supply Voltage/ Current	5V / 3 A
Operating Temperature	0 to 40 $^{\circ}$ C
Storage Temperature	-40 $^{\circ}$ C --70 $^{\circ}$ C (non-condensing)