

Data Sheet

Rev 01.1220

635nm-980nm High Performance Laser Diode Modules, Circular Beam, Focus Adjustable, Dia. 0.5in, with DC-Jack Connector

LXC Series



Overview

The Lasermate LXC 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
- Circular beam profile
- Singlet plastic 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 LXC series laser modules.

Part	Wavelength	Optical output	Laser	Operating	Operating current	Operating
Number	(nm)	power (mW)	class	voltage (VDC)	typical (mA)	temperature (°C)
LXC6351AH	635	0.5-0.99	II	5	40	-10 to +50
LXC6352AH	635	1.2-2	Illa	5	40	-10 to +50
LXC6354AH	635	2.5-4	Illa	5	60	-10 to +50
LXC6358AH	635	5-8	IIIb	5	90	-10 to +40
LXC6501AH	650	0.5-0.99	II	5	30	-10 to +50
LXC6502AH	650	1.2-2	Illa	5	30	-10 to +50
LXC6504AH	650	2.5-4	Illa	5	50	-10 to +50
LXC6608AH	660	5-8	IIIb	5	80	-10 to +50
LXC66012AH	660	10-14	IIIb	5	115	-10 to +50
LXC7802AH	780	1.2-2	IIIb	5	35	-10 to +50
LXC78014AH	780	10-14	IIIb	5	90	-10 to +50
LXC8082AH	808	1.2-2	IIIb	5	35	-10 to +40
LXC8502AH	850	1.2-2	IIIb	5	35	-10 to +50
LXC8504AH	850	2.4-4	IIIb	5	45	-10 to +50
LXC85014AH	850	10-14	IIIb	5	75	-10 to +50
LXC9042AH	904	1.2-2	IIIb	5	35	-10 to +50
LXC9044AH	904	2.4-4	IIIb	5	45	-10 to +50
LXC9804AH	980	2.4-4	IIIb	5	45	-10 to +40
LXC9808AH	980	5-8	IIIb	5	70	-10 to +40
LXC98014AH	980	10-14	IIIb	5	80	-10 to +40

Specifications of LXC Series Laser Diode Modules

Wavelength (nm)	635	650	780	808	850	904	980			
Tolerance	+/-10 nm @ 25 °C									
Laser light	Visibl	Infrared								
Laser class	Class II <1mW, Class IIIa	Class IIIb								
Diode structure	Index guided									
Diode output power	5-50mW									
Operating current	30-90mA typical									
Operating voltage	4.5–6 VDC or 4.5–9 VDC									
Drive circuit	Regulated APC with soft-start protection									
Optics	Singlet plastic collimating lens									
Beam divergence	< 0.5 mrad									
Beam size @ 7 m	Dia. ~ 5 mm									
Beam profile	Circular									
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	35 gm typical									
Option	Connecting to cross hair optics, LO- series line optics & TC- series beam expander									

Additional Notes

- The LXC 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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