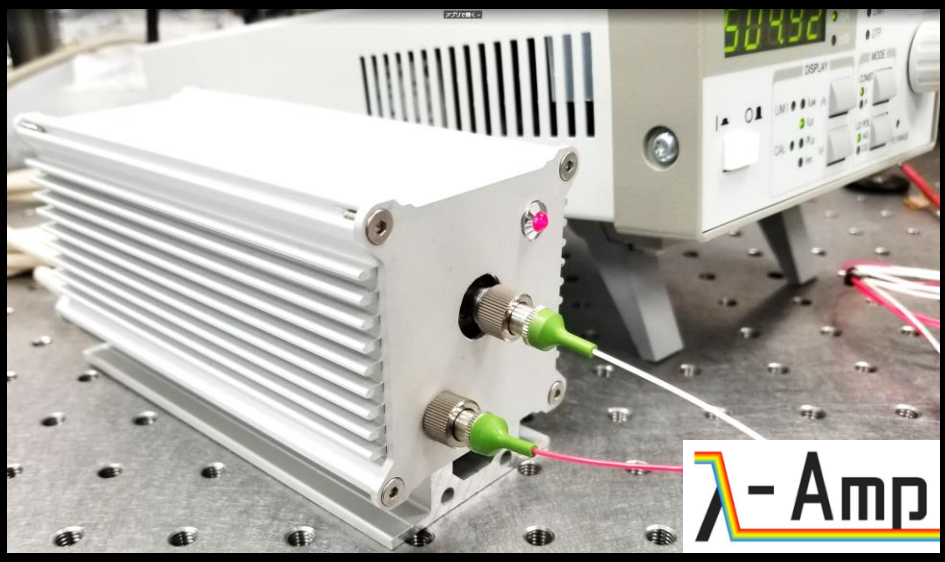
Spectra Quest Lab. Inc

1μm-Band, High-Power Semiconductor Optical Amplifier

RA1060C, RA1030C



Description

The RA1060C, RA1030C is a Semiconductor Optical Amplifier (SOA) designed for amplifying polarized optical signals in 1 μm-band. It is also an ideal gain medium for implementing wide band-with tunable lasers. It shows Maximum performance together with ASE-Free light source, λ-Master 1040.

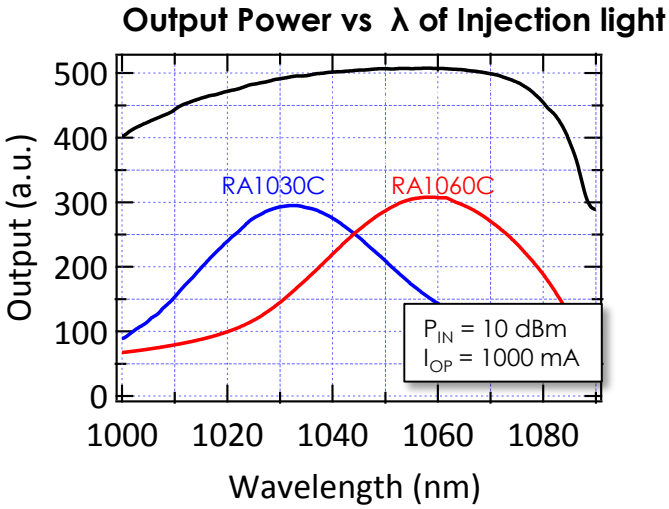
The semiconductor device is contained in a heat sink case, so it can be operated without TEC. The optical input/output are coupled to FC/APC connectors with fiber ports (PAF2A series, THORLABS) and uses PM980 fiber on both sides.

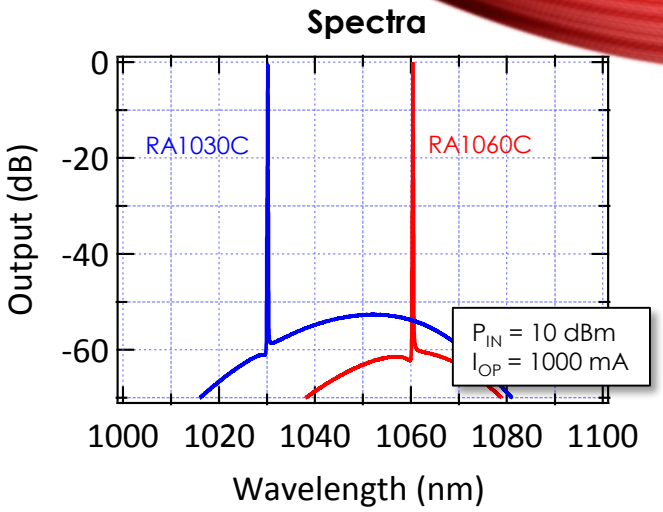
This device is designed to use LDC210C, THORLABS as a power supply.

