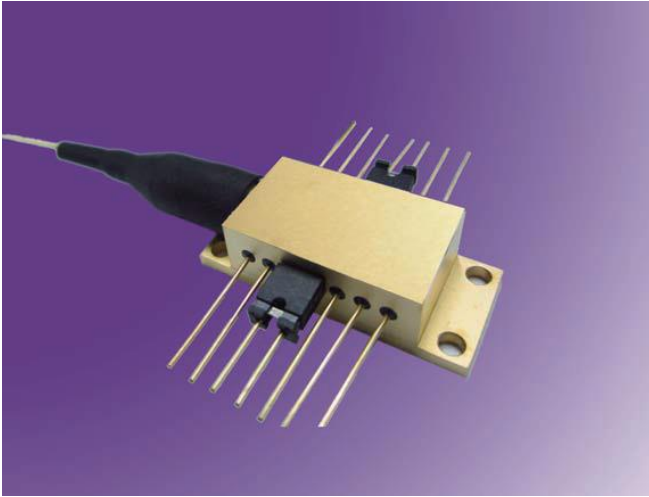


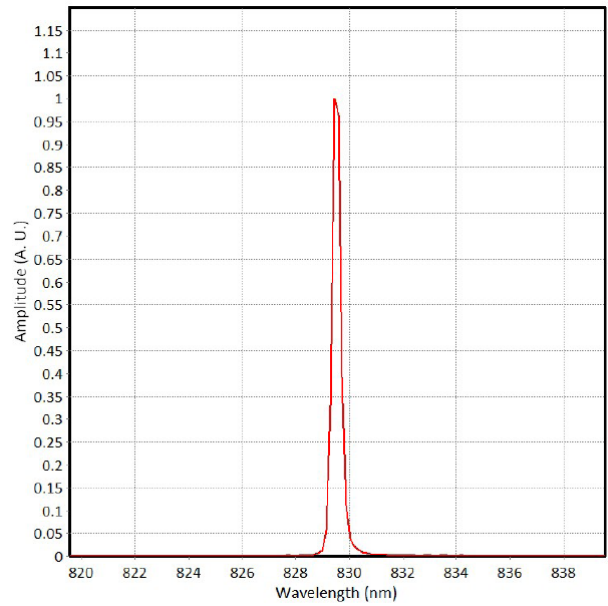
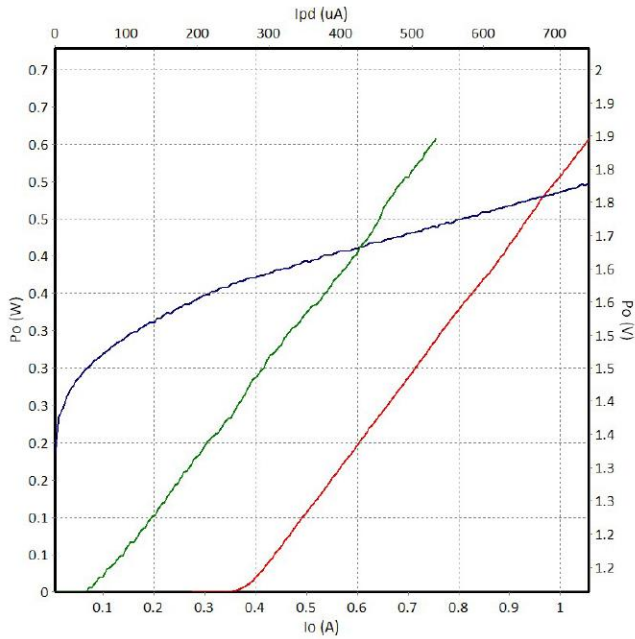
830nm 600mW Wavelength-stabilized Laser Diode Module

R830 ± 0.5-600mWF-14SBTF-TG



Feature
Output power: 600mW
Wavelength: 830±0.5nm
Fiber core: 105 μm, 0.22NA
Wavelength stability
Current range: 0.35~1.1A
Temperature range: 15~30°C
Application
Spectrum
Biology analysis

830nm 600mW Characteristics (25°C)





Typical Device Performance(25°C)

Parameter		Symbol	Typical Value	Unit
			R830 ± 0.5-600mWF-14SBTF-TG	
Optical	CW Output Power	Pop	600	mW
	Center Wavelength	λ_c	830 ± 0.5	nm
	Spectral Width	$\Delta \lambda$	≤ 0.1	nm
	Temperature drift of wavelength	$\Delta \lambda / \Delta T$	0.01	nm/°C
	Current drift of wavelength	$\Delta \lambda / \Delta I_{op}$	0.05	nm/A
Electrical	Threshold Current	I_{th}	0.38	A
	Operating Current	I_{op}	1.10	A
	Operating Voltage	V_{op}	1.84	V
	Slope Efficiency	η_{es}	0.83	W/A
	PD Parameter	IPD	< 2000	μA
	Thermistor	R_t	10 ± 5%/3450	kΩ / β
	TEC max Current	I_{max}	2.2	A
	TEC max Voltage	V_{max}	8.7	V
Fiber	Fiber Core Diameter	dcore	105	μm
	Numerical Aperture	NA	0.22	-
	Connector	-	FC/PC, ST, SMA905	-

Other Parameters

Parameter	Operating Temperature /°C	Operating Relative Humidity /%	Storage Temperature /°C	Storage Relative Humidity /%	Lead Soldering Temperature (max/°C)
Min	10	-	-20	-	-
Max	30	75	70	90	250(10Sec.)

Package Dimensions (mm)

Pin	Function	Pin	Function
1	TEC (+)	8	--
2	Thermistor	9	--
3	PD (P)	10	Laser (+)
4	PD (N)	11	Laser (-)
5	Thermistor	12	--
6	--	13	Shell
7	--	14	TEC (-)

