

### **785nm Laser Diode, 600mW, Wavelength Stabilized, Narrow Linewidth <math><0.5\text{nm}</math>**

- Wavelength Stabilized 785nm Laser Diode for Raman Spectroscopy
- Volume Bragg Grating Stabilized Spectral Width:  $<0.1\text{nm}</math>$
- Wavelength:  $785\text{nm} \pm 0.5\text{nm}</math>$
- Butterfly Package with TEC and PD  
Fiber core:  $105\ \mu\text{m}$ , 0.22NA  
Fiber Connector: FC/PC

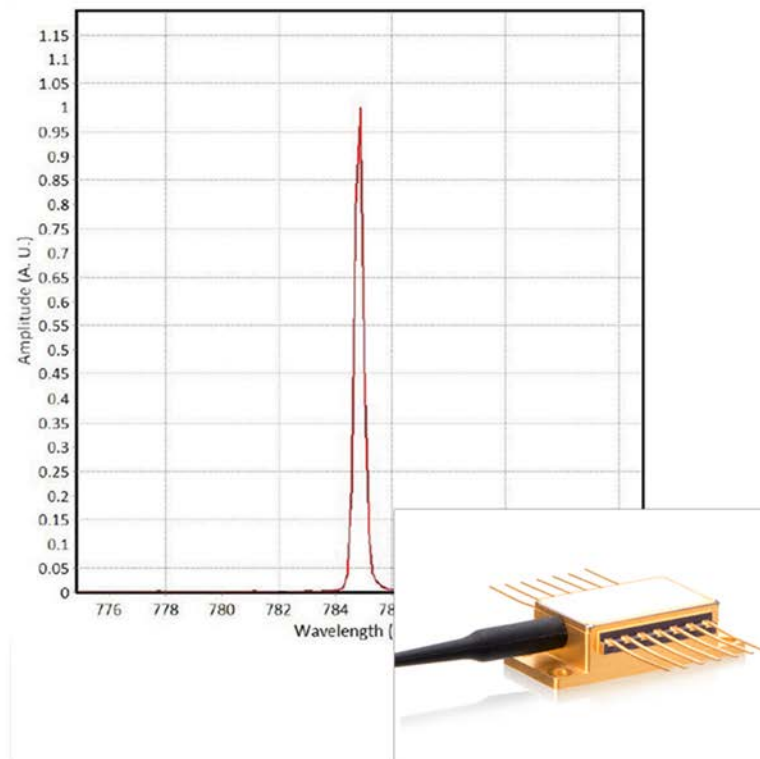
## RLS-785/600 DATA SHEET

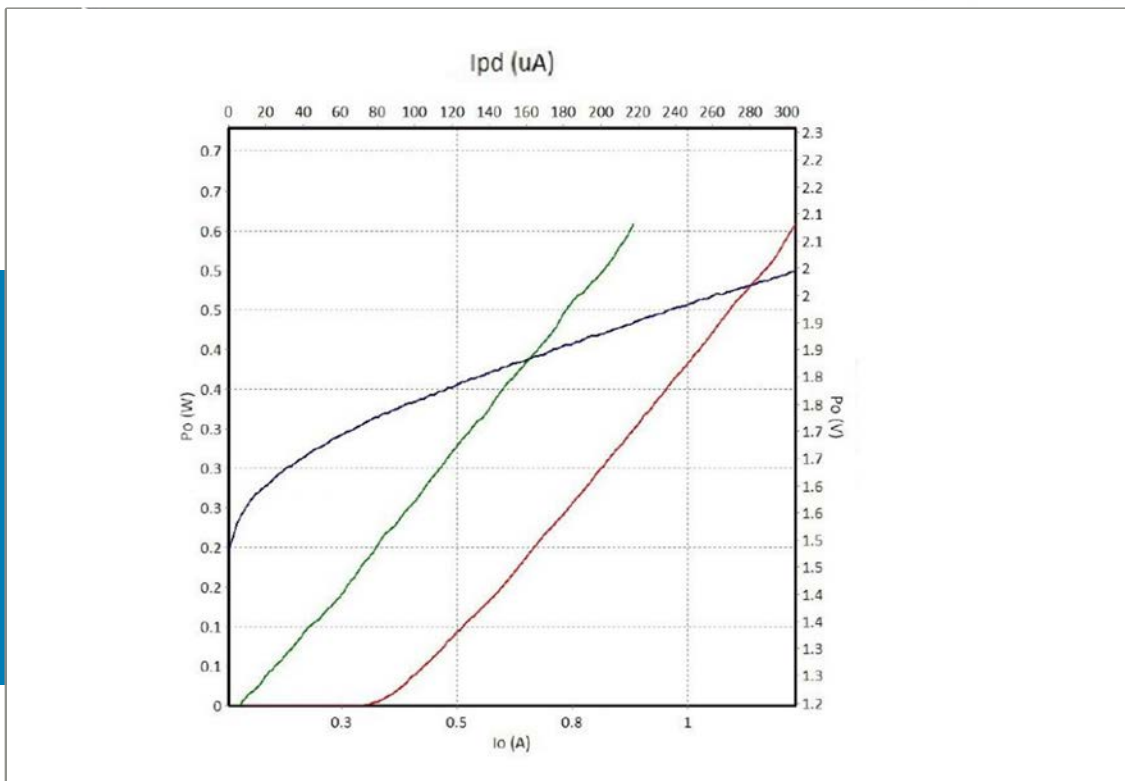
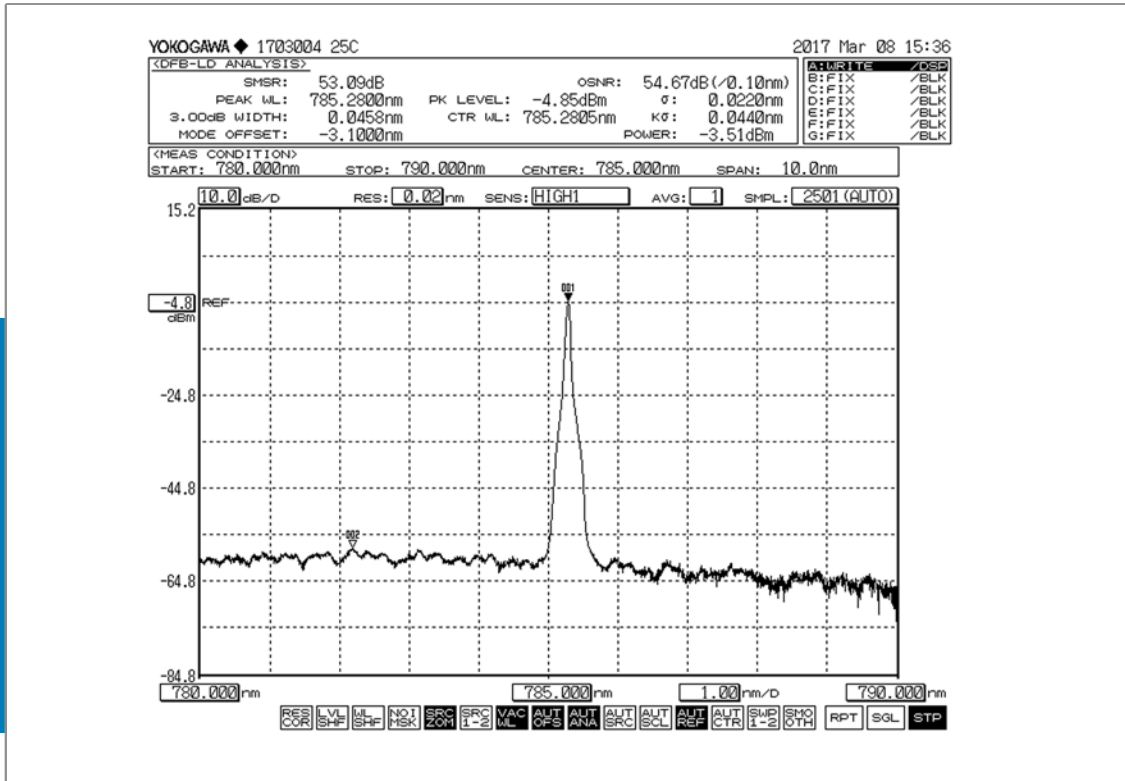
WORLD LEADING PRODUCTS  
FOR LASER SCIENTISTS AND ENGINEERS



