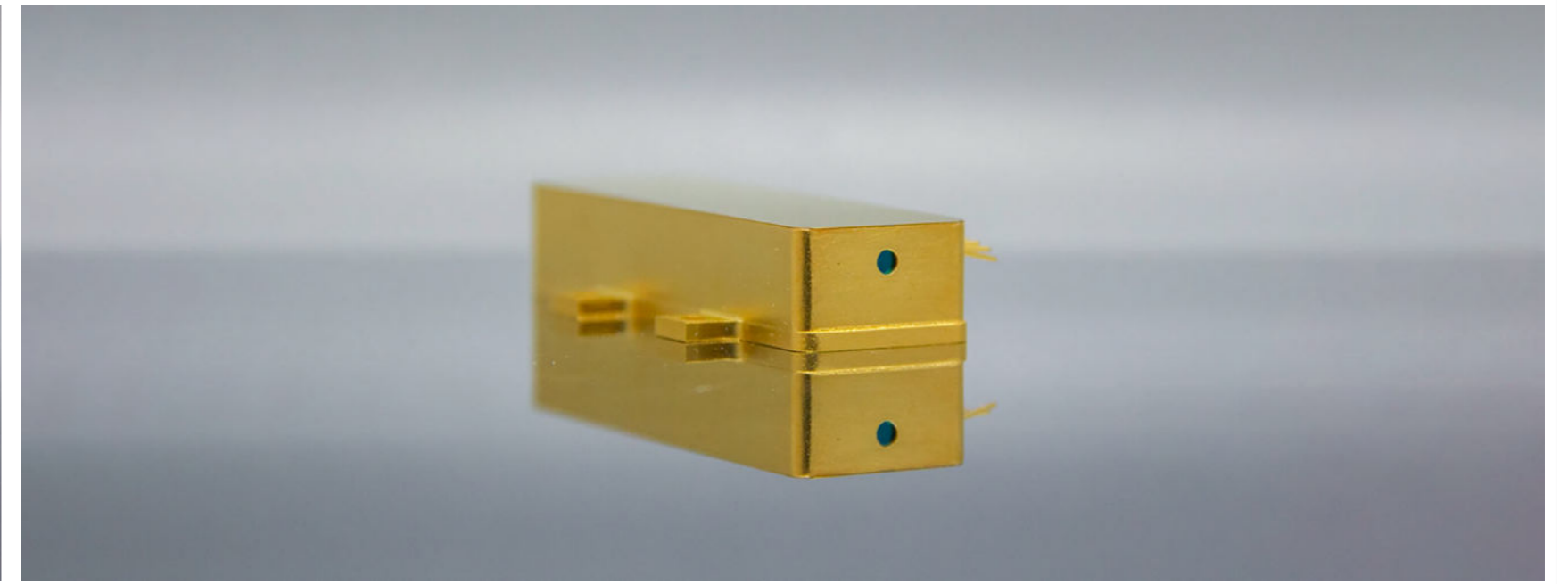
