



RLCD-A81H-8W



TECHNICAL DATA

Fiber Coupled Dual-Wavelength Laser Diode

Features

- Output Power: 8 W
- 808 nm Emission Wavelength
- Spectral Width: ≤ 6 nm
- SMA connector (fiber optional)
- Aiming Beam: 650 nm

Applications

- Dentistry
- Surgery
- Aesthetics
- Physiotherapy

Specifications (25°C)

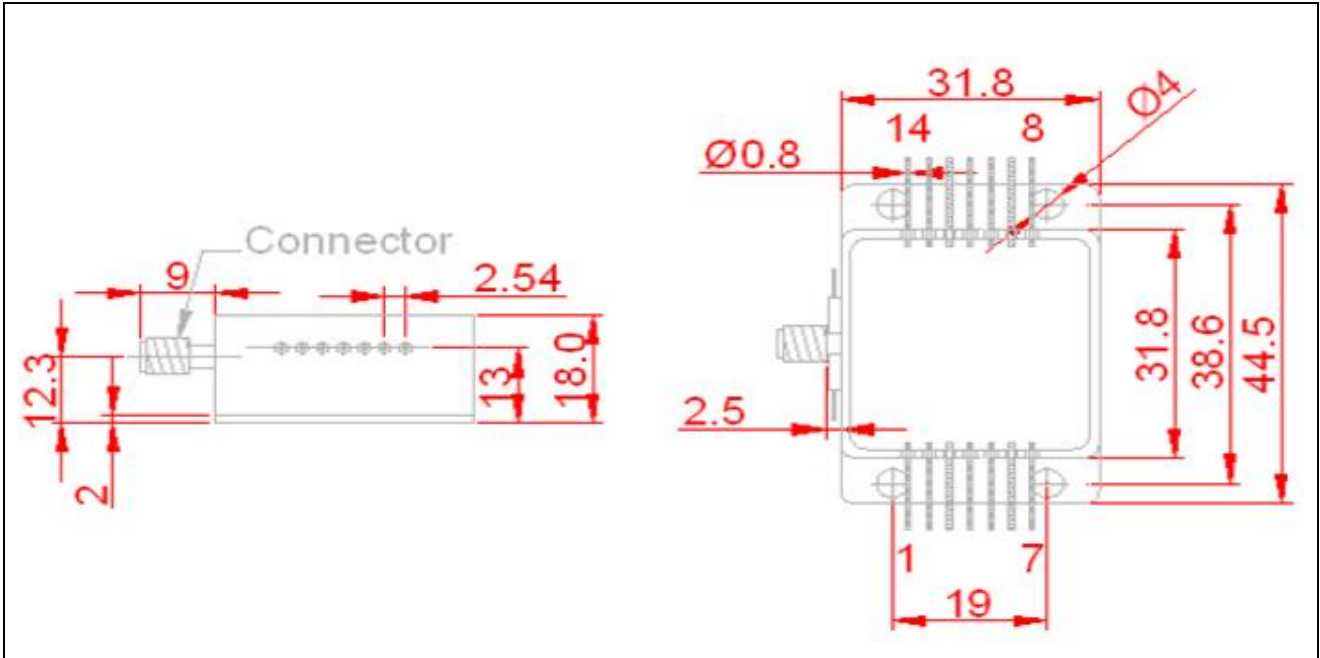
Type	Symbol	Min.	Typ.	Max.	Unit
Infrared Laser					
Output Power	P_F	-	8	-	W
Center Wavelength	λ_C	798	808	818	nm
Spectral Width	$\Delta\lambda$	-	-	6	nm
Threshold Current	I_{th}		1.8		A
Operation Current	I_{op}		11		A
Operation Voltage	V_{op}			2.2	V
Temperature Coefficient			0.3		nm/°C
Package Style		14-pin HHL, receptacle			
TEC					
Thermistor Value (25°C)			10 \pm 0.5		K Ω
TEC Max. Current			6.0		A
TEX Max. Voltage			9.8		V
Fiber Characteristics					
Fiber Core Diameter (recommended)		-	200	400	μ m
Connector		SMA-905 or ST			
Aiming Beam					
Aiming Beam Wavelength		640	650	660	Nm
Aiming Beam Operating Voltage			2.2		V
Absolute Maximum Ratings					
LD Reverse Voltage	U_r		2.0		V
Operating Temperature	T_{op}		+10 ... +30		°C
Storage Temperature	T_{stg}		-20 ... +80		°C
Lead Soldering Temperature (10 sec.)	T_{sol}		260		°C

The above specifications are for reference purpose only and subjected to change without prior notice.





Dimensions (mm)



Pin description

PIN	FUNCTION
1	Case
2	LD(+)
3	Thermistor
4	Thermistor
5	LD(-)
6	PD(P)
7	PD(N)
8	TEC(-)
9	FCD PD(P)
10	FCD LED(-)
11	FCD LED(+), FCD PD(N)
12	Aiming Beam LD(+5V)
13	Aiming Beam LD(0V)
14	TEC(+)



Safety of Laser light

- Laser Light can damage the human eyes and skin. Do not expose the eye or skin directly to any laser light and/or through optical lens. When handling the LDs, wear appropriate safety glasses to prevent laser light, even any reflections from entering to the eye. Focused laser beam through optical instruments will increase the chance of eye hazard.
- **This Laser is emitting invisible light!**



Cautions

1. Operating method

- Confirm that electrical spike current generated by swithing on and off does not exceed the maximum operating current level specified herein above as absolute maximum rating. Also, employ appropriat countermeasures to reduce chattering and/or overshooting in the circuit.

2. Static Electricity

- Static electricity or electrical surges will reduce and degrade the reliability of the LDs. It is recommended to use a wrist trap or anti-electrostatic glove when handeling the product.

3. Absolute Maximum Rating

- Active layer of LDs shall have high current density and generate high electric field during its operation. In order to prevent excessive damage, the LD must be operated stricly below absolute maximum rating.



NOTE
LASERDIODE
MUST BE COOLED