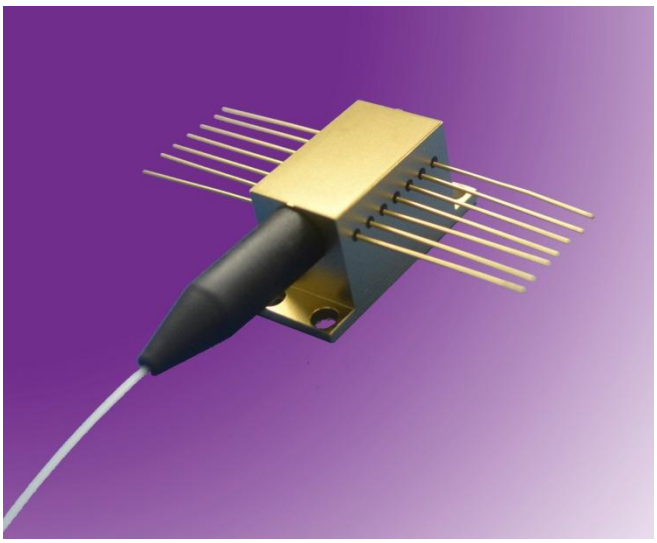
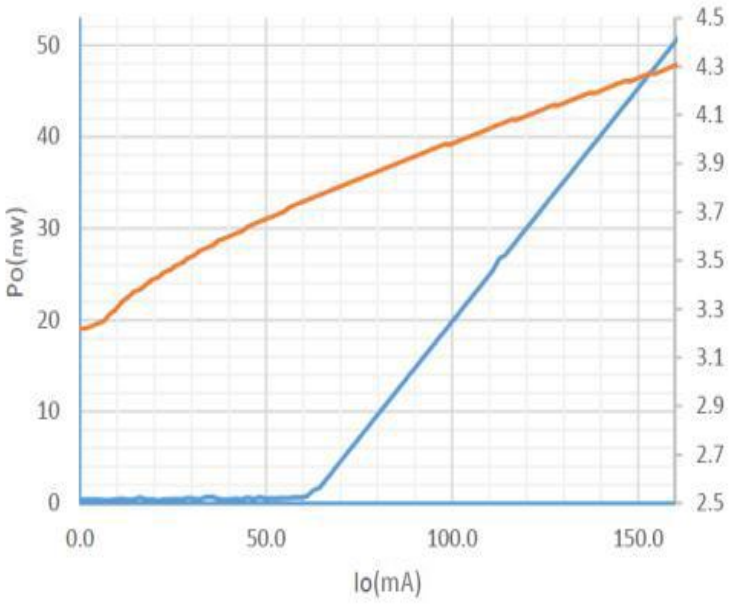
405nm 50mW Laser Diode Module

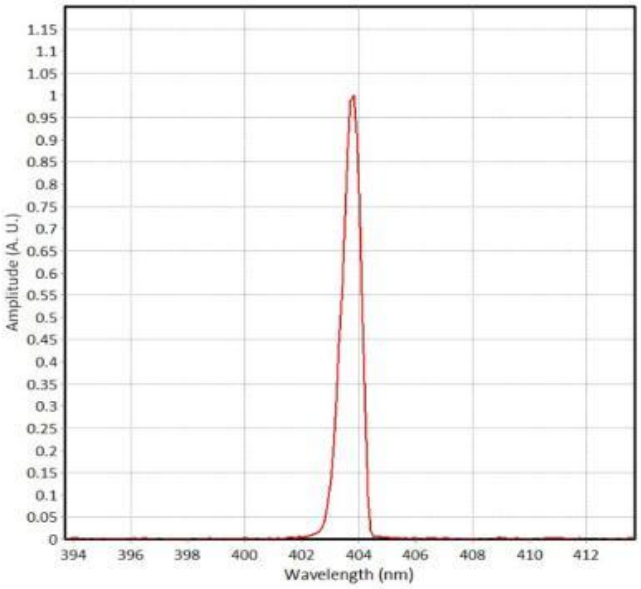
R405±5–50mWF–14BTF–T



Feature
Output power: 50mW
Wavelength: 405±5nm
Fiber core: 105 μm, 0.22NA
Application
Biological analysis
Fluorescence detection

405nm 50mW Characteristics (20˚C)





Typical Device Performance(25℃)

Parameter		Symbol	Typical Value	Unit
			R405±5–50mWF–14BTF–T	
Optical	CW Output Power	Pop	50	mW
	Center Wavelength	λc	405±5	nm
	Spectral Width	Δλ	⩽3	nm
	Temperature drift of wavelength	Δλ /ΔT	0.3	nm/℃
Electrical	Threshold Current	Ith	65	mA
	Operating Current	Iop	160	mA
	Operating Voltage	Vop	4.3	V
	Slope Efficiency	ηes	0.52	W/A
	PD Parameter	Ipd	<2000	μA
	Thermistor	Rt	10±5%/3450	kΩ/β(25℃)
	TEC max Current	Imax	2.2	A
	TEC max Voltage	Vmax	8.7	V
Fiber	Fiber Core Diameter	dcore	105	μm
	Fiber Clad Diameter	dclad	125	μm
	Fiber Buffer Diameter	dbuffer	250	μm
	Numerical Aperture	NA	0.22	-
	Connector	-	FC/PC,ST,SMA905	-

Other Parameters

Parameter	Operating Temperature /℃	Operating Relative Humidity /%	Storage Temperature /℃	Storage Relative Humidity /%	Lead Soldering Temperature (max/℃)
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	Case
7	--	14	TEC(-)