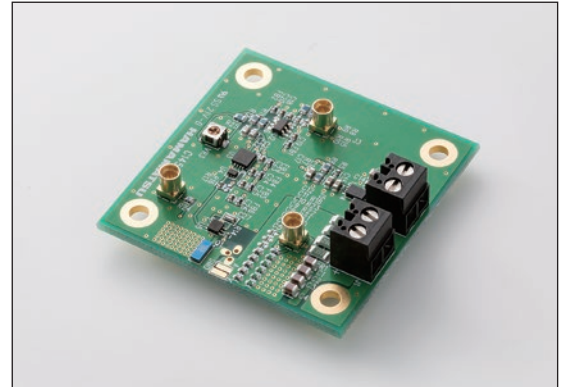


■ **Features**

- Narrow pulse width (4 ns)
- High peak current (to 40 A)
- Compact size (45 mm × 45 mm)
- TO-Can (5.6Φ) package, Compatible with SMD package
- Current monitor terminal available

■ **Outline**

The C14518 is a laser driver board designed to evaluate ultra-short pulse characteristics of Pulsed Laser Diodes (PLD) that are encapsulated in an SMD package or TO-Can (5.6Φ) package. PLD mounted laser driver board is also available.



■ **Electrical specifications (T<sub>op</sub> = 25 °C)**

Parameter	Symbol	Value	Unit
Pulse width	$t_w$	4 ± 1	ns
Peak forward current	$I_{fp}$	0 to 40	A
Repetition frequency	$f_r$	1 to 150	kHz
Maximum duty ratio	DR	0.05	%
Charge voltage	$V_c$	0 to 90	V
Supply voltage	$V_{IN}$	7 to 12	V
Trigger input *1	trig	20 to 200	ns
Pulse current monitor terminal (when terminated with 50 ohms) *2	—	22.7	A/V
Operating ambient temperature range *3	$T_{op}$	-20 to +70	°C

\*1: The input pulse range is CMOS 5 V.

\*2: The output from the pulse current monitor terminal is not an absolute measurement value. The measurement value varies depending on the mounted parts and wiring resistance, so use this output as a reference value.

\*3: No condensation.

\* The above specifications apply to operation when a pulsed laser diode (PLD) L11854-323-51 is mounted.

\* No laser diode is included.

Figure 1: Charge voltage vs. Peak forward current (Typ.)

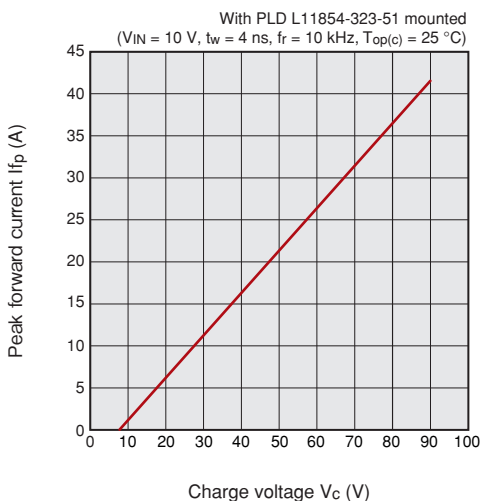
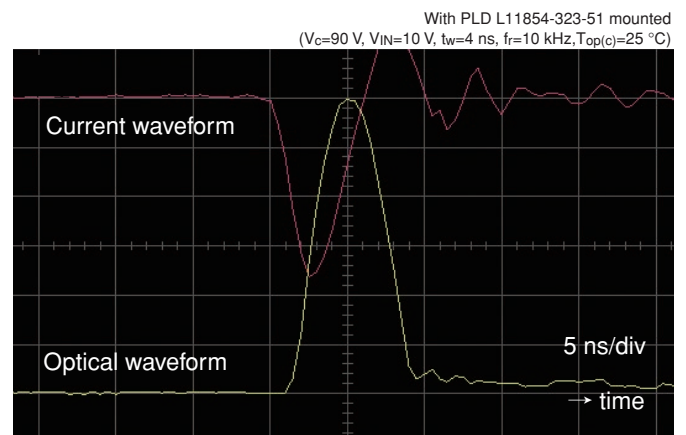


