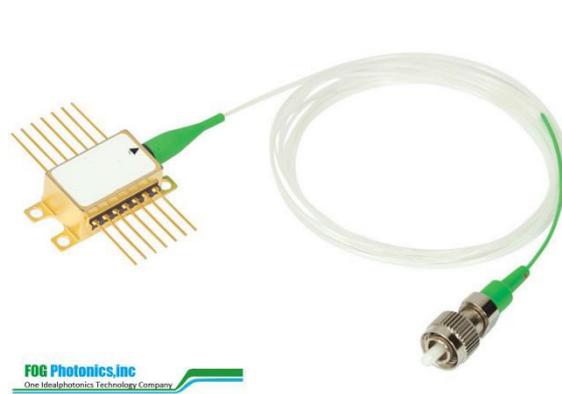


1550nm Super luminescent Diode fiber coupled Output**power 5mW****DESCRIPTION**

FOG-SLD-1550-14BF Superluminescent Diode is a light source for fiber transmission systems, fiber optic gyros, fiber optic sensors, optical coherence tomography, optical measurements. The diode is packaged in 14-pin standard butterfly package with monitor photodiode and thermo-electric cooler (TEC). Module is pigtailed with 0,7-1,0 m of single mode polarization maintaining fiber and connectorized by FC/APC connector.

FEATURES

- Optical output: 5mW
- Efficient coupling into single mode fiber
- CW or pulsed operation
- SM or PM Fiber ($\varnothing 0.9\text{mm}$)
- FC-APC connector
- 14-pin butterfly package
- Internal monitor PD and TEC
- Low power consumption

Optical and electrical characteristics: (T = 25°C)

Item	Symbol	Test condition	Min.	Typ.	Max.	Unit
Output Power	Pf			3	5	mW
Forward Voltage	VF	Pf=3mW			2.5	V
Forward Current	IF	Pf=3mW		200	300	mA
Center Wavelength	λ_c	Pf=3mW		1530		
Spectral Width	$\Delta\lambda$	Pf=3mW	30	35	40	nm
Monitor Current	Im	Pf=3mW,VRD=5V	40		500	μA

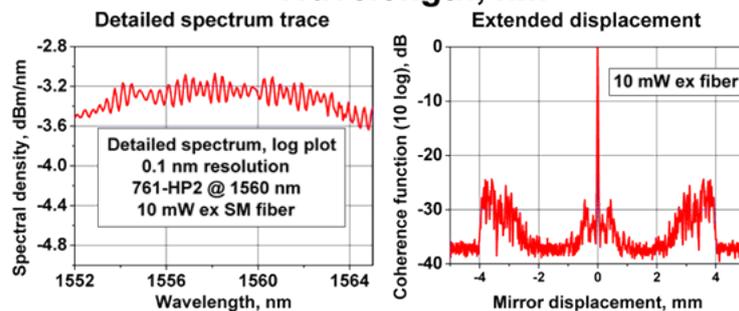
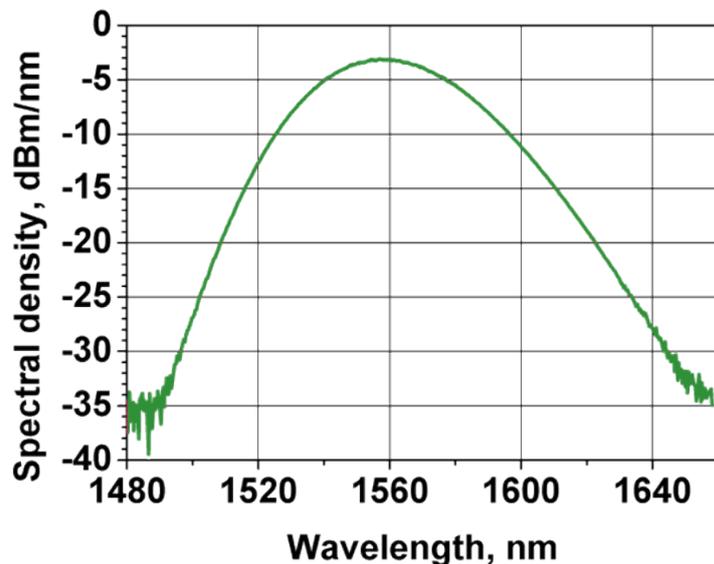
PD Dark Current	Id	VRD=5V			0.1	μ A
Cooler Voltage	Vc	IF=EOL, TC=70°C			2.7	V
Cooler Current	Ic	IF=EOL, TC=70°C			1.4	A
Thermal Resistance	Ro	TLD=25°C, B=3900 \pm 100K	9.5	10.0	10.5	k Ω
Extinction Ratio	Xp	Pf=3mW	17			dB

Absolute Maximum Ratings

Item	Symbol	Rating	Unit
LD Forward Current	If	300	mA
LD Reverse Voltage	Vr	1.8	V
PD Reverse Voltage	VRD	10	V
Operation Case Temperature	TC	-40 to+70	°C
Storage Temperature	Tstg	-40 to+85	°C
Cooler Current	Tc	1.4	A

