Laser Diodes

# Laser Module
# LC-LMD-650-06

650 nm Laser Module

## Features

1. APC (auto power control) IC inside
2. Low current consumption of the APC circuit
3. Superior laser beam profile

## Part No. Indications

**LC-LMD – 650 – 06 – XX – A**

| Output Power: |
|---|
| 01 - < 1 mW |
| 03 - < 2 ~ 3 mW |

## Absolute Maximum Ratings

| Item | Symbol | Rating | Unit |
|---|---|---|---|
| Power supply voltage | $V_{CC}$ | 3.3 | V |
| Laser Module optical output power | $P_o$ | < 3 | mW |
| Operation temperature | $T_{opr}$ | 0 ~ 40 | °C |
| Storage temperature | $T_{stg}$ | 0 ~ 60 | °C |



Germany & Other Countries
Laser Components GmbH
Tel: +49 8142 2864 – 0
Fax: +49 8142 2864 – 11
info@lasercomponents.com
www.lasercomponents.com

USA
Laser Components USA, Inc.
Tel: +1 603 821 – 7040
Fax: +1 603 821 – 7041
info@laser-components.com
www.laser-components.com

United Kingdom
Laser Components (UK) Ltd.
Tel: +44 1245 491 499
Fax: +44 1245 491 801
info@lasercomponents.co.uk
www.lasercomponents.co.uk

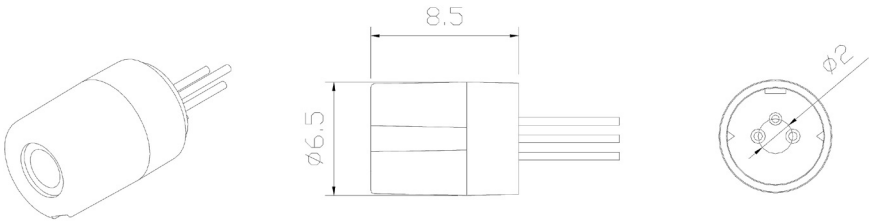
France
Laser Components S.A.S.
Tel: +33 1 39 59 52 25
Fax: +33 1 39 59 53 50
info@lasercomponents.fr
www.lasercomponents.fr

Laser Module
LC-LMD-650-06

## Electrical and Optical Characteristics ($T_C$ = 25 °C)

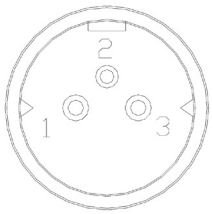
| Item | Symbol | | Min. | Typ. | Max | Unit | Condition |
|---|---|---|---|---|---|---|---|
| Wavelength | λ | | 645 | 655 | 660 | nm | $P_o$= < 3 mW |
| Output power | $P_{out}$ | 01 | - | 0.6 | 0.9 | mW | $V_{cc}$= 3 V |
| | | 03 | 2.2 | - | 3.0 | mW | $V_{cc}$= 3 V |
| Operation current | $I_{op}$ | | - | 15 | 35 | mA | $P_o$= 3 mW<br>$V_{cc}$= 3 V |
| Operation voltage | $V_{op}$ | | 2.5 | - | 3.3 | Volt | |
| Laser Beam spot size at 10 m | < 10 mm | | | | | | |
| Divergence angle | 1.1 mrad | | | | | | |
| Mean time to failure (MTTF) 3 mW 25 °C | >10000 hrs | | | | | | |

## Outline Dimensions (Units: mm)




## Pin Assignment

Pin 1: $V_{cc}$
Pin 2: GND
Pin 3: NC




**A type:** Heat sink stand (-)



Germany & Other Countries
Laser Components GmbH
Tel: +49 8142 2864 – 0
Fax: +49 8142 2864 – 11
info@lasercomponents.com
www.lasercomponents.com

USA
Laser Components USA, Inc.
Tel: +1 603 821 – 7040
Fax: +1 603 821 – 7041
info@laser-components.com
www.laser-components.com

United Kingdom
Laser Components (UK) Ltd.
Tel: +44 1245 491 499
Fax: +44 1245 491 801
info@lasercomponents.co.uk
www.lasercomponents.co.uk

France
Laser Components S.A.S.
Tel: +33 1 39 59 52 25
Fax: +33 1 39 59 53 50
info@lasercomponents.fr
www.lasercomponents.fr

01/12/V5/IF/diversopto/module/lc-lmd-650-06.indd