

Fiber-coupled Laser Diode STC-LDM-1064-10-G4

Characteristics

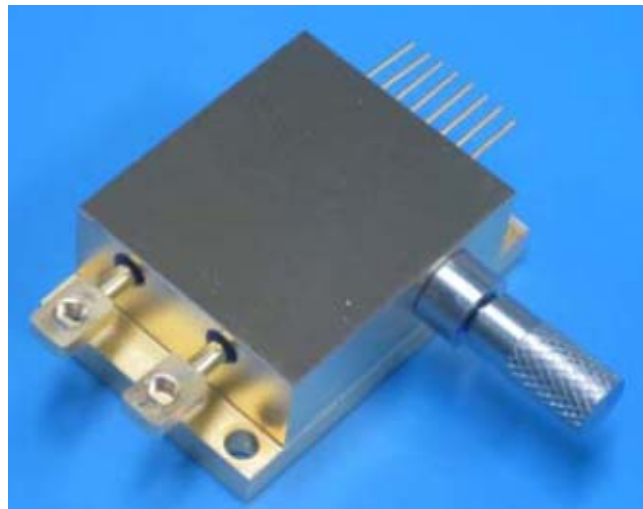
Output Power, 10W
Fiber Coupling 400 μ m
Fiber Core Dia. 0.22NA

Application

Laser pumping, Material processing,
Medical use

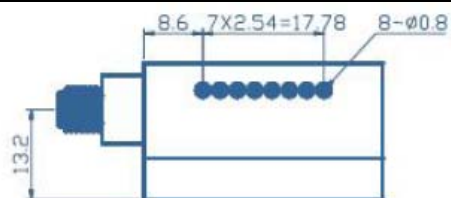
Accessories

Optional aiming beam (650nm), Monitor
photo diode, Thermistor, Fiber connector
detector



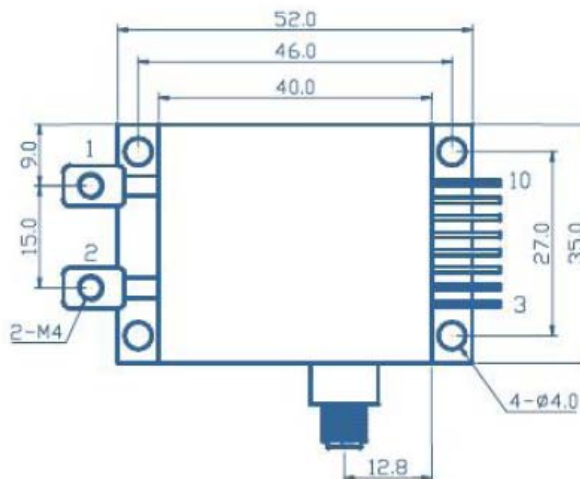
	Parameter	Symbol	Typical	Unit
Optical	CW Out Power	Pop	10	W
	Center Wavelength		1064 \pm 10	nm
	Spectral Width (90% of Power)	Δ	<7.0	nm
	Wavelength Shift with Temperature	$\Delta / \Delta T$	0.35	nm / $^{\circ}$ C
Electrical	Threshold Current	I _{th}	0.35	A
	Operating current	I _{op}	3.7	A
	Operating Voltage	V _{op}	7.2	V
	Slope Efficiency	η	2.7	W/A
	Power Conversion Efficiency	η_{ep}	38	%
Aiming Laser	CW Laser Power	P _{pb}	>2	mW
	Central Wavelength	λ_{pb}	650 \pm 10	nm
	Operating Current	I _{pb}	<30	mA
	Operating Voltage	V _{pb}	\sim 2.2	V
Fiber	Core Diameter	d _{core}	400	μ m
	Cladding Diameter	d _{clad}	440	μ m
	Fiber Buffer Diameter	D _{buffer}	700	μ m
	Numerical Aperture	NA	0.22	-
	Fiber Connector			SMA905

Parameter	Operating Temperature/ $^{\circ}$ C	Operating Relative Humidity/%	Storage Temperature/ $^{\circ}$ C	Storage Relative Humidity/%	Lead Soldering Temperature, 10s max/ $^{\circ}$ C
Min	10	-	-20	-	-
Max	40	75	80	90	250



Pin-Out Assignment

Pin	Function
1	LD (-)
2	LD (+)
3	
4	
5	Aiming Beam LD (+)
6	Aiming Beam LD (-)
7	PD (N)
8	PD (P)
9	Thermistor
10	Thermistor



* Pin4 is connected with the case.

Pin3 is connected with pin4 when the fiber connector is fully inserted into the fiber adapter of the module.