

INPHENIX

Compact Evaluation Board for Superluminescent Diodes (SLD) and Semiconductor Optical Amplifiers (SOA)

IPEVM1030

Feature

- Adjustable Forward Current up to 650mA*
- Temperature Controlled to 20°C ~ 50°C
- Single +12V Power Supply Input
- Be operated through the touchscreen
- Support serial commands from a USB 2.0 port

Applications

- Evaluation of InPhenix's 14-pin Butterfly SLD/SOA Devices

Performance Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit
SLD/SOA Forward Current	I _F	-	350	650*	mA
Chip Temperature	T _C	20	25	50	°C
TEC Current @ 25°C	I _{TEC}	-	0.4	1.2	A
Power Consumption	P	-	4.2	9.8	W
Physical Dimensions		155*100*28			mm × mm
Connection	See Pin Assignment Table				

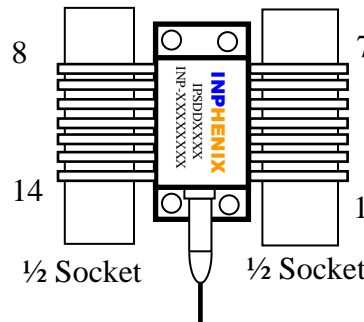
* Base this setting upon each Device's maximum rated current.

Butterfly Socket Pin Assignment

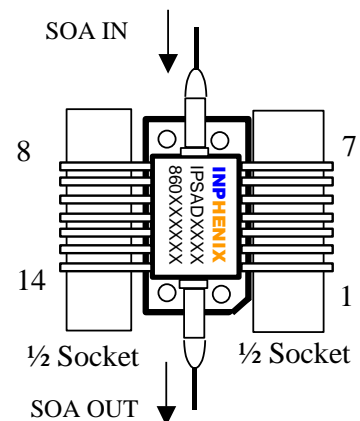
Pin	14-pin Butterfly Package
1	TEC+
2	Thermistor
3	Same as 2
4	Same as 5
5	Thermistor
6	NC
7	NC
8	NC
9	NC
10	SLD/SOA+
11	SLD/SOA-
12	NC
13	NC
14	TEC-

Power Port Pin Assignment

Pin	Connection
+12V	+12V DC+
GND	GND



14 Pin SLD Connection



SOA Connection



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Operation Instructions

- 1) Connect the AC/DC adapter (12V output) to the DC jack on the board, and ensure the power switch is in the OFF position.
- 2) Mount the device under test (DUT) into the butterfly socket on the heat sink using thermal compound (thermal grease) and screws. Be careful not to over-tighten the screws, as this may bend the DUT package, cause damage and impair performance.
- 3) Turn on the power switch. In normal conditions, the screen will display 'TEC OK' and 25.0°C. If 'TEC ALARM' and abnormal temperature reading is displayed, turn off the power immediately and check whether the pins of the DUT are making good contact with the fixture.



Figure a) TEC Normal



b) TEC Alarm

- 4) After setting the drive current and operating temperature, turn on the DUT and begin testing.
- 5) When the test is finished, reduce the current to 0 mA and turn off the power before detaching the DUT.

Optional:

Order +12V/2A Universal Power 100-240V AC/DC Adaptor from InPhenix.

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