

Production and Quality Control Data Sheet *DL pro L*



QM-Form: F-022

Date Form: 08.06.04

Version: 02

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01 General

Order Number: VB.09.1195
Serial Number DL pro L: 11152

Customer: Yale University
Production Date: 16.09.2009

02 Customer's Specifications

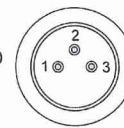
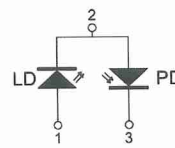
Wavelength: 690.0 nm
Coarse Tuning:

Output Power: 20.0 mW
Mode Hop Free Tuning: 15.0 GHz

03 Laser Diode

Article Number: #LD-0690-0035-1
Serial Number: 8K1357

Laser Diode Pinning



Pin1: LD Anode
Pin2: Common, GND
Pin3: PD Cathode

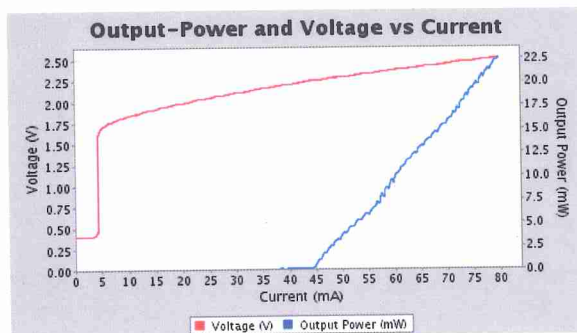
Positive Laser Diode
(Bottom View)

04 Stabilized Diode Laser

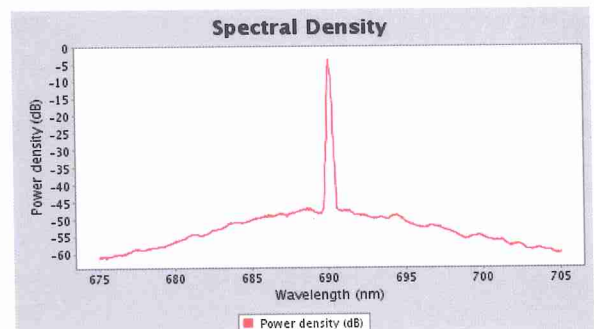
Wavelength: 690.0 nm

Lasing Threshold: 44 mA
Slope Efficiency: 0.635 W/A

Output Power vs. Current Characteristics



Optical Spectrum



Factory Settings:

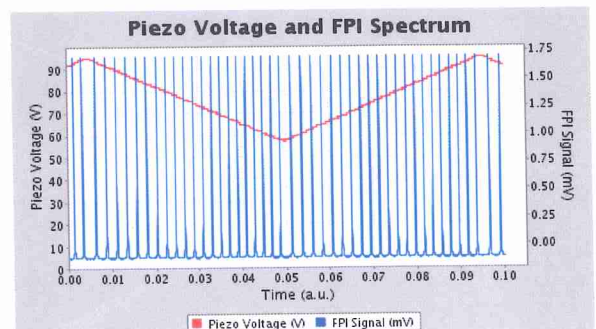
Set Power: 19.0 mW
Set Current: 75 mA
Set Temperature: 20.0 °C
Mode Hop Free Tuning: 21 GHz
Scan Amplitude: 38 V
Scan Offset: 76 V

Maximum Values:

Maximum Power: 21.5 mW
Maximum Current: 80 mA
Maximum Voltage: 2.82 V

Maximum MHFTR: 29 GHz @ 73.5 mA

FPI Signal (FSR= 1GHz)



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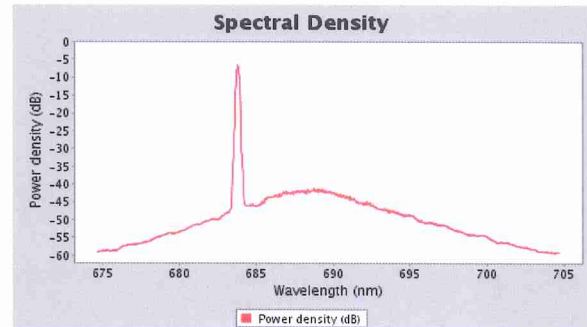
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05 Coarse Tuning

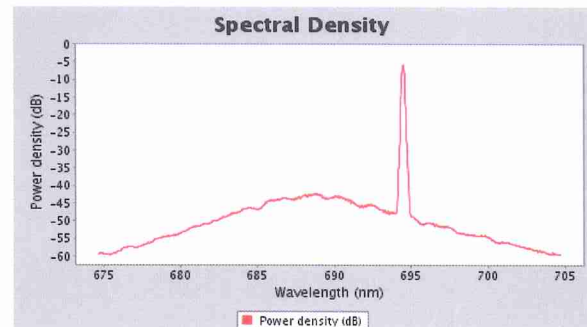
Minimum Wavelength: 683.8 nm
Lasing Threshold: 48 mA
Temperature: 19.9 °C
Maximum Power: 18.9 mW
Maximum Current: 80 mA