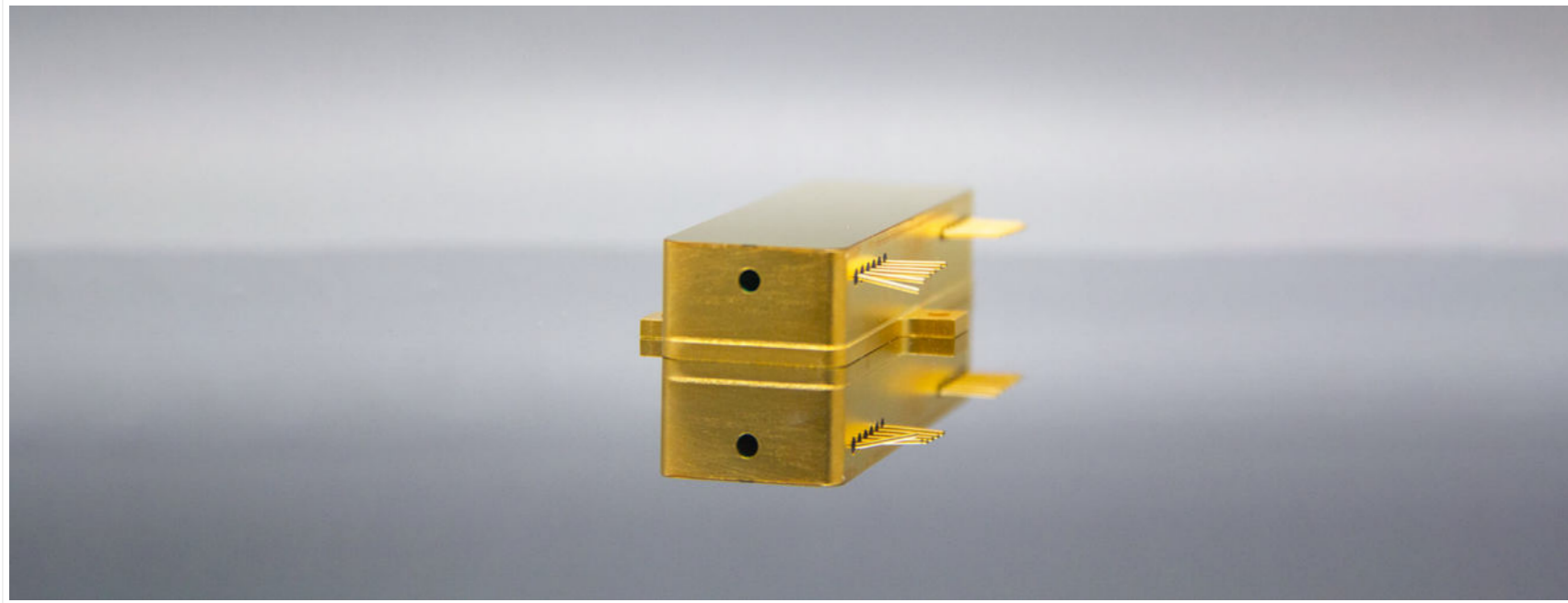


