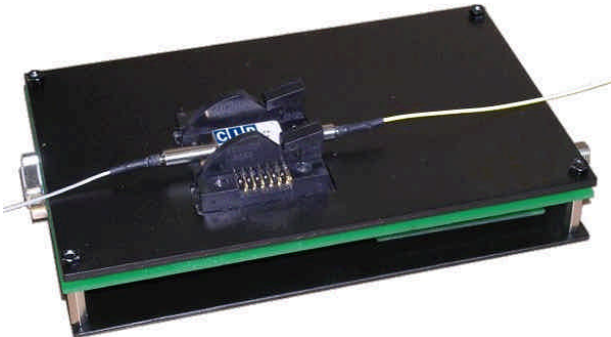


SOA/SLD Evaluation Board—7 Pin Butterfly



Features

- Compact Eurocard Driver Board for SOAs and SLDs
- Device Drive Current up to 250mA and TEC to 2.5A
- Integrated heatsink with demountable Butterfly connectors for easy device connection or changeover
- User reconfigurable pin connections to suit other device pin out arrangements
- Comprehensive driver software supplied for full computer control and monitoring of device
- Continuous traces of device drive parameters available on screen
- Allows direct plotting of LIV device characteristics
- Device settings can also be saved to driver for standalone use

Product Description

The LDR250E module uses the LDR core driver hardware and provides a versatile and user-friendly platform for current and thermo-electric control (TEC) of semiconductor optical amplifiers (SOAs) and superluminescent diodes (SLDs). The unit delivers specifications and features commonly found on high-end, bench top instruments and is provided in a format which can be readily integrated into customers systems. Alternatively it can be used as a device driver unit in research systems or for device evaluation and testing in laboratory or production areas. The LDR250E comes with a comprehensive PC based control program, V-DRIVE, which allows easy control and monitoring of the device operating conditions.

The LDR250E module contains a current source and thermo-electric controller, integrated with a Eurocard size motherboard which incorporates the power inlet socket, the communications interface and USB PC connection cable to allow computer control. The module includes demountable device connectors for industry standard butterfly 7 pin packages to allow easy device connection or changeover, and an integral heatsink for the device. Similarly packaged devices with different device pin outs can be accommodated using the reconfigurable on board pin connections. An external photodiode for power monitoring/automatic power control is incorporated, and a 5V plug-in power supply unit is supplied. The accompanying V-DRIVE software provides complete computer control of the LDR250E unit.

- The Current Source is capable of providing up to 250mA of drive current and can be configured to run in either constant current or constant power mode (using the back facet monitor or external photodiode). The desired operating point (current or power) is set using the V-DRIVE software.
- The TEC provides up to 2.5A peltier current and allows the set point of the temperature controller to be selected between 10°C and 40°C again through the V-DRIVE software. The TEC features a "Lockout Mode" which will shutdown the current source if the temperature goes outside a predefined set of parameters.
- An external modulation input enables the device to be directly modulated from 100Hz to 100kHz.
- Device settings may also be saved to the board to allow the LDRE to operate with fixed parameters in a standalone mode with no need for PC control.
- Continuous traces of the device drive parameters (power, current, forward voltage and temperature) are avail-



LDRE Specifications

Item	Specification			Unit	Comment
	Min	Typ	Max		
Overall					
Supply Voltage	4.5	5	5.5	V	
Supply Current		0.75	3.5	A	Depends on TEC draw
Update rate		3		Hz	
Current Source Subsystem					
Drive Current	0		250	mA	16 bit resolution
Forward Voltage			4	V	16 bit resolution
Modulation Bandwidth	0.1		100	kHz	
TEC Subsystem					
Set Point	10	25	40	C	User adjustable
Set Point Resolution			0.1	C	
Steady-state Error			0.1	C	
TEC Current			2.5	A	
External Power Monitor					
Input Optical Power			2.0	mW	16 bit resolution
General data					
USB					USB Connector
Operating Temperature	0		35	C	
Storage Temperature	-10		60	C	
Dimensions		160x100x50		mm	
Weight		0.325		Kg	
V Drive Software Compatibility	Windows 98SE/NT/2000/XP				
Device Pin Compatibility	Laser Diode	Grounded Cathode Floating			
	Photodiode	Grounded Anode Floating			

Operation

A full operating manual is supplied describing the set-up and operation of the LDR250E module and the V-DRIVE software. CIP cannot guarantee successful operation of the unit with other peoples products.

Ordering information - LDR250E-DBFL-IG3FC-U (Includes 5v Power supply unit)

CIP reserves the right to make changes in the design, specifications and other information at any time, and without prior notice. The information contained within the Data Sheet is believed to be accurate. However, no responsibility is assumed for possible inaccuracy or omission. Any information contained herein shall legally bind CIP only if it is specifically incorporated in the terms and conditions of a sales agreement.