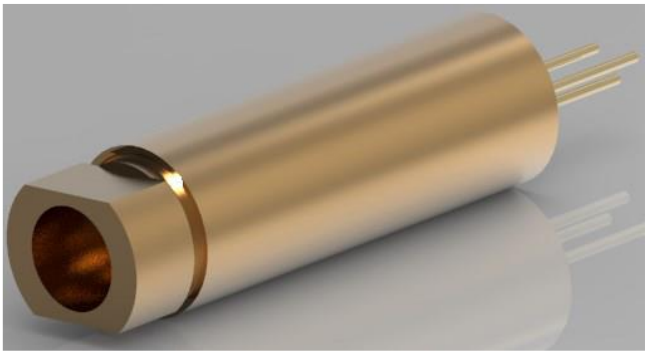
Tel: +852 2325 1078
Fax: +852 2325 1869
Email: info@brightlaser.com.hk
Website: www.brightlaser.com.hk

6mW 850nm Dot Laser Module

VM-0850B-006M-AD-0A0

Features

- Uniform and detail-oriented
- No stripes & No noise
- Collimated beam
- Long distance indication
- Low thermal resistance
- High power conversion efficiency



Applications

- Infrastructure alignment
- Medical and beauty application
- Smart housing system
- Sweeping robot
- Indication and positioning

Description

This product VM-0850B-006M-AD-0A0 is integrated by in-house manufactured & high-quality laser diode and is shielding with copper for better heat dissipation. Compared with traditional laser and LED, it enables to provide a higher peak power and lower power consumption, low wavelength drift with temperature and good reliability. It provides narrower emission angle without optical and thermal compensation, which allow to operate a wider range of environments. This product with laser diodes with small-sized, light, low price, long life, low power consumption and fast frequency response. It can be applied to infrastructure alignment, positioning, indication, inspection, machine vision and other fields for ideal invisible laser source.

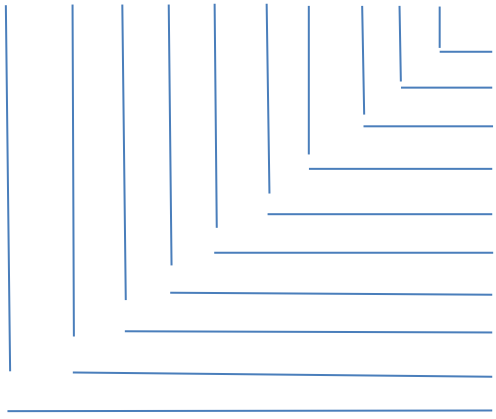
PRODUCT IDENTIFY

Part Number	Description
VM-0850B-006M-AD-0A0	6mW 850nmDot Shape Laser module

CODE RULES

VM- 0850B-006M –A D – 0 A 0

① ② ③ ④ ⑤ ⑥⑦ ⑧⑨⑩



Annex, option=0
Product version, A
Accessories 0 = standard
Shape, D = dot
Angle, A = 0-5 degree
Units, M =milliwatt
Power value, 6
Laser class: B=Class 3R
Wavelength, 850nm
Product classification, **VCSEL Module**

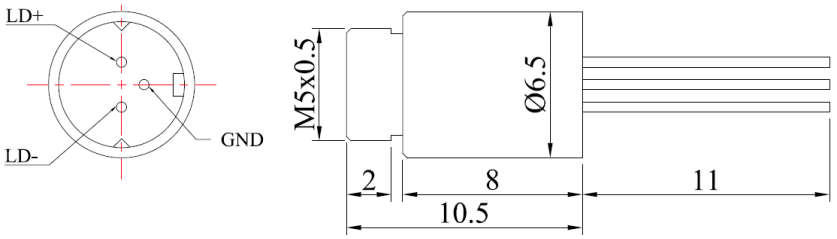
Tel: +852 2325 1078
Fax: +852 2325 1869
Email: info@brightlaser.com.hk
Website: www.brightlaser.com.hk

I. Specifications

Parameters	Typical values	Unit	Remarks
Wavelength	850	nm	-
Optical power	3	mW	Light exit window
Rated current	8	mA	-
Operating voltage	DC 2.3±0.1	V	-
Beam spot	Dot	-	-
Beam emission angle	⩽2	mrad	-
Power consumption	20	mW	-
Operating temperature	-20 to +60	℃	-
Storage temperature	-40 to +80	℃	-
Dimensions	Φ6.5×L22	mm	See Machanics
Waterproof	IP20	-	-
Laser classification	Class 3R	-	Laser goggle when using
Weight	4.3	g	Reference value

Note: Electro-Optical Characteristic with a package or diffuser would require further evaluation. Values are based on limited sample size and estimated values.

II. Mechanic schematic



III. Laser Product Safety

The output power of this module is classified as class 3R, one can refer to IEC 60825-1:2014《Laser Product Safety: Part 1: Devices classification, requirements and user's Manual》.

IV. Copyright Statement

V. Revision History

Revisions	Date	Description
V.01	2021/12/01	The first official Version