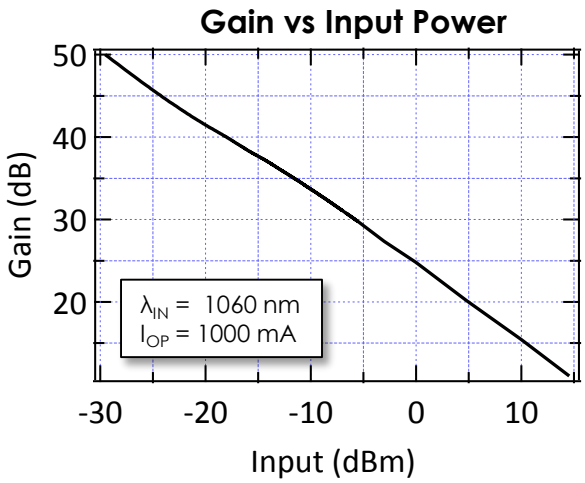
Specifications

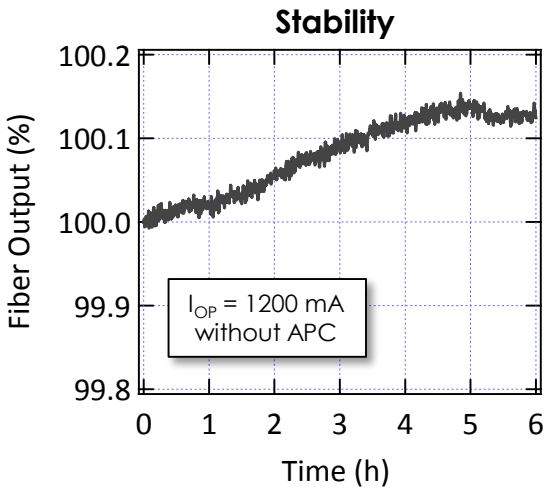
	Symbol	Min	Typ.	Max	Unit
Center Wavelength RA1060C RA1030C *980 nm is available	λ_C	1,055 1,030	1,060 1,035	1,065 1,040	nm
Operating Current	I_{OP}	-	-	1,000	mA
Small Signal Gain @ P_{IN} -20dBm	G	-	40	-	dB
Optical 3dB Bandwidth	BW	40	50	-	nm
Saturation PM-Fiber Output Power	P_{SAT}	22	23	-	dBm

Performance Plots

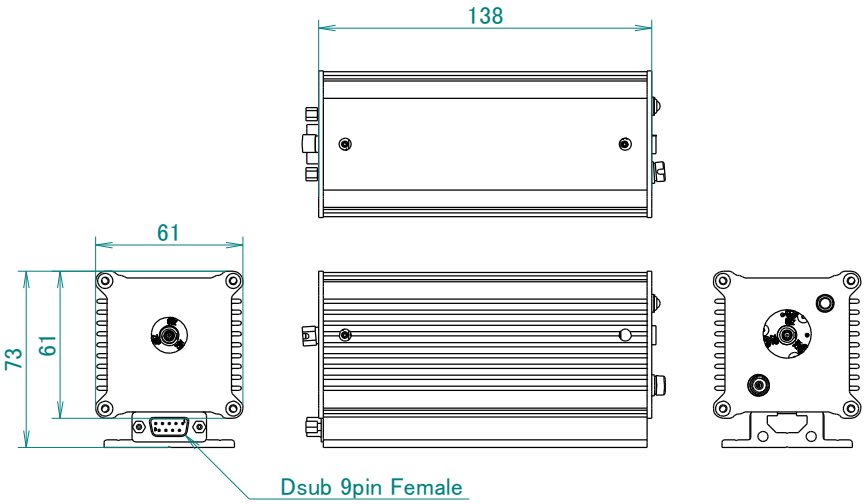








Drawings



1. Interlock and status LASER ON/OFF
2. Photodiode cathode
3. Laser diode ground
4. Photodiode anode
5. Ground for pin 1
6. N.C.
7. Laser diode cathode
8. N.C.
9. N.C.

Spectra Quest Lab. Inc
web : https://spectraquestlab.com
e-mail : info@spectraquestlab.com