

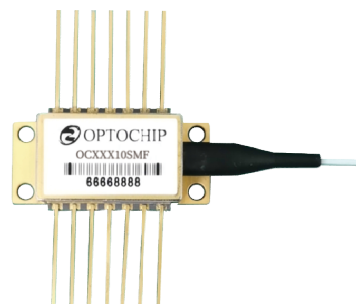


CW Narrow Band Tunable Laser Module

Model: OC2XX Series

Features

- 14 PIN Butterfly Package
- Optical output power 10 mW
- High side-mode suppression ratio > 40 dB
- Wavelength adjust flexibly, tuning range 8-10nm
- Qualified as per intent of Telcordia GR-468
- RoHS



Description

Optochip's OC2XX Series tunable laser is a DBR laser with a semiconductor optical amplifier (SOA). Its wavelength can be tuned continuously and flexibly, and can be tuned to ITU channel grids. The optical output power can be adjusted by the SOA injection current to level the power over the tuning range of applications.

Applications

- DWDM transmission systems
- Tunable DWDM transponders and transceivers
- Dynamic provisioning and wavelength routing in DWDM systems
- Test and measurement
- Optical Fiber Sensing

Absolute Maximum Ratings

Stresses in excess of the absolute maximum ratings can cause permanent damage to the device.

Parameter	Symbol	Min	Typ	Max	Unit
Storage Temperature	Ts	-40		85	° C
Relative Humidity	RH	0		85	%

地址：中国山东省济南市高新区舜华路 1 号齐鲁软件园 C 座 1 层 B120 邮编：250000

Add: B120, C Block, Qilu Soft Park, 1 Shunhua Road, High-tech District, Jinan 250000, Shandong, China



LD Forward Voltage	V			2	V
LD Reverse Voltage	Vr			2	V
Laser Gain Current	Ig			150	mA
SOA Current	Is			200	
Grating Current	Ir			90	mA
Phase Current	Ip			10	mA
MPD Rear Voltage	VMPDR			10	V
TEC Current	ITEC			1.2	A
TEC Voltage	VTEC			3.5	V
ESD(HBM)	ESD		500		V

Optical/Electrical Characteristics(Tc=25℃)

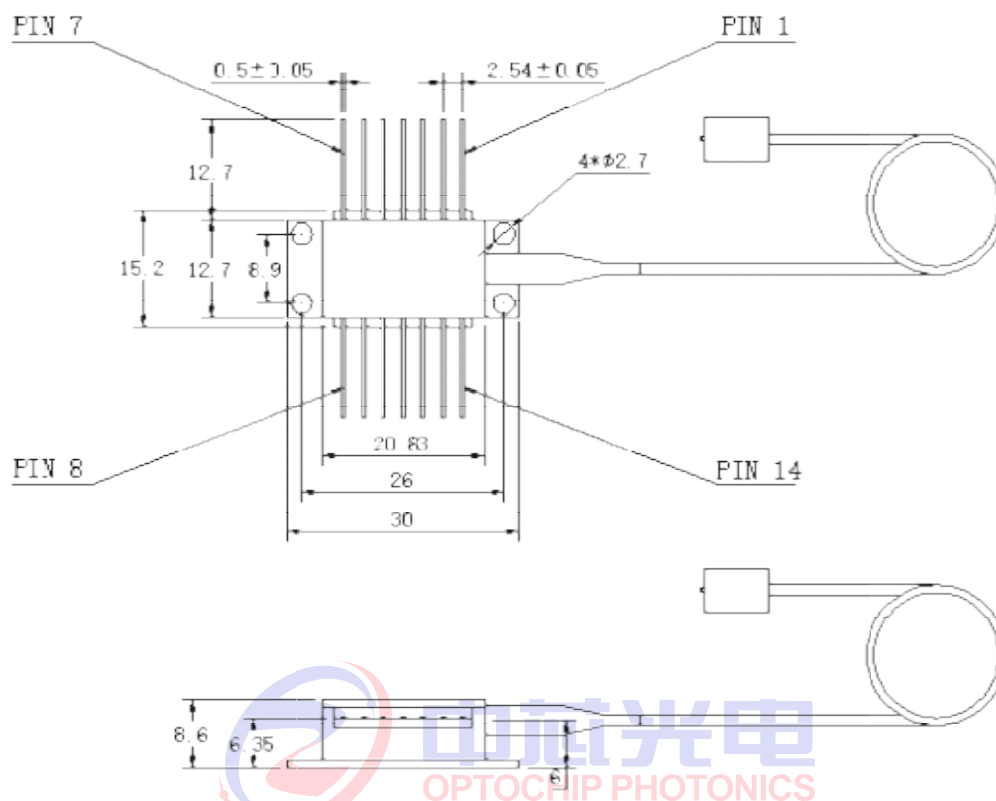
Parameter	Symbol	Min	Typ	Max	Unit
Threshold Current	Ith		15		mA
Operating Voltage	Vop			2	V
Laser Gain Current	Ig		100		mA
SOA Current	Is		80		mA
Grating Current	Ir			80	mA
Phase Current	Ip			5	mA
Output Optical Power	Po		10		mW
Monitor Operating Current	Im	10		200	μA/mW
Wavelength Tuning Range			8		nm
Center Wavelength Range		1530		1580	nm
Channel spacing (ITU grid)			50 /100		GHz
Number of channels			24/12		
Side-Mode Suppression Ratio	SMSR	40			dB
Linewidth	LW	2		5	MHz
Relative Intensity Noise	RIN			-140	dB/Hz
Optical Isolation		30			dB
Thermistor Resistance	Rth	9.5	10	10.5	kOhm
Thermistor Sensitivity Index	β		3892		K

