

# Pulsed laser diode module

## C6582

Compact, pulsed laser diode driver module



### Features

- Built-in pulsed laser diode (Hamamatsu L7055-02)
- Compact size
- Easy handling: single +5 V supply operation
- Laser oscillation by external pulse

### Applications

- Laser radars
- Fiber optic measurement systems
- Optical measurement equipment

### ■ Absolute maximum ratings

Parameter	Symbol	Value	Unit
Operating temperature	T <sub>opr</sub>	0 to +50	°C
Storage temperature	T <sub>stg</sub>	-20 to +60	°C

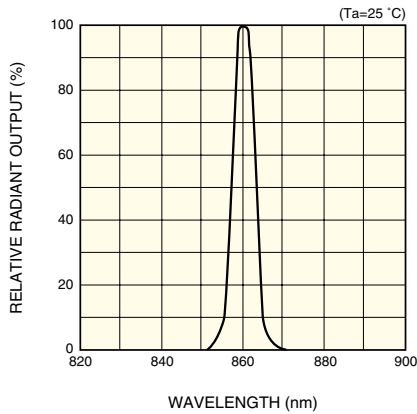
### ■ Specifications (Typ. T<sub>a</sub>=25 °C, unless otherwise noted)

Parameter	Symbol	Condition	Specification
Supply voltage	V <sub>s</sub>	I <sub>s</sub> =400 mA Typ. f=10 kHz	+5 V
Peak emission wavelength	λ <sub>p</sub>		870 nm Typ.
Radiant flux	φ <sub>e</sub>		25 W Typ.
Pulse width	P <sub>w</sub>		10 ns Typ.
External drive pulse signal	-		TTL or CMOS level
Repetition frequency	f		10 kHz Max.
Emission timing signal	-		TTL (negative theory)

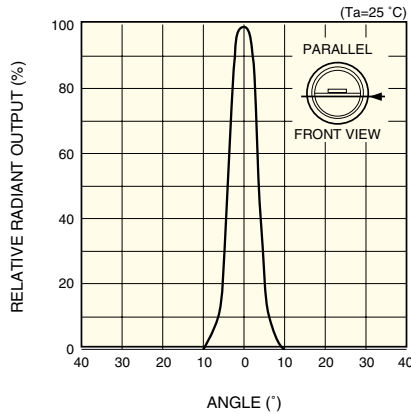
### ■ Precautions for use

- The laser used in this product emits invisible radiation and falls under **Class 3B** lasers. Looking directly at laser beams may impair eyesight, so always wear the appropriate safety glasses or goggles.
- This product contains a high voltage power supply. Touching an internal part may cause electrical shocks. Do not open the case.
- Laser power may fluctuate when the ambient temperature varies.

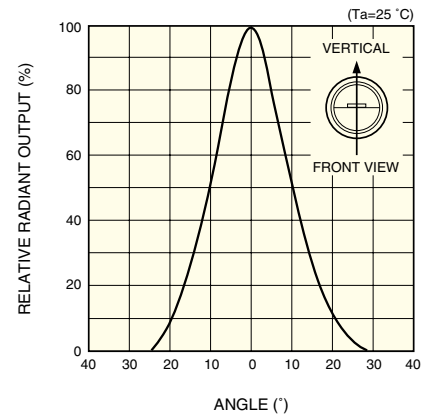
■ Emission spectrum (typical example) ■ Directivity



KACCB0043EB

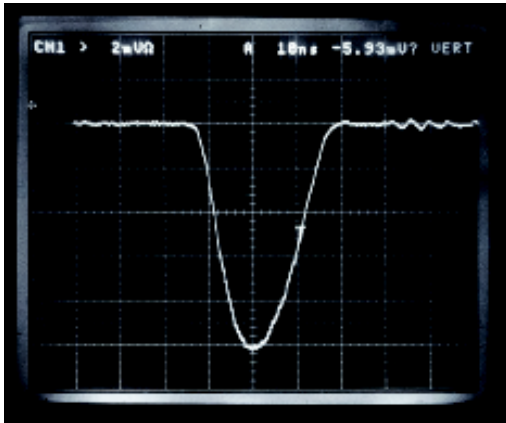


KACCB0044EA

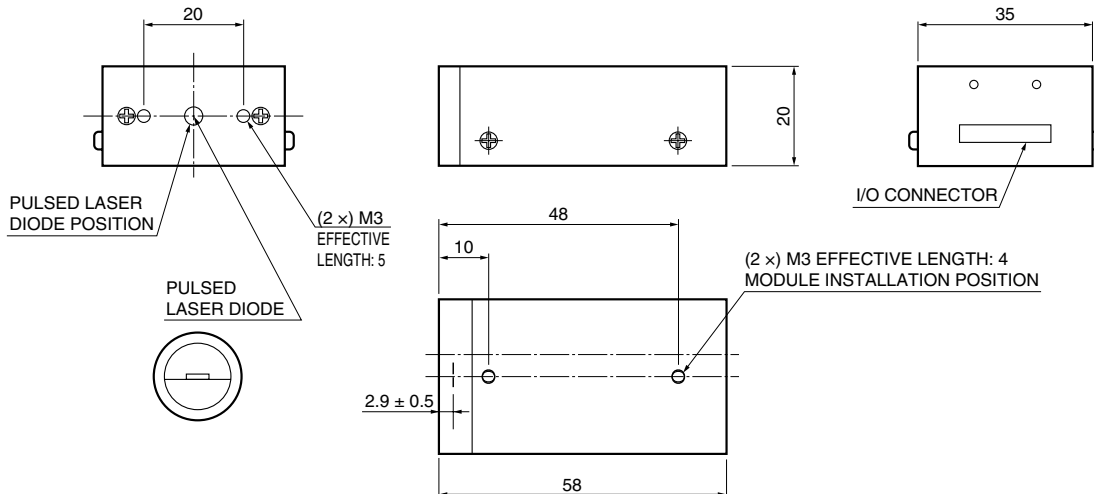


KACCB0045EA

■ Output waveform



■ Dimensional outline (unit: mm)



KACCA0056EA

**HAMAMATSU**

Information furnished by HAMAMATSU is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications are subject to change without notice. No patent rights are granted to any of the circuits described herein. ©2001 Hamamatsu Photonics K.K.

HAMAMATSU PHOTONICS K.K., Solid State Division

1126-1 Ichino-cho, Hamamatsu City, 435-8558 Japan, Telephone: (81) 053-434-3311, Fax: (81) 053-434-5184, <http://www.hamamatsu.com>

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, P.O.Box 6910, Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1) 908-231-0960, Fax: (1) 908-231-1218

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49) 08152-3750, Fax: (49) 08152-2658

France: Hamamatsu Photonics France S.A.R.L.: 8, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: 33-(1) 69 53 71 00, Fax: 33-(1) 69 53 71 10

United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, Welwyn Garden City, Hertfordshire AL7 1BW, United Kingdom, Telephone: (44) 1707-294888, Fax: (44) 1707-325777

North Europe: Hamamatsu Photonics Norden AB: Smidesvägen 12, SE-171 41 Solna, Sweden, Telephone: (46) 8-509-031-00, Fax: (46) 8-509-031-01

Italy: Hamamatsu Photonics Italia S.R.L.: Strada della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39) 02-935-81-733, Fax: (39) 02-935-81-741