

General Description

Semiconductor Optical Amplifier products (SOA-SO-1310 series) provide the amplification around 1310nm. It can be used in the 10G/40G/100G system, suit for system design conveniently. It provides output power up to be 10dBm. Two work modes, including ACC, APC are selectable.

Features

-  band, 1290~1320;
-  Power up to 10dBm;
-  2 work modes, ACC and APC for constant pump current, output power selectable;
-  Support 4 channels

Optical Specification

Parameter	Condition	Min	Typ	Max	Unit
Wavelength		1290		1320	nm
Input power		-14		0	dBm
Saturation output power		4	6	10	dBm
Gain	IN=-10 OUT=6	14			dB
NF	IN=-10 OUT=6			10	dB
PDG				2	dB
Input Sensitivity	@4X25G BER<10-12			-7	dBm

Operating and storage condition

Items	Parameter	Spec	Unit	Note
1	Operating temperature	-5~+60	°C	
2	Operating humidity	0~90	%RH	
3	Storage temperature	-20~75	°C	
4	Storage humidity	0~95	%RH	
5	Power consumption	20	W	

Pigtail and connector

Port	Definition of port	Connector type	Pigtail length
In1	Signal input 1	LC/UPC	TBD
Out1	Signal output 1	LC/UPC	TBD
In 2	Signal input 2	LC/UPC	TBD
Out2	Signal Output 2	LC/UPC	TBD
In3	Signal input 3	LC/UPC	TBD
Out3	Signal output 3	LC/UPC	TBD
In 4	Signal input 4	LC/UPC	TBD
Out4	Signal Output 4	LC/UPC	TBD

Electrical interface

PIN	Definition	PIN	Definition
1	+5V	26	Reserved
2	+5V	27	SOA2 Input Loss Alarm
3	+5V	28	GND
4	+5V	29	SOA2 Output Power Alarm
5	+5V	30	GND
6	+5V	31	GND
7	GND	32	GND
8	GND	33	Case Temperature Alarm
9	GND	34	SOA1 Output Power Alarm
10	GND	35	Pump Temperature Alarm
11	Reserved	36	Reserved
12	Reserved	37	SOA3 Output Power Alarm
13	GND	38	SOA4 Output Power Alarm
14	RESET INPUT	39	SOA4 Input Loss Alarm
15	RXD	40	SOA3 Input Loss Alarm
16	TXD	41	GND
17	Pump Current Alarm	42	GND
18	SOA1 Input Loss Alarm	43	GND
19	GND	44	GND
20	GND	45	+5V
21	Reserved	46	+5V
22	Reserved	47	+5V
23	Reserved	48	+5V
24	Reserved	49	+5V
25	GND	50	+5V

Note: Alarm active is high 3.3V

IN/OUT fiber position can be optional as A or B

