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Data Sheet
Rev 01.1220

635nm-980nm High Performance Laser Diode Modules, Elliptical Beam, Focus Adjustable, Dia. 0.5in

LTG Series

Overview

The Lasermate LTG series laser diode module system is a complete laser diode system designed for OEM applications with adjustable output power 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, especially in continuous long-time usage, such as bar code reader, measurement, alignment, and positioning.

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 optical output power
- Adjustable focus
- Super fine pitch (0.25mm) for precision focusing
- LED indicator
- Elliptical beam profile
- Glass collimating lens

Applications

- Pointing
- Leveling
- Sensing

Product Overview

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

Part Number	Wavelength (nm)	Optical output power (mW)	Laser class	Operating Voltage (V DC)	Operating Current (mA)	Operating Temperature (°C)
LTG6351AH	635	0.5-0.99	II	4.5-9	40	-10 to +50
LTG6354AH	635	2.5-3.5	IIIa	4.5-9	40	-10 to +50
LTG6357AH	635	5-7	IIIb	4.5-9	60	-10 to +50
LTG63514AH	635	10-18	IIIb	4.5-6	90	-10 to +40
LTG6501AH	650	0.5-0.99	II	4.5-9	30	-10 to +50
LTG6504AH	650	2.5-3.5	IIIa	4.5-9	30	-10 to +50
LTG6505AH	650	4-4.99	IIIa	4.5-9	40	-10 to +50
LTG6507AH	650	5-7	IIIb	4.5-9	45	-10 to +50
LTG66014AH	660	10-18	IIIb	4.5-6	80	-10 to +50
LTG66025AH	660	22-28	IIIb	4.5-6	115	-10 to +50
LTG6701AH	670	0.5-0.99	II	4.5-9	35	-10 to +50
LTG6704AH	670	2.5-3.5	IIIa	4.5-9	35	-10 to +50
LTG7804AH	780	2.5-3.5	IIIb	4.5-9	35	-10 to +50
LTG78025AH	780	22-28	IIIb	4.5-6	90	-10 to +50
LTG78045AH	780	40-50	IIIb	4.5-6	115	-10 to +50
LTG8084AH	808	2.5-3.5	IIIb	4.5-9	35	-10 to +40
LTG8504AH	850	2.5-3.5	IIIb	4.5-9	35	-10 to +50
LTG8507AH	850	5-7	IIIb	4.5-9	45	-10 to +50
LTG85025AH	850	22-28	IIIb	4.5-6	75	-10 to +50
LTG9044AH	904	2.5-3.5	IIIb	4.5-9	35	-10 to +50
LTG9047AH	904	5-7	IIIb	4.5-9	45	-10 to +50
LTG9807AH	980	5-7	IIIb	4.5-9	45	-10 to +40
LTG98014AH	980	10-18	IIIb	4.5-6	70	-10 to +40
LTG98025AH	980	22-28	IIIb	4.5-6	80	-10 to +40

Specifications of LTG Series Laser Diode Modules

Wavelength (nm)	635	650	660	670	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	5-100mW								
Operating current	30-125mA typical								
Operating voltage	4.5–6 VDC or 4.5-9V DC								
Drive circuit	Regulated APC with LED indicator								
Optics	Glass collimating lens with AR coating								
Beam divergence	< 0.5 mrad								
Beam size @ 5 m	~6 x 8 mm								
Beam profile	Elliptic								
Focus	Adjustable								
Operating temperature	-10 to +40 °C or -10 to +50 °C								
Connector	Black wire - & red wire +								
Safety feature	Green LED indicator								
Dimensions	Dia. 0.5” x L. 2”								
Weight	26.8 gm								
Option	Connecting to cross hair optics								

Additional Notes

- The LTG 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.

www.lasermate.com

Lasermate Group, Inc.
19608 Camino De Rosa
Walnut, CA 91789 USA
Tel: (909)718-0999
Fax: (909)718-0998
sales@lasermate.com
www.lasermate.com