1450nm OCT Butterfly Superluminescent Laser Emitting Diode

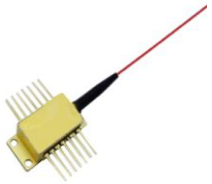
1450nm OCT Superluminescent Laser Emitting Diode (SLED) is a semiconductor optoelectronic product which can output high quality stable Broadband laser light by the pigtail. It's widely used in biomedical imaging application like Optical Coherence Teomography (OCT) system, Fiber Optic Sensor and Broadband Application. The OCT Butterfly SLED with TEC built in to control the temperature, isolator built in to avoid the back reflection laser light. The butterfly SLED Laser driver is available upon request.

Application:

OCT System
Fiber Optic Sensor
Broadband Application
Testing System

Features:

Low Coherence
Low Polarization Sensitivity
TEC, PD and Isolator Built In
High Reliability



Absolute Maxmum Ratings:

Parameter	Symbol	Value	Unit
LD Forward Current	If	600	mA
LD Reverse Voltage	Vr	2	V
Operating Temperature	T	-5~+70	℃
Storage Temperature	T	-40~+85	℃
Solder Temperature	T	260	℃
Lead Solder Time		10	S

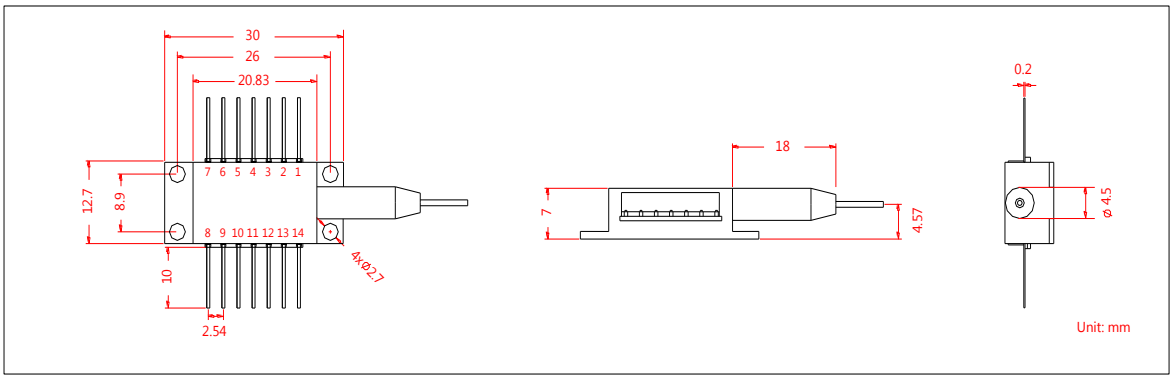
Notice: Above specifications should not be exceeded, or the LD will be seriously damaged.

Optical and Electrical Specification:

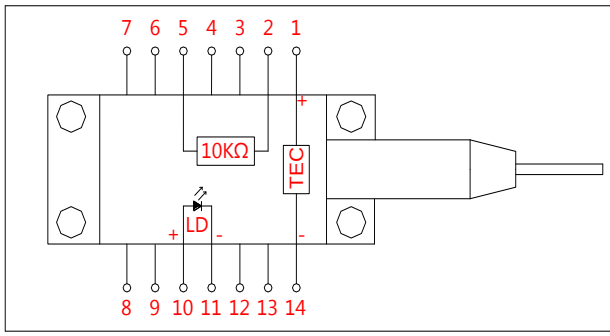
Parameter	Symbol	Min.	Tpy.	Max.	Unit	Test Condition
Center Wavelength	λc	1430	1450	1470	nm	
Optical Power	Po	1	10	20	mW	CW
Spectral Ripple	Δ		0.2	0.4	dB	CW, If=Iop
Optical Isolation	ISO	30			dB	
Threshold Current	Ith		80		mA	CW
Laser Operating Current	Iop		350	600	mA	CW, Po=10mW
Laser Forward Voltage	Vf		2.5	3	V	CW
Laser Reverse Voltage	Vr			2	V	CW
TEC Current	Itec		0.8	1.5	A	
TEC Voltage	Vtec		1.3	3.5	V	
Thermistor Current	Ithe	10		100	uA	
Thermistor Resistance	Rthe	9.5	10	10.5	KΩ	
Thermistor Temperature	T			100	℃	
Fiber Type	SMF-28e Fiber					

Notice: Above specifications are tested at in room temperature at 23℃.
Specifications may change without notice.

Drawing:



Pin Information:



Type A			
1	TEC (+)	14	TEC (-)
2	Thermistor	13	NC
3	NC	12	NC
4	NC	11	LD (-)
5	Thermistor	10	LD (+)
6	NC	9	NC
7	NC	8	Case Ground

Ordering Information (Part Number):

SMSLED-WWWW-OO-FF-J-LL-P-CC

WWWW	OO	P	FF	J	LL	CC
Wavelength	**Optical Power**	**Pin Assingment**	**Fiber Type**	**Fiber Jacket**	**Fiber Length**	**Connector**
1310 - 1310nm 1450 - 1450nm 1550 - 1550nm	01 - 1mW 05 - 5mW 10 - 10mW 20 - 20mW SS - Specify	A - Type A	S2 - SMF-28e	B - 250um Bare Fiber L - 900um Loose Tube	05 - 0.5m 10 - 1.0m 15 - 1.5m 20 - 2.0m SS - Specify	NE - None FA - FC/APC FU - FC/UPC LA - LC/APC LU - LC/UPC SA - SC/APC SU - SC/UPC SS - Specify

Notification:

1. The Semiconductor Optoelectronic products are particulary sensitive of ESD (electro-static discharge), it's recommended to use grounded anti-static wrist straps and grounded anti-static mats before handling the products.
2. Never plug or unplug the products under a living circuit, setting the current supply to zero before switching on or switching off the laser diode.
3. Always take anti-static measures to storage the products when not in use.