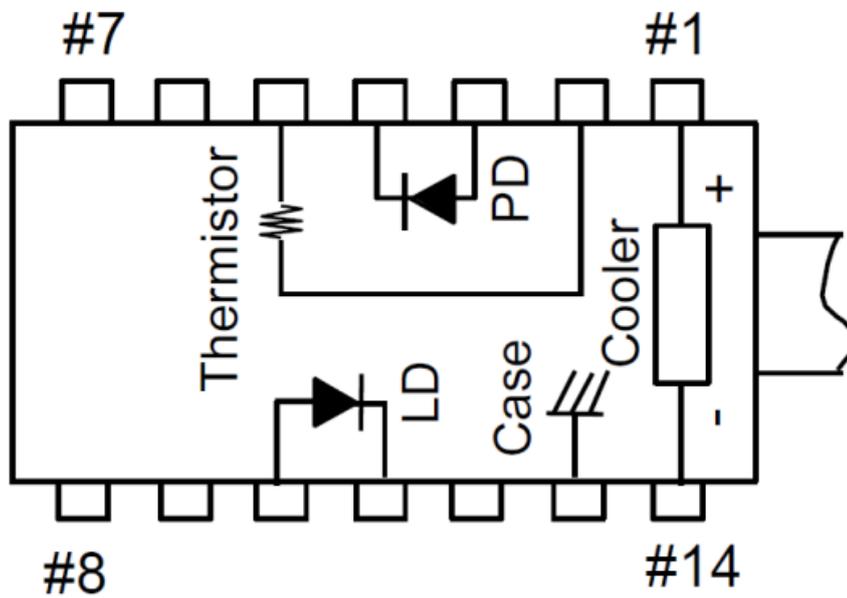
Spectral characteristic curve

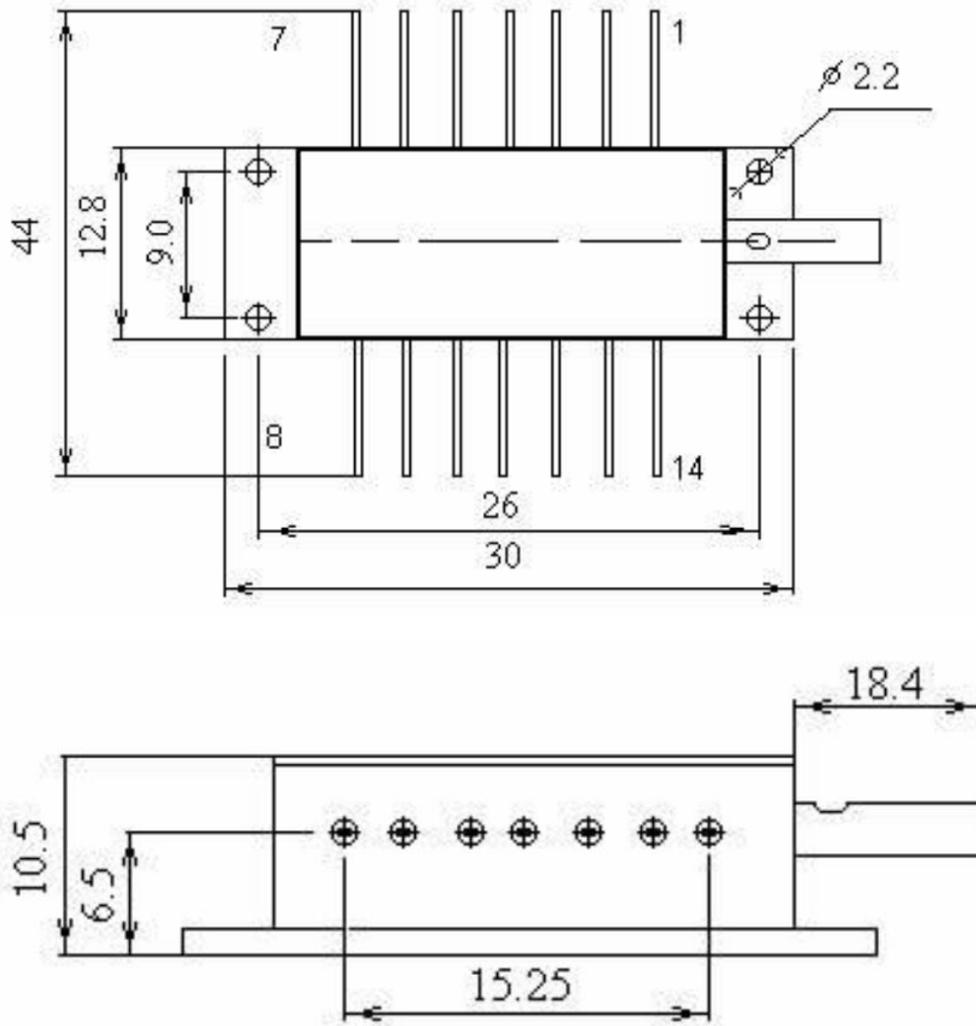
Spectrum



Packaging

NO.	FUNCTION	NO.	FUNCTION
1	Cooler anode	8	NC
2	Thermistor	9	NC
3	PD anode	10	LD anode
4	PD cathode	11	LD cathode
5	Thermistor	12	NC
6	NC	13	Case
7	NC	14	Cooler anode





(dimensions in mm)

NOTES

- a. The detector need feedback of voltage temperature control when operating.
- b. ESD protecting needed during storage, transporting and using.



607, 6/F, Jumbo Ind Bldg, 189 Wai Yip Street, Kwun Tong, KLN ,HK



(852) 30786684



(852)35902333



info@fogphotonics.com



www.fogphotonics.com