



## **LTC-A24 Series — 635nm to 980nm Laser Diode Modules**

*Adjustable Focus, Circular Beam, 24-28VDC*



### **Description**

The Lasermate LTC-A24 series laser diode modules cover a broad wavelength range from 635nm to 980nm, including popular red and infrared wavelengths such as 650nm, 780nm, 830nm, 850nm, and 904nm. These modules are designed with a circular beam profile and feature adjustable focus for precise beam control. Operating at 24-28VDC, the LTC-A24 series offers multiple output power levels suitable for various applications requiring reliable and stable laser performance.

### **Features**

- Wavelengths from 635nm to 980nm (including 650nm, 780nm, 830nm, 850nm, 904nm)
- Different output power levels for all wavelengths
- Adjustable focus
- Circular beam
- Operating voltage 24-28VDC

### **Applications**

- Scientific research
- Sensing and measurement
- Alignment and positioning

## Product Overview

The following table shows the list of available part numbers, wavelength, optical output power, laser class, operating voltage, and operating temperature for LTC-A24 series laser modules.

Part Number	Wavelength (nm)	Optical output power (mW)	Laser class	Operating Voltage (V DC)	Operating Temperature (°C)
LTC6351A24	635	0.5-0.99	II	24-28	-10 to +50
LTC6352A24	635	1.2-2	IIIa	24-28	-10 to +50
LTC6354A24	635	2.4-4	IIIa	24-28	-10 to +40
LTC6501A24	650	0.5-0.99	II	24-28	-10 to +50
LTC6502A24	650	1.2-2	IIIa	24-28	-10 to +50
LTC6504A24	650	2.4-4	IIIa	24-28	-10 to +40
LTC7802A24	780	1.2-2	IIIb	24-28	-10 to +50
LTC7804A24	780	2.4-4	IIIb	24-28	-10 to +40
LTC7808A24	780	5-8	IIIb	24-28	-10 to +40
LTC8304A24	830	2.4-4	IIIb	24-28	-10 to +40
LTC8504A24	850	2.4-4	IIIb	24-28	-10 to +40
LTC9044A24	904	2.4-4	IIIb	24-28	-10 to +40
LTC9804A24	980	2.4-4	IIIb	24-28	-10 to +40
LTC9808A24	980	5-8	IIIb	24-28	-10 to +40

## Specifications of LTC-A24 Series Laser Diode Modules

Model Number	LTC635- X <sub>1</sub> A24	LTC650- X <sub>1</sub> A24	LTC780- X <sub>1</sub> A24	LTC830- X <sub>1</sub> A24	LTC850- X <sub>1</sub> A24	LTC904- X <sub>1</sub> A24	LTC980- X <sub>1</sub> A24
Wavelength (nm)	635	650	780	830	850	904	980
Diode structure	Single mode						
Optical output power (mW)	For 635nm: 0.5-0.99 (X <sub>1</sub> =1); 1.2-2 (X <sub>1</sub> =2); 2.4-4 (X <sub>1</sub> =4) For 650nm: 0.5-0.99 (X <sub>1</sub> =1); 1.2-2 (X <sub>1</sub> =2); 2.4-4 (X <sub>1</sub> =4) For 780nm: 1.2-2 (X <sub>1</sub> =2); 2.4-4 (X <sub>1</sub> =4); 5-8 (X <sub>1</sub> =8) For 830nm: 2.4-4 (X <sub>1</sub> =4) For 850nm: 2.4-4 (X <sub>1</sub> =4) For 904nm: 2.4-4 (X <sub>1</sub> =4) For 980nm: 2.4-4 (X <sub>1</sub> =4); 5-8 (X <sub>1</sub> =8)						
Laser class	For 635nm-650nm: Class II <1mW, Class IIIa <5mW, Class IIIb >5mW For 780nm-980nm: Class IIIb						
Operating voltage (VDC)	24-28						
Drive circuit	APC						
Optics	Single plastic collimating lens						
Beam size at 5m (mm)	~5						
Beam profile	Circular						
Focus	Adjustable						
Operating temperature (°C)	-10 to +50 for X <sub>1</sub> =1,2 -10 to +40 for X <sub>1</sub> =4,8						
Connector	Black wire - & red wire +						
Dimensions (in)	Dia. 0.5 x L. 2						
Weight (gm)	~25.5						

**Additional Notes**

- The LTC-A24 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.
- An additional heat sink or cooling device may be needed.
- Specifications are subject to change without notice.



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