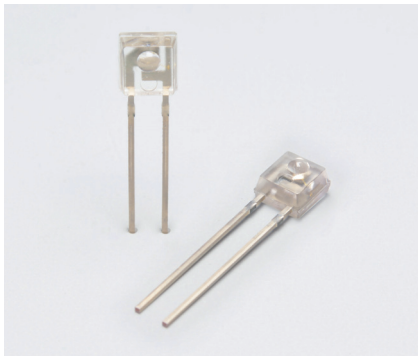


L6895-10



## High-power LED with miniature package

L6895-10 is a high-power LED molded into a miniature, clear plastic package that emits infrared light at a peak emission wavelength of 940 nm.

### Features

- Pd plated leads
- Miniature package with lens
- Peak emission wavelength: 940 nm

### Applications

- FSO (free space optics)
- Optical switch
- Rotary encoders, etc.

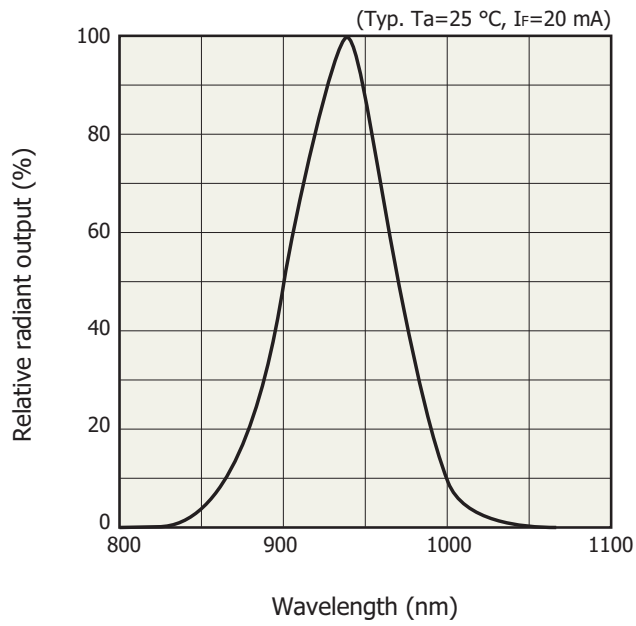
### Absolute maximum ratings (Ta=25 °C)

Parameter	Symbol	Condition	Value	Unit
Forward current	IF		60	mA
Reverse voltage	VR Max.		5	V
Pulse forward current	IFP	Pulse width: 100 μs Duty ratio: 1 %	1.0	A
Power dissipation	P		90	mW
Operating temperature	Topr		-30 to +85	°C
Storage temperature	Tstg		-30 to +85	°C

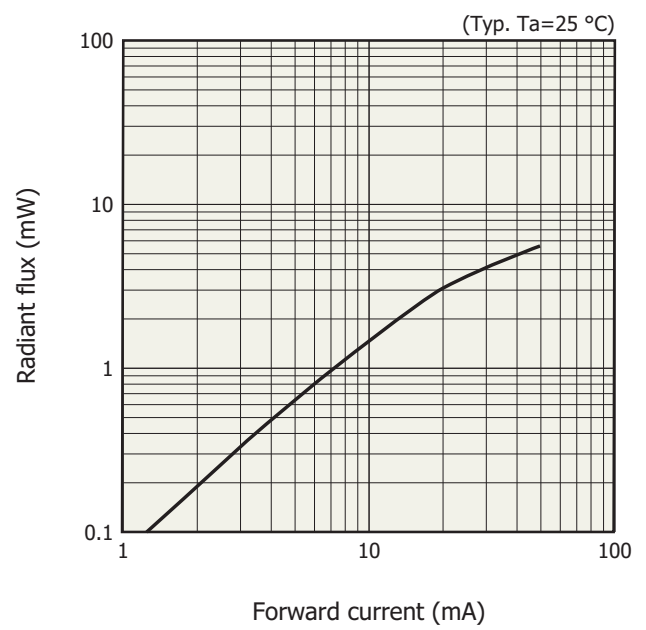
### Electrical and optical characteristics (Ta=25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Peak emission wavelength	λp	IF=20 mA	-	940	-	nm
Spectral half width	Δλ	IF=20 mA	-	60	-	nm
Forward voltage	VF	IF=20 mA	-	1.25	1.45	V
Reverse current	IR	VR=5 V	-	-	10	μA
Radiant flux	φe	IF=20 mA	1.2	-	-	mW
Terminal capacitance	Ct	VR=0 V, f=1 MHz	-	20	-	pF

