

840nm OCT Butterfly Superluminescent Laser Emitting Diode

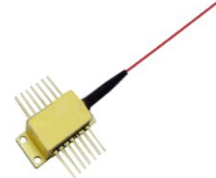
840nm OCT Superluminescent Laser Emitting Diode (SLED) is a semiconductor optoelectronic product which can output high quality stable Broadband laser light by the pigtail. It's widely used in biomedical imaging application like Optical Coherence Tomography (OCT) system, Fiber Optic Sensor and Broadband 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 Maximum Ratings:

Parameter	Symbol	Value	Unit
LD Forward Current	I _f	250	mA
LD Reverse Voltage	V _r	2	V
Operating Temperature	T	-20~+65	°C
Storage Temperature	T	-40~+85	°C
Solder Temperature	T	260	°C
Lead Solder Time		10	S

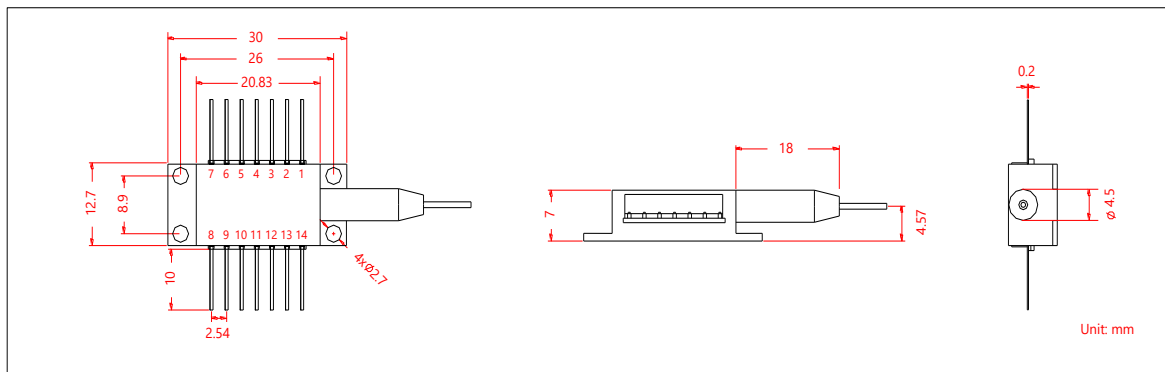
Notice: Above specifications should not be exceeded, or the LD will be seriously damaged.

Optical and Electrical Specification:

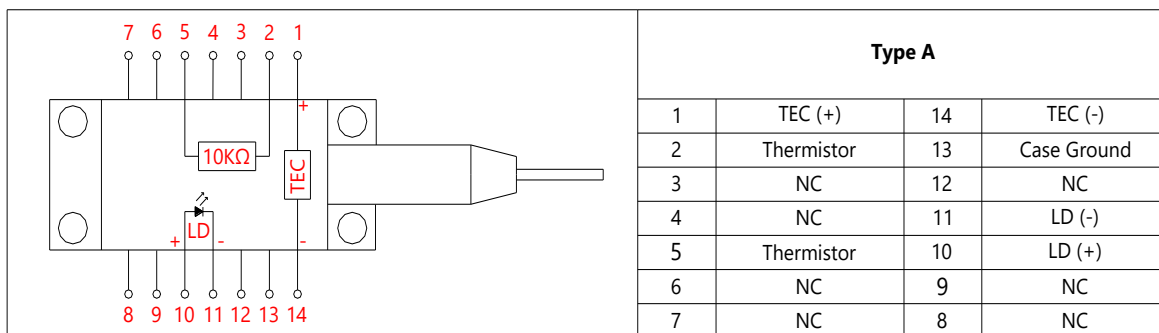
Parameter	Symbol	Min.	Tpy.	Max.	Unit	Test Condition
Center Wavelength	λ_c	820	840	860	nm	
Optical Power	P _o	10			mW	CW, I _f =180mA
Spectral Ripple	Δ		0.1	0.2	dB	CW, I _f =I _{op}
Laser Operating Current	I _{op}		180	220	mA	CW, P _o =10mW
Laser Reverse Voltage	V _r			2	V	CW
TEC Current	I _{tec}			2	A	
TEC Voltage	V _{tec}			3.5	V	
Thermistor Current	I _{the}			1.2	A	
Thermistor Voltage	V _{the}			3.2	V	
Thermistor Resistance	R _{the}	9.5	10	10.5	K Ω	
Thermistor Temperature	T			100	°C	
Fiber Type		HI 780 Fiber				

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

Drawing:



Pin Information:



Ordering Information (Part Number):

SMSLED-*WWW-OO-FF-J-LL-P-CC*

WWW	OO	P	FF	J	LL	CC
Wavelength	Optical Power	Pin Assingment	Fiber Type	Fiber Jacket	Fiber Length	Connector
830 - 830nm	01 - 1mW	A - Type A	H7 - HI 780	B - 250um Bare Fiber	05 - 0.5m	NE - None
840 - 840nm	05 - 5mW			L - 900um Loose Tube	10 - 1.0m	FA - FC/APC
850 - 850nm	10 - 10mW				15 - 1.5m	FU - FC/UPC
SSS - Specify	SS - Specify				20 - 2.0m	LA - LC/APC
					SS - Specify	LU - LC/UPC
						SA - SC/APC
						SU - SC/UPC
						SS - Specify

Notification:

1. The Semiconductor Optoelectronic products are particularly 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.

