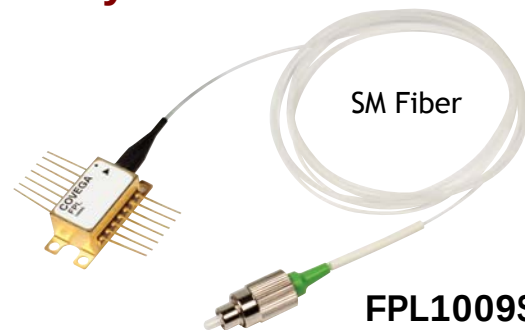




SM Fiber

FPL1009S

Description

The FPL1009S 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.

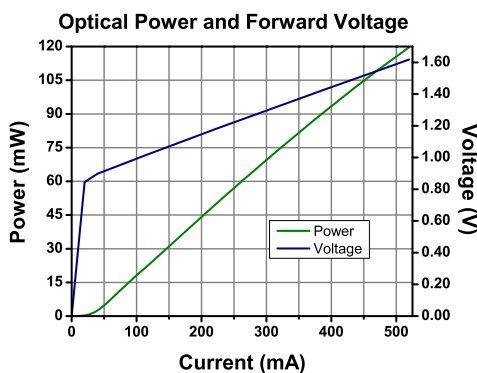
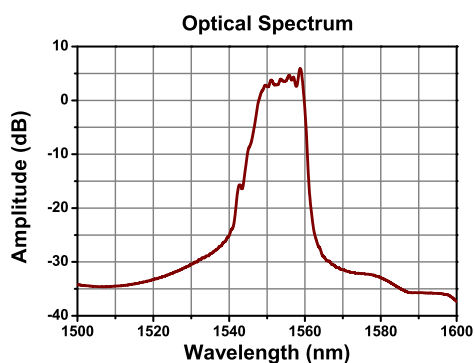
Specifications

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



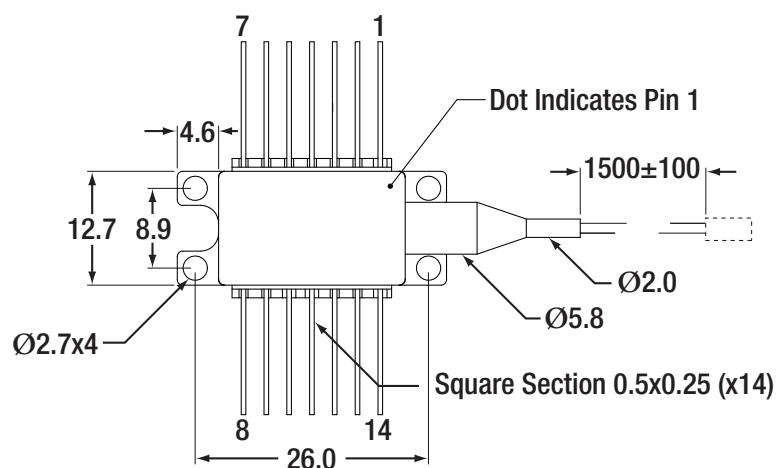
FPL1009S				
	Symbol	Min	Typical	Max
Electrical				
Operating Current	I_{OP}	-	400 mA	500 mA
Center Wavelength	λ_C	1530 nm	1550 nm	1570 nm
Spectral Bandwidth (RMS)	$\Delta\lambda$	-	10 nm	20 nm
Output Power over C-Band	P_{OUT}	80 mW	100 mW	-
Threshold Current	I_{TH}	-	35 mA	55 mA
Slope Efficiency	$\Delta P/\Delta I$	0.2 W/A	0.3 W/A	-
Forward Voltage	V_F	-	1.4 V	1.8 V
TEC Operation (Typical / Max @ $T_{CASE} = 25\text{ }^{\circ}\text{C}$ / $70\text{ }^{\circ}\text{C}$)				
TEC Current	I_{TEC}	-	0.18 A	1.5 A
TEC Voltage	V_{TEC}	-	0.5 V	3.5 V
Thermistor Resistance	R_{TH}	-	10 k Ω	-

Performance Plots



Drawings

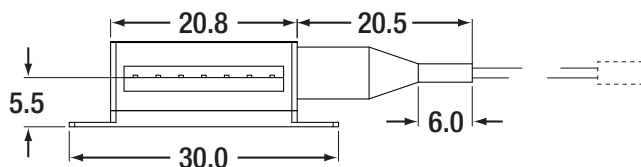
Butterfly Top View



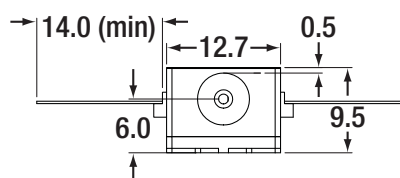
PIN IDENTIFICATION

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