LU0808D200
Medical Diode Laser
Up to 20W Output Power @ 808nm

Description:
The Lumics Medical Diode Laser series offers OEM integrators an excellent product to manufacture state-of-the-art end user laser systems. The easy integration and safe use of these medical laser components give the chance to be cost-efficient in development and manufacturing. Equipped with several accessories and features the Lumics diode lasers comply with CE, FDA & ROHS requirements. Lumics warranties highest reliability single emitter technology through careful design, extensive burn-in, long life-time & thermal testing.

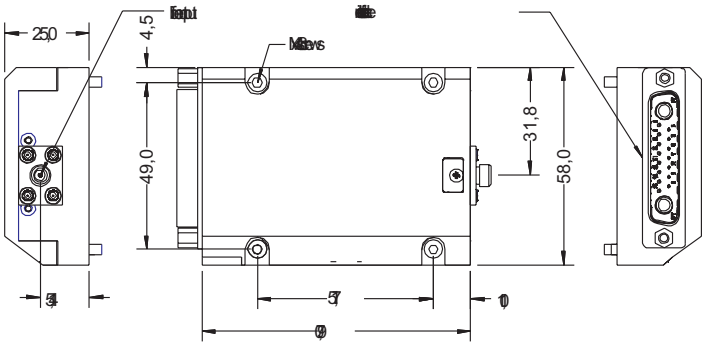
Features:
- Red Pilot
- Monitor Photodiodes
- Fiber Sensors
- Thermistor

Functions:
- 3 Single Emitters
- Sealed Housing
- 200µm Fiber
- Small Foot Print

Benefits:
- FDH-required Sensors
- Ultra long Lifetime
- OEM Quantities
- Passive Cooling

Applications:
- Dental
- Dermatology
- Therapeutic
- Veterinary

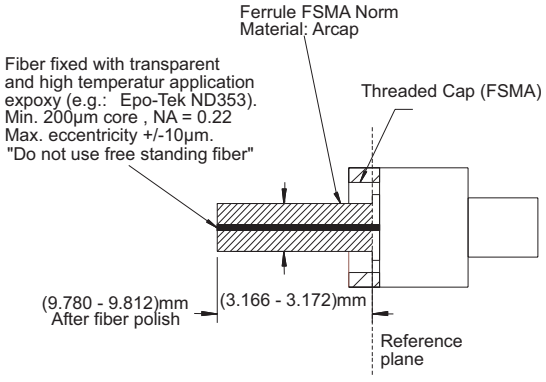
Module Drawing (Dimensions in mm)



Pin Connections

nP	
1	LM35 5V (optional NTC)
2	
3	
4	NTC*
5	
6	
7	Fiber Sensor Signal 1
8	Fiber Sensor Signal 2 *
9	
	Pilot Laser (Gnd)
11	Pilot Laser 3V
21	Monitor Diode 5V
31	Monitor Diode (Gnd)
41	Montor Diode Signal 1
51	Monitor Diode Signal 2 *
1A	Laser Diode (-)
2A	Laser Diode (+)
±	optional

F-SMA Connector



Your ideas are welcome.

Electrical and Optical Characteristics

Parameter	Conditions	Min	Typ	Max	Unit
Optical					
Output Power	P_{op} (c.w.)		20		W
Peak Wavelength (at P_{op})	λ_{peak}	798	808	818	nm
Spectral Width (FWHM)	λ_{rms}			5	nm
Spectral Shift with Temp.	$\lambda_{T\ Shift}$			0.3	nm / K
Fiber Core Diameter			200		µm
Fiber Centricity			<10		µm
Numerical Aperture	NA		0.22		
Fiber Connector Type			SMA905		
Electrical					
Forward Current	I_{op}		9.5		A
Treshold Current	I_{th}		1.8		A
Forward Voltage	V_{op}		5.5		V
Slope Efficiency	η_{diff}		3		W / A
Conversion Efficiency			40		%
Features					
Pilot Beam Output Power				1	mW
Pilot Beam Wavelength		630	635	640	nm
Pilot Beam Operating Voltage			3	3.3	V
Pilot Beam Operating Current			15	20	mA
Power Monitor Operating Voltage			5		V
Power Monitor Signal Voltage			0 - 4		V
Fiber Detection Sensor Operating Voltage			12		V
Fiber Destection Sensor Signal Voltage			12 / 0		V
Temperature Sensor / Energy Constant			NTC 10k, 3988K		

Important Note:

Read and carefully follow operating manual instructions. Especially - whenever power supply is switched on or off, always disconnect from laser module. See manual for details. Uncontrolled on / off switching may cause spikes and result in fatal device damage.

General Parameters / Accessories

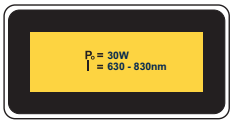
Parameter	Symbol	Min	Typ	Max	Unit
Expected Laser Diode Lifetime (1)	MTTF		20.000		h
Storage Temperature	T_S	0		+50	°C
Operation Temperature	T_{op}	15		35	°C
Humidity / Non-condensing Atmosphere				90	%
Recommended Thermal Heatsink Resistance				0.1	K / W
Weight				179	g
Compliance			CE, FDA, ROHS		
Standard Accessories					
Interface Connector			17W2 Female		
Mounting Screws / metric			4 x M3 x 10		
Options					
2nd Monitor Diode / 2nd Fiber Detection Sensor (2)					
Optical Fiber Patchcord with SMA Connectors	FCC Fiber Cable Connect	from our partner FCC GmbH, www.fibercableconnect.de			

Note:

(1) At 20°C Operating Temperature
(2) Please ask for Quotation

User Safety

Complies with 21 CFR1040.10



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