Figure 2: Pulsed optical output waveform (example)



# Laser Driver Board C14518

Figure 3: Details of connection terminals

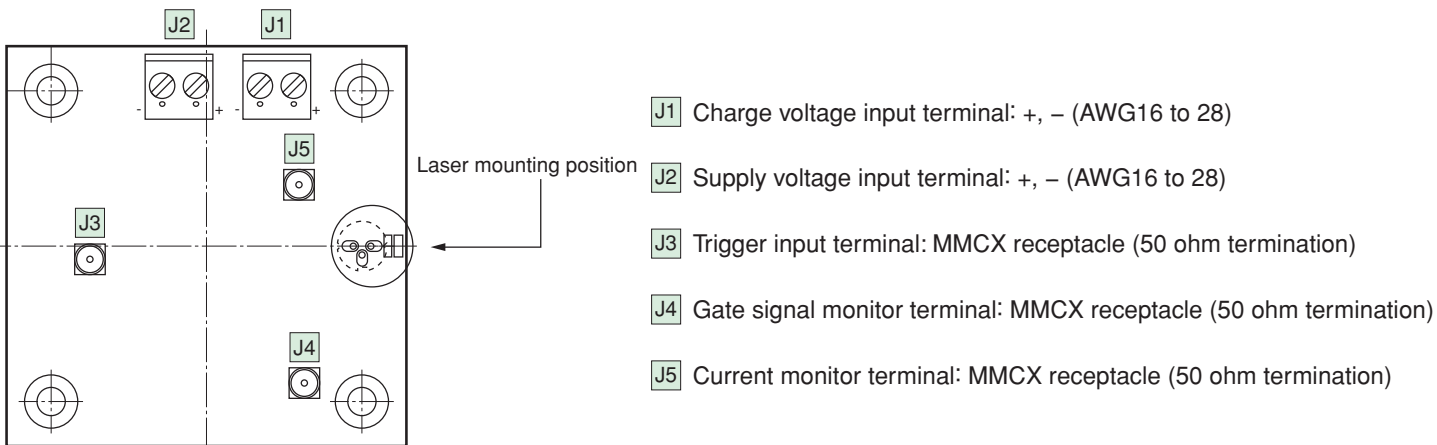
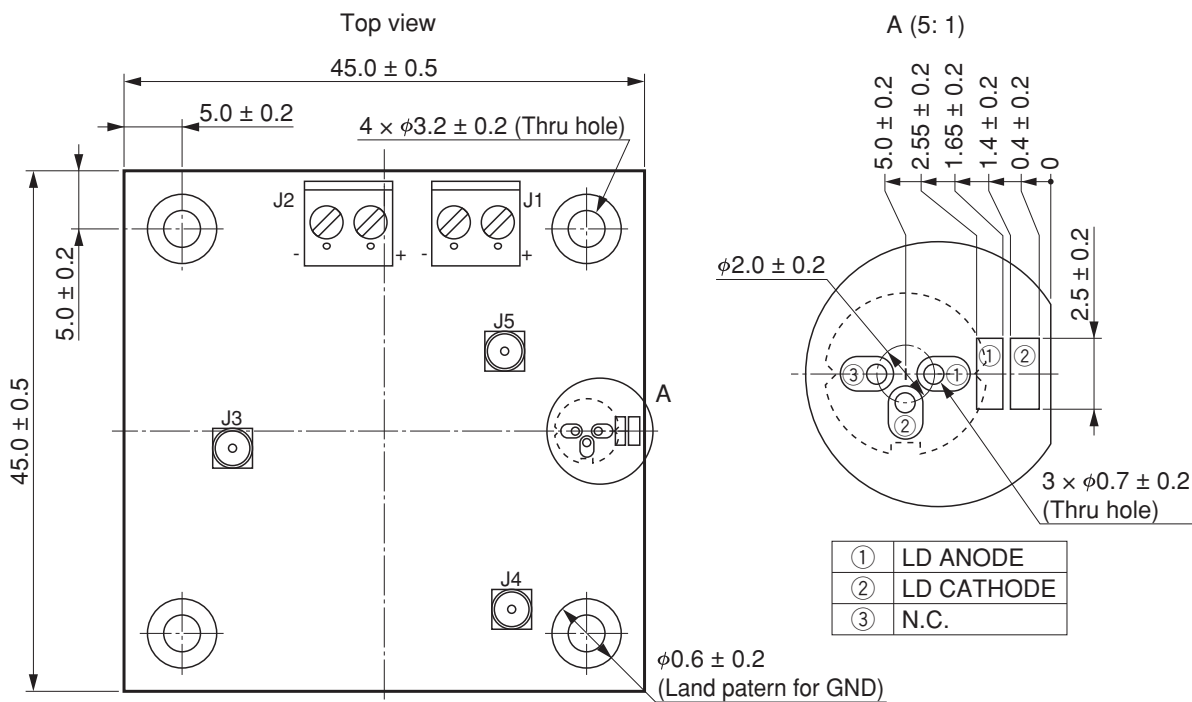


