Pump Butterfly Modules

SGLD-97X-XXX-BXX-00-X

◆ Description

The high quality pump laser diode with butterfly package can meet high power of optical transmitter system. Also,the built-in thermo-electric cooler (TEC) can make the laser diode work properly in various environments.

◆ Features:

- Operating power range from 20-600mW
- Optional Butterfly package
- Built-in thermistor and TEC
- Fiber Bragg grating stabilization
- Fiber selection available (Single-mode/PM fiber)
- Telcordia GR-468-CORE＆GJB548/8120

◆ Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit	Condition
Operating Case Temperature	Tc	-40	75	°C	
Storage Temperature	Tstg	-40	85	°C	
Reverse Voltage	Vr	--	3	V	
Forward current	I	--	1000	mA	
Thermoelectric cooler voltage	VTEC	--	3.3	V	
Thermoelectric cooler current	ITEC	--	2.5	A	
Lead solder Temperature	--	--	260	°C	
Lead Soldering Time	--	--	10	s	

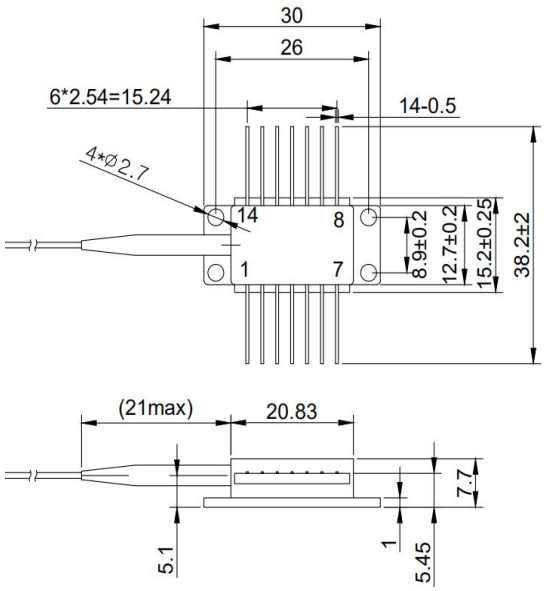
◆ Optical/Electrical Characteristics (T=25℃，unless otherwise stated)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Optical Output Power	P_o	--	--	600	mW	CW
Threshold Current	I_{th}	--	20	80	mA	T=25 °C
Forward Voltage	V_F	--	--	2	V	--
Operating Current	I_{op}	--	--	900	mA	CW, T=25 °C
Center Wavelength	λc	973 975	974 976	975 977	nm	Peak,P_f=Rated Power
Side-mode Suppression Ratio	SMSR	35	40	--	dB	Iop,CW, T=25 °C
Wavelength temperature coefficient	△λ/△T	--	0.008	0.015	nm/°C	T: FBG Temp.
Spectrum Width	Δ_λ	--	0.4	2	nm	RMS@-13dB
Monitor Current	I_{mon}	0.5	--	10	uA/mW	--
Monitor Dark Current	I_D	--	--	50	nA	V_R=5 V
Thermistor Resistance	R_T	9.5	10.0	10.5	KΩ	T=25 °C
Thermistor B-Value	--	--	3950	--	K	25℃/50℃
Polarization extinction ratio（Optional）	PER	13	-	-	dB	Slow axis alignment

◆ Dimensions and Pin Description

Dimensions are in millimeters. All dimensions are ±0.2mm unless otherwise specified.

Type: 00



Pin	Description
1	TE Cooler (+)
2	Thermistor
3	PD Anode
4	PD Cathode
5	Thermistor
6	N/C
7	N/C
8	N/C
9	N/C
10	LD(+)
11	LD(-)
12	N/C
13	GND
14	TE Cooler (-)

◆ Order information

SGLD-97X-XXX-BX-00-14

SGLD	Wavelength	Output Power	Encapsulation & Fiber selection	Connector	PIN
SGLD=Pump LD	…nm	…mW	BP=BTF PM Fiber	00=NO	14
…	974	200	BS=BTF SM Fiber		
	976	400	…	…	
	…	600			
		…			

Note:The laser module are ESD-sensitive devices. Please insure that proper ESD handling procedures are followed.