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Outline Drawing



- 1). Unit:[mm]
- 2). Fiber length >1.2m

Connection

Pin Assignments			
Pin	Function	Pin	Function
1	TEC (+)	8	Phase
2	Thermistor	9	Grating
3	MPD ANODE	10	SOA
4	MPD CATHODE	11	LD Cathode (-)
5	Thermistor	12	NC
6	NC	13	Case Ground
7	Gain	14	TEC (-)

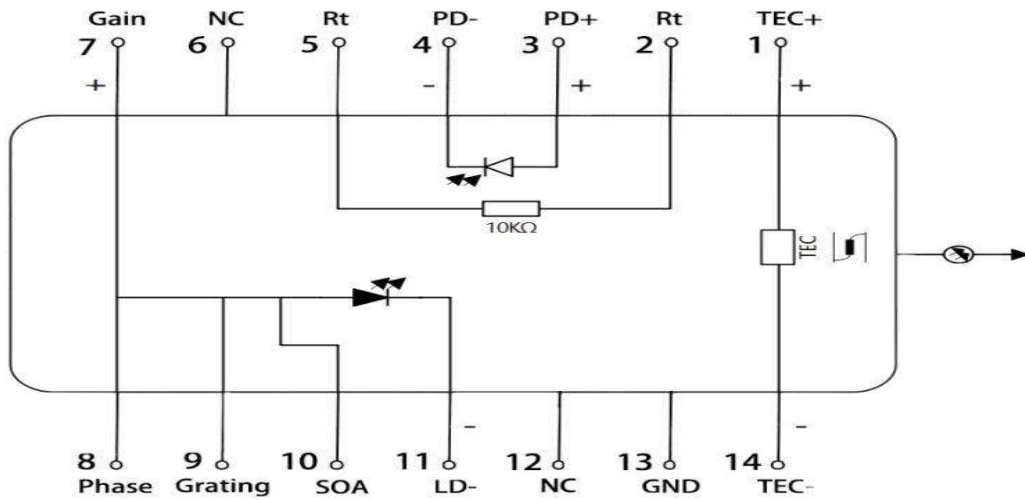
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山东中芯光电科技有限公司

OptoChip Optoelectronics Ltd



Ordering information

e.g.: O C 2 5 0 1 0 S M F

Connector Type: F--FC/APC

Fiber Type: SM--SMF

PM--PMF

Output Power: 20--20mW

10--10mW

02--02mW

Wavelength: 40 --1540nm

50 --1550nm

60 --1560nm

70 --1570nm

80 --1580nm

Laser Type: 1--DBR Laser

2-- DBR Laser with SOA

3-- DBR (Full C Type.)

Company: OPTOCHIP

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