Figure 4: Dimensional outline (Unit: mm)



\* Mount a TO-Can (5.6Φ) package PLD so that it emits light from the back side of the board.

LEB3F0146-A

● Information described in this material current as of October 2023. Specifications are subject to change without notice.

**HAMAMATSU PHOTONICS K.K.** [www.hamamatsu.com](http://www.hamamatsu.com)

**HAMAMATSU PHOTONICS K.K., Solid State Division**  
 1126-1 Ichino-cho, Higashi-ku, Hamamatsu City, 435-8558 Japan, Telephone: (81)53-434-3311, Fax: (81)53-434-5184

U.S.A.: HAMAMATSU CORPORATION: 360 Foothill Road, Bridgewater, NJ 08807, U.S.A., Telephone: (1)908-231-0960, Fax: (1)908-231-1218 E-mail: [usa@hamamatsu.com](mailto:usa@hamamatsu.com)  
 Germany: HAMAMATSU PHOTONICS DEUTSCHLAND GMBH.: Arzbergerstr. 10, 82211 Herrsching am Ammersee, Germany, Telephone: (49)8152-375-0, Fax: (49)8152-265-8 E-mail: [info@hamamatsu.de](mailto:info@hamamatsu.de)  
 France: HAMAMATSU PHOTONICS FRANCE S.A.R.L.: 19 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 E-mail: [infos@hamamatsu.fr](mailto:infos@hamamatsu.fr)  
 United Kingdom: HAMAMATSU PHOTONICS UK LIMITED: 2 Howard Court, 10 Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BW, UK, Telephone: (44)1707-294888, Fax: (44)1707-325777 E-mail: [info@hamamatsu.co.uk](mailto:info@hamamatsu.co.uk)  
 North Europe: HAMAMATSU PHOTONICS NORDEN AB: Torshamnsgatan 35, 16440 Kista, Sweden, Telephone: (46)8-509-031-00, Fax: (46)8-509-031-01 E-mail: [info@hamamatsu.se](mailto:info@hamamatsu.se)  
 Italy: HAMAMATSU PHOTONICS ITALIA S.R.L.: Strada della Moia, 1 int. 6 20044 Arese (Milano), Italy, Telephone: (39)02-93 58 17 33, Fax: (39)02-93 58 17 41 E-mail: [info@hamamatsu.it](mailto:info@hamamatsu.it)  
 China: HAMAMATSU PHOTONICS (CHINA) CO., LTD.: 1201, Tower B, Jiaming Center, 27 Dongsanhuan Beilu, Chaoyang District, 100020 Beijing, P.R. China, Telephone: (86)10-6586-6006, Fax: (86)10-6586-2866 E-mail: [hpc@hamamatsu.com.cn](mailto:hpc@hamamatsu.com.cn)  
 Taiwan: HAMAMATSU PHOTONICS TAIWAN CO., LTD.: 13F-1, No.101, Section 2, Gongdao 5th Road, East Dist., Hsinchu City, 300046, Taiwan (R.O.C) Telephone: (886)3-659-0080, Fax: (886)3-659-0081 E-mail: [info@hamamatsu.com.tw](mailto:info@hamamatsu.com.tw)

Cat. No. LPLD3008E03  
 OCT. 2023 IP