### 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.

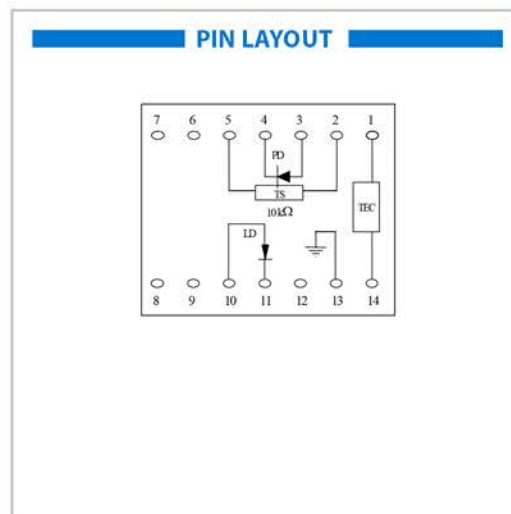






### LASER SPECIFICATIONS

CW Output Power:	600 mW
Center Wavelength:	785 nm ( $\pm 0.5$ 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



### FIBER AND CONNECTOR

Fiber Core Diameter:	105 $\mu$ m
Numerical Aperture:	0.22 NA
Connector:	FC/PC or SMA905 (specify @ time of order)



### ELECTRICAL SPECIFICATIONS

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 $\mu$ A
Thermistor:	10 ( $\pm 5\%$ ) k $\Omega$ (@25 $^{\circ}$ C)

### PRIMARY APPLICATIONS

Raman Spectroscopy, Analytical Instruments, Biological Research