# 785nm Narrow Linewidth Semiconductor Laser Module



## DESCRIPTION

Single mode narrow linewidth laser module is a special product of our company. It is equipped with standard I / O interface, which can be easily embedded into the user's whole system and realize very stable single mode narrow linewidth laser output. The product has built-in optimized optical feedback power stabilization module and Tec refrigeration module, which makes the product have good spectral characteristics and power stability characteristics. Customized and secondary development services can be provided according to customer requirements.

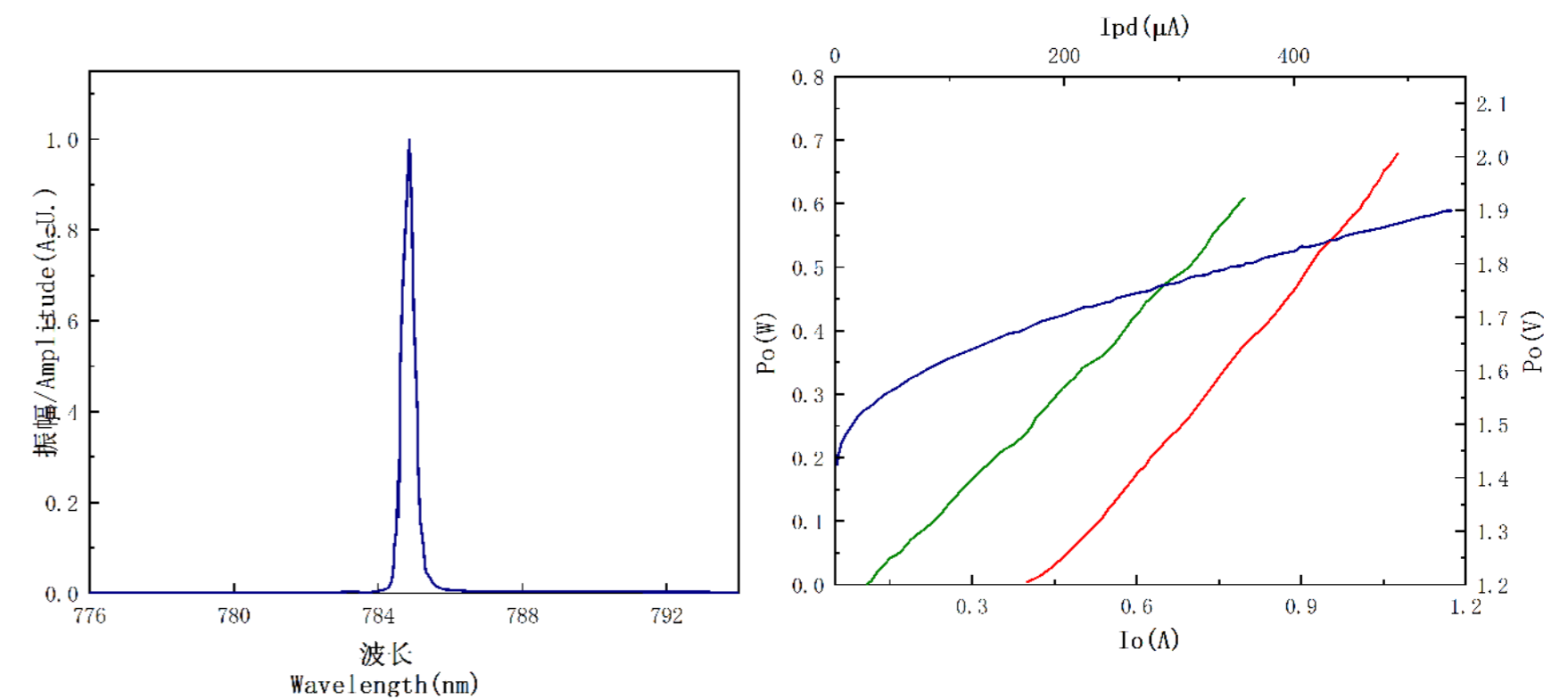
## APPLICATIONS

- Confocal microscope
- Raman spectrometer
- Fluorescence Spectrometer
- Up-conversion material
- Laser particle size analyzer

## FEATURES

- Wavelength stability  $\pm 0.005\text{nm} / ^\circ\text{C}$
- High power single mode fiber coupled output
- USB settings
- Low power consumption, typical power consumption <4W

