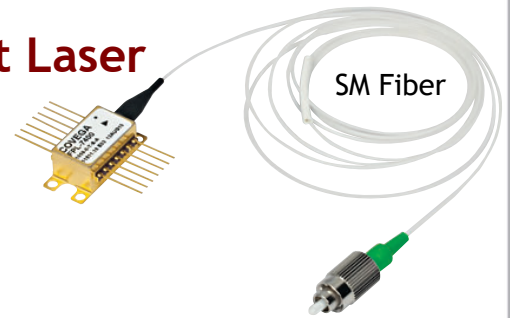


1650 nm Fabry-Perot Laser Butterfly Package



FPL1059S

Description

The FPL1059S is a high power, U-band Fabry-Perot Laser (FPL) Diode based on state-of-the-art, quantum-well epitaxial layer growth and reliable ridge waveguide structure.

These butterfly-packaged lasers are coupled to 1.5 m of FC/APC-connectorized fiber. The FPL1059S uses Single-Mode fiber. An integrated thermistor allows these lasers to be temperature controlled, thus stabilizing the lasing wavelength and power.

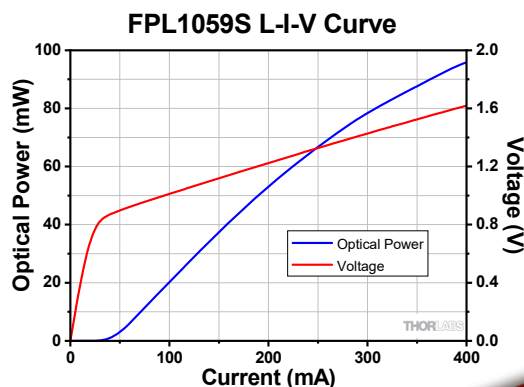
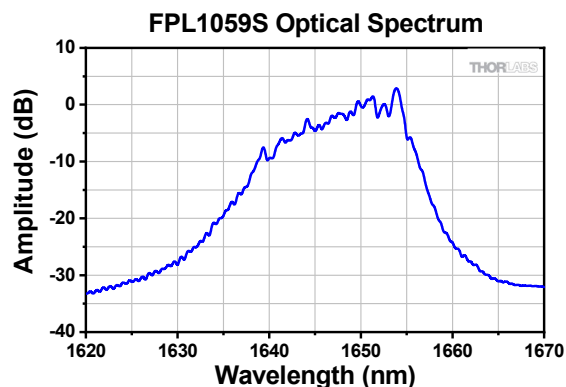
Specifications

CW; $T_{CHIP} = 25\text{ }^{\circ}\text{C}$, $T_{CASE} = 0 - 70\text{ }^{\circ}\text{C}$

FPL1059S				
	Symbol	Min	Typical	Max
Center Wavelength	λ_C	1630 nm	1650 nm	1670 nm
Operating Current	I_{OP}	-	400 mA	500 mA
Optical Power @ I_{OP}	P_{OUT}	60 mW	80 mW	-
Spectral Bandwidth (rms)	$\Delta\lambda$	-	10 nm	20 nm
Threshold Current	I_{TH}	-	45 mA	65 mA
Slope Efficiency	$\Delta P/\Delta I$	0.15 W/A	0.25 W/A	-
Forward Voltage @ I_{OP}	V_F	-	1.7 V	2.5 V
TEC Operation (Typical / Max @ $T_{CASE} = 25\text{ }^{\circ}\text{C} / 70\text{ }^{\circ}\text{C}$)				
- TEC Current	I_{TEC}	-	0.25 A	1.5 A
- TEC Voltage	V_{TEC}	-	0.35 V	3.5 V
- Thermistor Resistance	R_{TH}	-	10 k Ω	-

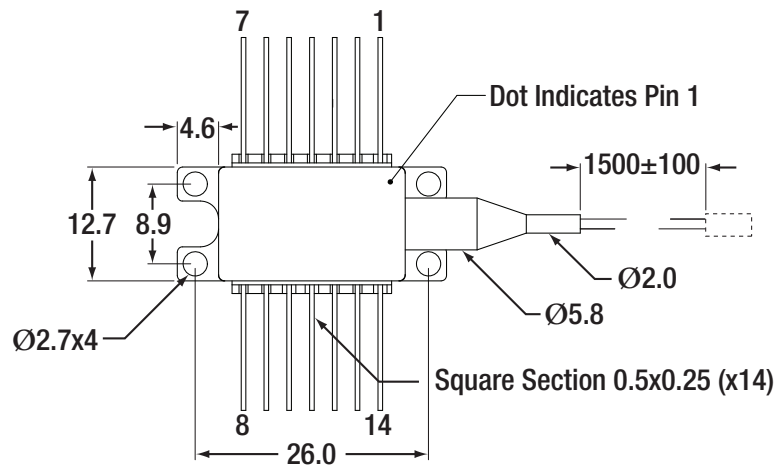


Performance Plots



Drawings

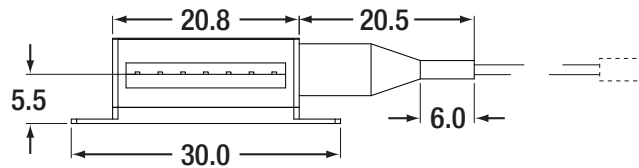
Butterfly Top View



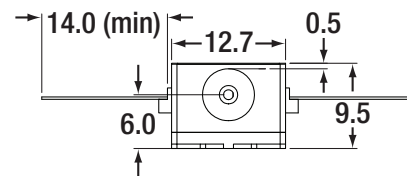
PIN IDENTIFICATION

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

Butterfly Side View



Butterfly Front View



All Dimensions in mm