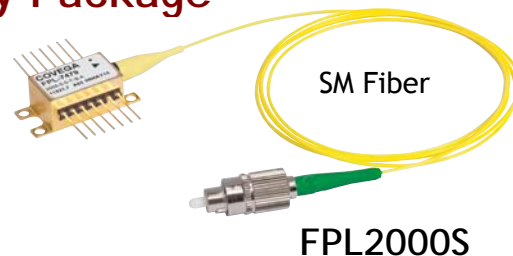


## 2000 nm Fabry-Perot Laser Butterfly Package



### Description

The FPL2000 series laser is a high power Fabry-Perot Laser diode (FPL) based on state-of-the-art, quantum-well epitaxial layer growth and reliable ridge waveguide structure.

The FPL2000S is housed in a standard, 14-pin butterfly package with an integrated thermoelectric cooler and thermistor. The output fiber is newly developed 2000 nm single-mode fiber with a larger optical core and significantly lower bend-loss sensitivity compared to SMF-28 fiber. SMF-28 is available as an option for applications requiring compatibility.

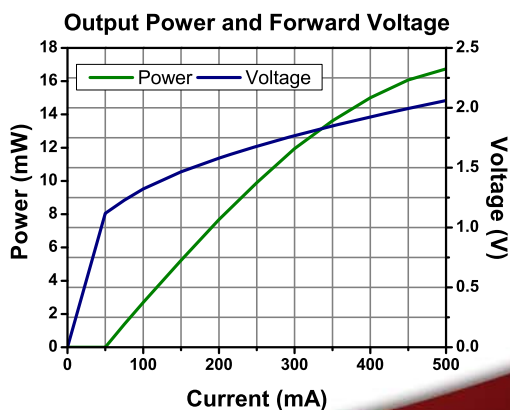
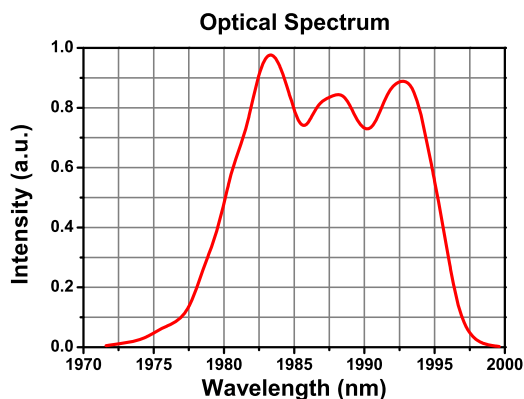
### Specifications

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

FPL2000S				
	Symbol	Min	Typical	Max
Center Wavelength	$\lambda_C$	1980 nm	2000 nm	2020 nm
Operating Current	$I_{OP}$	-	400 mA	500 mA
Optical Power @ $I_{OP}$	$P_{OUT}$	10 mW	15 mW	-
Spectral Bandwidth (rms)	$\Delta\lambda$	-	15 nm	-
Threshold Current	$I_{TH}$	-	55 mA	80 mA
Slope Efficiency	$\Delta P / \Delta I$	-	0.05 W/A	-
Forward Voltage @ $I_{OP}$	$V_F$	-	2.0 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 $\Omega$	-

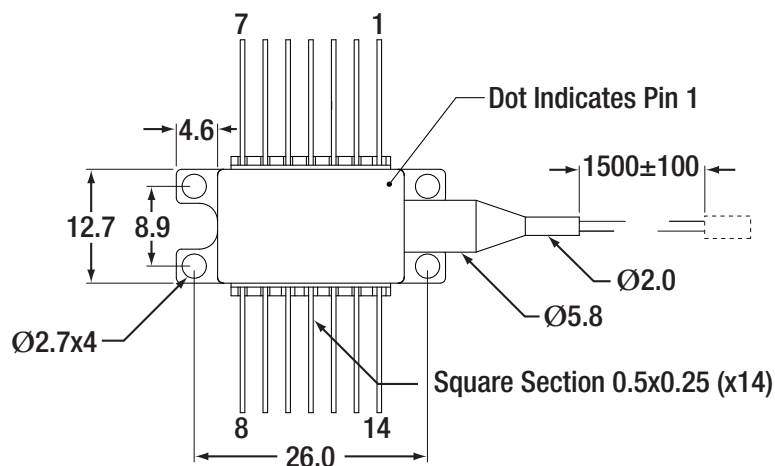


### Performance Plots



## Drawings

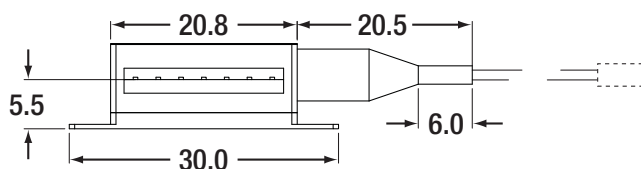
### Butterfly Top View



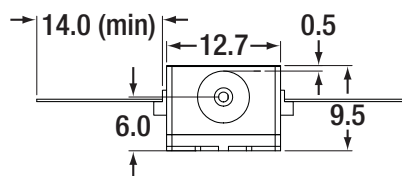
### PIN IDENTIFICATION

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