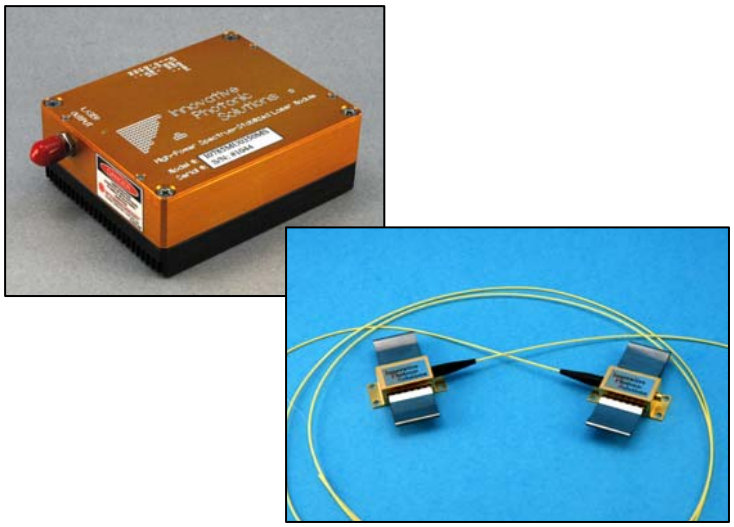
Innovative Photonic Solutions, Inc.
4250 U.S. Highway 1, Suite 1
Monmouth Junction, NJ 08852
Phone (732) 355-9300
Fax (732) 355-9302
Email: sales@innovativephotonics.com
http://www.innovativephotonics.com

1064 nm Single Mode Spectrum Stabilized Laser

Model # I1064SB0050P-IS



Features:

- High Power Single Mode Output
- Ultra-Narrow Spectral Linewidth (< 1 MHz)
- Stabilized Output Spectrum (< 0.007 nm/^{0}C)
- Excellent Beam Quality (M^2 < 1.1)
- Capable of High Speed Pulse Operation
- Integral Dual Stage Isolator

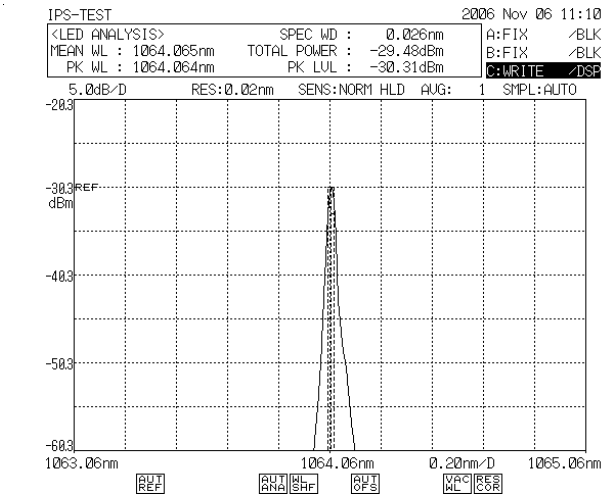
Target Applications:

- Fiber Laser Seeding
- Solid State Laser Seeding
- Interferometry
- Remote Sensing
- Difference Frequency Generation

Innovative Photonic Solution's I1064SB0050P-IS spectrum stabilized single frequency laser is specifically designed for applications where low phase noise and ultra-stable wavelength control are necessary. The integral dual stage isolator is the key to the device's superior performance. The integral isolator eliminates back reflections typically caused by fusion splices or downstream fiber connections and therefore eliminates retro-reflected light from disturbing the Hybrid ECL cavity. This feature simplifies high performance system design and offers superior performance as compared with devices that rely upon external or fusion spliced isolators to provide back reflection isolation.

The I1064SB0050P-IS is available in a 14-pin BF package, and can be manufactured at wavelengths ranging from 1020 nm – 1080 nm with wavelength specificity of 0.1 nm.

Typical Spectral Plot:



1064 nm SS Laser Spectrum @ 25 deg C

Ultra-Stable Performance With Spectral Linewidth As Low As 50 KHz

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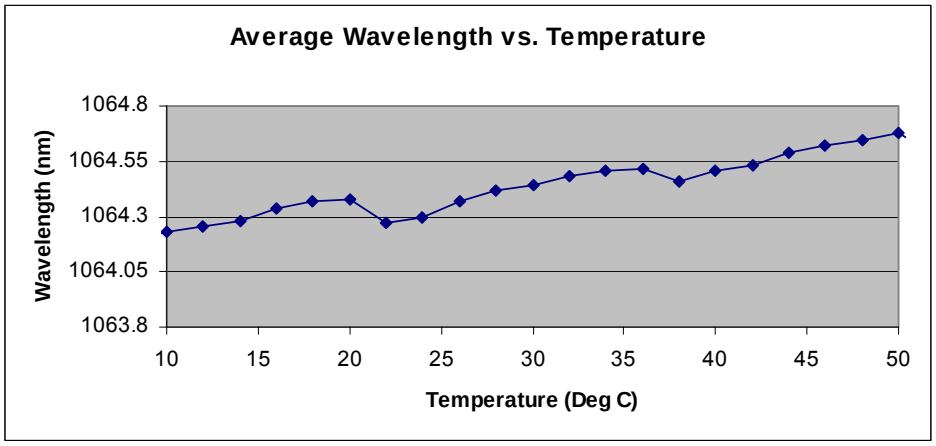
Operational Characteristics:



Laser exhibits characteristics of both DFB and ECL lasers

Product Specifications:

			I1064SB0050PZ-IS		
Parameter	**Test Conditions**	**Units**	**Min**	**Typ**	**Max**
Stabilized Lasing Wavelength	Peak λ measured in Vacuum at Iop and TEC @ 25-35 deg. C	nm	1064.00	1064.40	1064.80
Spectral Width	FWHM at Iop and TEC @ 25-35 deg. C	nm		<<1 MHz	
Output power	CW Output from PM fiber at at Iop and TEC @ 25-35 deg. C	mW	50		
Laser Operational Current	Iop	mA		300	350
Laser Operational Voltage	Compliance limited	V			2.2
Polarization Extinction Ratio (PER)		dB	20		
TEC Current Limit		A			2.5
TEC Voltage Limit	Compliance limited	V			4.5
Operational Temperature Range		Deg C	10		50

Substitute Z in part number schema with:		Blank for No Connector
	A	For FC/APC

Custom wavelengths, power levels, & packaging configurations are available upon request.

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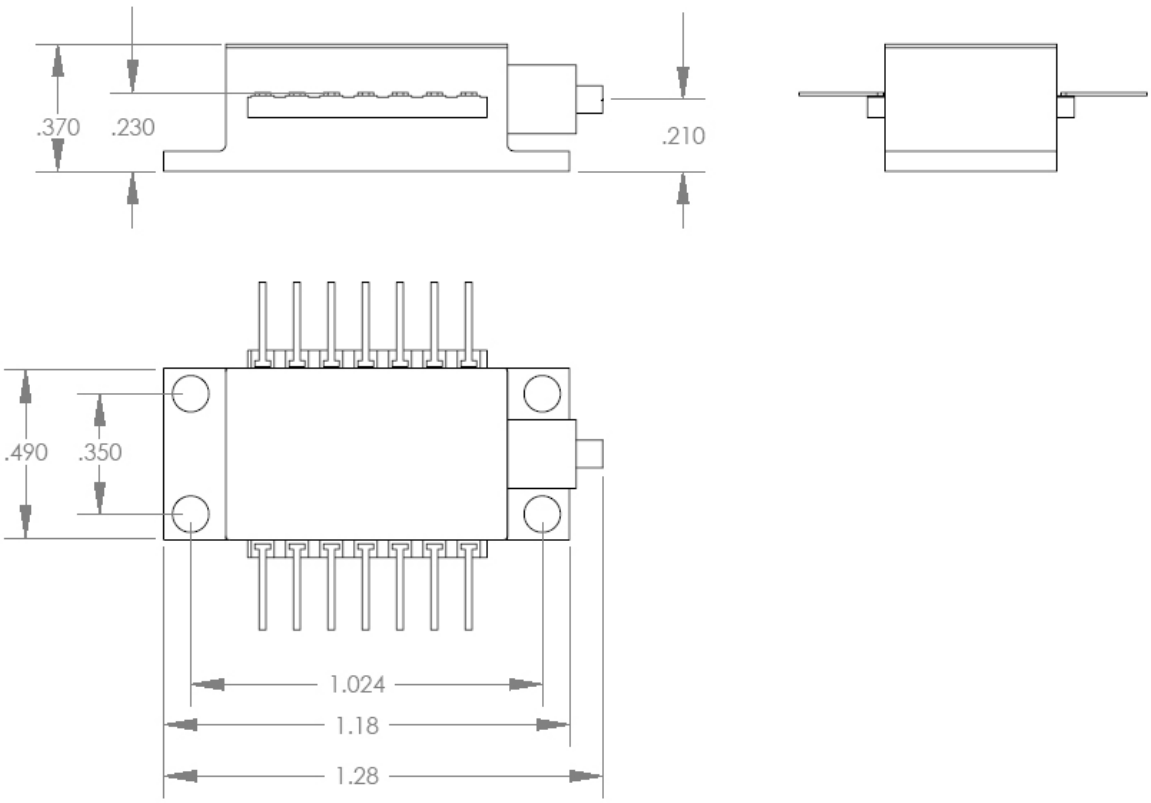
Mechanical Specifications:



BF Module Pin-Out:

Package Pin-Out	
Pin #	Name
1	TEC +
2	THERMISTOR (10K Ohm @ 25C)
3	PD ANODE
4	PD CATHODE
5	THERMISTOR
6	NC
7	NC
8	NC
9	LASER CATHODE (-)
10	LASER ANODE (+)
11	LASER CATHODE (-)
12	NC
13	CASE GROUND
14	TEC -