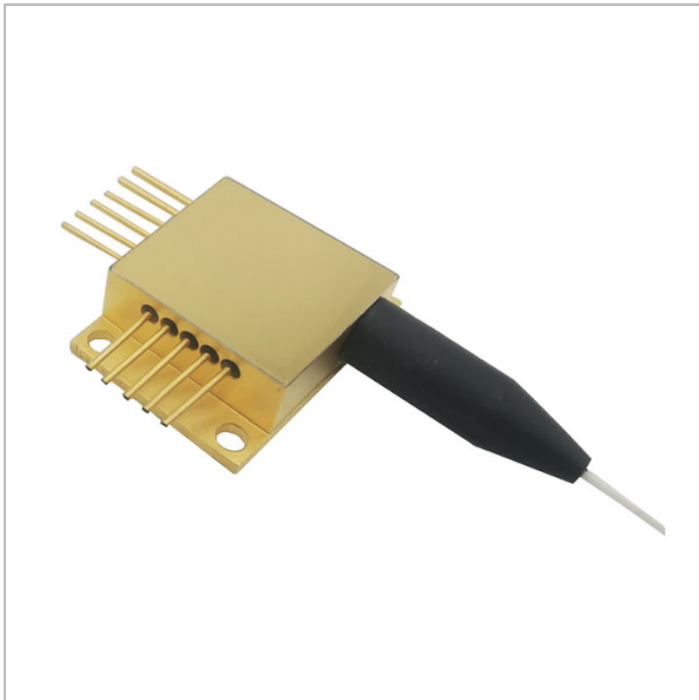




Offered by  
**LASER LAB SOURCE**

manufactured by  **RealLight**

## 808nm Fiber-Coupled Laser Diode | 9W Output Power



### **RLS / 808NM-9W-105UM-RL**

- o 105 $\mu$ m Fiber Core; 200 $\mu$ m Core Fiber Also Available (Inquire)
- o Integrated Thermistor, Photodiode and Red Aiming Beam
- o SMA905 Connector



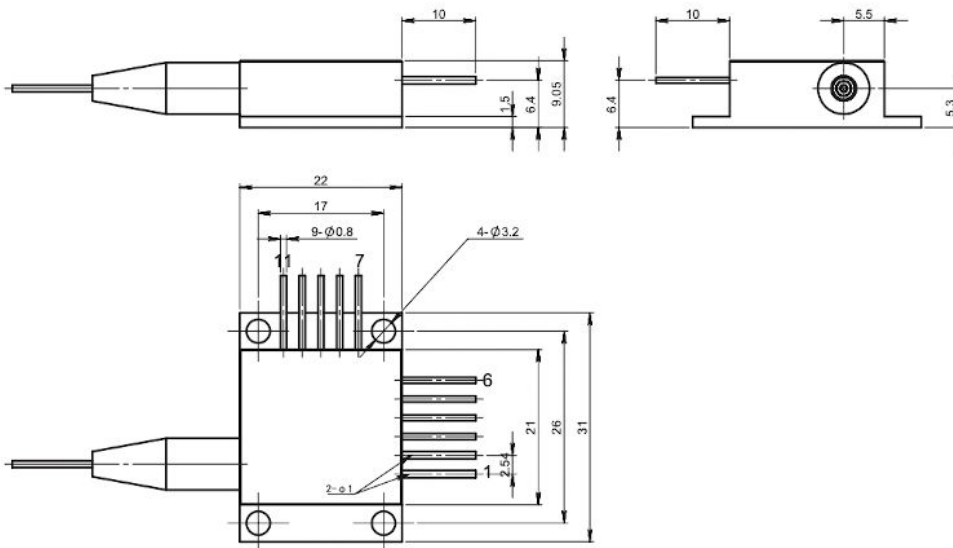
**LASER  
DIODE  
SOURCES**



## FIBER-COUPLED 808NM LASER DIODE

These multimode fiber-coupled laser diodes deliver high power via the 105µm core fiber. The laser is designed and constructed to provide stable output and a long operating lifetime. The laser includes an internal photodiode for power monitoring, and the integrated thermistor enables precision temperature control for wavelength and power stability. They also feature a separately controlled low-power aiming beam.

## DIMENSIONS AND PINOUT



Pin	Function	Pin	Function
1	Laser (+)	7	Thermistor
2	Laser (-)	8	Thermistor
3	PD (N)	9	Aiming Beam (+)
4	PD (P)	10	Aiming Beam (-)
5	-	11	-
6	-		





#### LASER SPECIFICATIONS

- CW Output Power: 9 Watts
- Center Wavelength: 808 nm
- Center Wavelength Tolerance:  $\pm 5$  nm
- Typical Spectral Width: 4 nm
- Temperature Tuning Coefficient: 0.3 nm/ $^{\circ}$ C
- Threshold Current: 1.4 Amps
- Forward Current: 11 Amps (typical full power)
- Forward Voltage: 2 Volts

#### FIBER AND CONNECTOR

- Fiber Core Diameter: 105  $\mu$ m
- Fiber Cladding Diameter: 125  $\mu$ m
- Fiber Coating Diameter: 250  $\mu$ m
- Numerical Aperture: 0.22 NA
- Connector: SMA905
- Alternate Available Fiber: 200 $\mu$ m Core / 220 $\mu$ m Clad (Inquire for Availability and Specifications)

#### ELECTRICAL SPECIFICATIONS

- Threshold Current: 1.4 A
- Operating Current: 11 A
- Operating Voltage: 1.4 V
- Monitor Photodiode Range: 2000  $\mu$ A
- Thermistor: 10 k $\Omega$  ( $\pm 5\%$ , @25 $^{\circ}$ C)
- Slope Efficiency: 0.9 W/A

#### GENERAL SPECIFICATIONS

- Operating Temperature Range: 10 $^{\circ}$ C – 30 $^{\circ}$ C
- Storage Temperature Range: -20 $^{\circ}$ C – 70 $^{\circ}$ C
- Max Operating Humidity, Relative: 75 %
- Max Storage Humidity, Relative: 90 %
- Lead Soldering Temp: 250 $^{\circ}$ C max, 10 sec