Light

CHAPTERS

Incoherent

Electronics

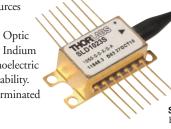
Drivers/Mounts

Sources

Quantum

1280 nm Superluminescent Diode

Superluminescent Diodes (SLDs) are excellent high-power broadband light sources for use as ASE Light Sources and in applications like Optical Coherence Tomography (OCT) Imaging Systems and Fiber Optic Gyroscopes (FOGs). The SLD offered here is an Indium Phosphide (InP) device with an integrated thermoelectric cooler (TEC) and thermistor to ensure output stability. The output is coupled into 1.5 m of SM fiber terminated with an FC/APC connector.





- 14-Pin Butterfly Package
- Integrated TEC and Thermistor
- SM Fiber-Coupled Output with an FC/APC Connector

1400

1450

SLD1023S

1.0

0.8

0.6

0.4

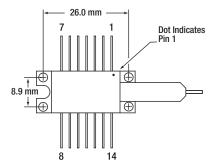
02

0.0

1200

Normalized Intensity

Butterfly Package



Pin Description

2

+TEC 14 -TEC 1 Thermistor 13 Case 3 NC 12 NC 4 NC 11 SLD Cathode 5 Thermistor 10 SLD Anode 6 NC 9 NC 7 NC 8 NC

Butterfly packages may be mounted in the LM14S2 (see page 1482) or LDC1300B (see page 1483) mount.

Optical-Electrical Characteristics

ITEM #	SLD1023S			
Characteristic	Symbol	Min	Typical	Max
Center Wavelength	$\lambda_{\rm C}$	1270 nm	1280 nm	1290 nm
ASE Power*	-	10 mW	15 mW	-
Optical 3 dB Bandwidth*	BW	40 nm	45 nm	-
RMS Gain Ripple*	ΔG	-	-	0.35 dB
Operating Current	I _{OP}	-	600 mA	800 mA
Forward Voltage*	V _F	-	1.4 V	2.0 V
TEC Current**	I _{TEC}	-	0.3 A	1.5 A
TEC Voltage**	V _{TEC}	-	0.6 V	3.5 V
Thermistor Resistance	R _{TH}	-	10 kΩ	-

*@ I_{op} ** Typical / Max at T_{CASE} = 25 °C / 65 °C

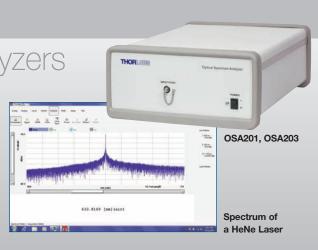
ITEM #	\$	£	€	RMB	DESCRIPTION
SLD1023S	\$ 2,150.50	£ 1,548.36	€ 1.870,94	¥ 17,139.49	15 mW SLD, BW: 45 nm, CWL = 1280 nm, Butterfly Pkg, SM Fiber, FC/APC

Have you seen our...



- Resolve Spectral Characteristics in the 350 1100 nm or 1000 - 2500 nm Range
- Resolution: 10 pm @ 633 nm; 60 pm @ 1550 nm
- Wavelength Accuracy: <1 pm ٠

Thorlabs' Optical Spectrum Analyzers are ideal for wavelength and spectral characterization measurements, making them useful tools for many lab applications. Two versions are offered for analyzation of light in the 350 - 1100 nm or 1000 - 2500 nm wavelength range.



Wavelength (nm) SLD1023S: Optical Power and Forward Voltage

1350

- I = 500 mA

1300

1250

SLD1023S: Optical Spectrum

