

# 785nm Laser Diode, 600mW, Wavelength Stabilized, Narrow Linewidth <0.5nm

- Wavelength Stabilized 785nm Laser
  Diode for Raman Spectroscopy
- Volume Bragg Grating Stabilized Spectral Width: <0.1nm</li>
- Wavelength: 785nm ±0.5nm
- Butterfly Package with TEC and PD Fiber core: 105 μm, 0.22NA Fiber Connector: FC/PC

## RLS-785/600 DATA SHEET

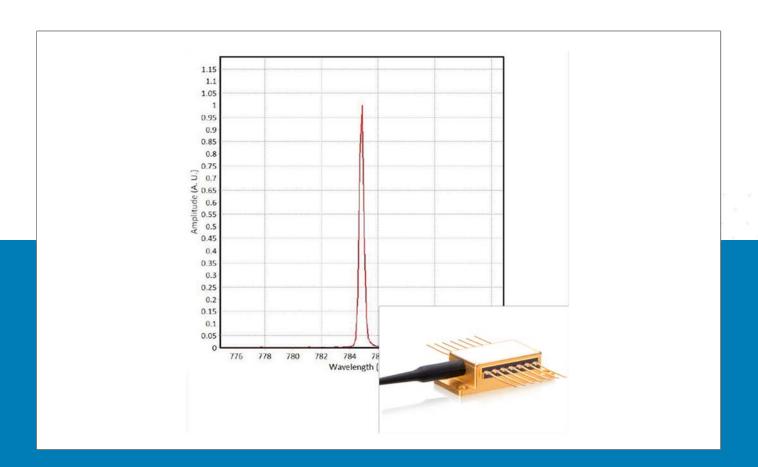






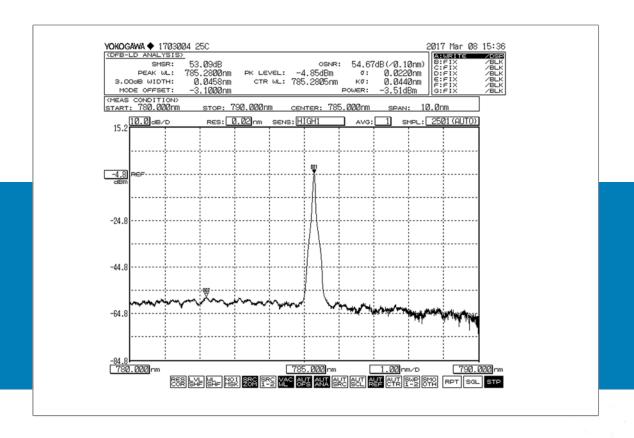
#### RLS-785/600 Product Overview:

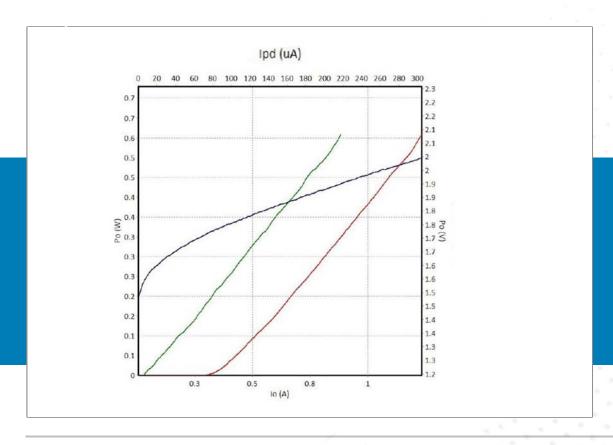
These 785nm, 600mW wavelength stabilized laser diodes are offered in a 14-pin butterfly package. These high power CW mode devices are used for Raman applications as well as metrology, sensing, bio-instrumentation and analytical instrumentation applications. These fiber coupled volume Bragg grating stabilized lasers deliver a very narrow linewidth, a broad operating temperature range and low power consumption. They are offered through Laser Lab Source in North America. They are manufactured by RealLight Technology, an industry leader specializing in the research, development, and manufacturing of semiconductor lasers for spectral analysis and pumping applications.















## LASER SPECIFICATIONS

CW Output Power: 600 mW

Center Wavelength:  $785 \text{ nm} (\pm 0.5 \text{ nm})$ 

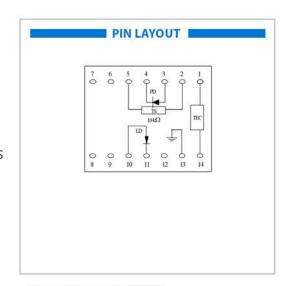
Spectral Width: < 0.1 nm

Temperature Tuning Coefficient: 0.01 nm/degree Celcius

Current Tuning Coefficient: 0.05 nm/A

Side Mode Suppression Ratio: > 40 dB

Slope Efficiency: 0.7 W/A



AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION CLASS IV LASER PRODUCT

### FIBER AND CONNECTOR

Fiber Core Diameter: 105 μm

Numerical Aperture: 0.22 NA

Connector: FC/PC or SMA905 (specify @ time of order)



Threshold Current: 0.36 A

Operating Current: 1.2 A

Operating Voltage: 2.3 V

TEC max Current: 2.2 A

TEC max Voltage: 8.7 V

Monitor Photodiode Range: 2000 μA

Thermistor:  $10 (\pm 5\%) k\Omega (@25\Box)$ 

#### **PRIMARY APPLICATIONS**

Raman Spectroscopy, Analytical Instruments, Biological Research