Optical Spectrum



Maximum Wavelength: 694.5 nm
Lasing Threshold: 51 mA
Temperature: 19.9 °C
Maximum Power: 19.7 mW
Maximum Current: 80 mA

Optical Spectrum

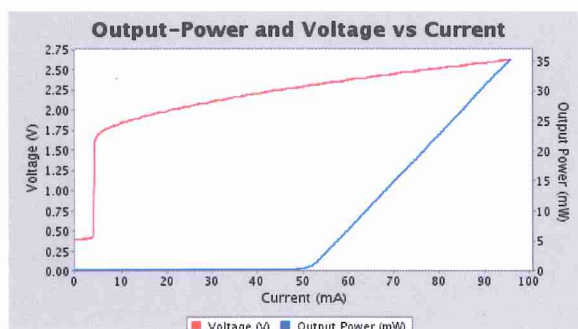


06 Free Running Laser Diode

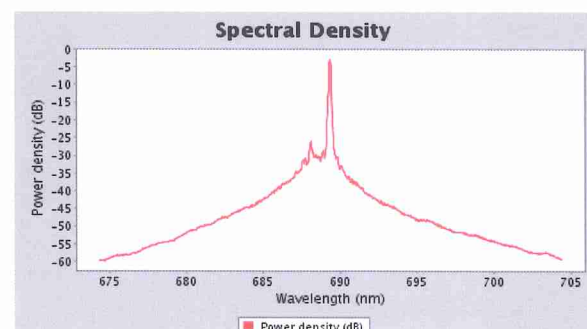
Wavelength: 689.4 nm
Lasing Threshold: 51 mA
Maximum Power: 35.3 mW
Maximum Current: 96 mA

Temperature: 20.0 °C
Slope Efficiency: 0.789 W/A

Output Power vs. Current Characteristics

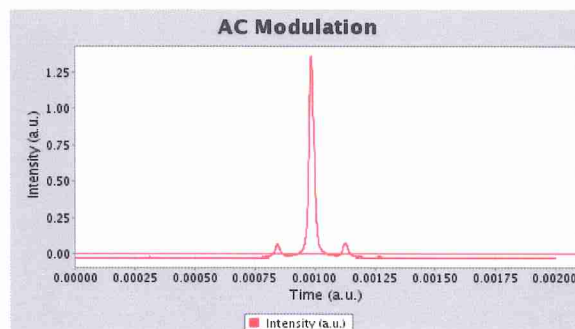


Optical Spectrum



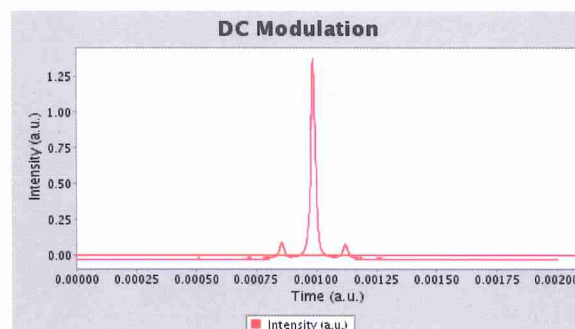
07 RF-Modulation (AC coupled)

Modulation Frequency: 20 MHz
RF Power (50 Ω -Source): -4.0 dBm



08 RF-Modulation (DC coupled)

Modulation Frequency: 20 MHz
RF Power (50 Ω -Source): -3.0 dBm



09 Integrated Isolator

Isolator:

Power before Isolator:

Isolator not installed

10 Integrated Fiber Coupling

Power before Fiber:

Fiber Coupling not installed

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11 Laser Optics

Collimator Lens: #OK-000813 **Optical Grating:** #OK-000090
Beam Steering Mirror: yes

12 Serial Numbers Electronics

DC 110/19": 02279
DC 110 Mon: 02587
DCC 110_100mA: 01223
DTC 110: 03323
SC 110: 02465
DCB 110: 01708
DIGILOCK 110: 01110
DIGILOCK 110: 01090

13 Jumper Settings Plug-in Modules

DCC 110: External input via DA# 0 backplane line
SC 110: Feed forward via DA# 0 backplane line
SC 110: External input via DA# 2 backplane line

15 Quality Control

Production:  **Date:** 16.09.2009

Final Check:  **Date:** 16.09.2009
Marvin Kurz