

### Description

The FPL1009SXL 1550 nm Fabry-Perot Laser Diode is based on quantum well epitaxial layer growth and a highly reliable ridge waveguide structure. This device is housed in a high performance, 14-pin butterfly package and coupled to 1.5 m of FC/APC-connectorized single mode fiber.

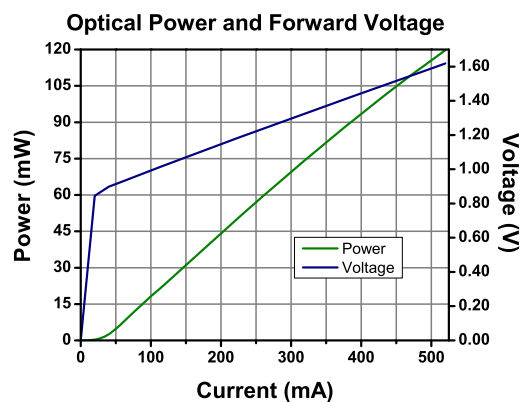
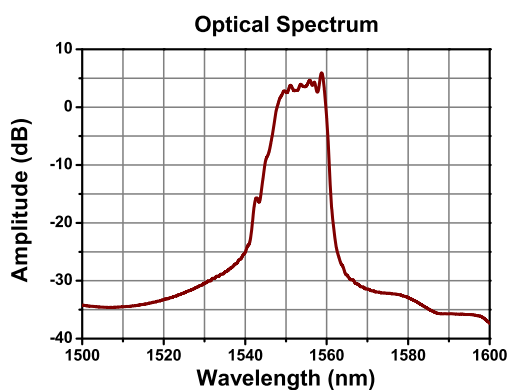
### Specifications

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



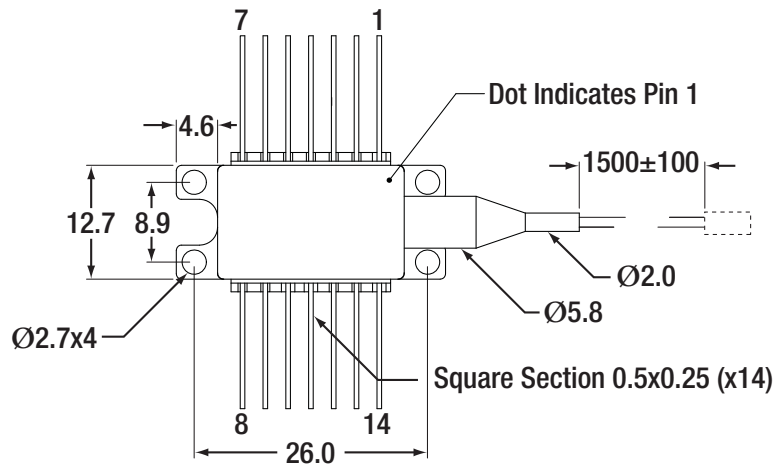
FPL1009SXL				
Electrical	Symbol	Min	Typical	Max
Operating Current	$I_{OP}$	-	400 mA	500 mA
Center Wavelength	$\lambda_C$	1530 nm	1550 nm	1570 nm
Spectral Bandwidth (RMS)	$\Delta\lambda$	-	-	18 nm
Output Power over C-Band	$P_{OUT}$	100 mW	-	-
Threshold Current	$I_{TH}$	-	38 mA	45 mA
Slope Efficiency	$\Delta P/\Delta I$	0.2 W/A	0.3 W/A	-
Forward Voltage	$V_F$	-	1.4 V	1.6 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

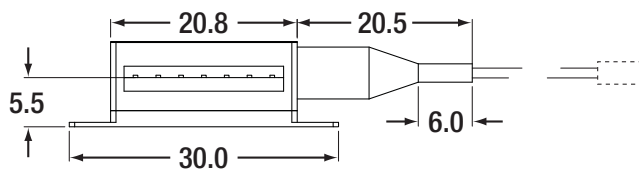
### Butterfly Top View



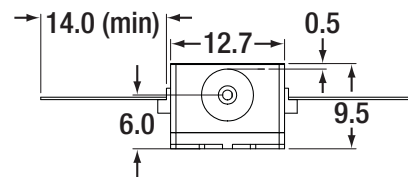
### PIN IDENTIFICATION

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