

High Power CW Laser Diode LCG-808-1000M-9N

FEATURES

- High-efficiency MQW structure
- Wavelength: 808 nm (Typ.)
- Optical Power: 1000 mW, CW
- Integrated Monitor Diode
- Standard Package: 9 mm Ø

APPLICATIONS

- Medical
- Printing
- Material Processing
- Illumination
- Measurement



OPTICAL AND ELECTRICAL CHARACTERISTICS AT $t_{RT} = 21\text{ °C}$

Parameter	Symbol	min	typ	max	Unit
Wavelength	λ	805	808	812	nm
Threshold current	I _{th}		600	700	mA
Output power	P	50	800	1000	mW
Operating current @ 500 mW	I _{op}		1100	1200	mA
Operating voltage @ 500 mW	V _{op}		2.2		V
Max. current	I _{max}		1600	1800	mA
Monitor current @ 500 mW	I _m		0.3	1	mA
Differential efficiency	η	0.9	1.0		W/A
Emitting aperture			200		μm
Divergence(FWHM)					
Perpendicular	$\Theta_{\perp}$		30	40	degree
Parallel	$\Theta_{\parallel}$		9	12	degree
Temperature					
Operating	T _{op}	-10		50	°C
Storage	T _{stg.}	-40		85	°C



Fig. 1:
Optical Output Power vs Forward Current

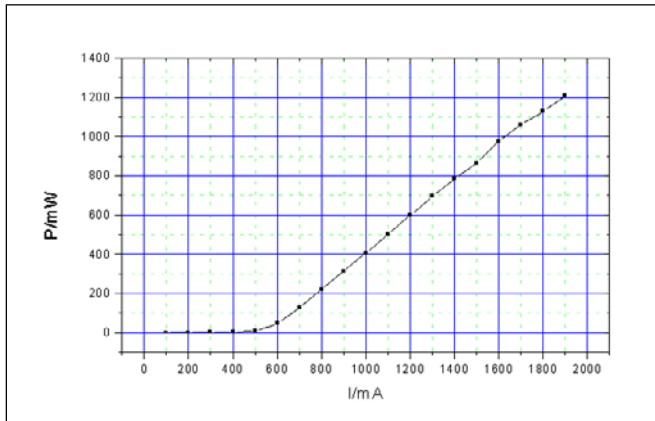


Fig. 2:
Forward Current vs Monitor Current

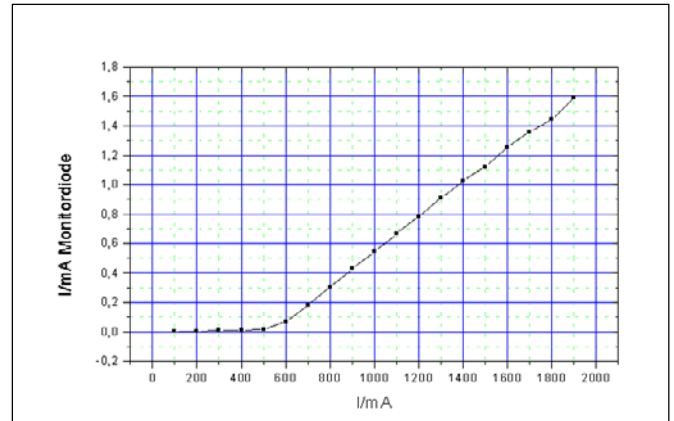
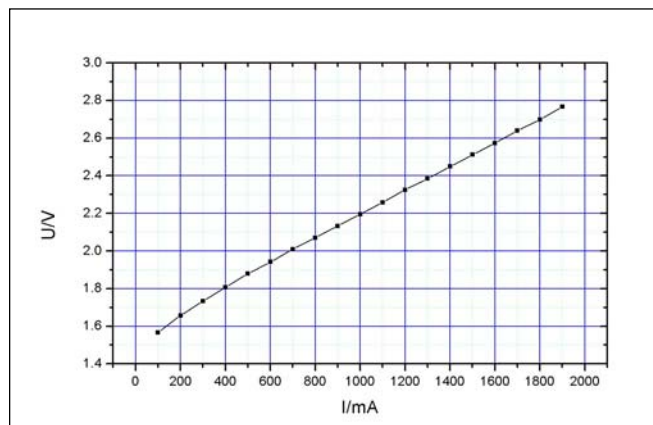
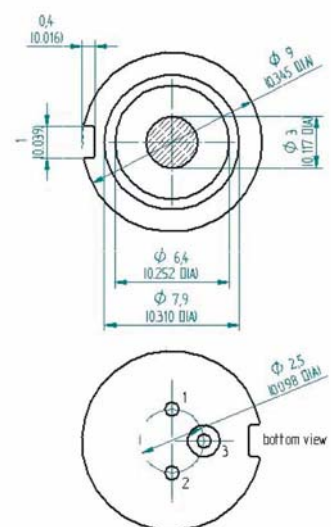
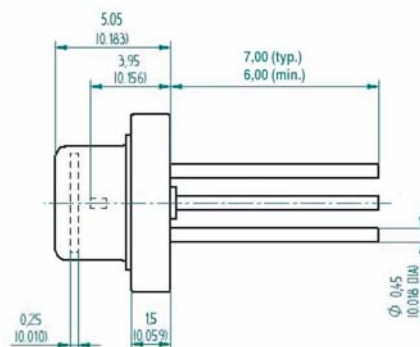
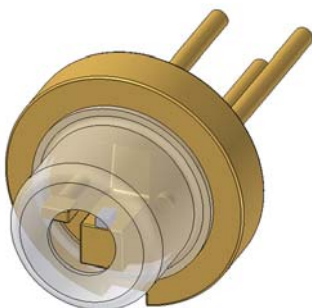


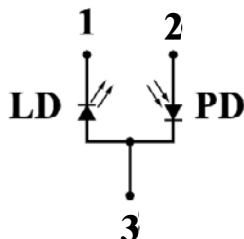
Fig. 3:
Drive Voltage vs Forward Current



PACKAGE DRAWING



PIN CONFIGURATION



1. Laser Diode Cathode
3. Laser Diode Anode
Photodiode Cathode
2. Photodiode Anode

*Case and Pin no. 3 are common

PRODUCT CHANGES

LASER COMPONENTS reserves the right to make changes to the product(s) or information contained herein without notice. No liability is assumed as a result of their use or application.

ORDERING INFORMATION

Products can be ordered directly from LASER COMPONENTS or its representatives. For a complete listing of representatives, visit our website at www.lasercomponents.com

Custom designed products are available on request.

LASER SAFETY

Personal Hazard:

Depending on the mode of operation, these devices emit highly concentrated non visible infrared light which can be hazardous to the human eye. Products which incorporate these devices have to follow the safety precautions given in IEC 60825-1 "Safety of laser products".

Handling Precautions:

Products are subject to the risks normally associated with sensitive electronic devices including static discharge, transients, and overload.

