SLED Butterfly Device

SGSLD-850-XX-XX-XX-X

◆ Features

a. High Power Output
b. Miniaturized Hermetic Package
c. TEC Inside
d. Polarization-maintaining or single-mode Optical Fiber
e. 14pin/8pin/6pin Butterfly Package

◆ Applications

a. Fiber-Optic Gyroscope
b. Optic Test
c. Optical Fiber Transmission System
d. Fiber-Optic Sensor
e. Instrumentation and Meters

◆ Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit	Condition
Operating Case Temperature	T_c	-40	70	℃	--
Storage Temperature	T_{stg}	-55	85	℃	--
Reverse Voltage	Vr	--	2.5	V	--
Forward Current	Iop	--	350	mA	--
Thermoelectric Cooler Voltage	V_{TEC}	--	3.0	V	--
Thermoelectric Cooler Current	I_{TEC}	--	1.5	A	--
Lead Solder Temperature	--	--	260	℃	--
Lead Soldering Time	--	--	10	s	--

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

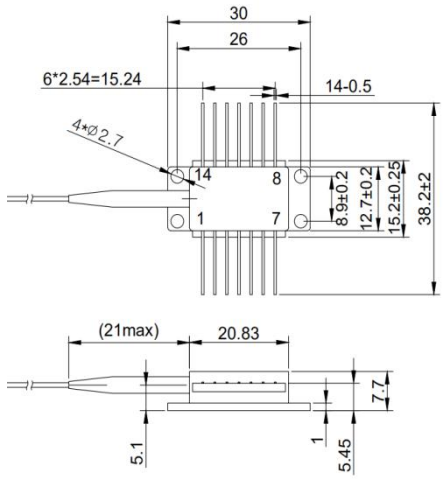
Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Optical Output Power	P_o	0.4	--	20	mW	Iop
Forward Voltage	V_F	--	2	--	V	Iop
Center Wavelength	λc	830	--	870	nm	Iop
Bandwidth FWHM	Bw	15 40*	--	-	nm	Iop
Spectral Ripple	--	--	--	0.2	dB	Iop
Polarization Extinction Ratio	PER	--	--	1	dB	Iop
Thermistor Resistance	RT	9.5	10.0	10.5	KΩ	T=25 °C
Thermistor B-Value	--	--	3950	--	K	25℃/50℃

Remark: * High-Polarization Chip

Dimensions And Pin Description

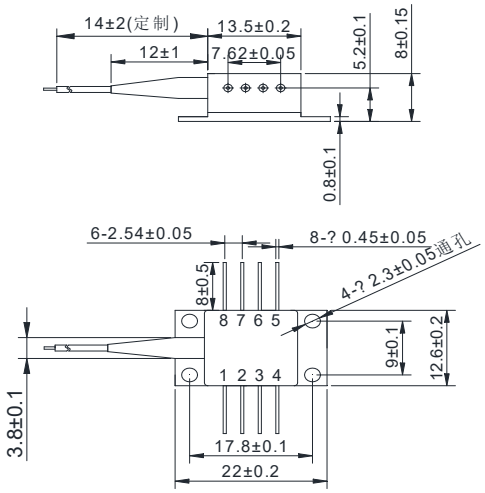
Dimensions are in millimeters. All dimensions are ±0.1mm unless otherwise specified.

Type: pin 14



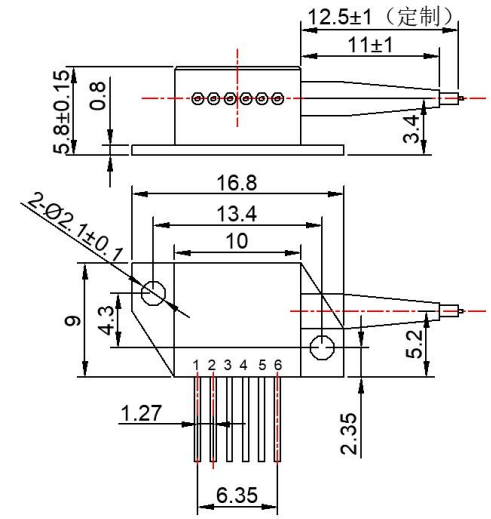
Pin	Description
1	TE Cooler (+)
2	Thermistor
3	N/C
4	N/C
5	Thermistor
6	N/C
7	N/C
8	N/C
9	N/C
10	SLED(+)
11	SLED(-)
12	N/C
13	GND
14	TE Cooler (-)

Type: pin 8



Pin	Description
1	TEC (+)
2	Thermistor
3	Thermistor
4	SLD (+)
5	SLD (-)
6	N/C
7	N/C
8	TEC(-)

Type: pin 6



Pin	Definition
1	SLED (+)
2	SLED (-)
3	Thermistor
4	Thermistor
5	Cooler (-)
6	Cooler (+)

◆ Ordering information

SGSLD-850-XX-XX-XX-X

LD	Wavelength	Output Power	Encapsulation & Fiber selection	Connector	PIN
SGSLD=SLED …	…nm 850=Low Polarization 850H=High Polarization …	…mW 0.4 2 12 …	BS1=BTF 6/125SM Fiber BS2=BTF 6/80SM Fiber BP=BTF 6/80PM Fiber BS=SM Fiber …	00=NO FA=FC/APC FU=FC/UPC SA=SC/APC …	14 8 6

Remark: ESD-sensitive devices; Class 3R laser devices. Implement appropriate protective measures accordingly.

CAUTION:

1. During device testing, ensure the base of the device case is in good contact with the heat sink block.
2. When applying forward operating current to the device, it must be within the specified range. Prevent device damage caused by excessive current.
3. ESD protection measures **must** be taken during operation. Use a grounded wrist strap and finger cots when handling the device. The device should be placed on an anti-static box or anti-static mat. Improper ESD protection will cause permanent damage to the device. Ensure the power is turned off when installing or removing the device.
4. Handle optical fibers with care during operation to avoid breakage or damage. Never pull the device by the fiber.
5. Do not operate the optoelectronic device beyond its rated maximum limits.
6. Do not repeatedly bend or deform the device pins. Avoid applying excessive force.