

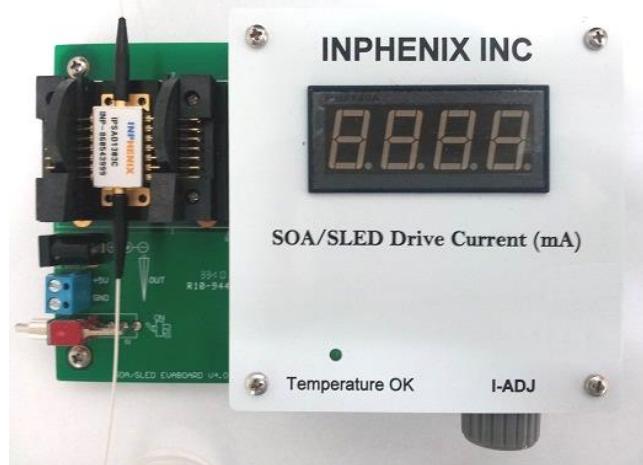
INPHENIX

Evaluation Board Semiconductor Optical Amplifiers (SOAs)

IPEVM1010

Feature

- Adjustable Forward Current up to 650mA or 1000mA*
- Temperature Controlled to 25°C
- Single +5V Power Supply Input



Applications

- Evaluation of InPhenix's SOA Devices

Performance Characteristics

Parameter	Symbol	Min.	Typ.		Max. *		Unit
			-2	-H	-2	-H	
SOA Forward Current	I_F	-	350	650	650	1000	mA
Chip Temperature	T_C	-		25		-	°C
TEC Current	I_{TEC}	-		0.4		1.2	A
Power Consumption	P	-	3	4.5	8.5	10.2	W
Physical Dimensions			150 × 118× 40				mm
Connection			See Pin Assignment Table				

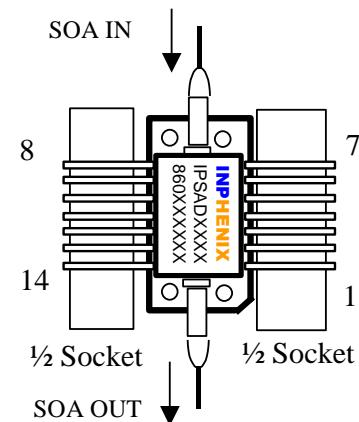
* Base this setting upon each SOA Device's maximum rated current.

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	SOA+
11	SOA-
12	NC
13	NC
14	TEC-

Power Port Pin Assignment

Pin	Connection
+5V	+5V DC+
GND	GND



SOA Connection



Operation Instructions

- 1) Connect the AC/DC adaptor (output 5V) to the DC jacket on the board, and make sure power switch is on the off position.
- 2) Turn the knob counter-clockwise to the most to make sure the drive current is 0mA when power on.
- 3) Mount SOA into SOA socket on the heat sink with a thermal compound (thermal grease) and 4 screws. Take care not to over-tighten screws when mounting. For this can bend the SOA package, cause damage and hinder performance.
- 4) Prepare an electric fan to cool down the SOA if it works over 400 mA.
- 5) Turn on the power switch. The Temperature OK indicator will blink for a second and keep on. This green LED indicates TEC working status. If the LED is off or abnormal for more than 5 seconds, turn off the power immediately and check the SOA pin connections.
- 6) Turn the knob clockwise to increase the drive current or counter clockwise to decrease drive current. **If power supply adaptor is used and the output power is not stable, try bonding GND pin to the ground.**
- 7) When test finishes, decrease the current to 0mA and turn off the power before detach the SOA.

Part Number Notes:

IPEVM1010-2: Standard SOA EVB (Evaluation Board) for max current \leq 650mA

IPEVM1010-H: High Power SOA EVB (Evaluation Board)

IPEVM1010-D: Mini SOA (Type D) SOA EVB (Evaluation Board)

Option 1:

IPEVM1010-2 with +5V/2A Universal Power (100VAC-240VAC) AC/DC Adaptor from InPhenix.

IPEVM1010-H with +5V/3A Universal Power (100VAC-240VAC) AC/DC Adaptor from InPhenix.

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