### 1625 nm Fabry-Perot Laser diode

## Description

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The FPL1054C 1625 nm Fabry-Perot Laser Diode is based on quantum well epitaxial layer growth and a highly reliable ridge waveguide structure. This diode features high optical output power and slope efficiency. The FPL1054C is a chip on submount measuring 3 mm x 5 mm and is ideal for incorporation into OEM solutions.

#### **Specifications**

 $T_{CHIP} = 25$  °C

FPL1054C				
	Symbol	Min	Typical	Max
Center Wavelength	λ	1605 nm	1625 nm	1645 nm
Spectral Bandwidth (RMS)	Δλ	-	7 nm	12 nm
Output Power Pulsed @ I <sub>PULSE</sub>	P <sub>PULSED</sub>	250 mW	-	-
Output Power CW @ I <sub>cw</sub>	P <sub>CW</sub>	130 mW	-	-
Operating Current Pulsed*	I <sub>PULSE</sub>	-	750 mA	1000 mA
Operating Current CW	I <sub>CW</sub>	-	400 mA	500 mA
Threshold Current	I <sub>TH</sub>	-	45 mA	55 mA
Forward Voltage	V <sub>F</sub>	-	2.0 V	3.0 V
Transverse Beam Divergence Angle	θτ	-	28°	37°
(FWHM) [CW at 400 mA]				
Lateral Beam Divergence Angle	$\theta_L$	-	15°	23°
(FWHM) [CW at 400 mA]			-	-
*OCW (Current Pulse Width = 10 us: Duty Cycle = $1\%$ ): T <sub>cup</sub> = 25 °C				

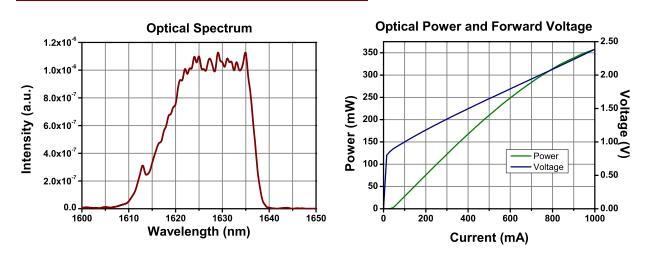
\*QCW (Current Pulse Width = 10  $\mu$ s; Duty Cycle = 1%); T<sub>CHIP</sub> = 25 °C



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## **Performance Plots**



Drawings

