

For current pricing, please see our website.

CHAPTERS

Coherent Sources

Incoherent Sources

Quantum Electronics

Drivers/Mounts

Accessories

SECTIONS

Gain Chips

Optical Amplifiers

Superluminescent Diodes

Fabry-Perot Lasers

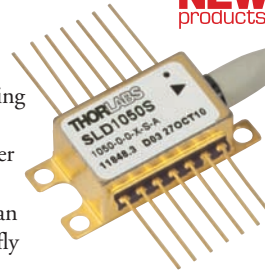
Single Frequency Lasers

Optical Modulators

1050 nm Superluminescent Diodes

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). These Indium Phosphide (InP) devices have an integrated thermoelectric cooler (TEC) and thermistor to ensure output stability. The output is coupled into 1.5 m of either SM or PM fiber terminated with an FC/APC connector. Each SLD is available in a standard butterfly package (see drawing below for details).

NEW
products



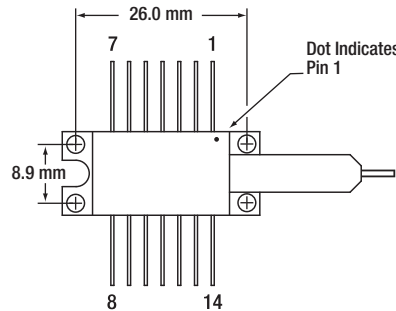
SLD1050S

Features

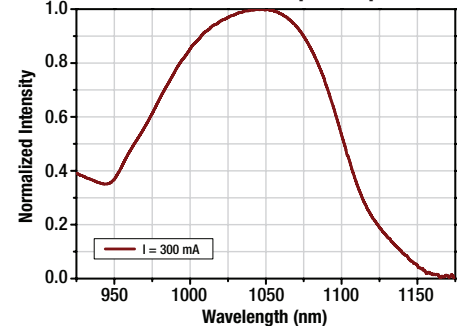
- 14-Pin Butterfly Package
- Integrated TEC and Thermistor
- SM or PM Fiber-Coupled Output with an FC/APC Connector

Pin Descriptions

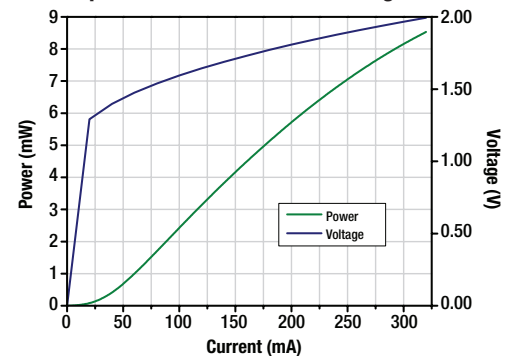
1 +TEC	14 -TEC
2 Thermistor	13 Case
3 NC	12 NC
4 NC	11 Device Cathode
5 Thermistor	10 Device Anode
6 NC	9 NC
7 NC	8 NC



SLD1050S/SLD1050P Optical Spectrum



SLD1050S/SLD1050P Optical Power and Forward Voltage



Optical-Electrical Characteristics

ITEM #	Symbol	SLD1050S/SLD1050P		
Characteristic	Symbol	Min	Typical	Max
Center Wavelength	λ_C	1030 nm	1050 nm	1070 nm
ASE Power*	-	6 mW	8 mW	-
Optical 3 dB Bandwidth*	BW	40 nm	50 nm	-
RMS Gain Ripple*	ΔG	-	0.1 dB	0.25 dB
Operating Current	I_{OP}	-	-	300 mA
Forward Voltage*	V_F	-	2.0 V	2.5 V
TEC Current**	I_{TEC}	-	0.25 A	1.5 A
TEC Voltage**	V_{TEC}	-	0.30 V	4.0 V
Thermistor Resistance	R_{TH}	-	10 k Ω	-

*@ I_{OP} ** Typical / Max at $T_{CASE} = 25^\circ C / 70^\circ C$

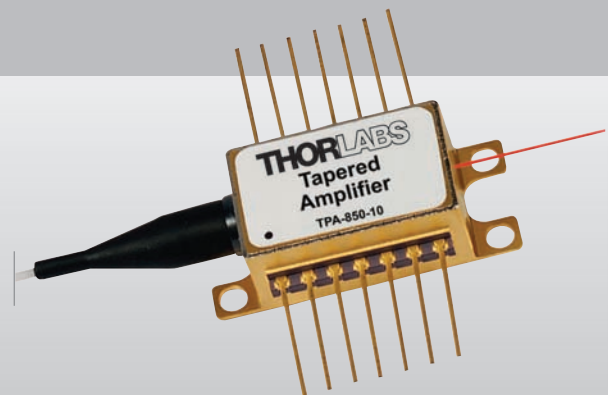
ITEM #	\$	£	€	RMB	DESCRIPTION
SLD1050S	\$ 1,500.00	£ 1,080.00	€ 1,305.00	¥ 11,955.00	8 mW SLD, BW: 50 nm, CWL = 1050 nm, Butterfly Pkg, SM Fiber, FC/APC
SLD1050P	\$ 1,650.00	£ 1,188.00	€ 1,435.50	¥ 13,150.50	8 mW SLD, BW: 50 nm, CWL = 1050 nm, Butterfly Pkg, PM Fiber, FC/APC

Have you seen our...

Tapered Amplifiers

- ◆ 20 nm FWHM Gain Range
- ◆ 1 W Output Power

Thorlabs' Tapered Amplifiers consist of an amplifier integrated into a 14-pin butterfly package. Within this package, we have fiber coupled the amplifier's input facet to eliminate tedious alignment procedures that customers typically have to perform when working with a component-based tapered amplifier. Our tapered amplifier design incorporates a PM fiber input to simplify connection to a seed laser. A collimating lens and beam-shaping cylindrical lens at the output provide a circular, collimated output beam.



For more details, see page 1396