Sintec Optronics

Fiber-coupled Laser Diode Module
STC-LDM-878.6-120

Typical Device Performance (25℃)

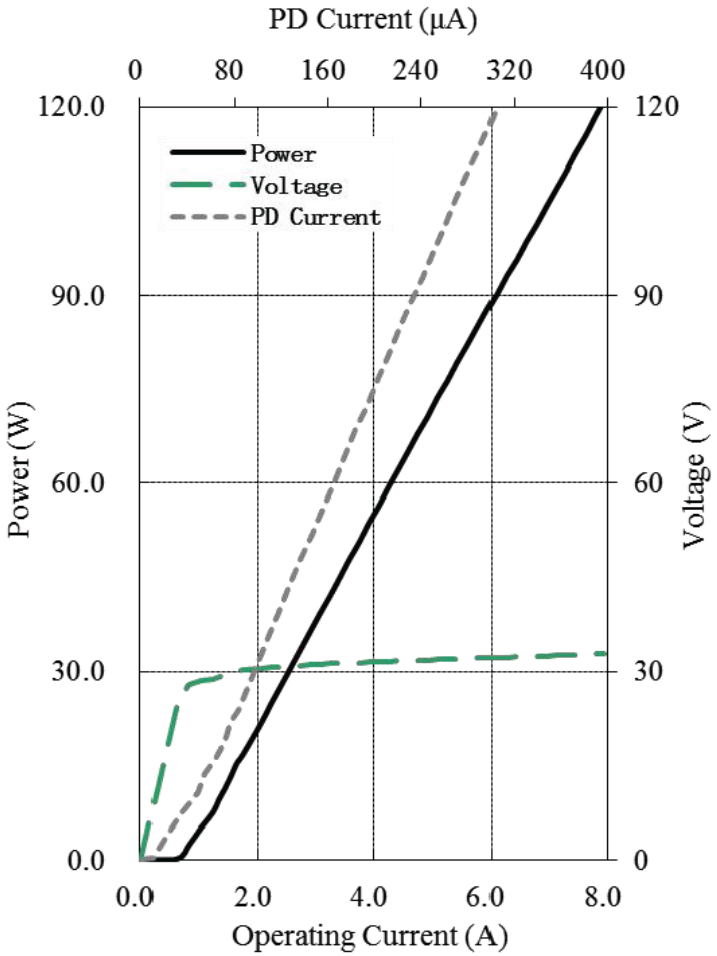
Optical	Unit	Typical Value
CW Output Power	W	120
Center Wavelength	nm	878.6±0.5
Spectral Width (90% of Power)	nm	<0.5
Wavelength Shift with Temperature	nm / ℃	0.02
Wavelength Shift with Current	nm / A	0.05
Feedback Protection (1030-1100nm)	dB	>40
Electrical		
Threshold Current	A	1.0
Operating Current	A	10
Operating Voltage	V	31
Slope Efficiency	W / A	13.3
Power Conversion Efficiency	%	42
Fiber*		
Fiber Core Diameter	μm	400
Fiber Cladding Diameter	μm	440
Fiber Buffer Diameter	μm	700
Numerical Aperture	-	0.22
Fiber Length	m	1-5

* Customized fiber and connector available.

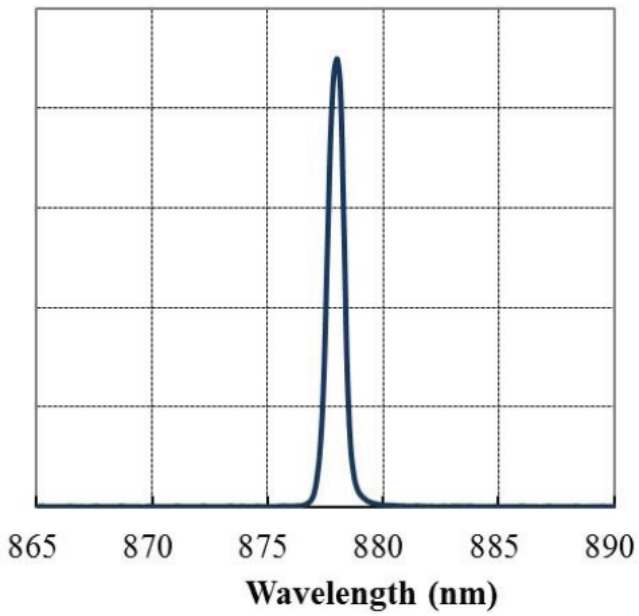
Absolute Ratings

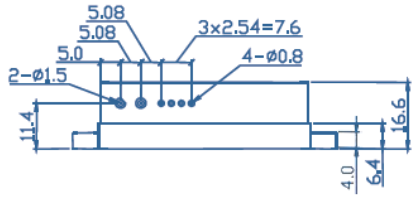
Parameter	Unit	Min	Max
Operating Temperature	℃	10	40
Operating Relative Humidity	%	-	75
Cooling mode			Water cooling (25℃)
Storage Temperature	℃	-20	80
Storage Relative Humidity	%	-	90
Lead Soldering Temperature, 10 s max	℃	-	250

Characteristics of 878.6nm-120W laser diode module (25℃)



Typical spectrum of 878.6nm-120W laser diode module (25℃)





Pin-Out Assignment	
Pin	**Function**
1	LD (+)
2	LD (-)
3	PD(N)
4	PD(P)
5	Thermistor
6	Thermistor