



650nm Miniature Dot Laser Diode Modules, Elliptical Beam, Dia. 9mm, 3-4.5VDC

LLP Series



Overview

The LLP series laser diode module is designed for OEM applications with lowest cost, miniature size and beam focusing requirements. Additional heat sink may be needed for the laser module under continuously operating for a long period of time. Designed for OEM, the laser is ideal for a wide range of low power laser applications, such as general sighting, alignment, and positioning.

Features

- 650nm wavelength
- Basic performance and lowest cost
- Miniature design: Dia. 9mm x L 18.3mm
- Fixed focus
- Elliptical beam profile
- Automatic Power Control (APC) circuit
- Connector: Pin (-) and Brass Case (+)

Applications

- Pointing
- Leveling
- Sensing

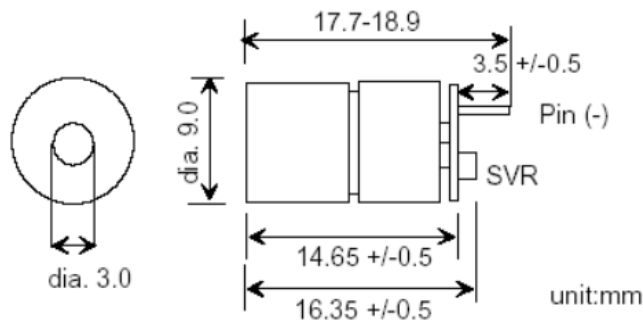
Product Overview

| Part Number | Wavelength (nm) | Optical output power (mW) | Laser class | Operating voltage (V DC) | Operating Current typical (mA) | Operating temperature (°C) |
|-------------|-----------------|---------------------------|-------------|--------------------------|--------------------------------|----------------------------|
| LLP6501FS | 650 | 0.7-0.99 | II | 3-4.5 | <40 | -10 to +40 |

Specifications of LLP Series Laser Diode Modules

| | |
|--------------------------------|---|
| Laser diode (nm) | 650 nm +/-10 nm, 5mW |
| Laser class | Class II |
| Output power | 0.7-0.99mW @ 4.5V DC |
| Operating current | <40mA |
| Operating voltage | 3-4.5V DC |
| Circuit board | APC without voltage regulator and with the pin hole |
| Optics | Singlet plastic collimating lens |
| Beam size @ 5m | <7 x 11 mm |
| Focus | Fixed |
| Solder high on the side of pin | <1.5 mm (or 0.06 inch) |
| Operating temperature | -10 to +40°C |
| Connector | Pin (-) & brass case (+) |

Dimensions of LLP Series Laser Diode Modules (unit: mm)



Additional Notes

- The LLP 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.



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