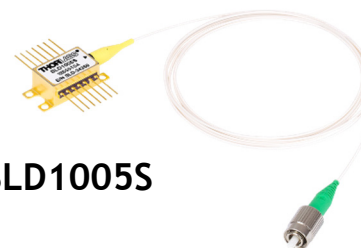


Superluminescent Diode 1550 nm, Butterfly



SLD1005S

Description

The SLD1005S is a 1550 nm, high-power, broadband Superluminescent Diode (SLD) with a near-Gaussian spectral profile and low ripple. This SLD is housed in a standard 14-pin butterfly package with FC/APC-connectorized, nonpolarization-maintaining fiber. An integrated thermistor allows for temperature control, thus stabilizing the power and spectrum.

Specifications

CW; $T_{CHIP} = 25\text{ }^{\circ}\text{C}$, $T_{CASE} = 0 - 65\text{ }^{\circ}\text{C}$

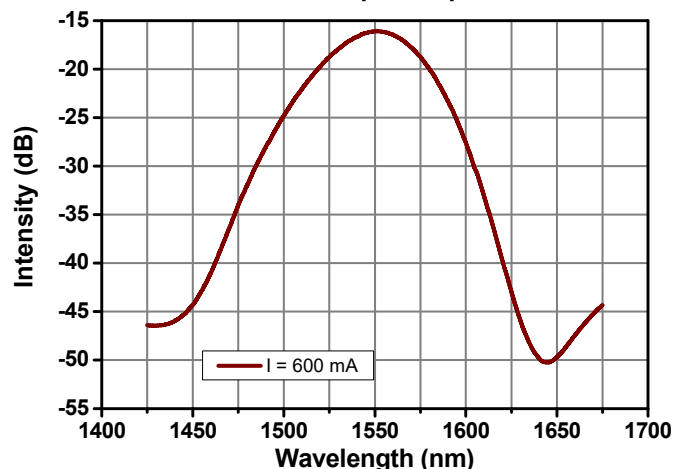
SLD1005S				
	Symbol	Min	Typical	Max
Center Wavelength	λ_C	1530 nm	1550 nm	1570 nm
Operating Current	I_{OP}	-	600 mA	800 mA
ASE Power*	P_{ASE}	20 mW	22 mW	-
Optical 3 dB Bandwidth*	BW	45 nm	50 nm	-
Gain Ripple (rms) *	δG	-	0.2 dB	0.35 dB
Forward Voltage*	V_F	-	1.4 V	1.8 V
TEC Operation (Typical / Max @ $T_{CASE} = 25\text{ }^{\circ}\text{C} / 65\text{ }^{\circ}\text{C}$)				
- TEC Current	I_{TEC}	-	0.3 A	1.5 A
- TEC Voltage	V_{TEC}	-	0.3 V	3.5 V
- Thermistor Resistance	R_{TH}	-	10 k Ω	-

* @ I_{OP}

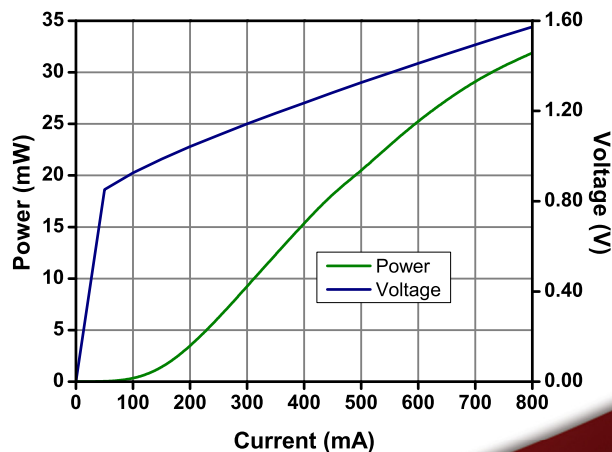


Performance Plots

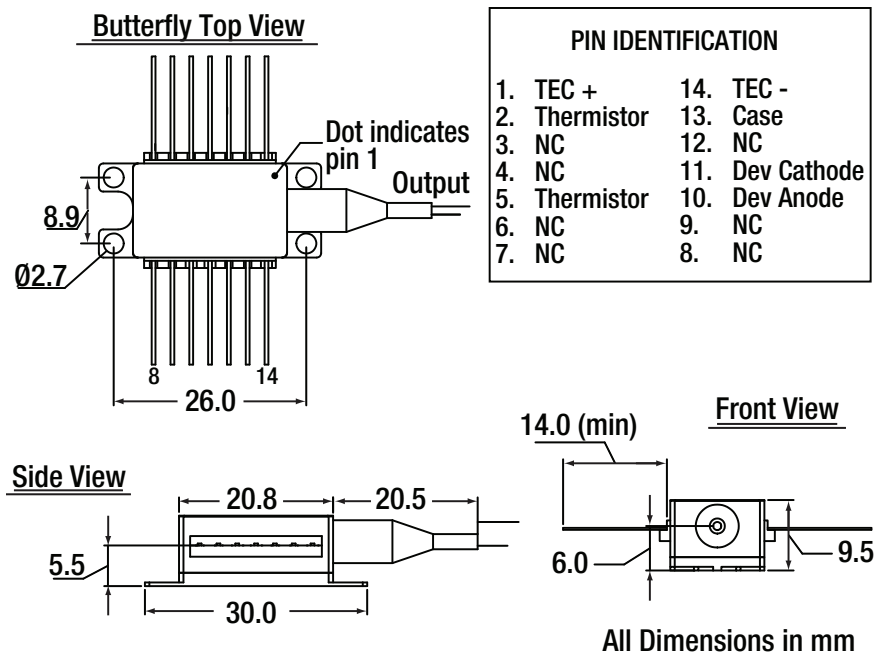
SLD1005S: Optical Spectrum



SLD1005S: Optical Power and Forward Voltage



Drawings



Note: Output isolator and monitor photodiode are available options for butterfly-packaged diodes. Please contact Technical Support for more information.