



## **LXG Series – 635nm–980nm High Performance Laser Diode Modules** *Elliptical Beam, Focus Adjustable, Diameter 0.5in, with DC-Jack Connector*



### **Overview**

The Lasermate LXG series laser diode module system is a complete laser diode system designed for OEM applications with low cost, soft-start protection and beam focusing requirements. The laser is designed as a high quality and high-performance laser diode module with flexible and adjustable characteristics for industrial heavy-duty users. Designed for OEM, the laser is ideal for a wide range of low power laser applications.

### **Features**

- Wide range of wavelengths from 635nm to 980nm (including 650nm, 670nm, 780nm, 808nm, 850nm, 904nm)
- Wide range of output power up to 50mW
- High performance and low cost
- Adjustable focus
- Soft-start protection
- Elliptical beam profile
- Glass collimating lens
- With DC-Jack connector

## Product Overview

The following table shows the list of available part numbers, wavelength, optical output power, laser class, operating voltage, operating current, and operating temperature for LXG series laser modules.

Part Number	Wavelength (nm)	Optical output power (mW)	Laser class	Operating voltage (VDC)	Operating current typical (mA)	Operating temperature (°C)
LXG6351AH	635	0.5-0.99	II	5	40	-10 to +50
LXG6354AH	635	2.5-3.5	IIIa	5	40	-10 to +50
LXG6357AH	635	5-7	IIIb	5	60	-10 to +50
LXG63514AH	635	10-14	IIIb	5	90	-10 to +40
LXG6501AH	650	0.5-0.99	II	5	30	-10 to +50
LXG6504AH	650	2.5-3.5	IIIa	5	30	-10 to +50
LXG6505AH	650	4.1-4.99	IIIa	5	40	-10 to +50
LXG6507AH	650	5-7	IIIb	5	60	-10 to +50
LXG66014AH	660	10-14	IIIb	5	80	-10 to +50
LXG66025AH	660	22-25	IIIb	5	115	-10 to +50
LXG7804AH	780	2.5-3.5	IIIb	5	35	-10 to +50
LXG78025AH	780	22-25	IIIb	5	90	-10 to +50
LXG78045AH	780	40-45	IIIb	5	115	-10 to +50
LXG8084AH	808	2.5-3.5	IIIb	5	35	-10 to +40
LXG8504AH	850	2.5-3.5	IIIb	5	35	-10 to +50
LXG8507AH	850	5-7	IIIb	5	45	-10 to +50
LXG85025AH	850	22-25	IIIb	5	75	-10 to +50
LXG9044AH	904	2.5-3.5	IIIb	5	35	-10 to +50
LXG9047AH	904	5-7	IIIb	5	45	-10 to +50
LXG9807AH	980	5-7	IIIb	5	45	-10 to +40
LXG98014AH	980	10-14	IIIb	5	70	-10 to +40
LXG98025AH	980	20-25	IIIb	5	80	-10 to +40

## Specifications of LXG Series Laser Diode Modules

Wavelength (nm)	635	650	660	780	808	850	904	980
Tolerance	+/-10 nm @ 25 °C							
Laser light	Visible Red				Infrared			
Laser class	Class II <1mW, Class IIIa <5mW, Class IIIb >5mW				Class IIIb			
Diode structure	Index guided							
Diode output power	5-50mW							
Operating current	30-90mA typical							
Operating voltage	4.5–6 VDC or 4.5-9V DC							
Drive circuit	Regulated APC with soft-start protection							
Optics	3-element glass collimating lens with AR coating							
Beam divergence	< 0.5 mrad							
Beam size @ 7 m	~6 x 8 mm							
Beam profile	Elliptic							
Focus	Adjustable							
Operating temperature	-10 to +40 °C or -10 to +50 °C							
Connector	5V DC-Jack connector							
Dimensions	Dia. 0.5" x L. 2"							
Weight	40 gm typical							
Option	Connecting to cross hair optics, LO- series line optics & TC- series beam expander							

### Additional Notes

- The LXG series laser modules are designated solely as OEM components for incorporation into the customer's end products. Therefore, it is the customer's responsibility to comply with the appropriate requirements of FDA 21CFR, section 1040.10 and 1040.11 for complete laser products. For the code of FDA regulations, please refer to [FDA Performance Standards for Light-Emitting Products](#) for detailed information.
- Additional heat sink may be needed if the laser module is operated continuously for a long period of time.
- Specifications are subject to change without notice.



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