


400mW 1060nm / 1070nm High Power Laser Diode Module

LC96A10x0-20R

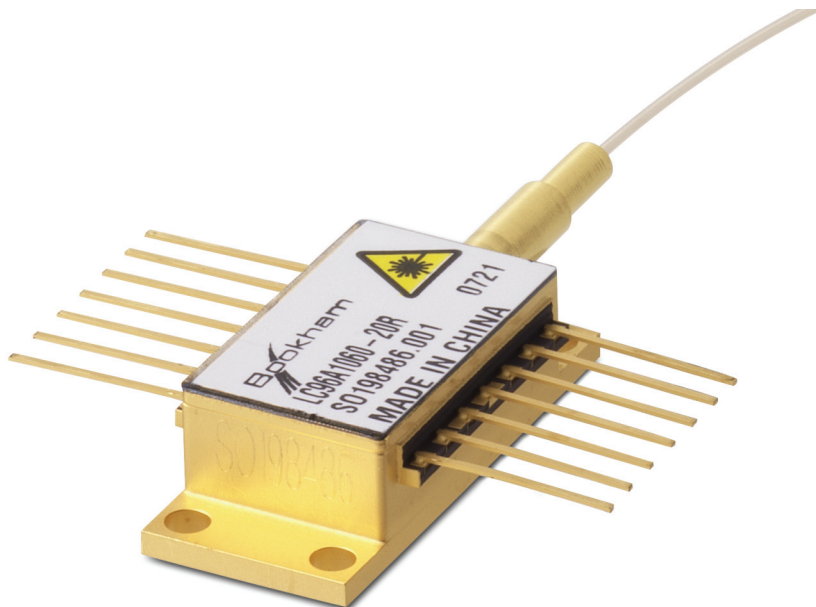
The Bookham LC96A10x0-20R high power single-mode laser module has been designed as light source for fiber laser applications. Processes and techniques of coupling the fiber to the laser allow high output powers that are very stable with both time and temperature. Devices are available with kink free output powers to 400mW.

Features:

- High output power, up to 400mW kink free
- 1060nm or 1070nm wavelength
- Polarization maintaining single-mode fiber pigtail
- Internal thermoelectric heatpump and monitor photodiode
- Hermetically sealed 14-pin butterfly package
- RoHS compliant 

Applications:

- Fiber lasers
- Pumping and printing applications



Characteristics

Conditions unless otherwise stated: Case temperature -20 to +75°C
 Submount temperature 25°C
 Monitor diode bias -5 V
 CW operation

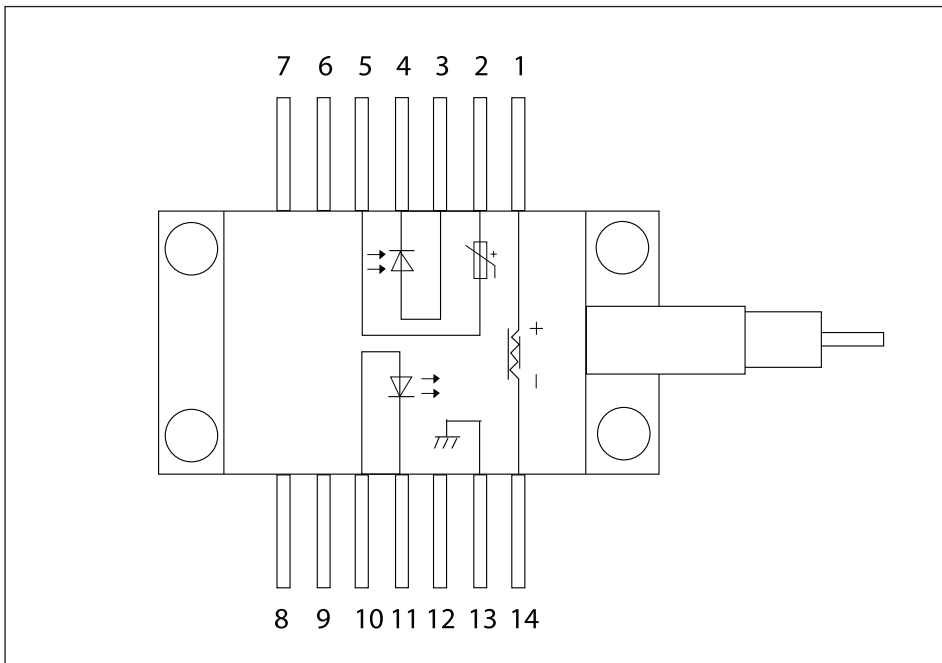
Parameter	Min	Typ	Max	Unit
Threshold Current (I_{th})	10	40	70	mA
Operating Power at 750mA	350	400		mW
Forward Voltage (V_f)		2	2.5	V
Peak Wavelength (λ_f) LC96A1060-20R LC96A1070-20R	1055 1065	1060 1070	1065 1078	nm
Monitor Detector Responsivity	0.3	1.0		$\mu A/mW$
Monitor Dark Current			10	nA
Thermistor Resistance (at 25°C)	9.5	10	10.5	k Ω
Heatpump Current ($\Delta T = 50^\circ C, I_f = I_{f\ max}$)			1.5	A
Heatpump Voltage ($\Delta T = 50^\circ C, I_f = I_{f\ max}$)			3.0	V

Absolute Ratings

Parameter	Min	Max	Unit
Storage Temperature	-40	85	°C
Laser Forward Current (10s max)		1000	mA
Laser Reverse Voltage		2	V
Heatpump Current		2.2	A
Lead Soldering Temperature (10s max)		260	°C
Fiber Bend Radius	30		mm

Connections

Pin #	Description	Pin #	Description
1	Peltier cooler (+)	8	Not connected
2	Thermistor	9	Not connected
3	Monitor anode (-)	10	Laser anode (+)
4	Monitor cathode (+)	11	Laser cathode (-)
5	Thermistor	12	Not connected
6	Not connected	13	Case ground
7	Not connected	14	Peltier cooler (-)



RoHS Compliance



Bookham is fully committed to environment protection and sustainable development and has set in place a comprehensive program for removing polluting and hazardous substances from all of its products. The relevant evidence of RoHS compliance is held as part of our controlled documentation for each of our compliant products. RoHS compliance parts are available to order, please refer to the ordering information section for further details.

Ordering Information:

LC96A1060-20R	400mW 1060nm High Power Laser Diode Module
LC96A1070-20R	400mW 1070nm High Power Laser Diode Module

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