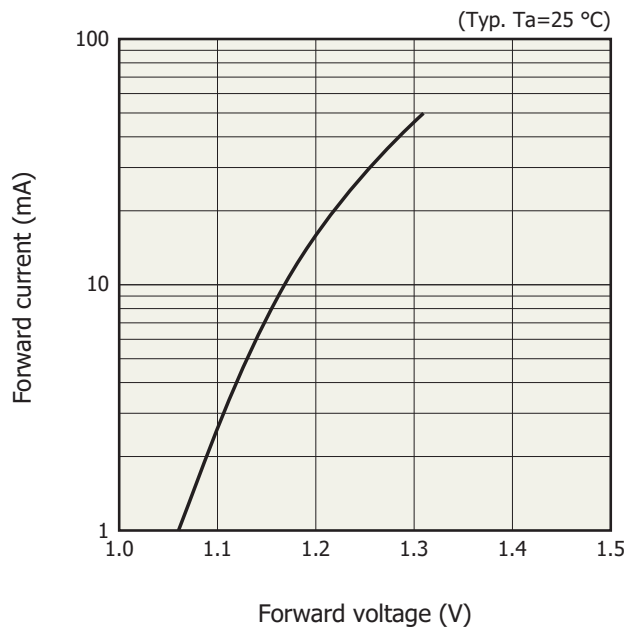
**Emission spectrum**



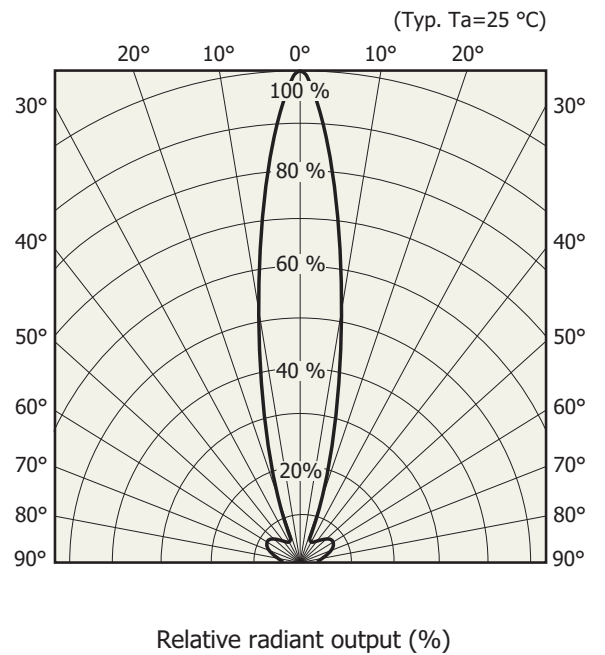
**Radiant flux vs. forward current**



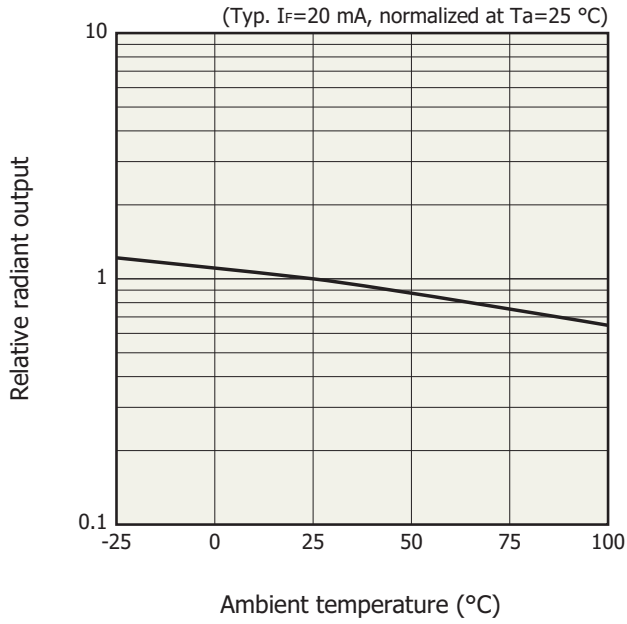
**Forward current vs. forward voltage**



**Directivity**

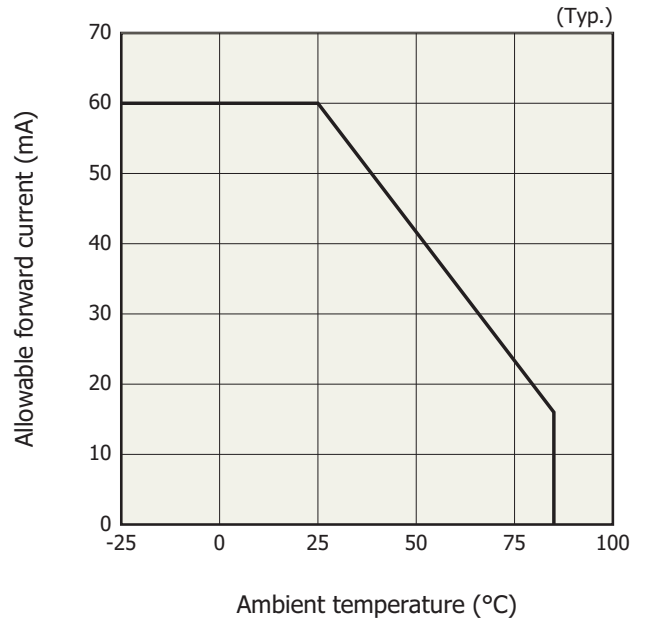


❑ Radiant output vs. ambient temperature



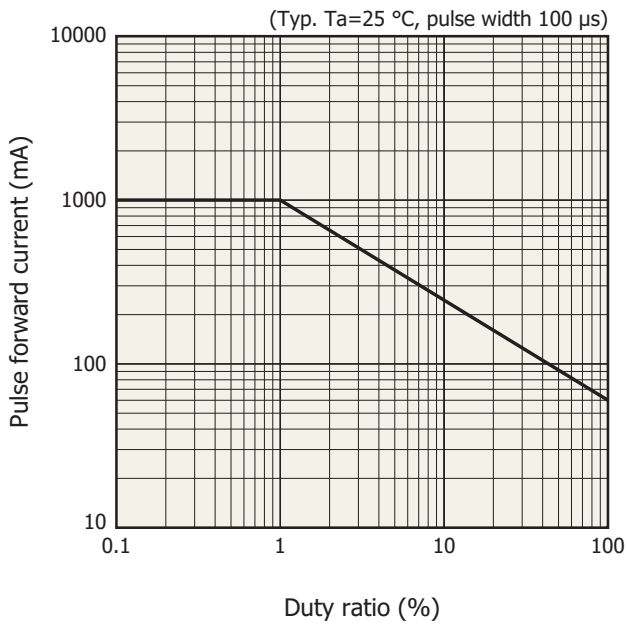
KLEDB0116EA

❑ Allowable forward current vs. ambient temperature



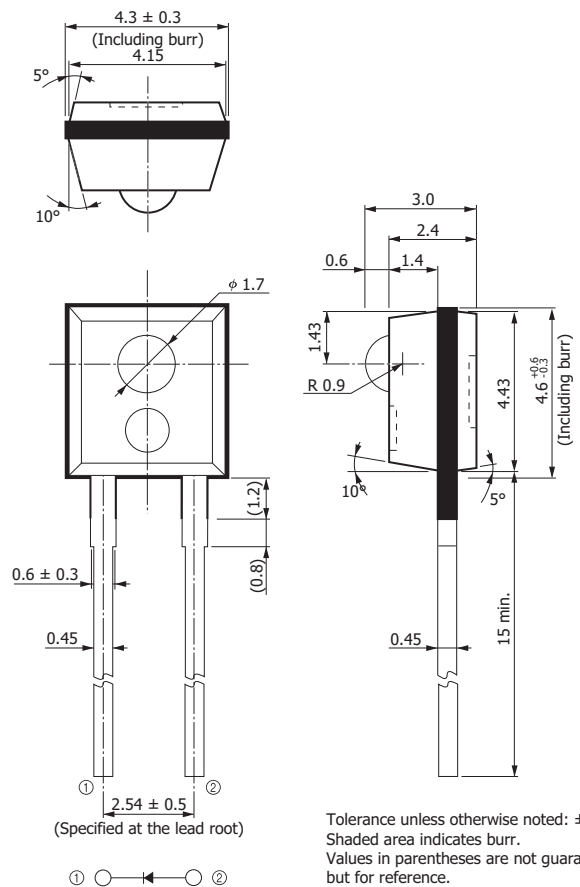
KLEDB0083EB

❑ Pulse forward current vs. duty ratio



KLEDB0084EA

❑ Dimensional outline (unit: mm)



Tolerance unless otherwise noted:  $\pm 0.2$ ,  $\pm 2^\circ$   
 Shaded area indicates burr.  
 Values in parentheses are not guaranteed, but for reference.

Packing type: Polyethylene bag (antistatic type)

KLEDA0044EB

### Recommended soldering conditions

Parameter	Specification	Remarks
Solder temperature	260 °C max. (3 s)	at least 2.5 mm away from package surface

Note: When setting the soldering conditions, check for any problems by testing out the soldering methods in advance.

### Related information

[www.hamamatsu.com/sp/ssd/doc\\_en.html](http://www.hamamatsu.com/sp/ssd/doc_en.html)

#### ■ Precautions

- Disclaimer
- Metal, ceramic, plastic packages

#### ■ Technical information

- LED

Information described in this material is current as of April 2021.

Product specifications are subject to change without prior notice due to improvements or other reasons. This document has been carefully prepared and the information contained is believed to be accurate. In rare cases, however, there may be inaccuracies such as text errors. Before using these products, always contact us for the delivery specification sheet to check the latest specifications.

The product warranty is valid for one year after delivery and is limited to product repair or replacement for defects discovered and reported to us within that one year period. However, even if within the warranty period we accept absolutely no liability for any loss caused by natural disasters or improper product use. Copying or reprinting the contents described in this material in whole or in part is prohibited without our prior permission.

# HAMAMATSU

[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, N.J. 08907, 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, D-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 Bellu, 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.: 8F-3, No. 158, Section2, Gongdao 5th Road, East District, Hsinchu, 300, 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)