

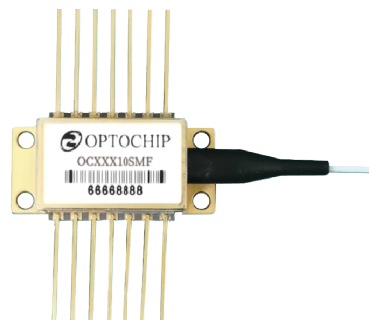


CW Narrow Band Tunable Laser Module

Model: OC1XX Series

Features

- 14 PIN Butterfly Package
- High output power, up to 30 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 OC1XX Series tunable laser is a DBR laser. Its wavelength can be tuned continuously and flexibly, and can be tuned to ITU channel grids.

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	%
LD Forward Voltage	V			2	V
LD Reverse Voltage	Vr			2	V

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



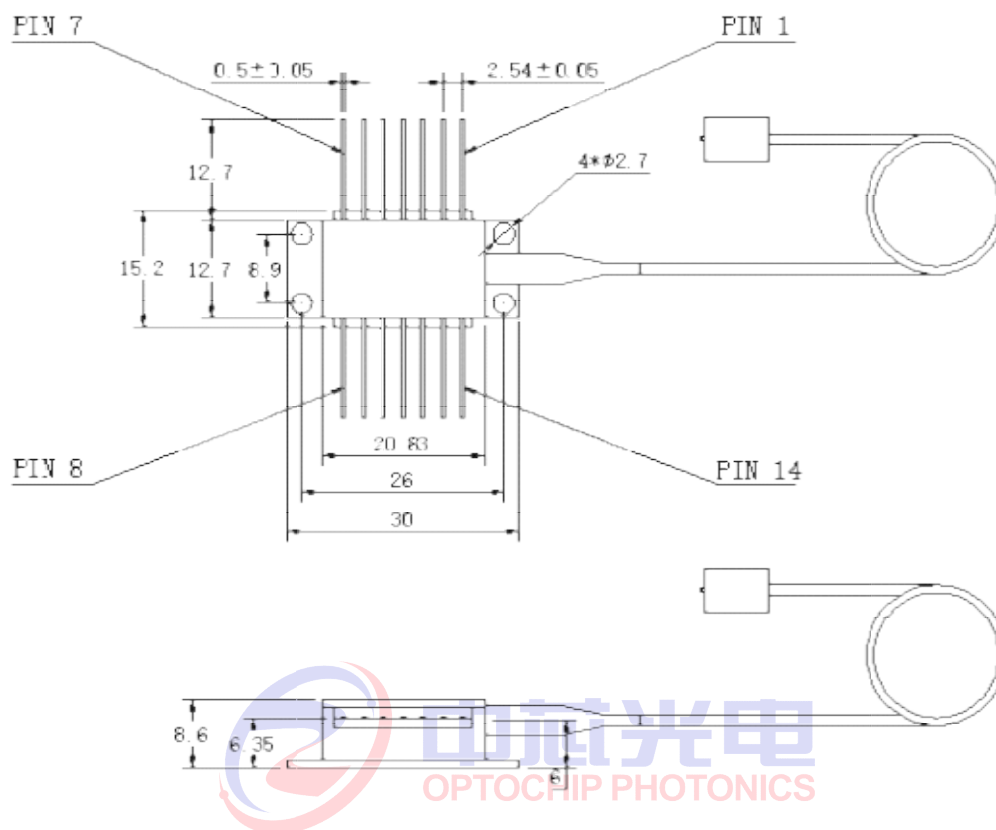
Laser Gain Current	I _g			250	mA
Grating Current	I _r			100	mA
Phase Current	I _p			10	mA
MPD Rear Voltage	V _{MPDR}			10	V
TEC Current	I _{TEC}			1.2	A
TEC Voltage	V _{TEC}			3.5	V
ESD(HBM)	ESD		500		V

Optical/Electrical Characteristics(T_c=25℃)

Parameter	Symbol	Min	Typ	Max	Unit
Threshold Current	I _{th}		35		mA
Operating Voltage	V _{op}			2	V
Laser Gain Current	I _g			150	mA
Grating Current	I _r			80	mA
Phase Current	I _p			5	mA
Output Optical Power	P _o		15	30	mW
Monitor Operating Current	I _m	10		200	μA/mW
Wavelength Tuning Range			8	10	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	R _{th}	9.5	10	10.5	kOhm
Thermistor Sensitivity Index	β		3892		K



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	NC
4	MPD CATHODE	11	LD Cathode (-)
5	Thermistor	12	NC
6	NC	13	Case Ground
7	Gain	14	TEC (-)

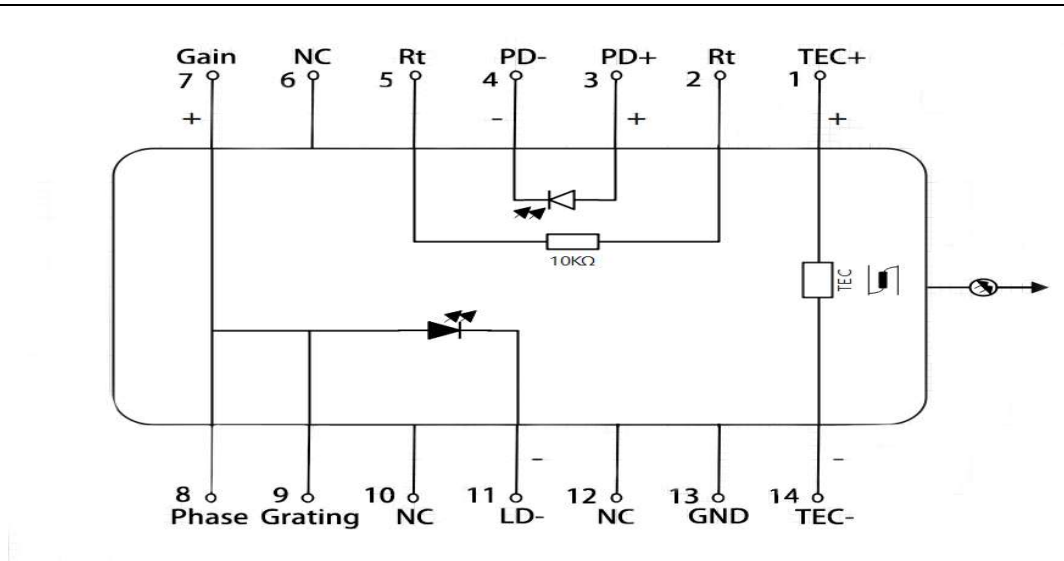
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山东中芯光电科技有限公司

OptoChip Optoelectronics Ltd



Ordering information

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

Connector Type: F--FC/APC

Fiber Type: SM--SMF

PM--PMF

Output Power: 20--20mW

10--10mW

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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