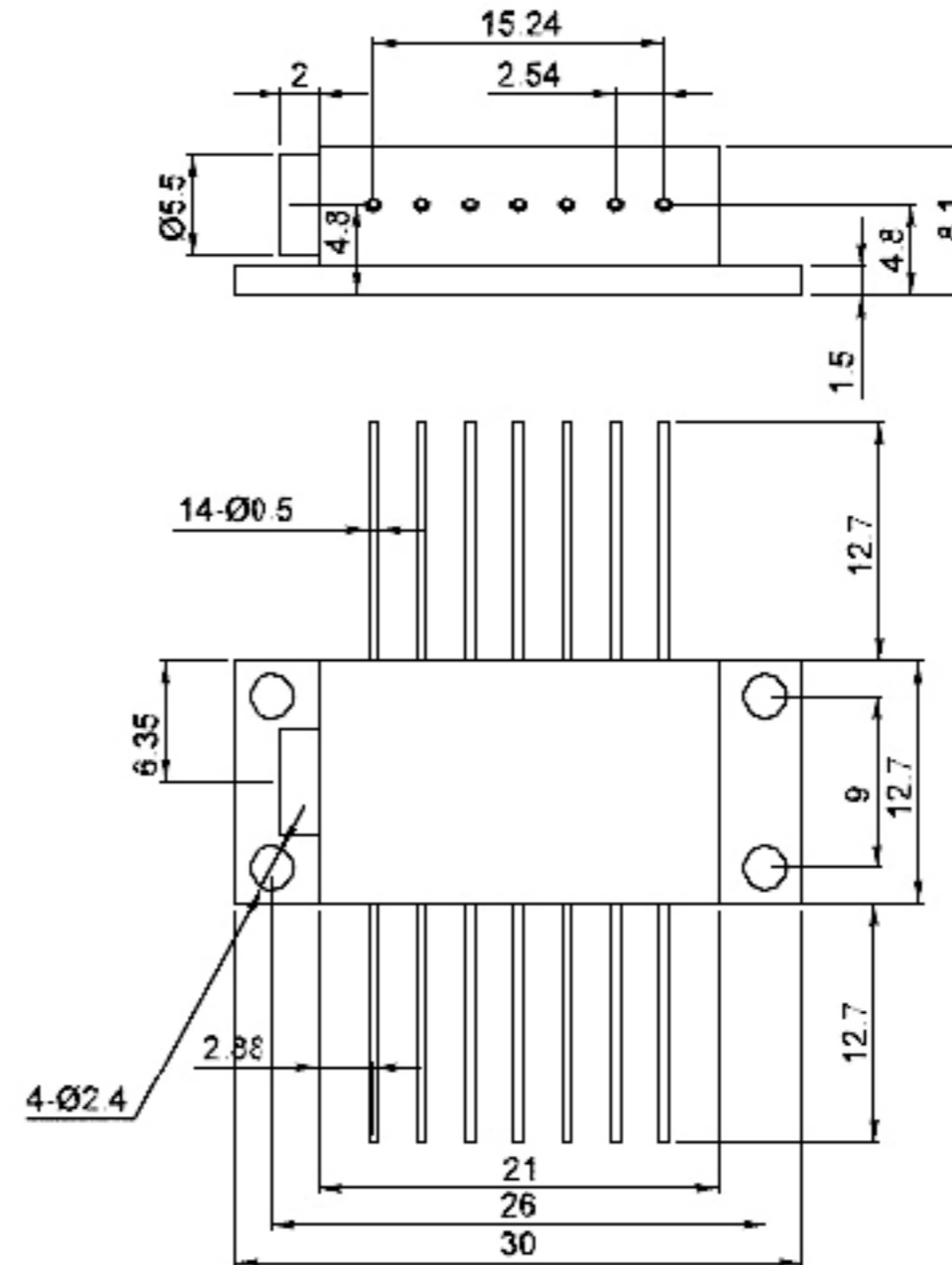
## CHARACTERISTICS OF 785nm 600mW SEMICONDUCTOR LASER ( $25^\circ\text{C}$ )



## PARAMETERS

Model	CL785-0.5-600mW-NSL(PD)001	CL785-0.5-600mW-NSL002	
Optical Parameter	Continuous Output Power (mW)	600	600
	Center Wavelength (nm)	785±0.5	785±0.5
	Spectral Width (nm)	≤0.1	≤0.1
	Characteristics of Wavelength With Temperature (nm/°C)	0.01	0.01
Electrical Parameter	Threshold Current (A)	0.36	0.36
	Operating Current (A)	1.09	1.09
	Operating Voltage (V)	2	2
	Differential Efficiency (W/A)	0.8	0.8
	PD Current (μA)	<2000	/
	Thermistor Parameters (kΩ/β(25°C))	10±5%/3450	/
	TEC Maximum Current (A)	2.2	/
Other Parameter	TEC Maximum Voltage (V)	8.7	/
	Operating Temperature (°C)	10-30	10-30
	Operating Relative Humidity (%)	75	75
	Storage Temperature (°C)	-20~70	-20~70
	Storage Relative Humidity (%)	90	90
Pin Soldering Temperature, Max (°C)	250(10 Sec.)	250(10 Sec.)	

## OUTLINE SIZE(mm)



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

